



ARKANSAS STATE UNIVERSITY
EDUCATES LEADERS,
ENHANCES INTELLECTUAL
GROWTH,
AND ENRICHES LIVES.

educate enhance enrich

**Graduate bulletin
2012-2013**



Student Responsibility

Each student should study this Graduate 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/Affirmative Action Employer with a strong institutional commitment to the achievement of excellence and diversity among its faculty and staff. To that end, the University provides opportunities in employment practices, admission and treatment of students without regard to race, color, religion, age, disability, gender, national origin, or veteran status. ASU complies with all applicable federal and state legislation and does not discriminate on the basis of any unlawful criteria.

Questions regarding this policy should be addressed to the Affirmative Action Program Coordinator, P.O. Box 1500, State University, Arkansas 72467. Telephone (870) 972-3658.

Services for Individuals with Disabilities

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 second floor (Room 2181). The telephone number is (870) 972-3964. The number for the Telecommunications Device for the Deaf (TDD) is (870) 972-3458.

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).

Arkansas State University



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

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Number 1

ACCREDITATION OF PROGRAMS

Arkansas State University's academic programs are accredited by the regional accrediting agency for all programs. Individual programs are accredited by specialized accrediting agencies for the respective programs.

**The Higher Learning Commission of the
North Central Association of Colleges and Schools (HLC)**

Thirty North LaSalle, Suite 2400
Chicago, IL 60602
Telephone: (312) 263-0456

Commission on Accreditation of Allied Health Education Programs

35 East Wacker Drive, Suite 1979
Chicago, IL 60601-2208
Telephone: (312) 553-9355
Fax: (312) 553-9616
Email: caahep@caahep.org

American Association of Museums

Commission on Accreditation in Physical Therapy Education (CAPTE)

111 North Fairfax Street
Alexandria, VA 22314
Telephone: (703) 706-3245

Commission on Accreditation of Athletic Training

2201 Double Creek Drive
Suite 5006
Round Rock, TX 78664
Telephone: (512) 733-9700
Fax: (512) 733-9701

Accrediting Council on Education in Journalism and Mass Communications

The Association to Advance Collegiate Schools of Business-International AACSB

777 South Harbour Island Boulevard, Suite 750
Tampa, FL 33602-5730 USA
Telephone: (813) 769-6500
Fax: (813) 769-6559

Council for American Speech-Language-Hearing Association

**Council for Accreditation of Counseling and Related Educational Programs
(CACREP)**

Joint Review Committee in Nuclear Medicine Technology

National Association of Schools of Theatre

National Association of School Psychologists (NASP)

Council on Rehabilitation Education (CORE)

Council on Social Work Education (CSWE)

1701 Duke Street, Suite 200
Alexandria, VA 22314

National Association of Schools of Public Affairs and Administration

**Engineering Accreditation Commission of the Accreditation
Board for Engineering and Technology, Inc. (ABET)**

Joint Review Committee on Education in Diagnostic Medical Sonography
2025 Woodlane Drive
St. Paul, MN 55125-2998
Telephone: (651) 731-1582

Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Dr., Suite 900
Chicago, IL 60606
Telephone: (312) 704-5304

National Accrediting Agency for Clinical Laboratory Sciences
8410 West Bryn Mawr, Suite 670
Chicago, IL 60631
Telephone: (773) 714-8880

National Association of Schools of Art and Design
11250 Roger Bacon Drive
Suite 21
Reston, VA 20190
Telephone: (703) 437-0700

National Association of Schools of Music
11250 Roger Bacon Drive
Suite 21
Reston, VA 20190
Telephone: (703) 437-0700

National Council for Accreditation of Teacher Education (NCATE)
2010 Massachusetts Ave NW, Suite 500
Washington, DC 20036
Telephone: (202) 466-7496
Fax: (202) 296-6620

National League for Nursing Accrediting Commission
3343 Peachtree Road NE, Suite 850
Atlanta, Georgia 30326
Telephone: 404-975-5000
Fax: 404-975-5020

National Alliance of Concurrent Enrollment Partnerships (NACEP)
126 Mallette Street
Chapel Hill, NC 27516
Telephone: (919) 593-5205
Fax: (877) 572-8693

Council on Accreditation of Nurse Anesthesia Educational Programs (COA)
222 South Prospect Avenue, Suite 304
Park Ridge, IL 60068-4010
Telephone (847) 692-7050
Fax (847) 692-7137

National Association of Schools of Public Affairs and Administration (NASPAA)
1029 Vermont Ave., NW, Suite 1100
Washington, DC 20005
Telephone: (202) 628-8965
Fax: (202)626-4978

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 College Educators in Radiologic Technology
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
Oak Ridge Associated Universities*
Southern Council on Collegiate Education for Nursing
Teacher Education Council of State Colleges and Universities

Oak Ridge Associated Universities:

Since 2004, students and faculty of Arkansas State University have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 98 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of under-represented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available at <http://www.ornl.gov/orise/educ.htm>, or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact:

Andrew T. Sustich

Interim Associate Vice Chancellor for Research and Technology Transfer
ORAU Councilor for Arkansas State University

Monnie E. Champion

ORAU Corporate Secretary (865-576-3306); or

Visit the ORAU Home Page (<http://www.ornl.gov>)

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Academic Calendar Arkansas State University-Jonesboro Fall Semester 2012

Orientation for New Faculty.....	August 13-14 (M-T)
Faculty Conference.....	August 15 (W)
College and Department Faculty Meetings.....	August 16-17 (R-F)
Last Day for Admissions.....	August 17 (F)
Residence Halls Open 9:00 a.m.....	August 18 (Sa)
First Year Convocation 2:00 p.m.....	August 19 (Su)
Regular Classes Begin.....	August 20 (M)
Last Day to Change from Credit to Audit.....	August 24 (F)
Intent to Graduate Cards Due for December Commencement.....	August 24 (F)
Saturday Classes Begin.....	August 25 (Sa)
Last Day to Drop/Withdraw Without Financial Assessment.....	August 26 (Su)
WN Grading Begins for Full Term and Session 1 Courses 8:00 a.m.....	August 27 (M)
Late Registration.....	August 27-31 (M-F)
Labor Day Holiday.....	September 3 (M)
WN Grading Ends for Full Term and Session 1 Courses 12:00 noon.....	September 4 (T)
Checksheets Due.....	September 4 (T)
Last Day to Drop Session I Courses.....	September 25 (T)
Mid-semester Exams.....	October 2-October 8 (T-M)
Last Day to Add Session II Courses.....	October 8 (M)
Session II Classes Begin.....	October 9 (T)
Mid-semester Grades Due 12:00 noon.....	October 10 (W)
WN Grading Begins for Session 2 Courses 8:00 a.m.....	October 15 (M)
WN Grading Ends for Session 2 Courses 12:00 noon.....	October 19 (F)
Comprehensive Examination Results Reported to Graduate School.....	November 2 (F)
Thesis/Dissertation and Oral Defense Results Reported to Graduate School.....	November 9 (F)
Last day to drop a course or withdraw from the University.....	November 14 (W)
Fall Break and Thanksgiving Holiday.....	November 19-24 (M-Sa)
Last Day of Class.....	December 3 (M)
Study Day.....	December 4 (T)
Final Examinations.....	December 5-11 (W-T)
Residence Halls Close (for all students not graduating) 12:00 noon.....	December 12 (W)
Inclement Weather Final Exams Make-Up Day (if necessary).....	December 12 (W)
Graduating Senior Grades Due 12:00 noon.....	December 13 (R)
All Grades Due 12:00 noon.....	December 14 (F)
Commencement (See Commencement Web Page 10:00 a.m. and 2:30 p.m. ceremonies).....	December 15 (Sa)

Spring Semester 2013

Residence Halls Open 9:00 a.m.....	January 11 (F)
Last Day for Admissions.....	January 11 (F)
Regular Classes Begin.....	January 14 (M)
Late Registration.....	January 14-18 (M-F)
Last Day to Change from Credit to Audit.....	January 18 (F)
Intent to Graduate Cards Due for May Commencement.....	January 18 (F)
Saturday Classes Begin.....	January 19 (Sa)
Last Day to Drop or Withdraw without Financial Assessment.....	January 20 (Su)
Martin Luther King Day Observed (No Classes).....	January 21 (M)
WN Grading Begins for Full Term and Session 1 Courses 8:00 a.m.....	January 22 (T)
Checksheets Due.....	January 29 (T)
WN Grading Ends for Full Term and Session 1 Courses 12:00 noon.....	February 1 (F)
Last Day to Drop Session I Courses.....	February 19 (T)
Mid-semester Exams.....	February 26-March 4 (T-M)
Last Day to Add Session II Courses.....	March 4 (M)
Session II Classes Begin.....	March 5 (T)
Mid-semester Grades Due 12:00 noon.....	March 6 (W)
WN Grading Begins for Session 2 Courses 8:00 a.m.....	March 11 (M)
WN Grading Ends for Session 2 Courses 12:00 noon.....	March 15 (F)
Spring Break.....	March 18-23 (M-Sa)
Thesis/Dissertation and Oral Defense Results Reported to Graduate School.....	March 29 (F)
Comprehensive Examination Results Reported to Graduate School.....	April 5 (F)
Convocation of Scholars.....	April 15-19 (M-F)
Spring Faculty Association Meeting.....	April 16 (T)
Last day to drop a course or withdraw from the University.....	April 24 (W)
Last Day of Class.....	April 29 (M)
Study Day.....	April 30 (T)
Final Examinations.....	May 1-7 (W-T)
Residence Halls Close (for all students not graduating).....	12:00 noon May 8 (W)
Graduating Senior Grades Due 12:00 noon.....	May 9 (R)
All Grades Due 12:00 noon.....	May 10 (F)
Commencement (See Commencement Web Page).....	May 11 (Sa)

First Summer Term 2013

Last Day for Admissions.....	May 24 (F)
Residence Halls Open 12:00 noon	May 25 (Sa)
Memorial Day Holiday Observed	May 27 (M)
Registration through	May 29 (W)
Last Day to Change from Credit to Audit	May 29 (W)
Classes Begin	May 29 (W)
Last Day to Drop or Withdraw without Financial Assessment	May 30 (R)
WN Grading Begins for Full Term and Session 1 Courses 8:00 a.m.	June 3 (M)
Intent to Graduate Cards Due August Commencement	June 5 (W)
WN Grading Ends for Full Term and Session 1 Courses 12:00 noon	June 7 (F)
Checksheets Due	June 13 (R)
Last day to drop a course or withdraw from the University	June 24 (M)
Last Day of Class	June 26 (W)
Final Examinations	June 27 (R)
All Grades Due 12:00 noon	July 1 (M)

Second Summer Term 2013

Last Day for Admissions	June 28 (F)
Thesis/Dissertation and Oral Defense Results Reported to Graduate School	June 28 (F)
Registration through	June 30 (Su)
Classes Begin	July 1 (M)
Last Day to Change from Credit to Audit	July 1 (M)
Last Day to Drop or Withdraw without Financial Assessment	July 2 (T)
Independence Day Holiday Observed	July 4 (R)
Comprehensive Examination Results Reported to Graduate School	July 5 (F)
WN Grading Begins for Session 2 Courses 8:00 a.m.	July 8 (M)
WN Grading Ends for Session 2 Courses 12:00 noon	July 12 (F)
Last Day to Drop or Withdraw from the University	July 26 (F)
Last Day of Class	July 31 (W)
Final Examinations	August 1 (R)
Graduating Senior Grades Due 10:00 a.m.	August 2 (F)
All Grades Due 10:00 a.m.	August 2 (F)
Residence Halls Close (for all students not graduating) 12:00 noon	August 2 (F)
Commencement 7:00 p.m.	August 2 (F)

ORGANIZATION OF THE UNIVERSITY

BOARD OF TRUSTEES—2012-2013

	Term Expires
Ron Rhodes, Cherokee Village.....	January, 2013
Mike Gibson, Osceola.....	January, 2014
Dan Pierce, Jonesboro.....	January, 2015
Charles Luter, Paragould.....	January, 2016
Howard L. Slinkard, Rogers.....	January, 2017

OFFICERS OF THE BOARD—2012-2013

Ron Rhodes	Chair
Mike Gibson.....	Vice Chair
Dan Pierce.....	Secretary

PRESIDENT OF THE UNIVERSITY SYSTEM

Dr. Charles L. Welch, B.A., M.A., Ed.D.

CHANCELLOR OF THE UNIVERSITY

Dr. Tim Hudson, B.A., M.A., PhD.

OFFICERS OF THE UNIVERSITY 2012-2013

EXECUTIVE OFFICERS

LYNITA M. COOKSEY, 1993

B.S., Arkansas State University
M.S., Arkansas State University
Ph.D., Oklahoma State University

Interim Vice Chancellor and Provost
Associate Professor of Environmental Entomology

LEN FREY, 2000

B.S., Arkansas State University
M.B.A., Arkansas State University
Ph.D., University of Memphis

Vice Chancellor for Finance and Administration
Associate Professor of Management

CHRISTIAN MURDOCK, 2008

B.S., Oklahoma State University
M.Div. Southern Baptist Theological Seminary

Vice Chancellor for University Advancement

WILLIAM R. STRIPLING, 1979

B.A., University of Tampa
M.R.C., Arkansas State University
Ph.D., Southern Illinois University

Vice Chancellor for Student Affairs

ACADEMIC DEANS OF INDEPENDENT DEPARTMENT

- DONALD WAYNE KENNEDY, 1993** Interim Dean, College of Agriculture & Technology
 B.S., Sam Houston State University Associate Professor of Animal Science
 M.Ed., Sam Houston State University
 Ph.D., Louisiana State University
- JAMES WASHAM, 1989** Interim Dean, College of Business
 B.S., Arkansas State University Associate Professor of Finance
 M.B.A., Arkansas State University
 Ph.D., University of Mississippi
- C. WILLIAM ROE, 2000** Associate Dean, College of Business
 B.S., Mississippi State University Professor of Management
 M.B.A., Mississippi State University
 Ph.D., Mississippi State University
- BRAD RAWLINS, 2012** Dean, College of Communications
 B.S., Washington State University Professor of Journalism
 M.A., University of Alabama
 Ph.D., University of Alabama
- THILLAINATARAJAN SIVAKUMARAN, 2012** Dean of College of Education
 B.S., University of Washington Associate Professor of Educational Leadership,
 M.S., University of Tennessee Curriculum and Instruction, Special Education
 Ph.D., University of Tennessee
- GREGORY MEEKS, 2003** Associate Dean, College of Education
 B.S.E., Ouachita State University Associate Professor of Teacher Education
 M.S.E., Henderson State University
 Ph.D., University of North Texas
- DAVID B. BEASLEY, 2009** Dean, College of Engineering
 B.S., Mississippi State University Professor of Engineering
 M.S., Mississippi State University
 Ph.D., Purdue University
- RICKY C. CLIFFT, 1980** Associate Dean, College of Engineering
 B.S., University of Arkansas-Fayetteville Professor of Civil and
 M.S., University of Arkansas-Fayetteville Environmental Engineering
 Ph.D., University of Houston
- DON BOWYER, 2012** Dean, College of Fine Arts
 B.A., West Virginia Wesleyan College Professor of Music
 M.A., California State University, Northridge
 D.A., University of Northern Colorado
- LAURI UMANSKY, 2012** Dean, College of Humanities and Social Sciences
 B.A, University of Massachusetts-Boston Professor of History
 M.A. Brown University
 Ph.D. Brown University
- DEBORAH CHAPPEL TRAYLOR, 1991** Associate Dean, College of Humanities
 B.S.E., Arkansas State University & Social Science
 M.A., Duke University Associate Professor of English
 Ph.D., Duke University

- JEFFREY R. BAILEY, 1992** Director, Library and Information Resources
 B.A., Morehead State University
 M.S.L.S., Clarion University of Pennsylvania
- CECIL L. CLARK, 2011** Chair, Independent Department of Military Science
 B.S., University of Louisiana-Monroe Professor of Military Science
 M.A., American Public University
- SUSAN N. HANRAHAN, 1995** Dean, College of Nursing and Health Professions
 B.S., University of Kansas Professor of Physical Therapy
 M.P.A., University of Kansas
 Ph.D., Temple University
- BEVERLY BOALS GILBERT, 1978** Dean, Continuing Education and Community Outreach
 B.A., University of Mississippi Professor of Early Childhood Education
 M.Ed., University of Mississippi
 Ed.D., University of Mississippi
- JOHN PRATTE, 2006** Interim Dean, College of Sciences and Mathematics
 B.A., University of Texas Professor of Physics
 Ph.D., University of Colorado
- JILL M. SIMONS, 1997** Executive Director of University College
 B.A., University of Arkansas
 M.S., University of Rhode Island
 S.C.C.T., Arkansas State University
 Ed. D., Arkansas State University
- ANDREW SUSTICH, 1991** Dean, Graduate School
 B.S., Univ of Illinois-Urbana/Cham. Interim Assoc Vice-Chan, Research & Tech Tran
 M.S., Univ of Illinois-Urbana/Cham. Interim Exec Dir, Arkansas Biosciences Institute
 Ph.D., University of Illinois - Urbana/Champaign Professor of Physics

THE UNIVERSITY

MISSION

Arkansas State University educates leaders, enhances intellectual growth, and enriches lives. (ASU=e³).

CORE VALUES

Arkansas State University values the following as central to our success:

- **Student-Centered:** We are committed to education, inquiry and service in order to meet students' changing needs. We foster lifelong learning, civic and social responsibility, leadership, and individual and career growth.
- **Learning-Centered:** We nurture intellectual flexibility, knowledge and skills by integrating teaching, research, assessment and learning to promote continuous improvement of our scholarly community.
- **Excellence:** We pursue excellence within the campus community through opportunities for achievement in teaching, research, scholarship, creative activity and service.
- **Diversity:** We embrace diversity in all of its dimensions realizing that mutual respect for individuality and the inclusion of all are vital for both personal and institutional success.
- **Service:** We support and recognize service at all levels of the university. We strive to contribute to the benefit of the university, the Delta, the state, the nation and the world.
- **Integrity:** We hold high standards of character and integrity as the foundations upon which the university is built.

VISION

Arkansas State University aspires to be an academic leader recognized for innovation and quality in teaching and learning, international standing in strategic research areas, and commitment to outreach and service to the Delta and beyond.

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 enjoys a reputation as a quality regional institution of higher education and is recognized for offering special services to the people of the Arkansas Delta. It is the only comprehensive public university located in this region. Dedicated to teaching, research, and service, the university provides students with the broad educational foundations that help develop critical thinking and analytical skills, decision-making capabilities, and communication skills.

This institution was founded in Jonesboro in 1909 by the Arkansas Legislature as a regional agricultural training school. It began offering a two-year college program in 1918, then became "First District Agricultural and Mechanical College" in 1925. A four-year degree program was begun in 1930, and A & M College became "Arkansas State College" in 1933. The Arkansas Legislature elevated the college to university status and changed the name to Arkansas State University in 1967. Today, the institution has more than 55,000 alumni.

DEGREE PROGRAMS

Master's degree graduate programs were initiated in 1955, and ASU began offering its first

doctoral degree, in educational leadership, in the fall of 1992. A second doctoral program, in Environmental Sciences, was begun in the fall of 1997, and the doctoral program in Heritage Studies began in the fall of 2001. The doctoral program in Molecular Biosciences began in the spring of 2006 and the doctoral program of Physical Therapy began in the fall 2009. Programs at the specialist's, master's, bachelor's and associate's degree levels are available through various colleges: Agriculture, Business, Communications, Education, Engineering, Fine Arts, Humanities and Social Sciences, Nursing and Health Professions, Sciences and Mathematics, and University College. Classes are also offered through The Honors College and the independent Department of Military Science. More information about the various colleges and academic departments is available through the Office of Research and Academic Affairs.

ACCREDITATION

Arkansas State University's commitment to excellence in higher education is demonstrated by its accreditation by The Higher Learning Commission of the North Central Association, as well as 23 specialized accrediting organizations. In addition, the university holds membership in several national organizations which support the highest educational standards.

THE ASU SYSTEM

The ASU System includes campuses at **Jonesboro** (Craighead County), which offers degree programs through the doctoral level; **Beebe** (White County), **Mountain Home** (Baxter County), and **Newport** (Jackson County), where associate degree programs are offered; and at **Heber Springs**, **Marked Tree** and **Searcy**. Arkansas State University-Beebe became part of the ASU system in 1955. It associated with White River Vo-Tech at Newport in 1992; that campus has attained stand-alone status and is now Arkansas State University-Newport. The Mountain Home campus officially became ASU-Mountain Home on July 1, 1995. Delta Technical Institute at Marked Tree merged with ASU and became Arkansas State University Technical Center on July 1, 2001. A new campus is being built for ASU-Heber Springs, which operates as a sister campus of ASU-Beebe. Foothills Technical Institute at Searcy was merged with ASU Beebe on July 1, 2003, and is now ASU-Searcy, a technical institute of ASU-Beebe.

ASU offers bachelor's degree programs, master's degree programs and upper level courses through ASU degree centers at ASU-Beebe, ASU-Mountain Home, and three other cities -- Blytheville, Forrest City and West Memphis -- where partnership agreements have been established in cooperation with the local community colleges. ASU also operates an instructional site at nearby Paragould, in Greene County.

LIBRARY

The Dean B. Ellis Library, centrally located in an eight-story building, functions as an educational center for the university community. It houses an open shelf collection which includes over 620,000 books and periodical bound volumes, 580,000 federal and state documents, and 585,913 units in microform. The collection includes most subject fields, but emphasizes education, history, fine arts, general reference, law, and American and English literature. The Library of Congress classification system is used for the arrangement of books, and an online catalog provides access to its book collection and electronic resources. Reserve items are available at the Circulation Desk.

The library meets the informational needs of the university by offering a variety of services. A staff of 15 professional librarians and 20 support personnel acquires, organizes, and services the collection. Reference librarians assist users in locating information and in the use of the library. The reference staff also offers an active library instruction program which reaches numerous university classes. Online databases provide access to thousands of journals and books not housed within the library. Materials that are not contained in the library's collection are accessible by interlibrary loan through the OCLC network.

Special collections include 1) the Cass S. Hough Aeronautical Collection of 14,000 books and memorabilia which has been described as the single most valuable collection of aviation materials in private hands; 2) an outstanding collection of Lois Lenski books for children; 3) collections of notable Arkansas authors of children's books: Charlie May Simon, Lois Snelling, Faith Yingling Knoop; and 4) a collection of Arkansas writer John Gould Fletcher.

The Tom Love Collection forms the nucleus of an extensive "Arkansas Collection." It is comprised of manuscripts, documents, and other historic materials relating to the state of Arkansas. In addition, the Arkansas Room collection contains Arkansas topographic and other maps, Arkansas State University publications, and the student newspaper, The Herald.

The Honorable E. C. Gathings Collection is comprised principally of correspondence from Arkansas' long-time congressional representative, making available primary research materials relating to the First Congressional District during Gathings' time of service in the Congress.

The Honorable Bill Alexander Collection expands and extends the research materials relating to the First Congressional District through Congressman Alexander's tenure as a member of the U.S. House of Representatives. The Alexander and Gathings collections cover 53 years, 1939 to 1992.

The collection of creation science papers, donated by former Arkansas Attorney General Steve Clark, includes the state's side of the landmark creation science case.

The Judd Hill Collection, Mabel H. Gieseck Collection, and the Ira Twist, Jr. Collection form the core of a primary research emphasis on the agricultural development and environment transformation of Eastern Arkansas.

An Oral History Program, housed in the library, has conducted and taped interviews with a number of local citizens and state leaders. The tapes are available for use by any interested patron holding an ASU library card.

Other collections include the Curriculum Materials Center which contains K-12 teacher education materials. In addition to materials directly related to classroom and research work, the library provides students with general and recreational reading materials. Exhibits and displays presenting ideas and issues are also a regular part of an ongoing service program.

Media Services offers a wide range of audio and visual services for both students and faculty engaged in university functions. The staff produces overhead transparencies, produces audio and video recordings, and provides laminating services. Additionally, Media services lends audio-visual materials and equipment for short-term use to students and faculty.

DELTA STUDIES CENTER

The Delta Studies Center at Arkansas State University has been established to increase understanding and address needs of the seven-state Lower Mississippi River Delta, as well as to focus national and international scholarly attention on the region.

The Delta Studies Center works with all colleges and programs across campus to focus on and seek support for interdisciplinary studies and activities directed toward the people, institutions, economy, health care issues, history, folklore, culture, arts, and biological and physical environments characteristic of the Delta. Specific activities of the center include archival development; public service; dissemination of information; support for program development, teaching and applied research; and collaboration with other agencies and institutions in the seven-state region.

MUSEUM

Arkansas State University Museum is a general museum housed in the Museum Building connected to the west end of the Dean B. Ellis Library. Providing resource materials for teaching and research, it exhibits strong collections of Arkansas artifacts: birds, archaeological objects, minerals and fossils, mammals, Pioneer items, and military history. Arkansas Indian cultures—Quapaw, Osage, Caddo, Chickasaw, and Choctaw—as well as Southwest Indian cultures constitute multiple exhibits. The nationally known Lutterloh glass collection forms the nucleus of an extensive decorative arts collection. Dolls and toys extend the many historic collections.

The museum, accredited by the American Association of Museums, is a public as well as an institutional museum by classification. It is one of five accredited museums in the state and is open on a regular schedule Mondays through Fridays as well as Saturday and Sunday afternoons.

ARKANSAS HERITAGE SITES

Arkansas Heritage SITES (System Initiatives for Technical and Educational Support) at Arkansas State University develops and operates heritage sites of regional and national significance in the Arkansas Delta. These sites provide educational resources for formal and informal learning, including serving as laboratories for the Heritage Studies Ph.D. program. In addition, they serve as economic catalysts in communities where they are located by attracting heritage tourists from around the country. These sites currently include the Hemingway-Pfeiffer Museum and Educational Center in Piggott, the Southern Tenant Farmers Museum in Tyronza, and the Lakeport Plantation in Lake Village.

GENERAL INFORMATION

STUDENT'S RESPONSIBILITY

Each student should thoroughly study this **Graduate Bulletin** and become completely familiar with the organization and regulations of the Graduate School. Failure to do this may result in serious mistakes for which the student must be held fully responsible.

DEGREES OFFERED

Arkansas State University offers work leading to the following degrees with major fields or emphasis areas:

Doctor of Education (Ed.D.)

Major in Educational Leadership

Doctor of Philosophy (Ph.D.)

Majors in

Environmental Sciences

Heritage Studies

Molecular Biosciences

Minor in Statistics (Ph.D.)

Doctor of Physical Therapy (D.P.T.)

Transitional Doctor of Physical Therapy (tD.P.T.)

Specialist in Community College Teaching (S.C.C.T.)

Emphasis Areas in

Agricultural Education

Biology

Business Administration

Business Technology

Chemistry

English

History

Music Education

Physical Education

Political Science

Reading

Sociology

Communication Studies and Theatre

Vocational-Technical Administration

Community College Administration

Specialist in Education (Ed.S.)

Majors in

Educational Leadership

Psychology and Counseling

Concentration in

Mental Health Counseling

School Psychology

Flex Track

Reading

Master of Accountancy (M.A.cc)
Master of Arts (M.A.)
 Majors in
 Art
 Biological Sciences
 Criminal Justice
 English
 History
 Emphasis in
 Public
 Global
 Political Science
 Sociology
 Communication Studies
Master of Arts in Teaching (M.A.T.)
Master of Business Administration (M.B.A.)
 Concentration in
 Finance
 Healthcare Administration
 International Business
 Logistics
 Management Information Systems
Master of Communication Disorders (M.C.D.)
Master of Engineering Management (M.E.M.)
Master of Music (M.M.)
 Emphasis in
 Performance
 Composition
Master of Music Education (M.M.E.)
Master of Public Administration (M.P.A.)
Master of Rehabilitation Counseling (M.R.C.)
Master of Science (M.S.)
 Majors in
 Biology
 Chemistry
 College Student Personnel Services
 Computer Science
 Disaster Preparedness and Emergency Management
 Early Childhood Services
 Environmental Sciences
 Exercise Science
 Health Sciences
 Mathematics
 Sports Administration
Master of Science in Agriculture (M.S.A.)
 Concentrations in
 Agricultural Business and Economics
 Agricultural Education
 Animal Science

- Plant and Soil Science
- Vocational-Technical Administration
- Master of Science in Education (M.S.E.)
 - Majors in
 - Curriculum and Instruction
 - Early Childhood Education
 - Educational Leadership
 - Educational Theory and Practice
 - Mid-Level Education
 - Reading
 - School Counseling
 - Secondary Education Teaching Fields
 - Majors in
 - Biology
 - Business Technology
 - Chemistry
 - English
 - Mathematics
 - Physical Education
 - Social Science
 - Special Education Instructional Specialist P-4
 - Special Education Instructional Specialist 4-12
 - Special Education - Gifted, Talented and Creative
- Master of Science in Engineering (M.S.E.)
 - Engineering
- Master of Science in Mass Communications (M.S.M.C.)
 - Majors in
 - Journalism
 - Radio-Television
- Master of Science in Nursing (M.S.N.)
 - Majors in
 - Adult Health Nursing
 - Family Nurse Practitioner
 - Nurse Anesthesia
- Master of Science in Social Work (M.S.W.)
 - Major in
 - Social Work
- Professional Science Masters (P.S.M.)
 - Major in
 - Biotechnology
- Graduate Certificate
 - Addiction Studies
 - Aging Studies
 - Health Communications
 - Healthcare Emergency Management
 - Healthcare Management
 - Health Sciences Education
 - Mental Health Counseling
 - Student Affairs

The following degrees are available in a fully on-line delivery format through the ASU Large Scale Distance Education (LSDE) Program. Further information about the LSDE Program is available in a separate supplemental Graduate Bulletin and at the Program website at <http://degree.astate.edu/>.

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

Master of Science in Education (M.S.E.)
Curriculum and Instruction
Educational Leadership
Educational Theory and Practice
Special Education - Instructional Specialist Grades P-4
Special Education - Instructional Specialist Grades 4-12
Special Education - Gifted, Talented and Creative

Specialist in Education (Ed.S.)
Educational Leadership

ADMISSION

The Graduate School is open to persons holding at least a bachelor's degree from an accredited college or university and whose undergraduate or graduate work has been of sufficient quality and scope to enable them to profitably pursue graduate study. Arkansas State University offers equal educational opportunity to all persons without regard to race, religion, sex, age, creed, color, national origin, or physical disability.

GENERAL PROCEDURES

Applicants for admission to graduate study should contact the Graduate School for an application form. The completed form and separate official transcripts of all undergraduate and graduate work must be transmitted to the dean of the Graduate School. All applicants also must submit written proof of measles, mumps and rubella immunization. This immunization must have been received after the first birthday and after January 1, 1968. Arkansas law requires that in order to be eligible for enrollment at a public institution of higher learning an applicant who is a U.S. citizen must be registered or be exempt from registration with the selective service system. A form affirming registration is also required for admission to Graduate School. Application materials become the property of the university and may not be returned to the applicant or forwarded to other institutions. Credentials will be maintained in active files for 12 months, after which they will be relegated to inactive status. After this time, applicants seeking subsequent admission must resubmit all application materials.

All applications must be accompanied by a nonrefundable application fee. The fee is \$50 for students seeking admission to doctoral study and \$30 for students seeking admission to specialist or master-level study. (A \$40 fee is required of international students seeking admission to specialist or master-level study.) Checks must be made payable to Arkansas State University. International students apply directly to the Office of International Programs. If applications are received without payment, the Graduate School will hold all application materials and notify the applicant that no action will be taken until payment is received.

An application may, depending on the timely submission of the required materials and the extent of review required, take from a few days to many weeks to process. Some programs have specific admission deadline dates, while others do not. Applicants are encouraged to check for particular program deadlines in the appropriate section of the Bulletin or online at <http://www.astate.edu/graduate>. Applications to specific programs are reviewed by program faculty before an admission decision is recommended to the Graduate School. All applicants are encouraged to submit all materials at the earliest possible date, preferably no later than six weeks prior to the beginning of the semester, to assist in a smooth application process. Late application may delay registration and limit course selection.

When consideration of the applications for admission to both the Graduate School and the specific degree program has been completed, the dean of the Graduate School will inform the applicant of the admission decision, including any conditions that may be imposed. A student may be admitted into the Graduate School in either Unconditional status or Conditional status.

ADMISSION REQUIREMENTS

Applicants will be required to meet admissions criteria established by the Graduate School for Unconditional or Conditional status in order to enroll in graduate courses. Meeting the minimum requirements for admission to the Graduate School does not necessarily ensure acceptance into a particular graduate degree program. Individual departments may establish requirements for individual degree programs above and beyond the standards for admission to the Graduate School. (See departmental sections of this Bulletin or online at <http://www.astate.edu/graduate> for specific program admission requirements.) A degree-seeking student admitted to one program who decides to change to another program must meet the admission requirements of the new program.

UNCONDITIONAL ADMISSION STATUS

The following Graduate School admission requirements are minimum standards which identify the pool of applicants from which departments select students to be admitted to candidacy in a degree program. To be granted Unconditional Admission Status in the Graduate

School, applicants must have

1. Submitted a completed application for admission and the designated nonrefundable application fee to the office of the Graduate School at least 30 days in advance of registration.
2. Earned a baccalaureate degree from an accredited institution (or its equivalent as determined by the Graduate School).
3. Achieved a minimum cumulative undergraduate grade point average of 2.75 on a 4.00 scale or a 3.00 GPA on the last 60 hours.
4. Achieved a minimum 3.00 GPA on any previous graduate courses completed at either Arkansas State University or another accredited university.
5. Submitted official transcripts from each college or university as requested by the Graduate School. Official transcripts must be submitted directly from the registrar of other institutions to the office of the Graduate School at Arkansas State University.

CONDITIONAL ADMISSION STATUS

An applicant who fails to meet the GPA requirements for Unconditional Admission Status, who lacks the appropriate undergraduate background for a particular degree program, or whose baccalaureate degree is from an unaccredited institution, may be granted Conditional Admission Status after

1. Submission of a completed application for admission and the designated nonrefundable application fee to the office of the Graduate School.
2. Submitted official transcripts from each college or university as requested by the Graduate School. Official transcripts must be submitted directly from the registrar of other institutions to the office of the Graduate School at Arkansas State University.
3. Achieving a minimum cumulative undergraduate grade point average of 2.50 on a 4.00 scale or a 2.75 GPA on the last 60 hours for admission into a graduate program or for admission as a non-degree student (see "Admission as a Graduate Non-degree Student").

ACADEMIC RECORDS PRIVACY RIGHTS

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.

TYPES OF ADMISSION

Applicants may be admitted to the Graduate School as either Degree-seeking students or Non-degree students. The Graduate Degree-seeking student classification is for those who wish to pursue a specific graduate degree program. The Graduate Non-degree student classification is for those who wish to enroll in graduate courses but who do not wish to pursue any graduate degree at the university.

ADMISSION TO A DEGREE PROGRAM

In addition to being admitted to the Graduate School, an applicant for admission to a doctoral, specialist, or master degree program also must meet departmental and/or program requirements. Applicants to a degree program must hold a baccalaureate or higher degree from an accredited four-year institution with the appropriate undergraduate background in the field

of the proposed academic emphasis. Additional requirements and materials for admission to particular degree programs are found elsewhere in the Bulletin or online at <http://www.astate.edu/graduate>. Be sure to check the section related to the college that houses the program in which you are interested.

Degree-seeking students must have submitted all additional application materials for the particular degree program and must have been accepted into the program by the appropriate department selection committee and the dean of the Graduate School. See Admission Requirements for the particular degree program elsewhere in this Bulletin or online at <http://www.astate.edu/graduate>.

ADMISSION AS A GRADUATE NON-DEGREE STUDENT

This option is for those seeking personal development, those fulfilling professional renewal requirements, those returning for educational workshops, and transient students. Students who have been admitted to another accredited graduate school and wish to take courses for transfer may establish Non-degree status by submitting an application for admission and a graduate transcript indicating good standing from the other institution.

Non-degree students may take an undergraduate and/or graduate course for which they qualify, with concurrence of the department offering the course. Departments, however, may restrict non-degree students from enrolling in designated courses. Departments also may require that non-degree students must consult with an adviser from the department before enrolling in any classes. Former or currently-enrolled non-degree students who want to apply for admission to a degree program must meet all requirements of that program.

Admission as a non-degree student does not imply that the student meets either Unconditional Status or graduate degree program admission requirements. Graduate credit earned as a nondegree student may be applied to a degree program only with approval of the appropriate department chair and the graduate dean. No more than 12 hours earned in non-degree status and no courses with a grade lower than "B" may be applied to a graduate degree. Nondegree admission does not entitle the student to enroll in the 7000 or 8000 level courses. Exceptions may be made for those holding an appropriate master's degree in a relevant field as accepted by the Department of Educational Leadership, Curriculum, and Special Education. Enrollment in 7000-level courses with COUN and PSY prefixes requires admission to the Ed.S. in Psychology and Counseling, unconditional admission to another university's accredited post-master degree program with a major in psychology or counseling, or (with permission) admission to the Ed.S. in Educational Administration, the Specialist in Community College Teaching Program, or the Ed.D. in Educational Leadership. Enrollment in 8000-level courses is restricted to those who have been admitted to pursue the doctoral degrees.

ADMISSION AS AN UNDERGRADUATE INTO THE ACCELERATED MASTERS PROGRAM

The Accelerated Master's degree option provides a transition that enables outstanding Arkansas State University undergraduate students to begin taking graduate course work in their junior or senior year and thus combine components of the undergraduate and graduate curriculum. Students admitted into an approved Accelerated Masters Degree Program may have a limited number of graduate level courses counted toward both the undergraduate and graduate degree. Students must apply and be admitted to the accelerated master's program by the department and the Graduate School before enrolling for any courses to apply to the graduate degree. Graduate programs at Arkansas State University offering an accelerated option are listed:

- Agriculture (MSA) - All Concentrations
- Chemistry (MS)
- Computer Science (MS)
- Special Education-Instructional Specialist Grades P-4 (MSE)
- Special Education-Instructional Specialist Grades 4-12 (MSE)

Depending on the program, up to 12 hours of graduate credits will apply toward completion

of the undergraduate degree requirements. Under the Accelerated Master's degree option, a student will be fully admitted to the Graduate School upon completion of the baccalaureate degree. This dual counting of a course for both undergraduate and graduate credit will only occur after the student completes the baccalaureate degree. Only courses with grades B or better will be eligible to count toward graduate credit. Undergraduate students interested in the Accelerated Master's opportunity should contact their department or the Graduate School for admission information.

ADMISSION AS A SENIOR TO ENROLL IN GRADUATE COURSES

Seniors at Arkansas State University may register for graduate credit if they meet all of the following criteria:

- Must be within 12 semester hours of completion of the bachelor's degree at ASU in the semester in which the dual enrollment is to occur.
- Met the GPA requirements for unconditional admission to the Graduate School.
- Obtain approval of the faculty advisor, the course professor and the graduate dean.

Seniors may then enroll in a maximum of 12 hours of graduate work, provided the total undergraduate and graduate hours do not exceed 15 semester hours. A course used toward an undergraduate degree cannot be counted or used later for graduate credit, except in the case of enrollment in an approved Accelerated Masters Program. Students will receive graduate credit only if the requirements for the bachelor's degree have been met by the end of the term and all requirements for admission to the Graduate School are met.

Enrollment under these conditions is limited to one term. Graduate tuition will be charged for all graduate courses.

Other exceptional undergraduate students who have attained senior status but are not in their last 12 hours and who wish to enroll in graduate school will be considered on a case-by-case basis.

ADMISSION OF STUDENTS FROM OTHER INSTITUTIONS

Graduate students transferring to Arkansas State University from other institutions must be in good standing with the institution from which they seek to transfer, must have a "B" average in all graduate work completed, and must meet Arkansas State University's criteria for admission to graduate study. For admission to a particular degree program, transferring graduate students must meet the established criteria of the degree program.

ADMISSION OF INTERNATIONAL STUDENTS

The Graduate School admits graduates of foreign colleges and universities and citizens of foreign countries if they can provide appropriate evidence of proficiency in the use of the English language, establish academic eligibility for admission, and provide certification by reputable financial institutions (acceptable to Arkansas State University) stating that financial resources are available to support the individuals during the stay in the United States. Coursework completed at foreign institutions is not normally accepted for graduate transfer credit. International student applicants must demonstrate a satisfactory level of proficiency in the English language if English is not their native language. Citizens of the British Isles, the English speaking portions of Canada and the West Indies, Australia, and New Zealand are considered to have native ability in English. Applicants whose native language is not English but who have completed four-year bachelor's degree programs at accredited institutions in the United States or in any of the above mentioned countries will be considered proficient in English. For applicants whose native language is not English and who do not have bachelor's degrees from accredited institutions in the United States or the above mentioned countries, proficiency in English may be demonstrated by submitting scores of 550 on the paper-based, 213 or higher on the computer-based, 79 on the internet-based Test of English as a Foreign Language (TOEFL); or a score of 6 on the International English Language Testing System (IELTS) exam.

The academic requirements for admission of international students are as follows:

1. The academic preparation of applicants must be the equivalent of a four year bachelor's degree from an accredited institution of the United States.
2. The records of previous studies must reveal appropriate standards of academic achievement.
3. Applicants must meet all Graduate School and all program admission requirements.

Admission processing of all international students is done through the Office of International Programs. They may be reached by e-mail (oiip@astate.edu), by phone at (870) 972-2329, by fax at (870) 972-3288, or by letter at International Programs P.O. Box 2230 State University, AR 72467, USA

ADMISSION TO THE MASTER'S DEGREE PROGRAMS

Applicants to the master's degree programs must hold a baccalaureate degree from an accredited four-year institution with the appropriate undergraduate background in the field of proposed academic emphasis. Applicants must submit the following to the Graduate School:

1. A completed application for admission. Applications should be submitted at least six weeks before the registration date of the term which the applicants plan to attend.
2. A \$30 nonrefundable application fee. Checks must be made payable to Arkansas State University. If applications are received without payment, the Graduate School will hold all application materials and notify the applicants that no action will be taken until payment is received.
3. One copy of official transcripts of all previous undergraduate and graduate course work attempted to be sent directly from the institution(s) previously attended.

Admission test scores are required for admission into certain master's degree programs. Consult the appropriate program section of this Bulletin or online at <http://www.astate.edu/graduate> to determine if the Graduate Record Examination, Miller Analogies Test, or Graduate Management Admission Test is required in the proposed program of academic emphasis.

SECOND MASTER'S DEGREE POLICY

In individual cases, when permitted by the program and upon the recommendation of the adviser, credits earned at Arkansas State University for one master's degree may, if appropriate to another degree plan, be applied toward the requirements for a second master's degree. No more than one-half of the total hours for the second degree may come from a previous degree program and credits applied under this policy must have been earned within the six year limit for completion of the second degree.

ADMISSION TO THE SPECIALIST DEGREE PROGRAMS

Applicants to the Specialist in Community College Teaching and the Specialist in Education degree program in Educational Leadership must hold an earned master's degree from an accredited institution. Applicants to the Specialist in Education in Psychology and Counseling must hold either an earned bachelor's or an earned master's degree from an accredited institution. Applicants must submit the following to the Graduate School:

1. A completed application for admission. Applicants are encouraged to submit the application before May 1 to be eligible for the following summer; before August 1 to be eligible to enter the following fall semester; and before December 1 to be eligible to enter the following spring semester.
2. A \$30 nonrefundable application fee. Checks must be made payable to Arkansas State

University. If applications are received without payment, the Graduate School will hold all application materials and notify the applicants that no action will be taken until payment is received.

3. One copy of official transcripts of all previous undergraduate and graduate course work attempted to be sent directly from the institution(s) previously attended.
4. Official report of a score, obtained within the last five years, on the Graduate Record Examination (Ed.S. in Psychology and Counseling only). The SCCT program will accept either the Graduate Record Examination or the Miller Analogies Test.
5. Please see program sections under the College of Education portion of this Bulletin for specific requirements or online at <http://www.astate.edu/education>.

ADMISSION TO THE ED.D. IN EDUCATIONAL LEADERSHIP DEGREE PROGRAM

Applicants to the Doctor of Education Degree program must hold an earned master's degree from an accredited institution and provide evidence of having sustained a superior level of scholarship during master's and post-master's level graduate work. Applicants must submit the following to the Graduate School:

1. A completed application for admission. Applicants are encouraged to submit the application no later than March 1 for the fall semester. Screening for admission will begin on March 1. Application forms are available from the Graduate School or from the Center for Excellence in Education.
2. A \$50 nonrefundable application fee. Checks must be made payable to Arkansas State University. If applications are received without payment, the Graduate School will hold all application materials and notify the applicants that no action will be taken until payment is received. International students may utilize a check or an International Postal Money Order to remit payment in U.S. currency.
3. One copy of official transcripts of all previous undergraduate and graduate course work attempted to be sent directly from the institution(s) previously attended. (The Graduate School will compute the graduate GPA by counting all graduate courses completed, including any repeated courses.)
4. At least four letters of recommendation, two from former professors and two from former or current employers. These letters will be reviewed by the doctoral faculty. An interview may be required. Both recommendation by the doctoral faculty and approval by the dean of the Graduate School are required for admission to the doctoral program.
5. Acceptable scores on the verbal, quantitative, and analytical sections of the Graduate Record Examination, or on the Miller Analogies Test.

ADMISSION TO GRADUATE PROGRAM IN ENVIRONMENTAL SCIENCES

Applicants to the Graduate Program Environmental Sciences Program must hold a baccalaureate or master's degree (BA, BS, MA or MS) from an accredited institution in a relevant field of study. Students should apply to either the PhD or MS program. For both programs, applicants must submit the following to the Graduate School:

1. A completed application for admission to the Graduate Program in Environmental Sciences. Applicants are encouraged to submit the application no later than January 15 for the fall semester and August 15 for the spring semester. Forms are available from the Graduate School.
2. A \$30 nonrefundable application fee for MS program, \$50 nonrefundable application fee for Ph.D. program. Checks must be made payable to Arkansas State University.

If applications are received without payment, the Graduate School will hold all application materials and notify the applicants that no action will be taken until payment is received. International students may utilize a check or an International Postal Money Order to remit payment in U.S. currency.

3. One copy of official transcripts of all previous undergraduate and graduate course work attempted, to be sent directly from the institution(s) previously attended. The Graduate School will compute the graduate GPA by counting all graduate courses completed, including any repeated courses.

Applicants to the Graduate Program in Environmental Sciences must possess a baccalaureate degree from an accredited four-year institution and meet the admission requirements of the Graduate School. Applicants should be aware that the breadth of the course work in this program demands that students have a basic background in several disciplines. Preparatory courses for this program may include:

- Mathematics: Calculus I as well as an applied statistics course or second semester Calculus course.
- Chemistry: A first and second semester chemistry course sequence.
- Biology: A first and second semester biology course sequence.
- Earth Science: A first and second semester earth science course sequence.
- Economics: An introductory level economics course.
- Political Science: American government, United States history or world history.

Students should contact the Program Director for details regarding course requirements for specific focus areas within the program. Students lacking the appropriate courses for their chosen focus area can be admitted into the program but may be required to complete preparatory course work before enrolling in specific graduate core courses. Applicants are also expected to have a working knowledge of computer systems and software. In some cases, the Environmental Sciences Graduate Program Committee may agree to substitute equivalent, documented work experience in the environmental field for specific courses and, in rare cases, other criteria for admission. Contact the Program Director for questions in these matters.

4. Three letters of recommendation to be reviewed by the Environmental Sciences Graduate Program Committee. Note that both recommendation by the Environmental Sciences Graduate Program Committee and approval by the Dean of the Graduate School are required for admission to the program.
5. Scores from the Graduate Record Examination showing a combined score of 1000 on the verbal and quantitative sections of the exam.
6. International student applicants must demonstrate a satisfactory level of proficiency in the English language if English is not their native language.
7. Statement of Purpose. In essay form, state your reasons for undertaking graduate study in the Environmental Sciences. Please describe your qualifications for the academic program to which you are applying and your objectives in undertaking this program. Applicants to the doctoral program should clearly outline their research interests. We are interested in how the applicant's interests would complement those research interests of the faculty. Applicants to master's program should discuss their plans for their academic and professional career and how the Graduate Program in Environmental Sciences will help them attain their goals.
8. Resume (C.V.) List all colleges and universities attended, major extracurricular activities and employment, detailing particularly those relevant to your proposed field of study; any honors or prizes awarded; and publications and research projects with

which you have been associated.

ADMISSION TO THE PH.D. IN HERITAGE STUDIES DEGREE PROGRAM

Applicants to the Ph.D. in Heritage Studies must hold a baccalaureate or master's degree from an accredited institution. Preferred applicants will have a master's degree in a related discipline such as archeology, anthropology, English literature (American regional/ethnic focus), folklore, geography, history, museum studies, political science, public administration, or sociology. Applicants admitted to the program will be required to complete a minimum of 18 hours of graduate work before they will be allowed to take 7000 level courses. Only in rare cases will applicants be admitted who have not completed an appropriate master's degree before they begin their doctoral studies. Applicants will be admitted to the program based on the following criteria.

1. A letter explaining interest in Heritage Studies and personal career goals.
2. Undergraduate and graduate GPA
3. Three (3) letters of reference
4. Interview with Heritage Studies' Admissions Committee (may be required).
5. Example of research and writing on a scholarly topic
6. Interview with the director or associate director of the Ph.D. program

Applicants must submit the following to the Graduate School.

1. A completed application for admission to the Ph.D. in Heritage Studies program. Applicants are encouraged to submit the application no later than January 15. Review of applications will begin January 15 for the fall semester.
2. A \$50 nonrefundable application fee. Checks must be made payable to Arkansas State University. If applications are received without payment, the Graduate School will hold all application materials and notify the applicants that no action will be taken until payment is received. International students may utilize a check or an International Postal Money Order to remit payment in U.S. currency.
3. One copy of official transcripts of all previous undergraduate and graduate course work attempted, to be sent directly from the institution(s) previously attended. The Graduate School will compute the graduate GPA by counting all graduate courses completed, including any repeated courses. Transcripts should reflect a strong background in social sciences and humanities. Applicants who are lacking this background who are otherwise exemplary may be granted provisional admission and required to make up these deficiencies. Such course credits may not be applied toward fulfillment of doctoral requirements.
4. Letter explaining applicant's career goals and knowledge of and interest in Heritage Studies.
5. Three (3) letters of reference from former professors or professional supervisors.
6. International student applicants must demonstrate a satisfactory level of proficiency in the English language if English is not their native language.

ADMISSION TO THE PH.D. IN MOLECULAR BIOSCIENCES DEGREE PROGRAM

Applicants to the Ph.D. in Molecular Biosciences Program must have a minimum of a B.S. in a basic or applied science, although preference may be given to M.S. level applicants. Applicants must submit the following to the Graduate School by February 15 for consideration for Fall admission:

1. A completed application for admission to the ASU Graduate School (or to the Office

of International Programs for international students). Forms are available directly from the Graduate School and Office of International Programs.

2. One copy of official transcripts of all previous undergraduate and graduate course work attempted, to be sent directly from the institution(s) previously attended. The Graduate School will compute the graduate GPA by counting all graduate courses completed, including any repeated courses.
3. Three letters of recommendation, to be reviewed by both the Dean of the Graduate School and the Molecular Biosciences Program Committee.
4. A personal statement (maximum of two pages) describing the student's academic and research goals. Applicants are encouraged to identify areas of research interest as well as possible research mentors within the faculty of the Molecular Biosciences Program.
5. Graduate Record Examination (GRE) scores for the Verbal, Analytical and Quantitative tests. The minimum combined Verbal and Quantitative scores must be 1000. Although not required, scores from an advanced test related to Molecular Biosciences may increase a candidate's chance for admission.
6. A \$50 nonrefundable application fee. Checks must be made payable to Arkansas State University. If applications are received without payment, the Graduate School will hold all materials and notify the applicants that no action will be taken until payment is received. International students may use a check or an International Postal Money Order to remit payment in U.S. currency.
7. International student applicants must demonstrate a satisfactory level of proficiency in the English language if English is not their native language.

ACADEMIC POLICIES AND PROCEDURES

GRADUATE COURSES AND CREDIT

Graduate credit will be given only for courses described in this bulletin under the heading Graduate Course Descriptions. Master's degree candidates must complete a minimum of 18 semester hours in courses numbered at the 6000 level. For master's degrees requiring more than 30 hours, at least 50 percent of the credit hours must be completed at the 6000 level. A course completed at the 4000 level for undergraduate credit cannot be taken again at the 5000 level for graduate credit. No more than three semester hours of credit earned through independent study may be applied toward a graduate degree.

Graduate students enrolled in courses numbered 5000 through 5999 must do special work in addition to that required of undergraduates in the courses numbered 4000 through 4999. A masters degree program traditionally consists of courses numbered 5000 and 6000. Courses numbered 7000 and above are normally reserved for specialist and doctoral programs. Check the particular degree program section for program specific restrictions or deviations.

SPECIAL STUDIES COURSES

Special courses of study may, upon request, be organized in any college at any level of study to meet the needs of interested groups. The second digit of the course numbers for such courses, which must be approved through normal university curriculum channels, will always be 9. 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.

AUDITING COURSES

All students auditing a course will pay the regular course audit fee as shown under the heading Fees and Expenses. No credit will be awarded for courses audited. Audited courses Will be counted as part of the stated maximum load for a semester or term. Only those persons who have been admitted to the Graduate School are eligible to audit a graduate course.

Auditors are expected to meet all requirements for a course other than taking examinations and completing formal written papers. The names of those persons registered to audit a course will appear on the class roster, and at the end of the enrollment period the professor will determine whether the audit designation AU should be entered on the student's permanent record. Permission of professor is required for audit.

ATTENDANCE POLICY

There is no formal attendance policy for graduate level courses as class attendance is a critical component of learning and students are expected to attend and participate fully in all scheduled class meetings and activities. Any attendance policy is established by the faculty of record for a given class. Students who do not attend traditional classes or participate in online courses during the first eleven class days of a fall or spring semester, or the first five class days of a five week term, will be assigned a grade of WN – with drawal for non-attendance, and are withdrawn from the class. The WN grade does not impact GPA calculation. Students who initiate attendance but discontinue attendance or completion of assignments without officially dropping a class are assigned a grade of FN – failure for non-attendance. The FN grade is equivalent to a grade of F for calculating GPA and academic standing.

Academic standing, not attendance, determines whether or not the student is eligible for continued enrollment (see probation, suspension and readmission of suspended students).

TRANSFER CREDIT

Subject to the approval of the student's adviser and the graduate dean, a student who has a "B" grade average or above in graduate work from another approved institution may be permitted to transfer a maximum of nine semester hours of credit. Only work with "B" or better grades earned at an accredited graduate school and acceptable toward a graduate degree at that institution will be considered for transfer. No correspon-

dence courses may be transferred.

GRADING SYSTEM

The letters, A, B, C, P, F, FN, I, IP, and CR, NC are used in grading, indicating the following qualities:

A	Excellent
B	Good
C	Fair
P	Pass
F	Failure
FN	Failure for Non Attendance
I	Incomplete
IP	In Progress (Thesis and Dissertation only)
CR	Credit Awarded for completed thesis/dissertation
NC	No Credit awarded for thesis/dissertation work

For the purpose of computing cumulative and collective grade averages, grade points are assigned as follows:

A	4
B	3
C	2
F, FN	0

Students' grade point averages are computed by multiplying the number of hours credit of each grade by the grade points assigned to that grade and dividing the sum of these several products by the total number of hours in which the students were enrolled. Grades of P, CR, and NC are not assigned grade points, and hours associated with these grades are not used in computing grade point averages.

An incomplete grade not removed within one semester unless extenuating circumstances are provided in writing to the Graduate School, will be recorded as "F."

No grade below "C" will be accepted for graduate credit.

NOTE: Any "Grade Change Report" form will be accepted only if submitted prior to the close of the semester immediately following the one in which the original grade was recorded. However, the "WN" grade may not be appealed.

ELIGIBILITY FOR DEGREE

A cumulative graduate GPA of 3.00 or higher on all coursework used toward the graduate degree is required and a cumulative graduate GPA of 3.00 or higher on all coursework taken from the academic college of the graduate degree sought is required before a graduate degree can be awarded.

PROBATION

Any graduate student whose cumulative GPA on all courses taken for graduate credit falls below 3.00 will be placed on probation. Students may be removed from probation by raising their cumulative GPA to 3.00 or better. Failure to make a grade of "B" or better in each

course taken while on probation will result in suspension from further graduate work if the student's cumulative GPA continues below 3.00. A graduate student on probation may not hold an assistantship and is not eligible for candidacy or graduation.

SUSPENSION

Any graduate student who receives a grade of "F" in any graduate-level course will be ineligible to register for further graduate work. A grade of "I" will be converted to "F" if it is not removed before the last day to withdraw during the next semester in which the student is enrolled at the university or within one calendar year if the student does not enroll.

READMISSION OF SUSPENDED STUDENTS

After one regular semester or full summer in suspended status, students may be readmitted on probation, but only upon recommendation of their adviser and department chair and with the approval of the dean of the Graduate School. Readmission to Graduate School does not imply readmission to a particular degree program. The student must reapply to the program.

DROPPING INDIVIDUAL COURSES (OTHER THAN ONLY ENROLLED COURSE)

The final date for dropping individual courses is the last day of the 10th week of classes in a semester, the 38th class day in a ten-week term (class that spans two five-week terms), the 26th class day in an eight-week term, the 17th class day in a five-week term, the 10th class day in a three-week term, and the sixth class day in a two-week term.

Students who drop individual courses will receive a grade of W in the courses. Students enrolled in only one course cannot drop that course, rather they must withdraw from the university.

WITHDRAWAL FROM THE UNIVERSITY (INCLUDING DROPPING ONLY ENROLLED COURSE)

Students withdrawing from the university during a session must obtain a withdrawal card from Advisement Services. Approval must be secured from the individuals and offices listed on the withdrawal card. This process must be completed two business days prior to the beginning of the final examination period in order to have the official date of withdrawal recorded on the permanent record. Grades earned in courses completed prior to official withdrawal from the university (i.e., short courses) will not be affected by that withdrawal.

Students who cease to attend classes without processing an official withdrawal automatically receive an F in all courses in which they were enrolled.

GRADUATE STUDENT LOAD

The load of full-time graduate students may not exceed 15 semester hours, including any undergraduate courses, per regular semester or the full summer term (which includes May and August interim) without special overload permission. The total academic load resulting from concurrent enrollments at Arkansas State University and other institutions shall not exceed the maximum loads stated above. Nine graduate hours or more for Fall and Spring terms are considered full-time; six hours or more cumulative over all summer terms are considered full-time.

GRADUATE ASSISTANT LOAD

Master and Specialist level graduate assistants must complete a minimum of six hours of graduate credit during a regular semester and will not be permitted to enroll for more than 12 hours of credit including both graduate and undergraduate courses. Students enrolling for fewer than six hours of graduate credit in a regular semester are not eligible to hold a graduate assistantship. Graduate assistants will be permitted to enroll in a maximum of seven semester hours at the graduate level in a five-week summer term. They must complete at least three semester hours at the graduate level in the combined summer terms if they hold an assistantship during any summer term. All Doctoral level graduate assistants are required to take a minimum of nine credit hours during the regular semester and three credit hours during each summer term an assistantship is held.

GRADUATE ASSISTANTSHIPS

Graduate assistantships are available to a limited number of qualified applicants in all departments offering graduate degrees. Assistantships are available for both regular semesters and summer school. Application for an assistantship must be made through the chair of the department in which the student wishes to major. No application for assistantship will be considered unless the applicant has also applied for admission to the Graduate School.

A graduate assistantship carries with it a waiver of out-of-state tuition. Doctoral graduate assistantship carries a tuition scholarship covering the cost of tuition.

To be awarded an assistantship, a graduate student must have been admitted to a graduate degree program at Arkansas State.

A graduate student whose GPA drops below 3.00 is placed on probation and is not eligible to hold a graduate assistantship.

The master and specialist level assistantship will have a maximum time limit of five semesters. An exception is made for students admitted based on a bachelor's degree rather than a master's degree to the Ed.S. in Psychology and Counseling; these students will have a maximum time limit of eight semesters. Ed.D. and Ph.D. assistantships will have a maximum time limit of eight semesters.

GRADUATE SCHOOL APPEALS AND GRIEVANCE PROCESSES

Graduate student appeals and grievance processes are outlined in the ASU Student Handbook available in the Office of Student Affairs. All grievances should first be taken to the student's graduate adviser, who will inform the student of the correct procedures to follow. Following proper channels for appeals and grievances is essential to obtain a timely and efficient resolution.

APPLICATION FOR THE DEGREE

All candidates are required to submit an intent to graduate notification for the degree and pay the graduation fee at the time they enroll for the final registration period before completing all requirements for the degree, except that students who expect to complete the requirements for the degree during the second summer term must submit an intent not later than the registration date for the first summer term. A new intent to graduate notification must be submitted if the degree is not completed in the term within which the original application was filed. Acceptance of candidates' intentions will be determined by the students' advisers and the graduate dean.

GRADUATE SCHOOL MASTER'S DEGREE POLICIES

GENERAL REQUIREMENTS

The program of study must include a minimum of 30 semester hours of graduate coursework and in the case of the Master of Arts, Master of Music Education, Master of Science, Master of Science in Agriculture and a Master of Science in Education in secondary teaching fields must include at least 21 semester hours in the major. (See major department section for specific degree requirements.)

TRANSFER CREDIT

Subject to the approval of the students' advisers and the graduate dean, master's students who have a "B" grade average or above in graduate work from another approved institution may be permitted to transfer a maximum of nine semester hours of credit. Only work with "B" or better grades earned at an accredited graduate school and acceptable toward a graduate degree at that institution will be considered for transfer.

COMPREHENSIVE EXAMINATION

All candidates for master's degrees are required to take a comprehensive examination over their program of study. The comprehensive examination may be written or oral or both, or may involve a practicum or internship experience as determined by the department in which the major is earned. An examination period is scheduled by each department during each full semester (Fall and Spring) and once in the Summer. The date of the examination is announced during the second week of the session by each department in writing to all enrolled students and to all previously enrolled students who have requested notification.

Master's candidates may choose to take the comprehensive examination during any enrollment period at the departmentally scheduled time. Students must notify the department chair of the intent to sit for the examination at least two weeks prior to the scheduled test date.

Students must pass the examination within the six-year time limit for completion of degree requirements. The language requirement or other research tool must have been fulfilled before completing the comprehensive examination for those degree programs having a language requirement or other research tool. Prior to a deadline established by the Graduate School for each enrollment period, the Graduate School must be notified in writing when students have passed or failed the examination. Students failing the examination may repeat it at a time approved by the comprehensive examination committee but no earlier than the next scheduled period.

Before taking the examination again, students should consult with the committee which may require the completion of additional coursework or other additional study.

Students who fail the comprehensive examination the second time will be dropped from eligibility for the degree.

THESIS

A thesis is required for the Master of Arts in Art and the Master of Science in Biology. A thesis is optional in other master's degree programs. Where required or elected, the thesis will carry six hours of credit. Credit is awarded only upon completion and approval of the thesis. The student must be enrolled for Thesis the semester the thesis is completed and approved by committee, even if all required thesis-credit hours have already been met. No letter grade is given. An oral examination over the thesis is required.

The thesis must demonstrate the student's capacity for creative expression, research, ability to organize and interpret data, and ability to report research in an acceptable style. The thesis subject is approved by the major professor and by the student's thesis committee no later than the close of the semester preceding that in which the student is planning to complete degree requirements. If degree completion is planned for a summer session, the thesis subject must be approved no later than 60 days after the first day of classes in the spring semester. The thesis shall be in the form prescribed by the Graduate School as presented in the Guide for Writers of Dissertations and Theses, available in the Graduate School.

The acceptance of the thesis, including its defense, lies with the student's thesis com-

mittee. The thesis must be in the hands of the major professor at least four weeks before the commencement date. The original, with the Thesis Defense Form signed by all thesis committee members, must be turned in to the Graduate School by the deadline listed in this Graduate Bulletin. The completed thesis will be submitted online through Proquest according to the Thesis/Dissertation guide located on the Graduate School website. The student is required to purchase four copies of their thesis for: Library, Graduate School, their advisor and their department.

THESIS COMMITTEE

The department chair and college dean, upon recommendation of the major professor, will appoint the student's thesis committee. This committee will consist of the major professor as chair, two additional graduate faculty members representing areas of the student's major, and others as deemed appropriate. The Thesis Committee Appointment form should be completed and submitted to the Graduate School for approval by the graduate dean.

APPROVAL OF THESIS RESEARCH BY THE IRB

Under federal regulation, all institutions receiving funds from any of 16 federal agencies, including USDA, NASA, NSF, EPA, Department of Education, and NIH, are required to establish institutional review boards to monitor all funded research involving humans. Human research is defined as any systematic activity involving the collection and/or analysis of data on human subjects for the purpose of advancing generalizable knowledge, unless this activity is specifically exempted by current federal regulations. It is the policy of this university to apply the regulations to all research and research related activities, funded or not, which involve humans. Thesis research involving human subjects is included.

Copies of the Arkansas State University Institutional Review Board Information Packet are available in the Office of Research and Technology Transfer.

TIME TO DEGREE

The time allowed for completion of the master's degree is six years, exclusive of time spent in the armed forces of the United States. Graduate work completed prior to six years from the students' date of completion of the degree cannot be used to satisfy degree requirements. Transfer credit taken prior to admission at Arkansas State University will be included in the six year limit.

GRADUATE SCHOOL SPECIALIST DEGREE POLICIES

GENERAL REQUIREMENTS

The Specialist degree programs are sixth-year programs of studies consisting of a minimum of 30 hours beyond the Master's degree. Each candidate's program will be planned during the initial enrollment period with the advisory committee to ensure that professional requirements are met.

TRANSFER CREDIT

Subject to the approval of the students' advisers, the Departmental Committee on Admissions, and the graduate dean, specialist students who have a "B" grade average or above in graduate work from another approved institution may be permitted to transfer a maximum of nine semester hours of credit. Requests for work to be taken at another institution for transfer must have the advanced approval of the students' advisers, committee on admissions, and the graduate dean. Only work with "B" or better grades earned at an accredited graduate school and acceptable toward a graduate degree at that institution will be considered for transfer.

SELECTIVE RETENTION

Admission to a specialist degree program, admission to candidacy for the degree, and final awarding of the degree may be denied for unsatisfactory scholarship, or on the grounds of unsatisfactory mental, moral, or emotional attributes. An overall grade point average of 3.00 will be required for the specialist degrees.

COMPREHENSIVE EXAMINATION

All candidates for specialist degrees are required to take a comprehensive examination over their program of study. The comprehensive examination may be written or oral or both as determined by the department in which the major is earned. An examination period is scheduled by each department during each enrollment period. The date of the examination is announced during the second week of the session by each department in writing to all enrolled students and to all previously enrolled students who have requested notification.

Specialist candidates may choose to take the comprehensive examination during any enrollment period at the departmentally scheduled time. Students must notify the department chair of the intent to sit for the examination at least two weeks prior to the scheduled test date. Students must pass the examination within the six year time limit for completion of degree requirements. Students will not be permitted to take the comprehensive examination unless a "B" average has been earned on all graduate work completed.

The examination shall be prepared and graded by the comprehensive examination committee selected from the faculty by the chair of the major department and the dean of the college with the approval of the graduate dean. Prior to a deadline established by the Graduate School for each enrollment period, the Graduate School must be notified in writing when students have passed or failed the examination. Students failing the examination may repeat it at a time approved by the comprehensive examination committee but no earlier than the next scheduled period. Before taking the examination again, students should consult with the committee which may require the completion of additional coursework or other additional study.

Students who fail the comprehensive examination the second time will be dropped from candidacy for the degree.

TIME TO DEGREE

The time allowed for completion of the specialist degree is six years, exclusive of time spent in the armed forces of the United States. Graduate work completed prior to six years from the students' date of completion of the degree cannot be used to satisfy degree requirements. Transfer credit taken prior to admission at Arkansas State University will be included in the six year limit.

GRADUATE SCHOOL DOCTORAL DEGREE POLICIES

DOCTOR OF EDUCATION PROGRAM

Applicants for admission to the Doctor of Education degree program must be in good standing in the graduate school of an accredited institution.

Admission to the Graduate School does not imply admission to the Doctor of Education degree. Students desiring to pursue graduate work for which they have not completed the prerequisites will be required to make up deficiencies. Specific program requirements and details are outlined under the Center for Excellence in Education (CEE) section of this bulletin and on the following pages.

GENERAL REQUIREMENTS FOR THE DEGREE

Candidates must earn a minimum of 99 hours of graduate credit beyond the bachelor's degree. This quantitative requirement is a minimum, as the quantity of coursework to be completed by each candidate is arranged individually by the advisory committee, subject to the approval of the graduate dean, and may be modified both as to quantity and as to type during the progress of the student's coursework.

ADVISORY COMMITTEES

Advisory committees will consist of no fewer than five members. Three members who possess expertise in students' major areas of concentration will be selected by students in consultation with the director of graduate studies in the Center for Excellence in Education. Two will be appointed, one by the dean of the Graduate School and one by the dean of the College of Education in consultation with students and the director of doctoral graduate studies. The education dean's appointee will possess expertise in professional education and will represent the interests of the faculty of the College of Education. The graduate dean's appointee, representing the university faculty at large, will be chosen from graduate faculty outside the field of professional education, but from a field related to the student's research interest. These names will be forwarded to the graduate dean for official appointment. No committee is considered constituted without the final written approval of the dean of the Graduate School.

Membership of advisory committees may be changed if either the student or a member of their committee feels that such a change is appropriate, and the requested change is approved by the Director of the Center for Excellence in Education and the graduate dean. Such a change will not be approved except in clearly unusual circumstances. If approval is given, the student will be notified in writing by the Graduate School.

DEGREE PLAN

As the successful completion of 12 semester hours approaches, students should file a degree plan listing all courses completed and to be completed. This plan must be approved by the advisory committee and submitted to the graduate dean for approval. The dean will notify the applicant after the degree plan has been approved. Students will not be permitted to register for more than a cumulative total of 12 semester hours before an approved degree plan is on file in the Graduate School.

TRANSFER CREDIT

The Ed.D. Program consists of a minimum of 99 credits beyond the bachelor's degree. Students who have not completed the master's degree will be encouraged to do so prior to pursuing admission to the doctorate. Although all appropriate graduate credits from master's and beyond will be transferred to the Ed.D., all students must complete the doctoral block and dissertation which total 45 credits plus the necessary prerequisites. Students enrolled in the Ed.D. program who receive six hours with a grade of "C" or lower in the Doctoral Knowledge Core will be dismissed from the program. Students will be held responsible for the content of each course placed on the program of study through written examination.

COMPREHENSIVE EXAMINATION STRUCTURE

The comprehensive examination for the Ed.D. has multiple parts; the students must choose three of four options.

1. Individual written exam
2. Cohort project
3. Portfolio or
4. Presentation/publication/grant.

Prior to committing to the options, students are advised to consult the department handbook and confer with their faculty advisers. Any failed portion may be repeated once but the student may be directed by the program advisory committee to take additional coursework. If the examination or any portion thereof is failed a second time, the student will be dismissed from the program. The re-examination on any portion failed must be successfully passed within the next consecutive full semester.

Failure to pass the comprehensive examination the second time terminates the degree program and the student will be dismissed from the program. Upon successful completion of the examination, the program advisory committee will endorse advancement to candidacy. Students must complete all portions of the comprehensive examination by December 31 following the last semester in which the student completes the block.

ADMISSION TO CANDIDACY

Students may apply for admission to candidacy upon satisfactory completion of the comprehensive examination. Students may not apply for candidacy while on probation or with a GPA of less than 3.00.

CONTINUOUS ENROLLMENT

Doctoral students must maintain continuous enrollment subsequent to passing the comprehensive examination. Students maintaining continuous enrollment must register for a minimum of one hour of dissertation during each regular semester, including at least one summer term each year, until the dissertation has been accepted by the graduate dean. Doctoral students who are granted an extension to complete the dissertation beyond the allocated four year period of time must enroll in six credit hours for each consecutive semester (Fall, Spring, Summer I or II) until the completion or termination of doctoral status.

TIME TO DEGREE

All requirements for the doctoral degree must be completed within a period of four (4) years from the last semester in which the student completes the block courses. A student who has not completed the dissertation four years from the last semester in which the student completed the block courses has two options to extend the time to degree. Time limits are strictly monitored. Students exceeding the time limit may be required to repeat the comprehensive examination, replace out-of-date credits with up-to-date work, and/or show other evidence of being current in their major and minor fields. Students anticipating that they will exceed the time limit should apply for an extension.

Holding a full-time job is not in itself considered sufficient grounds for requesting an extension. Time spent in obligated military service of the United States will not be considered in computing these time limits. However, career members of the armed forces should consult the graduate dean concerning credit given to work completed before entering active service.

The faculty approved the following procedure to operationalize the "Time to Degree" policy:

Students who have not completed the dissertation four years from the last semester in which the student completes the block courses have two options to extend the time to degree.

Doctoral students who have completed a dissertation proposal that has been accepted by the committee prior to the expiration date will be granted a one year extension upon committee approval.

For those individuals who have not had a proposal approved by their committee, a two year extension may be granted contingent upon committee approval with the completion of additional prescribed course work and a retake of the written comprehensive examination.

APPROVAL OF DISSERTATION RESEARCH BY THE IRB

Under federal regulation, all institutions receiving funds from any of 16 federal agencies, including USDA, NASA, NSF, EPA, Department of Education, and NIH, are required to establish institutional review boards to monitor all funded research involving humans. Human research is defined as any systematic activity involving the collection and/or analysis of data on human subjects for the purpose of advancing generalizable knowledge, unless this activity is specifically exempted by current federal regulations. It is the policy of this university to apply the regulations to all research and research related activities which involve humans, funded or not. Dissertation research involving human subjects is included.

Copies of the Arkansas State University Institutional Review Board Information Packet are available in the Office of Research and Technology Transfer.

SEMINAR FOR THE DEFENSE OF THE DISSERTATION PROPOSAL

The dissertation proposal should be distributed to all members of the advisory committee at least one week before the date set for the defense seminar. Enough copies should be made for all members of the doctoral committee and for visitors to the defense seminar. The defense seminar will be open to faculty and to master's and doctoral students. After candidates have successfully defended the proposed problem, it is assumed that they will develop, with the supervision of the advisory committee, this proposed problem into a completed dissertation. The candidates will be notified in writing of their committee's approval.

DISSERTATION DEFENSE

Upon completion of the dissertation, an oral presentation of the dissertation research and results followed by an examination which deals with the dissertation and any other aspect of candidates' programs which the committee designates will be held.

Arrangements for this examination will be made by the CEE, but announced by the Graduate School. This oral examination will be open to the public.

FINAL FORM

The completed dissertation must follow the style and format requirements of the Graduate School as contained in the Guide to Thesis and Dissertations: Preparation and Electronic Submission. It is the responsibility of candidates to assure that the completed dissertation follows this designated form. Before submission to the graduate dean, the completed dissertation must be approved by the entire advisory committee and the CEE Director, as listed in the Guide. At least four copies of the completed dissertation will be submitted by candidates. The bound copies will be on file with the ASU Library, Graduate School, CEE, adviser, and the department. The Center endorses the use of APA as the approved style for formatting the dissertation. Any deviation from APA should be approved by the advisor.

THE ABSTRACT

Candidates will be responsible for the preparation of an abstract of the dissertation which will be submitted at the same time as the completed dissertation or project. The abstract must not exceed 300 words.

DEADLINE FOR SUBMISSION

The completed dissertation and abstract, signed by all members of the advisory committee, must be to Proquest by the deadline set for accepting dissertations. The date for each semester and summer term is given in the Academic Calendar.

Checklist for the Last Semester Before Graduation

1. In the last semester before graduation, candidates must register for the graduation fee.
2. File an Intent to Graduate Form with the relevant deadline.
3. Complete the final oral examination on the dissertation.
4. Submit the dissertation online by the relevant deadline.

DOCTOR OF PHILOSOPHY IN ENVIRONMENTAL SCIENCES PROGRAM

As a reflection of the interdisciplinary nature of the program, a course of study will be tailored to each student's own scholarly interests, research, and proposed career direction. The specific quantity and content of each student's course of study will require approval by the student's Doctoral Advisory Committee. General course requirements are outlined below and in the section of this Bulletin entitled Program of Study for the Ph.D. in Environmental Sciences. Applicants are advised that admission to the Graduate School does not imply admission to the Ph.D. in Environmental Sciences Program.

DOCTORAL ADVISORY COMMITTEES

Each student is expected to identify a doctoral advisory committee chair during the first year of their program of study. The Doctoral Advisory Committee will consist of members of the graduate faculty and other professionals as deemed appropriate and approved by the Environmental Sciences Graduate Program Committee and the Graduate Council. Each committee must have at least five members with at least one member of the natural and social sciences. Committee membership is subject to the approval by the Graduate Program in Environmental Sciences, the Environmental Sciences program director, review by the dean's office, and final approval by the graduate dean. The doctoral advisory committee is to review the student's dissertation proposal and to provide guidance toward the successful completion of the research project.

Students in the program without a designated committee chair during their first semester will be assigned an interim adviser by the Environmental Sciences Graduate Program Committee. The primary role of the interim adviser will be to establish a tentative curriculum for the student pending establishment of the Doctoral Advisory Committee. An interim adviser may serve for a maximum of one year until the student selects a permanent advisory committee chair.

Membership of advisory committees may be changed if either the student or a member of their committee feels that such a change is appropriate and the requested change is approved by the Environmental Sciences Graduate Program Committee and the graduate dean. Such a change will not be approved except in clearly unusual circumstances. If approval is given, the student will be notified in writing by the Graduate School.

A Doctoral Advisory Committee chair must be a member of the graduate faculty and must be approved to direct the research of graduate students by the Graduate Council and the graduate dean.

PROGRAM OF STUDY

A program of study, to be developed by the student in consultation with the Doctoral Advisory Committee, is to be submitted to the Director of the Environmental Sciences Program for approval no later than the end of the second semester after admission to the program. Programs of study may change to meet course requirements and match the student's academic goals, scholarly aspirations and career preparation needs. Each Doctoral Advisory Committee will meet at least once a year to review and provide record of the student's progress.

SATISFACTORY PROGRESS

Students are required to earn a grade of "B" or better in the core courses. A single grade of "C" will be accepted for courses in the focus area. A second instance of a grade of "C" or a single instance of a grade below "C" will be cause for the review of the student's status within the program by the Environmental Sciences Graduate Program Committee. After such review, the Environmental Sciences Graduate Program Committee may recommend the

student enter the Master's of Science program in Environmental Sciences or dismissal of the student from the program.

TIME TO DEGREE

A minimum of six semesters of graduate study beyond the baccalaureate degree is required. All requirements for the degree must be completed within eight calendar years of admission to the program. Requirements subsequent to admission to candidacy must be completed within four calendar years of admission to candidacy. A student exceeding the time limit may be required to repeat the qualifying examination, replace out-of-date credits with up-to-date ones, and/or show other evidence of being current within both the core curriculum and the student's area of specialization. Extension of the eight-year requirement will be granted only if a student has obtained prior approval from his or her Doctoral Advisory Committee, the Environmental Sciences Graduate Program Committee and the Arkansas State University Graduate School.

RESIDENCE REQUIREMENT

One year of full-time residence at Arkansas State University normally will be required. This requirement may be waived under special circumstances if approved by the student's Doctoral Advisory Committee, the Environmental Sciences Graduate Program Committee and the Arkansas State University Graduate School.

QUALIFYING EXAMINATION

These examinations are required by the Program, but take a variety of forms in the case of individual students. The practice requirement is determined by the student's choice of specialty area and the student's advisory committee and approval by the Director of the Graduate Program in Environmental Sciences. The goal of these examinations is to assess the students preparedness for doctoral level study and assess the students potential in their chosen field. The examination may be written or oral in part or in whole. The subject(s) of the examination may include core course work and /or work relevant to the students specialty area. One examination, typically oral, is taken in a core course area outside of the students specialty area. The second can be oral or written in part or whole in the specialty area (administered by the doctoral advisory committee or portion thereof) or in a second non-specialty core discipline. Possible outcomes of these examinations are (i) pass, (ii) fail with option to retake (one time only) the examination, or (iii) fail. Students who fail initially or after the second attempt will be reclassified to the MS Program and will be re-considered for the PhD Program only under extraordinary circumstances. It should be noted that there is a Program requirement that ten calendar weeks must pass before a retake of either or both of the qualifying examinations may be scheduled. These examinations must be taken prior to the end of the fourth semester in residence.

DISSERTATION PROPOSAL

Each Ph.D. student must pass the oral research proposal defense examination. Possible outcomes of the first examination are i) pass, ii) fail with option to retake (one time only) the examination, or iii) fail. The oral defense of the research proposal occurs after successful completion of the qualifying examination. Students who have not defended their proposal by end of their fifth semester or who have not passed by the end of their sixth semester will no longer be in good standing in the PhD Program. They will be reclassified into the M.S. program and will be reconsidered for the Ph.D. program only under extraordinary circumstances. It should be noted that there is a Program requirement that ten calendar weeks must pass before a retake of the oral proposal defense examination may be scheduled.

It is imperative that each student register the time and date of the oral proposal defense with the Graduate School two weeks in advance of the proposal defense seminar. Announcements of the public portion of the proposal defense must be posted a minimum of two weeks in advance of the presentation. The timing of this examination should be in coordination with the student's advisory committee.

ADMISSION TO CANDIDACY

A student may apply for admission to candidacy upon successful completion of the qualifying examination and defense of the dissertation proposal. A student may not apply for candidacy while on probation or with a GPA of less than 3.00. Doctoral students, upon reaching PhD candidacy (passing both qualifying examinations, oral proposal defense and examination, and completing the core course requirements (9 hours of core, 6 hours of statistics, 1 hour of research ethics, 2 hours of topical seminar, 2 hours of environmental seminar) are granted an MS in Environmental Science provided that they have met the requirements above. Students who intend to earn an MS in Environmental Sciences must complete an Intent to Graduate Form in the semester they will attain candidacy. This form is available in the Graduate School.

COMPREHENSIVE EXAMINATION

The comprehensive examination is designed to test general knowledge of environmental science as well as the student's expertise in specialized areas of research and interest. The examination consists of a mandatory oral component and an optional written component. Students intending to take comprehensive examinations must submit an intent form to the program office at the beginning of the semester in which they intend to take the examination.

Students will have not more than eight hours to complete their answers to the questions. The oral examination is conducted by the student's Doctoral Advisory Committee. The dean of the Graduate School will appoint an additional member to the committee for purposes of the oral examination to represent the interests of the graduate faculty in its entirety. In case of failure, the examination may be retaken if the committee feels that additional study is justified and the student continues such studies for an additional period of time as specified by the committee. A second failure will result in dismissal from the program.

CONTINUOUS ENROLLMENT

Students must maintain continuous enrollment subsequent to passing the qualifying examination. They must maintain a minimum of one semester hour of dissertation during each regular semester, including at least one summer term each year, until the dissertation has been accepted by the graduate dean.

DISSERTATION DEFENSE

After the research is completed, the student will submit a draft of the dissertation to his or her advisory committee. Upon the recommendation of the committee, the candidate will arrange with the chair of his or her advisory committee to schedule and conduct a presentation of the results.

The candidate will also be required to orally defend the dissertation before the Doctoral Advisory Committee, members of the faculty, students, and interested persons. Arrangements for the dissertation defense will be made through the Environmental Sciences Program Office, but announced by the Graduate School. Students are advised to be aware of the deadlines set by the Graduate School for submission of defense results and dissertations.

The defense must occur at least four weeks before the date of graduation. A successful defense receives no more than one negative vote by the members of the Doctoral Advisory Committee. Failure of the defense requires a one semester probation before a second defense can be scheduled. A second failure of the defense constitutes elimination from the program.

DEADLINE FOR SUBMISSION

The completed dissertation must follow the format requirements of the Graduate School as contained in the Guide to Dissertations and Theses: Preparation and Electronic Submissions. Before submission online, the completed dissertation must be approved by the advisory committee. Candidates will also be responsible for the preparation of an abstract of the dissertation, not to exceed 350 words, which will be submitted with the completed dissertation.

The student is required to purchase four copies of the bound dissertation for the ASU Library, the Graduate School, the Environmental Sciences program office, and the dissertation advisor.

Checklist for the Last Semester Before Graduation

1. In the last semester before graduation, candidates must: Register for the graduation fee.
2. File an Intent to Graduate Form with the graduate dean by the relevant deadline.
3. Complete the oral defense of the dissertation.
4. Submit the dissertation by the relevant deadline.

DOCTOR OF PHILOSOPHY IN HERITAGE STUDIES PROGRAM

Policies specific to the Ph.D. in Heritage Studies may be found in the College Humanities and Social Science section.

DOCTOR OF PHILOSOPHY IN MOLECULAR BIOSCIENCES PROGRAM PROGRAM DESCRIPTION

The mission of the program is to produce scientists with sufficient background and training to advance the field of Molecular Biosciences. Molecular Biosciences addresses classical and contemporary problems in biology through creative integration of molecular, genomic, cellular and developmental information. Among other topics Molecular Biosciences research may include the study of biomolecular interactions, the engineering and design of metabolic pathways to produce bioactive molecules, bioinformatics, discovery and development of novel biomaterials, and process development and scale-up.

ADMISSION REQUIREMENTS

Students seeking admission into the Doctor of Philosophy in Molecular Biosciences Program must meet the admission requirements of the Graduate School in addition to the program's specific requirements. Each applicant must have a minimum of a B.S. in a basic or applied science, although preference may be given to M.S. level applicants. In addition to official transcripts, applicants must also provide official Graduate Record Examination scores for the Verbal, Analytical and Quantitative tests. The minimum combined Verbal and Quantitative scores must be 1000. Although not required, scores from an advanced test related to Molecular Biosciences may increase a candidate's chance for admission. Once the basic Graduate School application requirements are met, applications will be forwarded to the Molecular Biosciences Program Committee for their consideration and determination for student admission. Applicants are advised that admission to the Graduate School does not imply admission to the Molecular Biosciences Ph.D. Program. Other materials required of MBS applicants are three letters of recommendation and a statement of research interests that includes identification of possible faculty mentors. Foreign applicants must also meet the requirements of the Office of International Programs.

GRADUATE STUDENT SUPPORT

Any university support, whether as a Graduate Teaching Assistant or as a Graduate Research Assistant, will be awarded competitively through the Molecular Biosciences Program Committee. Students may also be supported from faculty research grants.

DOCTORAL ADVISORY COMMITTEES

During the first year of their program of study, each student is expected to identify a Doctoral Advisory Committee Chair to direct the research of the student and who must be approved by the Molecular Biosciences Program Committee and the graduate dean. In addition to the chair, the Doctoral Advisory Committee will consist of members of the graduate faculty and other professionals as deemed appropriate and approved by the Molecular Biosciences Program Committee, the Molecular Biosciences Program director and the graduate dean. Each committee must have at least four members. The Doctoral Advisory Committee is to review the student's dissertation proposal, administer the Qualifying and Candidacy Exams

and provide guidance toward the successful completion of the research project.

Students in the program without a designated committee chair during their first semester will be assigned an interim adviser by the Molecular Biosciences Program Committee and the graduate dean. The primary role of the interim adviser will be to establish a tentative curriculum for the student, pending establishment of the Doctoral Advisory Committee. An interim adviser may serve for a maximum of one year until a permanent advisory committee chair is selected.

Membership of Advisory Committees may be changed if either the student or a member of their committee feels that such a change is appropriate and the requested change is approved by the Molecular Biosciences Program Committee and the graduate dean. Such a change will not be approved except in clearly unusual circumstances. If approval is given, the student will be notified in writing by the Graduate School.

GENERAL PROGRAM OF STUDY

A program of study, to be developed by the Doctoral Advisory Committee in consultation with the student, is to be submitted to the Director of the Molecular Biosciences Program for approval no later than one calendar year after admission to the program. As a reflection of the interdisciplinary nature of the program, a course of study will be tailored to each student's own scholarly interests, research, and proposed career direction. General course requirements are outlined on the Molecular Biosciences home page under "Program of Study for the Ph.D. in Molecular Biosciences".

Each Doctoral Advisory Committee will meet at least once a year to review and provide a written report of the student's progress.

SATISFACTORY PROGRESS

Students are required to earn a grade of "B" or better in all courses attempted. A single instance of a grade below "C" within the student's immediate research topic area will be accepted for courses outside the student's immediate research topic area. A second instance of a grade of "C" or a single instance of a grade below "C" will be cause for the review of the student's status within the program by the Molecular Biosciences Program Committee. After such review, the Program Committee may recommend dismissal of the student from the program.

TIME TO DEGREE

A minimum of 72 graduate credits beyond the baccalaureate degree or 45 graduate credits beyond the master's degree is required. All requirements for the degree must be completed within eight calendar years of admission to the program. Requirements subsequent to admission to candidacy must be completed within four calendar years of admission to candidacy.

A student exceeding the time limit may be required to repeat the qualifying examination, replace out-of-date credits with up-to-date ones, and/or show other evidence of being current within both the core curriculum and the student's area of specialization. Extension of the eight-year requirement will be granted only if a student has obtained prior approval from his or her Doctoral Advisory Committee, the Molecular Biosciences Program Committee and the Arkansas State University Graduate School.

QUALIFYING EXAMINATION

The student's Doctoral Advisory Committee will administer a Qualifying Examination as one means of assessing a student's preparedness for doctoral level study. This exam will consist of the student's written dissertation proposal which is then orally defended. The student may be required to take additional academic work at the discretion of the committee. All dissertation research proposals must be approved by the student's Doctoral Advisory Committee through the mechanism of a dissertation proposal seminar. It is the responsibility of the student to file an announcement of the seminar with the program office at least two weeks in advance of the seminar. The seminar will be an open forum. The candidate will be notified in writing of the committee's approval. If required by the committee, the candidate may hold a second seminar in order to meet the committee's approval. This exam must be taken during the third semester, and successfully completed no later than the end of the fourth semester.

ADMISSION TO CANDIDACY

A student may apply for admission to candidacy upon successful completion of the Qualifying Examination and defense of the dissertation proposal. A student may not apply for candidacy while on probation or with a GPA of less than 3.00.

CANDIDACY EXAMINATION

The Candidacy Examination is designed to assess a student's ability to develop and defend a hypothesis-driven research proposal outside the area of the student's thesis project. The selected topic must be approved by the student's Doctoral Advisory Committee. The format of the proposal will follow that of either NSF or NIH guidelines or another federal agency approved by the student's Doctoral Advisory Committee. The seminar will include an open forum and, if required, may involve a second seminar in order to meet with the Doctoral Advisory Committee's approval. This exam must be completed within one year after passing the Qualifying Exam.

DISSERTATION DEFENSE

After the research is completed, the student will submit a draft of the dissertation to his or her Doctoral Advisory Committee. Upon the recommendation of the Committee, the candidate will arrange with the chair of the Doctoral Advisory Committee to schedule and conduct a presentation of the results.

The candidate will also be required to orally defend the dissertation before the Doctoral Advisory Committee, members of the faculty, students and interested persons. Arrangements for the dissertation defense will be made through the Molecular Biosciences Program Office, but announced by the Graduate School. Students are advised to be aware of the deadlines set by the Graduate School for submission of defense results and dissertations.

The defense must occur at least four weeks before the date of graduation. A successful defense receives no more than one negative vote by the members of the Doctoral Advisory Committee. Failure of the defense requires a one semester probation before a second defense can be scheduled. A second failure of the defense results in elimination from the program.

DEADLINE FOR SUBMISSION

The completed dissertation must follow the format requirements of the Graduate School as contained in the Guide to Dissertations and Theses: Preparation and Electronic Submissions. Before submission online, the completed dissertation must be approved by the advisory committee. Candidates will also be responsible for the preparation of an abstract of the dissertation, not to exceed 350 words, which will be submitted with the completed dissertation.

The student is required to purchase four copies of the bound dissertation for the ASU Library, the Graduate School, the Environmental Sciences program office, and the dissertation advisor.

Checklist for the Last Semester Before Graduation

1. In the last semester before graduation, candidates must: Register for the graduation fee.
2. File an Intent to Graduate Form with the graduate dean by the relevant deadline.
3. Complete the oral defense of the dissertation.
4. Submit the dissertation by the relevant deadline.

DOCTOR OF PHYSICAL THERAPY

Policies specific to the D.P.T. may be found in the College of Nursing and Health Professions section.

FEES AND EXPENSES

Students' fees are payable in full at the beginning of the semester. Students unable to meet this requirement should contact Student Account Services 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. To access downloadable tuition and fee tables, please visit Student Accounts at:

<http://www2.astate.edu/a/finance-admin/student-accounts/tuition-fees/>

GENERAL REGISTRATION FEE	PER TERM
Graduate Tuition	
Arkansas Resident	\$230 per hour
Non-Resident (Enrolled Prior to Fall 2011)	\$586 per hour
Non-Resident (Enrolled After Fall 2011)	\$460 per hour
International	\$460 per hour
Online MBA Program	\$452.00 per hour
Infrastructure Fee	\$4 per hour
Athletics Fee	\$17 per hour
Student Union Fee	\$10 per hour
Information Technology Fee	\$10 per hour
Library Fee	\$6 per hour
Student Recreational Fee	\$7 per hour
College Support Assessment Fee (Business, Engineering, and Nursing & Health Profession)	\$47 per hour
College Support Assessment Fee (College of Sciences & Mathematics)	\$43 per hour
Arkansas Assessment Fee	\$5 per term
Student Activity Fee (3 or more hours)	\$20 per term
DEGREE CENTER—GENERAL REGISTRATION FEES	
Off Campus Courses, including distance learning classes and fees:	
Arkansas Resident Graduate	
ASU-Beebe	\$264 per hour
ASU-Mountain Home	\$264 per hour
East Arkansas Community College	\$264 per hour
Arkansas Northeastern College	\$264 per hour
Mid-South Community College	\$64 per hour
Online MBA Program	\$452.00 per hour
Non-Resident Graduate (Enrolled Prior to Fall 2011)	
ASU-Beebe	\$618 per hour
ASU-Mountain Home	\$618 per hour

East Arkansas Community College	\$618 per hour
Arkansas Northeastern College	\$618 per hour
Mid-South Community College	\$618 per hour
Online MBA Program (Per Credit Hour)	\$452.00 per hour
Non-Resident Graduate (Enrolled After Fall 2011)	
ASU-Beebe	\$528 per hour
ASU-Mountain Home	\$528 per hour
East Arkansas Community College	\$528 per hour
Arkansas Northeastern College	\$528 per hour
Mid-South Community College	\$528 per hour
Online MBA Program (Per Credit Hour)	\$452.00 per hour
Academic Excellence Fee	\$2 per hour
Information Technology Fee	\$10 per hour
Distance Education Fee	\$20 per hour

RESIDENCY REQUIREMENTS FOR FEE PAYMENT

Students should contact the Registrar's Office concerning residency requirements for university fee purposes. A student who knowingly gives false information in an attempt to avoid out-of-state fee payment shall be subject to dismissal from the university.

MISCELLANEOUS FEES

	FLAT
Yearbook Fee Per Semester (12 or more hours)	10.00
Graduation Fee	
Masters	65.00
Specialist.....	75.00
Doctorate.....	125.00
Application for Admission	
*International Students.....	40.00
Master/Specialists	30.00
Doctoral Program	50.00
Fee for International Students requiring third party billing.....	25.00
Late Payment of Tuition Fee.....	25.00/40.00
Penalty for Checks Returned for Insufficient Funds, etc.	25.00
Installment Fee	40.00
Tuition Deferment	40.00
Audit Fee/Credit hour	Same as Tuition and Fees

*International students should contact the Office of International Programs regarding the application process and fees for international students.

Special fees for some departments are shown with the respective departments. Additional course fees vary for each class ranging from \$5.00 to \$225.00 per course.

TUITION-FELLOWSHIP FOR QUALIFIED OUT-OF-STATE STUDENTS

Arkansas State University will offer a waiver of the out-of-state portion of tuition costs in the form of a fellowship to all graduate students who meet the following criteria:

- Graduate students with a cumulative undergraduate GPA of 3.000 or higher
- Attend ASU-J with 6 or more hours of graduate level courses (Fall or Spring semester)

- or 3 or more hours of graduate level courses (summer terms)
- Residents of any one of the 49 states in the United States other than Arkansas or resident of any of the U.S. territories

FEE WAIVER FOR SIXTY-YEARS OF AGE

Persons sixty years of age or older are eligible to have their tuition waived. Students eligible for this waiver are responsible for all other charges related to their enrollment. Eligibility is determined as of the first day of the semester. Students seeking this waiver should contact Student Account Services upon completing registration.

INTERNATIONAL STUDENTS ON SCHOLARSHIPS FROM THEIR HOME GOVERNMENTS

All international students on scholarships from their home government should have a valid, up-to-date letter of financial guarantee on file in the International Student's Office. In order for tuition to be billed to the embassy or scholarship agency, the guarantee should be on file no later than June 1 of each academic year.

SPECIAL COURSE FEES

Some courses have additional fees. Please check the course descriptions for these fees.

GRADUATE ASSISTANTSHIPS

Graduate assistantships are available to a limited number of qualified applicants in all departments offering graduate degrees. Assistantships are available for both regular semesters and summer school. Application for an assistantship must be made through the chair of the department in which the student wishes to major. No application for assistantship will be considered unless the applicant has also applied for admission to the Graduate School.

To be awarded an assistantship, a graduate student must have been admitted to a graduate degree program at Arkansas State. A graduate student whose GPA drops below 3.00 is placed on probation and is not eligible to hold a graduate assistantship.

GRADUATE ASSISTANTSHIP TUITION FELLOWSHIPS

All Graduate Assistant positions carry a tuition fellowship which includes the following benefits:

- tuition charged at the in-state rate
- tuition fellowships totaling 100% for all courses taken by doctoral Graduate Assistants

These tuition fellowships apply only to ASU courses.

POLICIES CONCERNING GRADUATE ASSISTANTSHIPS INCLUDE THE FOLLOWING

1. The Master and Specialist level appointee must complete at least six semester hours of graduate work and no more than 12 hours of both graduate and under graduate work each semester during the academic year and at least three hours of graduate work cumulative during the summer terms. All Doctoral level graduate assistants are required to take a minimum of nine graduate credit hours during the regular semester and three during each summer term on assistantship.
2. A graduate assistant must have a definite schedule of duties and responsibilities assigned by the dean of the college and the chair of the department in which the assistantship is held.
3. Graduate assistants are not considered to be a part of the faculty of the University, are not entitled to faculty privileges, and will not be included in the Group Life and Hospital Insurance Program sponsored by the University.
4. The appointee should attend regular staff meetings of the college and department

as well as the general staff meetings of the University if requested to do so. The appointee should also attend the faculty workshop at the beginning of the academic year if requested to do so.

5. If a student is unable to complete a semester's course work and assistantship responsibilities due to circumstances beyond his or her control, that semester may not be counted as one of the semesters included in the maximum amount of time for which he or she may hold the assistantship. In those instances, the Graduate School must be notified immediately of any such situations warranting consideration of this policy by the department and the student. Final authority for granting an exemption from counting the semester as part of time for holding the assistantship rests with the Graduate School.
6. The assistantship will be awarded on an academic year or summer term or terms basis. Reapplication is necessary for the student to be considered for reappointment each period. There is no automatic renewal.
7. The appointee must maintain a grade point average of 3.00 or better on all graduate work completed in order to remain eligible for the assistantship.
8. The master and specialist level assistantship will have a maximum time limit of five semesters. An exception is made for students admitted based on a bachelor's degree rather than a master's degree to the Ed.S. in Psychology and Counseling; these students will have a maximum time limit of eight semesters. Ed.D. and Ph.D. as sistantships will have a maximum time limit of eight semesters.

FINANCIAL ASSISTANCE

To be considered for financial assistance, a graduate student must be admitted to the Graduate School as well as the program they plan to study. Students must be enrolled in at least 4.5 graduate credit hours in a regular term and 3 semester hours for the summer term, to be considered for Financial Aid.

Student Loans are available from a number of sources including, Federal Direct Subsidized and Unsubsidized Student Loans, Federal Direct Grad PLUS Loans and various private lenders. Interested applicants should complete the Free Application for Federal Student Aid at www.fafsa.gov to begin the process. Additional information may be found at <http://www2.astate.edu/finaid/>.

REFUND OF FEES SCHEDULE

Semester		Five-Week Terms	
1st - 5th class day	100%	First and second day	100%
6th - 10th class day	75%	Third and fourth day	75%
On or after 11th class day	None	On or after 5th class day	None

Students eligible for refund should contact Student Account Services at (870) 972-2285 when the drop or withdrawal process has been completed.

ROOM AND BOARD

Kays Hall is an 11-story modern high rise housing 470 first year students in suite-style accommodations. This coeducational residence hall houses males and females on different wings with card access to the building as well as to wings. Each room has a sink in addition to the standard furnishings. Residents of Kays have use of the attractive main lobby, five comfortable lounges (complete with microwaves), two computer rooms, a central kitchen, and laundry and vending rooms. Kays is conveniently located close to the Student Center, classrooms, and two lighted tennis courts.

Arkansas Hall is home to 330 first year male students. This suite-style building is furnished

with wooden bunkable beds, dressers, desks and chairs. Students can arrange their rooms in many ways. The beds can be adjusted to different positions to allow students to choose a traditional arrangement or one that gives them more floor space. Arkansas Hall offers a computer lab, central kitchen, spacious main lobby, study lounges, and a laundry and vending room. Arkansas Hall is located near the Fowler Center and the Convocation Center.

University Hall accommodates 300 female students. It is also the home of five sorority suites or chapter rooms. This five-story suite style building has a computer lab, laundry and vending room, and central kitchen. Students can arrange their rooms in many ways. The beds can be adjusted to different positions to allow students to choose a traditional arrangement or one that gives them more floor space. University Hall is located near the center of campus.

Northpark Quads accommodates 836 students in five separate residential buildings. It also includes a Community Building with a laundry, kitchen, meeting rooms, and administrative offices. Students live in four bedroom two bath suites. Each suite includes a living room and kitchenette. Bedrooms and living rooms are furnished. The five buildings are reserved for students with at least one year of college experience. Northpark Quads is located between the Baptist Campus Ministry and the Convocation Center.

Collegiate Park, features all private bedrooms designed exclusively for juniors and seniors. Nestled within the landscaped beauty of the north side campus, this peaceful community contains two bedroom/two bathroom, two bedroom/one bathroom, and four bedroom/two bathroom flats and townhouses configurations. All utilities, cable, and internet are included in the rent. A centrally located clubhouse with a multi-purpose room, a laundry and a computer lab along with a swimming pool, sand volleyball court and a barbeque pavilion make our 334 bedroom complex complete.

Collegiate Park, features all private bedrooms designed exclusively for juniors and seniors. Nestled within the landscaped beauty of the north side campus, this peaceful community contains two bedroom/two bathroom, two bedroom/one bathroom, and four bedroom/two bathroom flats and townhouses configurations. All utilities, cable, and internet are included in the rent. A centrally located clubhouse with a multi-purpose room, a laundry and a computer lab along with a swimming pool, sand volleyball court and a barbeque pavilion make our 334 bedroom complex complete.

1. A deposit of \$100 along with a housing application is required to reserve a room for any regular semester. Students are required to live in university housing during the entire term of enrollment for which the reservation is made. Students who do not fulfill this requirement will forfeit their room deposits. The room deposit is refundable on the following conditions: (a) if cancellation is made, through the Residence Life office in writing prior to the confirmation date on the contract, (b) if the student has occupied the room until the end of the contract period and then checks out of the residence hall, through the Residence Life office, not later than 24 hours after the last official day of the spring semester, (c) if no damages have occurred during the term of occupancy.
2. All occupants of residence halls are required to participate in a university meal plan. (Optional for commuter students and Collegiate Park, Red Wolf Den and The Village rentals)
3. A permanent identification card will be issued to students during the first semester of attendance. Students will use this card to access residence halls, parking lots, laundry, and dining services venues. A \$10 replacement fee will be assessed for lost IDs.

4. The charges for room and board for less than a full semester are computed on the base rate for the period of occupancy.
5. The residence halls and cafeteria will be open during the periods classes are in session. Vacation periods (fall break, spring break, winter break, and Interims) are not included in the regular room and board charges.
6. Residents are expected to occupy their rooms during the entire session for which the rooms are reserved, unless they are forced to withdraw from the university because of illness or other valid reasons.
7. Room and Board may be paid in four (4) installments. Students seeking such arrangements should contact Student Account Services at (870) 972-2285.

Students are responsible for ALL room and board even when meal cards have been invalidated or they have been locked out due to nonpayment.

RESIDENCE LIFE ROOM AND BOARD RATES— 2012-2013

Fall and Spring Rates per semester

Resident Halls	Double Rate	Single Rate	Single Deluxe Rate
Arkansas Hall	\$1850.00	\$2200.00	\$2315.00
Kays Hall	\$1850.00	\$2200.00	NA
University Hall	\$1850.00	\$2200.00	\$2315.00
Northpark Quads (2-5)	NA	\$2075.00	NA
Northpark Quads (1)	NA	\$2225.00	NA
Honors Living Learning Center	\$1865.00	\$2075.00	NA
ROTC	NA	\$1900.00	NA
STEM Den	NA	\$1900.00	NA

Single and single deluxe rooms are only available space permitting.

Apartments	One Bedroom One Bath	Two Bedroom Two Bath	Two Bedroom One Bath
Collegiate Park	NA	\$2185.00	\$1970.00
Red Wolf Den	NA	NA	\$2115.00
Village Apartments	\$2590.00	NA	\$3075.00

Apartments	Two Bedroom w/ Washer & Dryer Connections	Three Bedroom	Four Bedroom Townhouse	Four Bedroom Flat
Collegiate Park	NA	NA	\$1920.00	\$1865.00
Red Wolf Den	NA	\$1945.00	NA	\$1975.00
Village Apartments	\$3230.00	\$3505.00	NA	NA

Houses	Two Bedroom w/Washer & Dryer Connections
	\$2285.00

Rent includes all utilities, internet connection, cable, and local phone services. The Village Houses and Apartments will be open during break periods.

ROOM AND BOARD CHARGES

Room and board charges are assessed and payable in full at the beginning of each semester. Students seeking installment arrangements should contact Student Account Services at (870) 972- 2285. Students receiving financial assistance that equals or exceeds their total charges are not eligible for installment arrangements.

To access downloadable room and board fee tables, go to the Residence Life website at: <http://www2.astate.edu/a/student-affairs/residence-life/current-students/room-and-board-rates/>.

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. The Village consists of 50 two-bedroom houses and 191 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 Village Apartments are designed to offer affordable, comfortable, and accessible living accommodations to the students and their families. A laundry is located in The 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 and <http://www.astate.edu/student-affairs/reslife>.

Meal Plan Options for 2012 - 2013

Meal plans are mandatory for all students who live in Kays Hall, University Hall, Arkansas Hall, North Park Quads, Honors Living Learning Community, and the ROTC Living Learning Community. Plans may only be changed prior to the opening date of the residence halls each semester.

Commuter students and those who live Collegiate Park Apartments, Red Wolf Den Apartments, and the Village have the option of purchasing a meal plan. All plans are available for these students; however, the Voluntary Meal Plans (VMPs) are available only to these students.

Students who purchase a "block" meal plan may dine in the Acansa, up to the number of block meals purchased. The block plans also allow the holder to use the plan to bring in guests. Each guest will reduce the block by one meal.

Students with the 5 Day or 7 Day plans may NOT bring guests in, unless they use Flex Dollars to pay for them.

The purchase of any meal plan is dependent on year classification. Unused Flex Dollars will carry over from fall to spring if a spring plan is purchased, but Flex Dollars must be used by the end of spring semester to avoid forfeiture.

Freshman Options:

(Upper classmen may also purchase these plans.)

7 Day + \$100 Flex = \$1,345.00

7 Day + \$300 Flex = \$1,500.00

5 Day + \$150 Flex = \$1,345.00

5 Day + \$200 Flex = \$1,370.00

2nd Year and Above Options:

150 Block + \$300 Flex = \$1,265.00

150 Block + \$400 Flex = \$1,350.00

\$1200 Flex = \$1,200.00 (3rd year and above)

VMP Options for 2011/2012:

Plan 1: 80 Block Meals + \$100 Flex = \$575.00

Plan 2: 50 Block Meals + \$75 Flex = \$380.00

Plan 3: 25 Block Meals + \$75 Flex = \$230.00

The 7-Day + Plans offers unlimited access to dining in Acansa Dining Hall - 7 days a week. Come in for a meal, a snack or just to enjoy a cup of coffee or a soda. This is our most economical plan, perfect for the student with a big appetite, small appetite or somewhere in between. Flex dollars may be used at any dining location on campus, including the Campus Store. Any student living on campus may select these plans.

The 5-Day + Plans also offers unlimited access to dining in our Acansa Dining Hall - Monday through Friday. It operates just like the 7-Day Plan, but is more suitable for the diner who prefers to only eat on campus during the school week. If you travel to your hometown most weekends, this plan is for you! Flex dollars may be used at any dining location on campus, including the Campus Store. Any student living on campus may select these plans.

The Block Plans allow a meal plan holder to dine in the Acansa, up to the number of block meals purchased, any time Acansa is open. The Block plans also give the flexibility of allowing the plan holder to use the plan to bring in guests. Only students who have completed at least one year of college may select this meal plan.

Flex Dollars operates like a declining balance account that can be used at any of our dining venues, including Acansa Dining Hall, the Food Court, the Campus Store, Starbucks, and Simply to Go. Flex is tax-exempt, offering a savings of 8.5% in Craighead County. Customers may add up to \$150.00 additional Flex Dollars per semester to any dining plan with a Flex feature. Anyone with a meal plan can add Flex dollars to their plan, but only students who

have completed at least one year of college may select the all-Flex plan.

Express Dollars is also a declining balance account that can be used at all our dining venues, as listed above. They can also be used in the ASU Bookstore and off campus at local retailers. See the Student Account Services Web page for more information and a list of participating retailers.

ONLINE LARGE SCALE DISTANCE EDUCATION PROGRAM

SPECIALIST IN EDUCATION DEGREE WITH A MAJOR IN EDUCATIONAL LEADERSHIP

ONLINE Large Scale Distance Education Program

Purpose of the Degree

The Specialist in Education degree (Ed.S.) with a major in Educational Leadership offers educators a program designed to improve their general educational and specific professional competencies as leaders in the public school systems within one of the following areas. The Specialist Degree program is designed to provide study beyond the Master's degree and is based on recommendations from professional organizations and accrediting associations. Candidates complete performance-based activities in P-12 school sites and related settings.

SUPERINTENDENCY TRACK

Admission Requirements

To be considered for the Specialist Degree-Superintendency track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Three years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing central office administrator who will serve as a mentor during this program.

Program Of Study

ELAD 7013 School Personnel Administration

ELAD 7023 School Business Management

ELAD 7033 Contemporary Issues

ELAD 7043 Management of Operational Systems for Learning

ELAD 7073 Schooling in a Pluralistic Society

ELAD 7103 School District Administration

ELCI 7523 Curriculum Theory and Practice

ELFN 7583 Evaluation of Educational Programs and System

ELAD 7473 Field Study

ELAD 7493 Supervised Internship

(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. All candidates for the Ed.S. degree in Educational Leadership seeking district administrator licensure must have a standard building-level administrator license or a standard program administrator and must pass the appropriate examination (s) required by the state(s) in which licen-

sure is sought. A copy of the scores should be sent to Arkansas State University.

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the degree are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 24 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 3.25 GPA on master's degree, have a written commitment from a practitioner who will serve as a mentor, and must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .
- The capstone experience serves as the comprehensive examination for the degree.
- All students must complete a portfolio on the LiveText digital format that is a culmination of authentic performance-based assessments completed throughout the program. Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

PRINCIPALSHIP TRACK

Admission Requirements

To be considered for the Specialist Degree-Principalship Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing building-level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues

ELAD 7073 Schooling in a Pluralistic Society

ELCI 7523 Curriculum Theory and Practice

ELFN 7583 Evaluation of Educational Programs and System

ELAD 6103 Ethical Leadership

ELAD 6073 School Law

ELAD 6003 School and Community Relations

ELCI 6063 Curriculum Management

ELCI 6083 Supervision and Evaluation of Teaching

ELAD 6593 Supervised Internship

(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a building-level administrator's license, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

CURRICULUM DIRECTOR TRACK**Admission Requirements**

To be considered for the Specialist Degree-Curriculum Director Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing building-level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues

ELAD 7073 Schooling in a Pluralistic Society

ELCI 7523 Curriculum Theory and Practice

ELFN 7583 Evaluation of Educational Programs and System

ELAD 6103 Ethical Leadership

ELAD 6003 School and Community Relations

ELCI 6063 Curriculum Management

ELCI 6083 Supervision and Evaluation of Teaching

ELCI 6323 Elementary Curriculum

ELCI 6423 Middle School Curriculum

ELCI 6523 Secondary School Curriculum

ELCI 6493 Curriculum Internship

(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 36

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a curriculum director's license, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

SPECIAL EDUCATION DIRECTOR TRACK**Admission Requirements**

To be considered for the Specialist Degree-Director of Special Education Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing building-level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues
 ELAD 7073 Schooling in a Pluralistic Society
 ELCI 7523 Curriculum Theory and Practice
 ELFN 7583 Evaluation of Educational Programs and System
 ELAD 6103 Ethical Leadership
 ELAD 6423 Special Education Law
 ELAD 6033 Administration and Supervision of Special Education
 ELAD 6003 School and Community Relations
 ELCI 6083 Supervision and Evaluation of Teaching
 ELCI 6493 Curriculum Internship
 (The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a curriculum director's license, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

GIFTED, TALENTED, AND CREATIVE DIRECTOR TRACK

Admission Requirements

To be considered for the Specialist Degree-Director of Gifted, Talented, and Creative Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher of gifted, talented, and creative (GTC) in an educational institution.
3. A current state-issued(GTC) teaching license.
4. A written commitment from a GTC director or district level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues
 ELAD 7073 Schooling in a Pluralistic Society
 ELCI 7523 Curriculum Theory and Practice
 ELFN 7583 Evaluation of Educational Programs and System
 ELAD 6103 Ethical Leadership
 ELAD 6073 School Law

ELAD 6003 School and Community Relations
ELCI 6063 Curriculum Management
ELCI 6083 Supervision and Evaluation of Teaching
ELCI 6493 Curriculum Internship
(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a license as a director of gifted, talented, and creative programs, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

MASTER SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN EDUCATIONAL THEORY AND PRACTICE

ONLINE Large Scale Distance Education Program

The online Master of Science in Education Degree with a Major in Educational Theory and Practice is a 30 hour program consisting of the following courses:

ELSE 5733 Gifted Children in the Regular Classroom
ELSE 6053 Educational Procedures for Individuals with Mild Disabilities
ELFN 6763 Philosophies of Education: Developing a Vision of Learning
ELAD 6003 School and Community Relations: Enhancing Programs and Practices
ELCI 6063 Curriculum Management: Enhancing Teaching and Learning
ELCI 6533 Theories of Instruction: Broadening the Instructional Repertoire
ELFN 6773 Introduction to Statistics and Research: Making Data-Driven Decisions to Improve Student Achievement
ELCI 6043 Reflective Teaching
TE 6263 Teachers as Professionals: Working toward National Teaching Standards
ELCI 6773 National Teaching Standards Capstone Experience

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the MSE in Theory and Practice are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 18 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 2.75 GPA on undergraduate work or at least a 3.0 in the last 60 hours, must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or

faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .

- The capstone experience, which serves as the comprehensive examination for the degree, focuses on developing descriptive, analytical, and reflective writing as preparatory for the National Board portfolio.
- Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

MASTER SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN EDUCATIONAL LEADERSHIP

ONLINE Large Scale Distance Education Program

The online Master of Science in Education Degree with a Major in Educational Leadership is a 36 hour program consisting of the following courses:

ELFN 6773 Introduction to Statistics and Research

ELFN 6763 Philosophies of Education

ELAD 6103 Ethical Leadership

ELAD 6073 School Law

ELAD 6003 School and Community Relations

ELAD 6033 Administration and Supervision of Special Education

ELAD 6053 Planning and Resource Allocation

ELCI 6533 Theories of Instruction

ELCI 6083 Supervision and Evaluation of Teaching

ELCI 6063 Curriculum Management

[One of the following curriculum courses]

ELCI 6323 Elementary School Curriculum

ELCI 6423 Middle School Curriculum

ELCI 6523 Secondary School Curriculum **AND**

ELAD 6593 Supervised Internship

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the degree are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 24 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 2.75 GPA on undergraduate work or at least a 3.0 in the last 60 hours, have a written commitment from a practitioner who will serve as a mentor, and must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .
- The capstone experience serves as the comprehensive examination for the degree.
- All students must complete a portfolio on the LiveText digital format that is a culmination of authentic performance-based assessments completed throughout the program. Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

MASTER SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN CURRICULUM AND INSTRUCTION

ONLINE Large Scale Distance Education Program

The online Masters of Science in Education Degree with a Major in Curriculum and Instruction is a 36 hour program consisting of the following courses:

Purpose Of The Degree

The M.S.E. in Curriculum and Instruction is designed to prepare directors of Special Education Gifted, Talented, and Creative and Curriculum and Instructional Facilitators.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Curriculum and Instruction must meet the admission requirements of the Graduate School and the specific program requirements.

- Unconditional Admission Status:
- Hold a valid teaching license.
- Achieved a minimum cumulative undergraduate grade point average of 3.00 (on a 4.00 scale).
- Have two years of teaching experience.
- Have a written commitment from a practicing program director who is in your area of licensure and who will function as your mentor during the program.
- Conditional Admission Status: Students who do not meet the requirements for unconditional admission may be granted conditional admission as follows:
- Hold a valid teaching license.
- Achieved a minimum cumulative undergraduate grade point average of 2.75 (on a 4.00 scale) or a 3.00 GPA on the last 60 hours. Any courses attempted, including any repeated courses, are considered in computing the GPA.
- Have two years of teaching experience.
- Have a written commitment from a practicing program director who is in your area of licensure and who will function as your mentor during the program.

Coursework must be taken at through either ASU-Jonesboro or at an ASU degree center. Students who fail to remove conditional status upon completing 12 semester hours of graduate work in the program will be dropped from the degree program.

Course Requirements

Foundation Courses

ELFN 6773 Introduction to Statistics and Research

ELFN 6763 Philosophies of Education

Core Courses

ELAD 6103 Ethical Leadership

ELAD 6073 School Law

ELAD 6003 School and Community Relations

ELCI 6533 Theories of Instruction

ELCI 6083 Supervision and Evaluation of Teaching

ELCI 6063 Curriculum Management

COURSES FOR CURRICULUM DIRECTOR GIFTED, TALENTED, AND CREATIVE TRACK

Complete each of the following

ELCI 6323 Elementary School Curriculum
ELCI 6423 Middle School Curriculum
ELCI 6523 Secondary School Curriculum

COURSES FOR SPECIAL EDUCATION DIRECTOR TRACK

Complete the following two courses as well as one of the three courses listed under Curriculum Director.

ELAD 6033 Administration and Supervision of Special Education
ELAD 6423 Special Education Law

COURSES FOR INSTRUCTIONAL FACILITATOR TRACK

Complete the following two courses as well as one of the three courses listed under Curriculum Director.

ELCI 5313 Coaching Assessment of Student Learning
ELCI 5403 Facilitating Instruction through Collaborative Partnerships with Adult Learners

Internship

ELCI 6493 Supervised Internship

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the degree are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 24 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 2.75 GPA on undergraduate work or at least a 3.0 in the last 60 hours, have a written commitment from a practitioner who will serve as a mentor, and must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .
- The capstone experience serves as the comprehensive examination for the degree.
- All students must complete a portfolio on the LiveText digital format that is a culmination of authentic performance-based assessments completed throughout the program. Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

MASTER SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SPECIAL EDUCATION--INSTRUCTIONAL SPECIALIST GRADES P- 4

ONLINE Large Scale Distance Education Program

The online Master of Science in Education Degree with a Major in Special Education—Instructional Specialist Grades P-4 is a 36 hour program consisting of the following courses:

ELSE 6053 Educational Procedures for Individuals with Mild Disabilities
ELSE 6023 Characteristics of Individuals with Disabilities
ELSE 5743 Assessment of Young Children with Exceptionalities
ELFN 6763 Philosophies of Education
ELSE 5753 Methods of Working with Young Children with Exceptionalities
ELSE 5083 Collaboration for Special Education Service Delivery
ELSE 6073 Educational Procedures for Individuals with Moderate-Profound Disabilities
ELFN 6773 Introduction to Statistics and Research
ELAD 6423 Special Education Law
ELSE 6813 Laboratory Experiences I P-4
ELSE 6823 Laboratory Experiences II P-4
ELSE 5033 Behavior Intervention and Consultation

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the degree are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 24 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 2.75 GPA on undergraduate work or at least a 3.0 in the last 60 hours, have a written commitment from a practitioner who will serve as a mentor, and must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .
- The capstone experience serves as the comprehensive examination for the degree.
- All students must complete a portfolio on the LiveText digital format that is a culmination of authentic performance-based assessments completed throughout the program. Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

MASTER SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SPECIAL EDUCATION-INSTRUCTIONAL SPECIALIST GRADES 4-12

ONLINE Large Scale Distance Education Program

The online Master of Science in Education Degree with a Major in Special Education—Instructional Specialist Grades 4-12 is a 36 hour program consisting of the following courses:

ELSE 6053 Educational Procedures for Individuals with Mild Disabilities
 ELSE 5043 Educational Diagnosis and Assessment in Special Education
 ELFN 6763 Philosophies of Education
 ELSE 6063 Educational Procedures for Individuals with Emotional and Behavior Disorders
 ELSE 5083 Collaboration for Special Education Service Delivery
 ELSE 6073 Educational Procedures for Individuals with Moderate-Profound Disabilities
 ELFN 6773 Introduction to Statistics and Research
 ELAD 6423 Special Education Law
 ELSE 6853 Laboratory Experiences I 4-12
 ELSE 6863 Laboratory Experiences II 4-12
 ELSE 5033 Behavior Intervention and Consultation
 ELSE 6023 Characteristics of Individuals with Disabilities

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the degree are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 24 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 2.75 GPA on undergraduate work or at least a 3.0 in the last 60 hours, have a written commitment from a practitioner who will serve as a mentor, and must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .
- The capstone experience serves as the comprehensive examination for the degree.
- All students must complete a portfolio on the LiveText digital format that is a culmination of authentic performance-based assessments completed throughout the program. Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

MASTER SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SPECIAL EDUCATION--INSTRUCTIONAL SPECIALIST GIFTED, TALENTED, AND CREATIVE

ONLINE Large Scale Distance Education Program

The online Master of Science in Education Degree with a Major in Special Education—Gifted, Talented, and Creative is a 30 hour program consisting of the following courses:

ELSE 5703 Identification, Nature, and Needs of the Gifted, Talented, and Creative
 ELSE 5713 Educational Procedures and Materials for the Gifted, Talented, and Creative
 ELSE 5723, Assessment for Programming in the Classroom
 ELSE 5813 Current Issues in Gifted Education
 ELSE 6033 Affective Programming in the Classroom
 ELSE 6433 Creativity
 ELFN 6763 Philosophies of Education

ELFN 6773 Introduction to Statistics and Research
ELSE 6833 Practicum for Gifted, Talented, and Creative (Internship)
ELSE 6843 Capstone: Advanced Practicum for Gifted, Talented, and Creative

- There are no specific pre-requisite courses for the degree.
- All courses required for completing the degree are scheduled in a pre-determined sequence and will be available online at the appropriate time. Students who adhere to the schedule should be able to complete the program in 24 months. If a candidate finds it necessary to deviate from the schedule, he/she will be able to re-enter the sequence at any time in that a candidate has six years to complete the degree.
- Admission criteria are to hold a current state-issued teaching license, have at least a 2.75 GPA on undergraduate work or at least a 3.0 in the last 60 hours, have a written commitment from a practitioner who will serve as a mentor, and must not be a felon.
- ASU-Jonesboro will be using Blackboard as the web delivery platform. This platform allows synchronous and asynchronous interactions, streaming video, and electronic discussion boards. Students will also interact via e-mail, telephone, and fax.
- Computer requirements include Ethernet, cable, DSL, or public wireless hotspot (Dial up will not work.); Windows XP or Windows Vista; any process of 1.2GHZ or faster; 512MB for XP or 1GB for Vista; minimum of 20GB available free disk space; display resolution of 1024x768 minimum; CD/DVD .
- The capstone experience serves as the comprehensive examination for the degree.
- All students must complete a portfolio on the LiveText digital format that is a culmination of authentic performance-based assessments completed throughout the program. Some examinations will be taken online while others will require the student to go to a location where the examination will be proctored.

MASTER OF PUBLIC ADMINISTRATION IN PUBLIC ADMINISTRATION

ONLINE Large Scale Distance Education Program

The online Master of Public Administration is a 36 hour degree program consisting of the following courses:

Admissions Requirements

The Master of Public Administration at Arkansas State University exists to enhance individual, organizational, social and governmental capacity in the public and non-profit sectors by equipping pre-service and mid-career students with sound management skills and a public/non-profit philosophy to lead public institutions of the future with integrity, innovation, excellence and professionalism.

To be considered for admission to the MPA program, in addition to meeting Graduate School admission requirements applicants must provide:

- Three letters of recommendation;

Moreover, an applicant's undergraduate background must include courses with grades of "C" or higher in American national government and principles of economics or their equivalents. If the student is deficient, these courses must be taken in addition to the graduate course requirements specified below. Such undergraduate deficiencies must be completed prior to or during the first graduate enrollment period.

For unconditional admission, a student must have a minimum cumulative undergraduate grade point average of 3.0 (or 3.2 in the last 60 hours).

For conditional admission, academic proficiency must be established by a minimum cumulative undergraduate grade point average of 2.75

Courses required all of all candidates:

POSC 6563 Seminar in Public Administration
POSC 6533 Public Policy Analysis & Evaluation
POSC 6553 Public Budgeting & Finance
POSC 6543 Administrative Behavior
POSC 6003 Techniques of Political & Public Administration Research
POSC 6633 Public Information Management
POSC 6593 Seminar in Human Resources Management
POSC 6573 Grant Writing & Administration
POSC 6613 Administrative Leadership
POSC 6623 Administrative Ethics

Six hours chosen from the three options listed below

POSC 6523 Decision Making
POSC 6503 Managing Local Government
OR
POSC 6603-6, Internship in Public Administration*
OR
POSC 6656, Thesis in Public Administration

*Internships are strongly encouraged for all pre-service students and are normally undertaken after a student has completed 18 credit hours. Internships are open only to students with a grade point average of no less than 3.0.

*All students are required to complete and submit a set of comprehensive case study analyses during their final enrollment period. Case studies and instructions for completion are provided when students file for graduation.

COLLEGE OF AGRICULTURE AND TECHNOLOGY

Mission

To prepare students for entry and career advancement in the food, fiber and natural resources industry, which involves crop and livestock production, agribusiness, value-added processing, public service, public education 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 in an environmentally sound and sustainable manner.

Programs of Study

The College of Agriculture and Technology (COAT) offers coursework leading to the Master of Science in Agriculture (MSA) degree with concentrations in agricultural education, agricultural business and economics, animal science, plant and soil science, and vocational-technical administration. All MSA programs require students to choose either the Thesis or Non-thesis option. Students interested in pursuing a PhD in either the Molecular Biosciences (www.astate.edu/a/scimath/mbs) or the Environmental Sciences (www.astate.edu/a/scimath/evs) programs (both interdisciplinary) may do so through faculty in the College of Agriculture and Technology.

Application and Admission Procedures

Admission begins with an application for a graduate degree program through the Graduate School. The application is online at <http://www.astate.edu/graduate>. Before making application, the prospective student should review the graduate catalog to select a degree program in the COAT and select which option (non-thesis or thesis) to apply for. After the student submits an application and the appropriate paperwork to the Graduate School, the student packet is forwarded from the Graduate School to the COAT Graduate Committee Chair, who will determine if a faculty member in the appropriate discipline is willing to serve as the faculty advisor for the applicant (if the thesis option is selected the faculty member must indicate the subject of the proposed research project). If the student has visited with a faculty member and wants to request a faculty member to be his/her advisor, a note to this effect should be made in the application letter. If a faculty member is identified who is willing to serve as the faculty advisor, the Graduate School will be notified to admit the student, otherwise admission will be denied to the COAT.

Admission Requirements

The prospective student must meet all the admission requirements of the Graduate School and the COAT to be admitted. Other requirements and expectations may be stated as a condition of acceptance to the degree program (see specific degree program). The advisor is key in the planning and development of the student's program of study and research interest. Students are expected to meet with the advisor throughout the graduate experience to ensure satisfactory progress toward a degree.

PROGRAM OF STUDY FOR THE MASTER OF SCIENCE IN AGRICULTURE DEGREE WITH A CONCENTRATION IN AGRICULTURAL BUSINESS AND ECONOMICS, ANIMAL SCIENCE, PLANT AND SOIL SCIENCE

Requirements for Unconditional Admission

Students seeking unconditional admission into the Master of Science in Agriculture with a concentration in agricultural business and economics, animal science, or plant and soil science must meet the admission requirements of the Graduate School and the specific program requirements. Specific program requirements include:

1. A minimum of 12 undergraduate hours in the appropriate field of study and an undergraduate grade point of 2.75 or greater (on a 4.0 scale) or a 3.0 on the last 60 hours of undergraduate work. Students judged to be deficient in some areas of undergraduate preparation may, at the discretion of their graduate advisor, be assigned undergraduate courses (6 to 12 hours) as a condition of admission.
2. Three letters of reference.
3. A statement of educational objectives and career goals
4. Select either the non-thesis or thesis option.

Requirements for Conditional Admission

Applicants not meeting all of the above college criteria may be admitted on a conditional basis if they meet the Graduate School admission requirements and have:

1. A minimum of 12 undergraduate hours in the appropriate field of study and an undergraduate grade point of 2.5 or greater (on a 4.0 scale) or a 2.75 on the last 60 hours of undergraduate work. Students judged to be deficient in some areas of undergraduate preparation may, at the discretion of their graduate advisor, be assigned undergraduate courses (6 to 12 hours) as a condition of admission.
2. Three letters of reference.
3. A statement of educational objectives and career goals and select either the non-thesis or thesis option.
4. Complete 12 hours of graduate level course work in two semesters as a non-degree student, and earn a 3.00 GPA with no more than three hours of "C".

Core courses required of all candidates

AGRI 5233 Experimental Agricultural Statistics or AGRI 6213, Experimental Designs or a graduate level statistics course approved by the student's graduate advisory committee
AGRI 6371 Graduate Seminar

Courses in the concentration area

Each student, with the approval of the faculty adviser and the student's graduate committee, may select courses leading to specialized training in agricultural business and economics, animal science or plant and soil science.

Thesis or Non-Thesis Option

Students electing the thesis option will count six hours of thesis toward the degree.

Students interested in pursuing a PhD in the future should consult with their faculty advisor prior to choosing either the thesis or non-thesis option for the Master of Science in Agriculture degree.

Minimum hours required for this program: 30

PROGRAM OF STUDY FOR THE MASTER OF SCIENCE IN AGRICULTURE DEGREE WITH A CONCENTRATION IN AGRICULTURAL EDUCATION

Admission Requirements

Students seeking admission into the Master of Science in Agriculture with a concentration in Agricultural Education must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 semester hours of professional education courses including the requirements for a valid teaching certificate. Applicants who do not meet the requirements for a valid teaching certifi-

cate will be required to complete the undergraduate courses required for such a certificate. These courses may be completed concurrently with graduate work, but must be completed before the student is admitted to candidacy for the degree. Applicants will submit three letters of reference and a statement of their educational objectives and career goals. Students must indicate their choice of either the non-thesis or thesis option.

Unconditional Admission

Students seeking unconditional admission into the Master of Science in Agriculture with a concentration in agricultural education must have a minimum cumulative undergraduate grade point average of 2.75 on a 4.00 scale or a 3.0 on the last 60 hours of undergraduate work.

Conditional Admission

Students with an undergraduate GPA of 2.5 or greater (on a 4.0 scale) or a 2.75 or higher on the last 60 hours may apply for conditional admission. For conditional admittance a student must complete 12 hours of graduate level course work in two semesters as a non-degree student, and earn a 3.00 GPA with no more than three hours of "C" in the 12 hours.

Courses required of all candidates

Required College of Education Core Courses (9 hours)

- EDFN 6763, Philosophies of Education
- EDFN 6773, Introduction to Statistics and Research
- PSY 6513, Advanced Educational Psychology

Courses in the Major (9 hours)

- VOED 6513, History and Principles of Vocational Education
- VOED 6573, Introduction to Research and Evaluation in Vocational Education
- VOED 5443, Advanced Methods of Teaching in Career and Technical Education

Thesis or Non-Thesis Option

Students electing the thesis option will count six hours of thesis toward the degree.

Students interested in pursuing a PhD should consult with their faculty advisor prior to choosing either the thesis or non-thesis option.

Elective College of Agriculture and Technology Courses (9-15 hours)

Nine Hours of Agricultural Science courses (approval of advisor) if thesis option is chosen, if non-thesis option is selected 15 hours of Agricultural Science courses.

Minimum hours required for this program: 33

**PROGRAM OF STUDY FOR THE MASTER OF SCIENCE IN
AGRICULTURE WITH A CONCENTRATION IN
VOCATIONAL-TECHNICAL ADMINISTRATION**

Admission Requirements

Students seeking admission into the Master of Science in Agriculture must meet the admission requirements of the Graduate School and the specific program requirements. Applicants will submit three letters of reference and a statement of their educational objectives and career goals. Student must indicate their choice of either the non-thesis or thesis option.

Unconditional Admission

Students seeking unconditional admission into the Master of Science in Agriculture with a concentration in Vocational-Technical Administration must have a minimum cumulative undergraduate grade point average of 2.75 on a 4.00 scale or a 3.0 on the last 60 hours of undergraduate work.

Conditional Admission

Students with an undergraduate GPA of 2.5 or greater (on a 4.0 scale) or a 2.75 or higher on the last 60 hours may apply for conditional admission. For conditional admittance a student must complete 12 hours of graduate level course work in two semesters as a non-degree student, and earn a 3.00 GPA with no more than three hours of "C" in the 12 hours.

Core courses required of all candidates

Required College of Education Core Courses (9 hours)

EDFN 6773, Introduction to Statistics and Research

PSY 6513, Advanced Educational Psychology or ELFN 6763, Philosophies of Education

VOED 6513, History and Principles of Vocational Education

Required courses in the major field: (18 hours)

VOED 6463, Resource Management in Vocational Education

VOED 6473, School and Community Relations in Vocational Education

VOED 6503, Program Management in Vocational Education

VOED 6523, Student Services Management in Vocational Education

VOED 6533, Human Resource Management in Vocational Education

VOED 6563, Instructional Management in Vocational Education

Thesis or Non-Thesis Option

Students electing the thesis option will count six hours of thesis toward the degree. If the non-thesis option is selected 6 hours of electives (VOED, AE or AGED) are required.

Students interested in pursuing a PhD should consult with their faculty advisor prior to choosing either the thesis or non-thesis option.

Minimum hours required for this program: 33

NON DEGREE PROGRAMS

ADULT EDUCATION CERTIFICATION

Students seeking adult education licensure should visit with an Adult Education advisor in the College of Agriculture and Technology. Twelve of the following 27 hours are required for adult certification, if the person holds a valid Arkansas teacher's license. If a person does not hold a valid Arkansas teacher's license, 18 hours are required.

AE 5513, Introduction to Adult Education

AE 5523, Psychology of the Adult

AE 5533, Methods and Materials for the Adult Learner

AE 5543, Teaching Reading to Adults

AE 5553, Practicum in Adult Education

AE 5563, Special Problems in Adult Education

VOED 5503, Foundations of Adult Education in Vocational Education

VOED 5583, Methods and Materials for Teaching the Adult
VOED 6543, Administration and Supervision of Adult and Vocational Education

CAREER ORIENTATION CERTIFICATION

VOED 5513, Hands-On Observation and Experiences for Career Orientation
VOED 5533, Methods of Organizing and Teaching Career Orientation

COLLEGE OF AGRICULTURE GRADUATE COURSE DESCRIPTIONS

Agriculture

AGRI 5233 Experimental Agricultural Statistics Fundamental concepts of experimental and statistical methods as applied to agricultural research.

AGRI 5523 Applied Modern Biotechnology An introduction to the principles and the applications of modern Biotechnology with emphasis on the applications of recombinant DNA technology to solve environmental and human health problems. The review of major biotechnology companies and bio-products is also included.

AGRI 5773/4773 Remote Sensing The course will cover the image acquisition and image processing methods using ERDAS Imagine software as the analytical assessment package.

AGRI 619V Thesis

AGRI 6203 Intermediary Metabolism Integration of biochemistry and physiology with nutrition of livestock and agronomic plants.

AGRI 6213 Experimental Designs A course that teaches the basic principles of statistics to be able to design experiments properly and to draw valid conclusions from the results. Includes material on the most common experimental designs in use, correlation, regression, and mean separation. Prerequisite: AGRI 4233.

AGRI 6243 Environmental Sustainability Study of environmental impacts of socio-economic development. Examines complex interactions between development and environment and discusses integrative systems approach for achieving sustainability in all human development activities. Agriculture, energy, air, development, cultural, economic and political issues related to sustainable natural resources addressed.

AGRI 6303 Global Water Issues Overview of current and historical water quality and quantity issues shaping human civilization. Emphasizes water issues facing regions of dense population and intensive agriculture. Importance of ground and surface water, ecosystem, sustainability, economic and policy issue of water are investigated.

AGRI 6351 Graduate Seminar, Research Orientation Provide pedagogy related to assembling graduate committee, developing and submitting degree plans, developing thesis or non-thesis research proposal and formally present the degree plan, literature background and plan of thesis or non-thesis research project to the faculty and other students.

AGRI 6361 Graduate Seminar, Grant Proposals Provide pedagogy related to developing research grant proposals using a federal funding agency format and guidelines and formally present the grant proposal to the faculty and other students.

AGRI 6371 Graduate Seminar, Final Research Proposal Formal presentation to the faculty and other students of student's completed thesis research project or non-thesis research experience, and defense of research results and interpretation.

AGRI 6381-3 Independent Study

AGRI 6393 - Non Thesis Research Experience Supervised research project, submitted to and approved in advance by the student's graduate advisory committee, resulting in a project report presented and defended to the student's advisory committee. A member of the committee must agree to serve as supervisor.

Agricultural Business and Economics

AGEC 5173 Natural Resource Economics Comprehensive overview of economics of natural resource and environment. Theoretical and empirical analyses, valuations and examinations of sustainable quality of environmental and natural resources over time. Economic reasoning for examining natural resource problems and measures for dealing with them. Prerequisites: AGECE 1003, ECON 2313, ECON 2323; or consent of instructor.

AGEC 5023 International Commodity Marketing Development and coordination of activities related to marketing agricultural commodities and food products in foreign markets. Emphasis given to identification and analysis of market size, location, mix, methods and changes in trading for commodities and food products in international markets, and role in food supply chain management. Prerequisite: Any economics or management foundation course, permission of professor.

AGEC 5033 Agricultural Law Farm laws pertaining to land purchases, legal descriptions, leases, mortgages, security agreements, fences, drainage, irrigation, pollution, and quarantines. Prerequisite: AGECE 1003 or ECON 2313 or ECON 2323.

AGEC 5043 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: AGECE 1003.

AGEC 5053 Agricultural Finance A study of the financial elements of the farm business. Emphasis will be given to the use of and sources of agricultural credit. Prerequisite: AGECE 1003 or ECON 2313 or ECON 2323.

AGEC 5083 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: AGECE 1003 or ECON 2313 or ECON 2323.

AGEC 6003 Advanced Agricultural and Food Marketing Recent developments in food, crop and livestock marketing. A study of costs and efficiencies associated with various agricultural and food marketing channels. Application of firm theory to agricultural and food marketing.

AGEC 6013 Advanced Agricultural Price Analysis Rigorous analysis of economic determination of agricultural and food prices in markets separated by time, geographically dispersed, and government influenced. Characteristics of specific agricultural product types and prices under alternative structures; relationship to global food supply chain.

AGEC 6023 Advanced International Agribusiness and Food Marketing Principles,

barriers, policies, strategies, and decisions involved in international marketing of agricultural commodities and food products. Combines agribusiness marketing concepts with strategic international marketing, export documentation, market analysis and applications. Include development and presentation of an international agribusiness marketing plan.

AGEC 6033 Strategic Agribusiness and Food Management Practical application of operational and strategic decision-making tools to agribusiness; emphasis on problem recognition and economic analysis to production, marketing, and financial decisions facing agribusiness and food marketing firms. It includes applied strategic concepts, analysis, and problem solving skills to manage agribusiness and food marketing firms.

AGEC 619V (1-6 hours) Thesis

AGEC 6253 Econometrics Application of regression analysis on time-series and cross-sectional data to empirically verify economic theory. Various estimation techniques including regression and simultaneous equation models, serial correlation, heteroskedasticity, panel data and instrumental estimation methods are discussed.

Agricultural Education

AGED 4473 / 5473 International Agri. Study Tour This course is intended to help students develop awareness and perspective of international agricultural enterprises and educational programs, and how world agricultural systems relate to and impact the U.S. agricultural system. Includes a focus on environmental issues related to food and fiber production.

AGED 6393 Non-Thesis Research Experience Supervised research project, submitted to and approved in advance by the student's graduate advisory committee, resulting in a project report presented and defended to the student's advisory committee. A member of the committee must agree to serve as supervisor.

AGED 6591-6 Thesis

Animal Science

ANSC 5633 Diseases of Farm Animals The prevention, treatment, and control of common diseases, including problems of hygiene and sanitation. Prerequisite: ANSC 3633.

ANSC 5663 Principles of Breeding The basic principles underlying reproduction and the application of genetic principles to the improvement of farm animals with emphasis on selection, crossbreeding, linebreeding, and inbreeding.

ANSC 5673 Digestive Physiology and Nutrition of Domestic Animals A discussion of the role of nutrients and physiological and metabolic mechanisms involved in nutrient utilization by domestic animals. Emphasis will be placed on food-producing animals, horses, dogs, cats, and catfish. Prerequisite: ANSC 1613

ANSC 5683 Theriogenology A course that teaches the anatomy, physiology, endocrinology, and biochemistry of reproduction in farm animals. This course also 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.

ANSC 5691 Laboratory for Advanced Animal Nutrition This laboratory is designed to provide students with theories and skills associated with nutrition-related laboratory analyses.

ANSC 5693 Integrated Poultry Management Production principles and problem solving strategies used by vertically-integrated poultry companies. Prerequisite: ANSC 2703 or permission of professor.

ANSC 5712 Advanced Animal Nutrition Emphasis will be placed 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.

ANSC 5733 Endocrinology of Farm Animals A study of the endocrinology system and its role in lactation, reproduction, digestion and metabolism.

ANSC 5743 Equine Nutrition Principles of nutrition and their application to feeding horses will be taught. Digestive physiology, sources of nutrients, feeding and grazing programs for various classes of horses and interactions of nutrition, diseases, and environment will be discussed.

ANSC 6003 Current Issues in Animal Agriculture A discussion of current issues affecting production and human use of animal products for food, fiber, and medicine (D)

ANSC 679V (1-6 hours) Thesis

Food Science and Technology

FDST 5333 Food Microbiology Relation of microorganisms to food spoilage; food borne illness and intoxication; general food and water quality; standard methods used for food and public health laboratories. Prerequisite: BIO 2103 Microbiology and BIO 2101 Microbiology Lab.

FDST 6213 Food Security and Safety Assurance Current issues in food supply chain including security and safety; Industrial and international food safety concerns; principles and practices of HACCP. Prerequisite: FDST 3203 Food Quality Assurance or FDST 2503 Food Safety and Sanitation.

Horticulture

HORT 5233 Commercial Vegetable Production Origin, nutritive value, botany and cultural production practices of major vegetable crops, emphasizing sustainable practices, soil management, IPM for insects, diseases and weed, with discussion of organic practices and economics of wholesale farmers' markets.

HORT 5253 Greenhouse Management Construction, operational practices, and general management of greenhouses and associated structures. Lecture two hours, laboratory two hours per week. Prerequisite: HORT 2253.

HORT 5273 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. Prerequisite: HORT 2253.

HORT 5323 Plant Propagation Principles, practices, and methods employed in the propagation of plants, emphasizing anatomical features and physiological principles involved in sexual and asexual propagation. Lecture two hours, laboratory two hours per week. Prerequisite: HORT 2253.

HORT 6253 Plant Nutrition A study of nutrient elements within the plant; mechanism involved in nutrient absorption, transport and utilization.

HORT 6263 Current Topics in Horticulture Emphasis will be placed on such subjects as plant propagation, greenhouse construction and management.

Plant and Soil Science

PSSC 5313 Plant Growth and Development Auxins, gibberellins, and various other regulators of plant growth; also phenomena such as flowering and dormancy.

PSSC 5342 Seed Analysis and Processing Techniques and principles of seed analysis and grading; methods of producing and processing quality seeds and seed stocks.

PSSC 5713 Soil Quality Assessment and Interpretation A study of the indicators of soil quality, documentation and measurement of soil quality, interpretations of soil quality, impacts and effects of management on soil quality, and the role of conservation planning in improving soil quality.

PSSC 5813 Soil Fertility A study of the principles involved in maintaining and increasing fertility of the soil. Lecture two hours, laboratory two hours per week.

PSSC 5853 Soil and Water Study of soil and water management practices and strategies as it relates to agriculture, urban planning, and natural resources. Sustainability of the soil resource will be the main focus of this course.

PSSC 5863 Soil Chemistry Chemical properties and constituents of soils, determination of several important elements, application to soil fertility.

PSSC 5873 Soil Physics Soil physical properties and measurements, with emphasis on the relation to plant growth. Lecture two hours, laboratory two hours per week.

PSSC 5883 Soil Microbiology Soil organic matter in relation to soil organisms. Lecture two hours, laboratory two hours per week.

PSSC 639V (1-6 hours) Thesis

PSSC 6543 Advanced Geographic Information Systems Advanced GIS using Arc GIS software as the analytical assessment package. Prerequisites: PSSC 3543 Fundamental of GIS and GPS or instructors consent.

PSSC 6803 Soil and Crop Production Soil classes as affecting crop production; fertility, drainage, texture, structure, organic matter.

PSSC 6813 Investigative Procedures in Agricultural Research Analytic laboratory procedures required for agricultural research. Lecture one hour, laboratory four hours per week.

Adult Education

AE 5513 Introduction to Adult Education An in-depth study of the growth and development of adult education in the United States. Analysis of contemporary issues and trends in adult education.

AE 5523 Psychology of the Adult A study of the adult with emphasis on (1) learning theories and developmental processes; (2) major contributors to the adult learning discipline; and (3) psychological aspects of middle and later life challenges and crises.

AE 5533 Methods and Materials for the Adult Learner Theory and application of methods and materials essential to effective instruction in adult education. Emphasis on writing objectives, classifying content, classroom management, and utilizing media.

AE 5543 Teaching Reading to Adults Problems in teaching reading to adults. Special emphasis on individual differences, materials of instruction, and measuring reading ability.

AE 5553 Practicum in Adult Education A series of educational experiences designed to place students in a cooperative relationship with an experienced adult educator while under university supervision. Emphasis is placed on practice teaching and related on-the-job activities of adult educators.

AE 5563 Special Problems in Adult Education Individual research on problems related to the education of adults. Prerequisite: permission of professor.

Vocational Education

VOED 5443 Advanced Methods of Teaching in Career and Technical Education The philosophy and objectives of teaching Career and Technical Education, including appropriate instructional principles and theories, instructional models, learning styles and learner centered methods and techniques at both the secondary and post-secondary levels for career and technical education.

VOED 5503 Foundations of Adult Education in Vocational Education Historical and philosophical development; comparison of vocational and non-vocational adult education; development and evaluation, teaching methods, and issues and trends in adult vocational education programming.

VOED 5513 Hands-On Activities and Observation Experiences for Career Orientation The course will provide opportunity to study, develop and demonstrate the essential facets of Hands-On Activities according to the instructional material in career orientation.

VOED 5533 Methods of Organizing and Teaching Career Orientation A study of curricula, methods and techniques involved in teaching career orientation as related to the 15 occupational clusters in the world of work.

VOED 5553 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.

VOED 5573 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.

VOED 5583 Methods and Materials for Teaching the Adult Emphasis on the methodologies, techniques and materials applicable to the adult learner based upon personal needs.

VOED 6393 Non-Thesis Research Experience Supervised research project, submitted to and approved in advance by the student's graduate advisory committee, resulting in a project report presented and defended to the student's advisory committee. A member of

the committee must agree to serve as supervisor.

VOED 6403 The Beginning Vocational Teacher Internship This course assists beginning teachers develop a strong foundational experience in their first and second year on which they can build their professional careers.

VOED 645V (1-3 hours) Current Topics in Agricultural or Vocational Education Emphasis will vary as issues in vocational education develop. Topics will include curriculum, mission, new technology and products and their effects upon local agricultural education or vocational education programs and student learning.

VOED 6463 Resource Management in Vocational Education Management of the fiscal affairs and capital facilities of a vocational-technical school is covered with emphasis on competency demonstration in an actual vocational-technical school setting.

VOED 6473 School and Community Relations in Vocational Education Procedures for initiating and maintaining productive working relationships between the local vocational-technical school and the community it serves are covered with emphasis on competency demonstration in an actual vocational-technical school setting.

VOED 649V (1-3 hours) Independent Study

VOED 6503 Program Management in Vocational Education Procedures for planning, developing and evaluating vocational education programs are studied, with emphasis on competency performance in actual vocational education settings.

VOED 6513 History and Principles of Vocational Education Historical and philosophical development of vocational education, economic and social impact, issues, trends, principles and objectives of vocational education, and its relationship to other educational programs.

VOED 6523 Student Services Management in Vocational Education Procedures for the development and supervision of student services programs unique to vocational education programs are studied, with emphasis on competency performance in actual vocational education settings.

VOED 6533 Human Resource Management in Vocational Education Selection, supervision, management and evaluation of vocational school personnel, and the design and implementation of programs for staff development are studied with emphasis on competency performance in actual vocational education settings.

VOED 6543 Administration and Supervision of Adult and Vocational Education A study of the problems and procedures involved in the supervision and administration of vocational education. Considered from the national, state, and local levels.

VOED 655V (1-3 hours) Educators in Industry Internship Emphasis of this experience is to assist educators in developing first-hand understanding of general and technical knowledge and skills that are relative to their classroom teaching situation

VOED 6563 Instructional Management in Vocational Education Procedures for planning, developing and evaluating instructional programs appropriate to vocational education are studied with emphasis on competency performance in actual vocational education settings.

VOED 6573 Introduction to Research and Evaluation in Vocational Education Course will include historical development of educational research and evaluation, interpreting published research, planning, conducting, writing, and evaluating research and assessments

related to vocational education.

VOED 658V (1-3 hours) Laboratory Experiences in Vocational Education Supervised activities designed to apply new and/or innovative approaches to the operation of a local vocational-technical school or program. The design, identification, and application of innovative and exploratory approaches will be stressed.

VOED 659V (1-6 hours) Thesis

COLLEGE OF BUSINESS

Mission Statement

The mission of the ASU College of Business is to provide high-quality management education to traditional and non-traditional students in the Mid-South 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.

Degrees Offered

The College of Business offers work leading to the Master of Business Administration degree, the Master of Accountancy degree, the Master of Science in Education degree with a major in Business Technology, and the Specialist in Community College Teaching degree in the fields of Business Administration and Business Education. The last two degrees (M.S.E. and S.C.C.T.) are designed to prepare students for careers in teaching and are jointly administered by the College of Education.

All general Graduate School requirements listed elsewhere in the bulletin are applicable to these degree programs in addition to the specific program requirements.

Admission Requirements

An applicant's complete application package, including application to Graduate School, official transcripts, official GMAT/GRE scores, required application fee and, when required, proof of immunization must be received in the Office of the Graduate School no later than 30 days prior to the beginning of classes each semester. To ensure time for issuance of an I-20, international students must submit a complete application, including all the above plus official TOEFL scores and a financial guarantee no later than 90 days prior to the beginning of classes each semester.

Unconditional Admission

Applicants for the Master of Business Administration (M.B.A.) degree program must submit a score on the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE). Entering students will be granted unconditional admission if they meet one of the following sets of criteria:

1. A minimum cumulative GPA of 2.75, or its equivalent on a 4.0 scale, on all undergraduate coursework completed AND a minimum GMAT composite score of 480.
2. A minimum cumulative GPA of 3.00, or its equivalent on a 4.0 scale, on the last 60 hours of undergraduate coursework completed AND a minimum GMAT composite score of 480.
3. A minimum cumulative GPA of 2.75, or its equivalent on a 4.0 scale, on all undergradu-

ate coursework completed AND a minimum GRE composite score of 300 with a minimum of 145 on the Verbal Section and a minimum of 145 on the Quantitative Section.

4. A minimum GPA of 3.00, or its equivalent on a 4.0 scale, on the last 60 hours of undergraduate coursework completed and a minimum GRE composite score of 300 with a minimum of 145 on the Verbal Section and a minimum of 145 on the Quantitative Section.

Information pertaining to the GMAT or GRE may be obtained by contacting the Testing Center at (870) 972-2038. International students must submit the required TOEFL or IELTS scores.

Conditional Admission

An applicant for the Master of Business Administration (M.B.A.) degree program may be admitted conditionally with a minimum overall undergraduate GPA of 2.75 at the discretion of the Director of Graduate Programs. However, no more than nine hours of MBA coursework (excluding foundation courses) may be taken by an individual who has not met ALL of the requirements for unconditional admission.

MBA Foundation Courses

The foundation courses serve students who wish to enter the MBA program from a nonbusiness baccalaureate background. The required foundation courses may be taken at the graduate level (fast track) or the undergraduate level, or a combination of both. Each graduate level course substitutes for one or two undergraduate courses, as shown below. No foundation course is a part of the MBA program and the grades received from the Fast Track courses will NOT be counted toward your graduate GPA for retention/graduation purposes as discussed under "Eligibility for Degree" on page 33 of this bulletin.

Deficient Grades: Should a student receive more than 6 hours of "C" or lower in 6000-level courses within the College of Business, that student will not be allowed to continue in the program in subsequent semesters regardless of overall GPA.

Graduate Foundation Courses (Fast Track): Undergraduate Foundation Courses:

MBA 500V, Survey of Accounting ACCT 2003, Principles of Accounting I

ACCT 2013, Principles of Accounting II

MBA 501V Survey of Finance FIN 3713, Business Finance

MBA 502V, Survey of Microeconomics ECON 2313, Principles of Macroeconomics

MBA 503V, Survey of Macroeconomics ECON 2323, Principles of Microeconomics

MBA 507V, Survey of Law LAW 2023, Legal Environment of Business

MBA 508V, Survey of Statistics ECON 2113, Business Statistics

MBA 509V, Survey of Operations Management CIT 3523, Operations Management

All applicants who enter the program without the necessary foundation courses must complete the foundation courses or their undergraduate equivalent at an IAME accredited institution with a grade of "B" or better. When a student has completed the foundation course(s) in a specific area, she/he may take the core course in that area. All the foundation courses must be taken before a student is admitted to candidacy.

Non-degree candidates cannot enroll in College of Business graduate courses unless they meet all the admission requirements of the degree candidate. Students who are admitted to Master's degree programs outside the College of Business will not be permitted to take more than nine semester hours of 6000-Level College of Business graduate courses unless they meet all the admission requirements of the degree candidate.

MASTER OF ACCOUNTANCY (MAcc) DEGREE

The Master of Accountancy Program will provide those with undergraduate training in accounting with knowledge and skills needed to advance beyond the entry-level stage in the accounting profession, provide students who have undergraduate training in accounting with the in-depth understanding of accounting issues needed for success on licensure and certification examinations, and serve as foundation work for those who may choose to pursue advanced graduate work.

Special Admission Requirements

Those admitted to the program must possess an undergraduate degree, meet the same GPA and Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE) formula as required in the current MBA program, plus have a C or better in the following key undergraduate accounting courses:

- Intermediate Accounting I (or equivalent content)
- Intermediate Accounting II (or equivalent content)
- Intermediate Accounting III (or equivalent content)
- Cost or Managerial Accounting at junior level or above
- Tax I
- Auditing
- Accounting Information Systems

Curriculum Outline

The Master of Accountancy program will require all students to take the following courses in accounting:

- ACCT 6023 Ethics and Professional Responsibility
- ACCT 6033 Advanced Accounting and Reporting
- ACCT 6073, Seminar in Financial Accounting Theory
- ACCT 6063, Contemporary Auditing Issues
- ACCT 6043, Tax Planning and Research
- ACCT 6003, Accounting for Planning and Control
- ACCT 6503, Special Problems in Accounting (taken in last semester as a capstone experience, see description below)

Elective Courses

Nine hours of electives may be selected in business or accounting. Students may take two courses at the 5000 level; otherwise elective courses must be taken at the 6000 level. Students who did not take Tax Accounting II (ACCT 4113/5113) and Governmental and Not-For-Profit Accounting (ACCT 4123/5123 as part of their undergraduate program must include these courses in the course of study for the MAcc.

Under special circumstances, a student may substitute a directed individual study for an elective. All directed individual studies must be taken after a student has completed 24 hours of coursework with a GPA of 3.5 or higher. Directed individual studies should be targeted toward a publication and/or paper/presentation as an outlet for the research. Students are also expected to make a presentation on their research to a group of Graduate Faculty.

Capstone Experience

At the end of their program each student will complete a capstone experience course, ACCT 6503 Special Problems in Accounting. This course will require students to work with an accounting graduate faculty member to work on a single issue or accounting related project in depth. The issue or project must be approved by the faculty member and business graduate director prior to enrollment in this course for the student's final semester. The capstone experience will culminate in a written issues paper and a presentation of the results of the research or other approved project. A grade of B or better on the capstone project will be required for

graduation. Students will attend regularly scheduled class during project development, project implementation, and project presentation.

Minimum hours required for this program: 30

MASTER OF BUSINESS ADMINISTRATION DEGREE

The Arkansas State University MBA Program is a professional degree program designed to prepare students of all educational and professional backgrounds for management positions in all types of organizations. As such, the program stresses the development of analytical, problem-solving and decision making competencies for the dynamic, complex global organizational and social environments.

The program of study includes the functional areas of business with the opportunity to obtain emphasis areas in each, as well as the option to select specialty emphasis areas. This provides students with the flexibility to tailor their MBA degrees to individual needs and goals. With courses offered on campus in late afternoon and evenings and also on-line, the program accommodates working professionals seeking career advancement and/or career changes as well as recent graduates desiring to move into positions of responsibility in organizations.

The program consists of a core curriculum of 27 hours. This common body of knowledge is aimed at developing competency for overall management and leadership. In addition, students may select electives in their field of choice to develop emphasis areas to meet their needs. The core courses plus the electives result in a 33-hour program. Students with a non-business undergraduate degree typically must take up to 15 hours of the Fast-Track foundation courses, or their equivalent, resulting in as much as a 48-hour program for such students. All courses must be taken at the 6000 level. However, those students seeking to sit for the CPA exam may take one 5000 level course in accounting to help prepare them for the exam while meeting the 150-hour rule for the exam.

Management 6423, Strategic Management, must be taken after all core courses have been taken or during the student's last semester of coursework. Students may take an internship course which can count for a three-hour elective. All internships must be taken after a student has completed 15 hours of course work. Only a single 3-hour internship or one directed independent study may count toward the degree.

Core Courses required of all students

- ACCT 6003, Accounting for Planning and Control
- ECON 6313, Managerial Economics
- FIN 6723, Corporate Financial Management
- IBS 6593, Global Strategic Initiatives
- MIS 6413, Management Information Systems
- MGMT 6403, Seminar in Organizational Behavior and Leadership
- MGMT 6423, Strategic Management
- MKTG 6223, Strategic Marketing
- MIS 6543, Business Analytics

Elective Courses

Six hours of electives may be selected in business or economics, as approved by the director of graduate business programs. Under special circumstances, a student may substitute a directed individual study for an elective. All directed individual studies must be taken after a student has completed 24 hours of coursework with a GPA of 3.5 or higher. Directed individual studies should be targeted toward a publication and/or paper/presentation as an outlet for the research. Students are also expected to make a presentation on their research to a group of Graduate Faculty.

Minimum hours required for this program: 33

MASTER OF BUSINESS ADMINISTRATION CONCENTRATION in FINANCE

The MBA with a Concentration in Finance is designed to allow students to complement their studies in business administration with in-depth coverage of the core components of finance, including corporate finance, financial markets and institutions, and investments. Students will complete the 27 hours within the MBA core and 9 additional hours of graduate level finance coursework.

Program of Study

Each student within the program will complete the following 27 hours within the MBA core:

ACCT 6003, Accounting for Planning and Control
ECON 6313, Managerial Economics
FIN 6723, Corporate Financial Management
IBS 6593, Global Strategic Initiatives
MIS 6413, Management Information Systems
MGMT 6403, Seminar in Organizational Behavior and Leadership
MGMT 6423, Strategic Management
MKTG 6223, Strategic Marketing
MIS 6543, Business Analytics

In addition, students will complete the following 9 hours of finance courses:

FIN 6053, Financial Statement Analysis
FIN 6733, International Financial Markets
FIN 6743, Seminar in Finance

Total Program Coursework: 36 hours

MASTER OF BUSINESS ADMINISTRATION CONCENTRATION in HEALTHCARE ADMINISTRATION

The MBA with a Concentration in Healthcare Management is designed to allow students to complement their studies in business administration with in-depth coverage of the core components of the healthcare administration arena and the unique issues and challenges facing healthcare organizations in the dynamic healthcare industry. Students will complete the 27 hours of the MBA core and 15 hours of graduate level courses in Healthcare Administration.

Program of Study

Each student within the program will complete the following 27 hours within the MBA core:

ACCT 6003, Accounting for Planning and Control
ECON 6313, Managerial Economics
FIN 6723, Corporate Financial Management
IBS 6593, Global Strategic Initiatives
MIS 6413, Management Information Systems
MGMT 6403, Seminar in Organizational Behavior and Leadership
MKTG 6223, Strategic Marketing
MIS 6543, Business Analytics

In addition, students will complete the following concentration courses:

HCA 6003, Healthcare Policies and Ethics

HCA 6013, Current Issues in Healthcare Administration
HCA 6703, Healthcare Internship
HCA 6423, Strategic Management
HCA 6243, Services Marketing Strategy Development

Total Program Coursework: 39 hours

MASTER OF BUSINESS ADMINISTRATION CONCENTRATION in INTERNATIONAL BUSINESS

The MBA with Concentration in IB program is designed to allow graduate business students the ability to select in-depth coverage of the core components of today's IB field while furthering their business administration academic career. Students will complete the 27 hours within the MBA core and 12 additional hours of graduate level IB coursework.

Program of Study

Each student within the program will complete the following 24 hours within the MBA core:

ACCT 6003, Accounting for Planning and Control
ECON 6313, Managerial Economics
FIN 6723, Corporate Financial Management
MIS 6413, Management Information Systems
MGMT 6403, Seminar in Organizational Behavior and Leadership
MGMT 6423, Strategic Management
MKTG 6223, Marketing Policies
MIS 6543, Business Analytics

In addition, students will complete the following 12 hours of IB courses:

IBS 6593, Global Strategic Initiatives
IBS 6293, Seminar in International Corporate Social Responsibility
IBS 6143, Seminar in International Human Resource Management
IBS 6323, Emerging Markets

Total Program Coursework: 36 Hours

MASTER OF BUSINESS ADMINISTRATION CONCENTRATION IN MANAGEMENT INFORMATION SYSTEMS

The MBA with Concentration in MIS program is designed to allow graduate business students the ability to select in-depth coverage of the core components of today's IT field while furthering their business administration academic career. Students will complete the 27 hours within the MBA core (which includes two graduate level MIS course) and 9 additional hours of graduate level MIS coursework.

Program of Study

Each student within the program will complete the following 27 hours within the MBA core:

ACCT 6003, Accounting for Planning and Control
ECON 6313, Managerial Economics
FIN 6723, Corporate Financial Management

IBS 6593, Global Strategic Initiatives
MIS 6413, Management Information Systems
MGMT 6403, Seminar in Organizational Behavior and Leadership
MGMT 6423, Strategic Management
MKTG 6223, Strategic Marketing
MIS 6543, Business Analytics

In addition, students will complete the following 9 hours of MIS courses:
MIS 6453, Electronic Commerce
MIS 6463, Information Systems Analysis & Design
Any 6000-level MIS course

Total Program Coursework: 36 Hours

MASTER OF BUSINESS ADMINISTRATION CONCENTRATION IN SUPPLY CHAIN MANAGEMENT

The MBA with a Concentration in Supply Chain Management is designed to allow students to complement their studies in business administration with in-depth coverage of the core components of the supply chain functions of business as they relate to firms operating in a dynamic global business environment. Students will complete the 27 hours of the MBA core and 12 additional hours of graduate level courses in logistics.

Program of Study

Each student within the program will complete the following 27 hours within the MBA core:
ACCT 6003, Accounting for Planning and Control
ECON 6313, Managerial Economics
FIN 6723, Corporate Financial Management
IBS 6593, Global Strategic Initiatives
MIS 6413, Management Information Systems
MGMT 6403, Seminar in Organizational Behavior and Leadership
MGMT 6423, Strategic Management
MKTG 6223, Strategic Marketing
MIS 6543, Business Analytics

In addition, students will complete the following 12 hours of concentration courses:
MKTG 6253, Seminar in Logistics Management
MKTG 6283 Global Supply Chain Management
MKTG 6513 Logistics Operations
MKTG 6523 Sourcing and Procurement

Total Program Coursework: 39 hours

MASTERS OF SCIENCE IN EDUCATION, BUSINESS TECHNOLOGY

The M.S.E. in Business Technology is a degree that is designed to enable students to extend, reinforce, and advance their technology and educational skills for the purpose of enhancing their educational careers.

Students seeking admission into the MSE, in Business Technology degree must meet

the admission requirements of the Graduate School. In addition, a student must have completed the requirements for a valid teaching license or they must complete the MSE Degree in Business Technology disclaimer form, which allows the student to waive the valid teaching license requirement. The disclaimer form is available in the CIT department office (BU204).

For unconditional admission, academic proficiency must be established through satisfaction of one of the following formulas:

- A minimum undergraduate GPA of 2.75 and a minimum scaled MAT score of 350. Also, when the undergraduate GPA is multiplied by 200 and added to the MAT score, the total is at least 950.
- A minimum undergraduate GPA of 2.75 and a minimum composite GRE score of 280. Also, when the undergraduate GPA is multiplied by 200 and added to the GRE score, the total is at least 880.

For conditional admission, academic proficiency must be established through satisfaction of the following formula:

A minimum undergraduate GPA of 2.50 AND either a minimum scaled MAT score of 350 or a minimum composite GRE score of 280. Any student granted conditional admission status will be advanced to Unconditional Admission Status at such time as the student completes 9 graduate semester hours in the M.S.E. program of study with cumulative graduate GPA of 3.0 or higher. Students who fail to remove conditional status upon completing 12 semester hours of graduate work in the program will be dropped from the program.

Program of Study for the MSE Degree with a Major in Business Technology

Major Field Core

BTEC 6613, Business Technology Applications

BTEC 6683, Seminar for Business Technology

One course to be selected from the following:

BTEC 6523, Instructional Strategies I

BTEC 6453, Instructional Strategies II

BTEC 6603, Instructional Strategies III

12 hours of electives from graduate level courses approved by the Graduate Programs Director

NOTE: Students admitted conditionally may not take graduate courses in the COB that are part of the MBA/MACC program. Students admitted unconditionally may take up to nine hours of courses in these programs, if other prerequisites are met.

Professional Education Courses

ELFN 6773, Introduction to Statistics and Research

Either

ELFN 6763, Philosophies of Education, or

PSY 6513, Advanced Educational Psychology

Choice of

Either (whichever not taken to meet requirement above)

PSY 6513, Advanced Educational Psychology, or

ELFN 6763, Philosophies of Education

ELCI 6063, Curriculum Management

ELCI 6423, Middle School Curriculum
ELCI 6523, Secondary School Curriculum

Minimum hours required for this program: 30

THE SPECIALIST IN COMMUNITY COLLEGE TEACHING

The 60 graduate hours, including the Master's degree, which are required for the Specialist in Community College Teaching degree include the following:

Teaching Fields	39 Semester Hours
Community College Core	12 Semester Hours
Teaching Core	9 Semester Hours

A detailed description of this program, along with specific requirements, is presented in the Specialists in Education Degree program under the College of Education.

Minimum hours required for this program: 30 plus a master's degree

COLLEGE OF BUSINESS GRADUATE COURSE DESCRIPTIONS

Accounting

ACCT 5013 Tax Accounting I This course 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 2133.

ACCT 5113 Tax Accounting II A continuation of Tax Accounting I. Emphasis in this course will be on Federal Income Tax Laws for Partnerships, Fiduciaries and Corporations. Prerequisite: ACCT 4013.

ACCT 5123 Government and Not-For-Profit Accounting Accounting concepts and reporting standards for state or local government entities and not for profit organizations. Emphasis is on areas covered in CPA exam content specifications. Prerequisite: ACCT 3013 with a C or better.

ACCT 5153 Fraud Examination A study of how and why occupational fraud is committed, how fraudulent conduct can be deterred, and how allegations of fraud should be investigated and resolved. Prerequisite: ACCT 2133.

ACCT 6003 Accounting for Planning and Control The course is an introduction to the concepts of cost analysis and management control with a focus on the application of the conceptual framework of financial and managerial accounting to practical situations. Prerequisites: ACCT 2133 or MBA 5003.

ACCT 6023 Current Accounting Problems A critical analysis of current accounting and reporting problems. Emphasis is on both the theoretical and pragmatic aspects of accounting practices. Prerequisite: ACCT 2133.

ACCT 6033 Advanced Accounting and Reporting Advanced study of accounting for business combinations, foreign currency transactions and translation, reorganizations and

liquidations, and financial reporting requirements of the Securities & Exchange Commission. Prerequisite or Corequisite: ACCT 3033 Intermediate Accounting III or equivalent content and admission to the Business Graduate Program.

ACCT 6043 Tax Planning and Research This course introduces the master's degree student to the basic concepts, methods, and tools of tax research. The coverage is broad, exploring the general framework of tax law. Prerequisite: ACCT 4113 or 5113.

ACCT 6063 Contemporary Auditing Issues In-depth study of significant pronouncements of the auditing standards board (Professional Standards Vols. 1 & 2) and from the governmental auditing area. Prerequisite: ACCT 4053 with a C or better.

ACCT 6073 Seminar in Financial Accounting Theory Review of the principles, rules, and procedures underlying the broad area of external financial reporting, including comparisons of U.S. and International Accounting Standards. Literature of the course is composed of publications by authoritative accounting bodies and contemporary development in academic research. Prerequisite: ACCT 3013.

ACCT 6083 Ethics and Professional Responsibility The course will provide the student with a framework for making ethical decisions in the context of accounting. In addition, the course will provide an introduction to professional responsibility with a particular focus on the CPA profession. Prerequisite: Admission to one of the College of Business Graduate Programs.

ACCT 6093 Directed Individual Study Detailed individual research directed by graduate faculty, resulting in a paper and presentation. Consent of instructor and approval of prospectus by graduate business programs director required.

ACCT 6503 Special Problems in Accounting This course will require MAcc students to work with an accounting graduate faculty member to work on a single-issue in-depth accounting related project. The capstone experience will culminate in a written issues paper and a presentation of the results of the research or other approved projects. Students will attend a regularly scheduled class during project development, project implementation and project presentation

ACCT 670V (3-6 hours) Accounting Internship Provides practical accounting experience by assigning students to work in a meaningful capacity in an outside organization. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours of credit may be applied to degree requirements. Prerequisite: Must have completed 15 hours of graduate courses toward degree as eligibility for internship.

Business Administration

BUAD 600V (1-3 hours) Independent Study Prior approval must be granted by the department chair.

BUAD 6703 Internship May be repeated once. Grade earned will be Pass or Fail.

BUAD 6706 Internship May be repeated once. Grade earned will be Pass or Fail.

Business Technology

BTEC 5503 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 aided instruction.

BTEC 5513 Business Technology Field Experience Provides business technology teachers, under direct supervision, the opportunity to develop and/or refine their technology competencies in business occupations. Intended for BSE majors.

BTEC 6523 Instructional Strategies I Concerned with the development of methodology in the teaching of keyboarding. Current theory and practices are analyzed and evaluated. Course objectives, content, equipment, software, and teaching materials, standards, testing and grading are included.

BTEC 6543 Instructional Strategies II Concerned with the improvement of the teaching of such subjects as general business, consumer economics, business law, and other basic non-skill business courses.

BTEC 6603 Instructional Strategies III The contribution of accounting in the educational curriculum; selection and organization of resource materials; and the development of units of study. Problems and methods in teaching accounting will be covered.

BTEC 6613 Business Technology Applications A course designed to assist classroom teachers with microcomputer software applications. Software will include electronic spreadsheets, word processing, and accounting/bookkeeping software. Software application relative to data processing, word processing, accounting, and intensive office laboratory classes will be demonstrated. The software packages will be evaluated for possible classroom use.

BTEC 6683 Seminar for Business Technology A study of new concepts, topics and/or issues in business technology as reported in current literature. Students are expected to research and report on pertinent topics as to the effects on business education.

BTEC 670V (1-6 hours) Thesis

BTEC 680V (1-3 hours) Independent Study Prior approval must be granted by the department chair.

Economics

ECON 5323 Public Expenditure and Taxation 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, 2323 or 2333.

ECON 5333 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 trade-offs associated with public regulation of electric, natural gas, cable TV, and telecommunications firms. Not available for credit for MBA degree. Prerequisites: ECON 2313, 2323.

ECON 6093 Directed Individual Study Detailed individual research directed by graduate faculty, resulting in a paper and presentation. Consent of instructor and approval of prospectus by graduate business programs director required.

ECON 6253 Econometrics Application of regression analysis on time series and cross sectional data to empirically verify economic theory. Various estimation techniques including regression and simultaneous equation models, serial correlation, heteroskedasticity,

panel data and instrumental estimation methods are discussed.

ECON 6313 Managerial Economics A complete survey of price theory as applied to business decision making and a summary of public policy toward business. Prerequisites: ECON 2313, ECON 2323, or MBA 502V and 503V.

ECON 6333 Business Cycles and Forecasting Descriptive account of U.S. business cycles; survey of business cycle theory including New Keynesian, and new Classical approaches; review of forecasting techniques such as exponential smoothing and multiple regression. Prerequisite: ECON 2313.

ECON 6353 Environmental Economics This course provides analysis of some of the most important areas of environmental economics. Areas stressed include the economics of pollution control, the application of cost benefit analysis to the environment, the economics of sustainable development, environmental policy development, and global environmental issues. Prerequisites: ECON 3313, Microeconomic Analysis, equivalent, or consent of instructor.

ECON 6703 Economics Internship Provides practical economics experience by assigning students to work in a meaningful capacity in an outside organization. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours credit may be applied to degree requirements. Prerequisite: Must have completed 15 hours of graduate courses toward degree as eligibility for internship.

Economic Education

ECED 506V (1-3 hours) Seminar in Business Issues Advanced seminars on selected business topics designed to provide in-service teachers with an in-depth examination of the issues surrounding those topics in a variable credit format.

ECED 5513 Economic Education Workshop 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 grades.

ECED 5523 Special Issues and Methods in Economic Education A detailed examination of selected contemporary economic issues relevant to institutional economics and teaching methods/materials appropriate for grades kindergarten through 12. Prerequisites: ECED 4513/5513 and/or permission of professor.

Finance

FIN 6053 Financial Statement Analysis This course will provide an analytical framework for the valuation of corporations and corporate financial statements and a basis for making credit and investment decisions. Prerequisite: admission to the business graduate program.

FIN 6093 Directed Individual Study Detailed individual research directed by graduate faculty, resulting in a paper and presentation. Consent of instructor and approval of prospectus by graduate business programs director required.

FIN 670V (3-6 hours) Finance Internship Provides practical finance experience by assigning students to work in a meaningful capacity in an outside organization. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours credit may be applied to degree requirements.

Prerequisite: Must have completed 15 hours of graduate courses toward degree as eligibility for internship.

FIN 6723 Corporate Financial Management Organization, policy, administration, institutions, and instruments involved in financing the modern business corporation. Quantitative financial relations are measured and expressed. Financial plans are prepared for corporations in different industries and in different stages of the business cycle. Financial management appraised and business judgment developed through short problem and case methods. Prerequisite: FIN 3713 or MBA 5003.

FIN 6733 International Financial Markets The flow of capital between international markets. It specifically deals with balance of payments, international monetary system, international banking, exchange rates, international money and capital. The international financial problems related to economic development, Eurodollar and Petrodollar markets are also studied.

FIN 6743 Seminar in Finance Contemporary topics in financial management will be considered. The primary emphasis will be on current developments in the business finance area. Prerequisite: FIN 3713.

FIN 6813 Healthcare Finance Provides students with an understanding of the fundamental theories of finance, with a focus on applications in the healthcare industry.

Healthcare Administration

HCA 6003 Healthcare Policies and Ethics Study of the relationship and importance of developing healthcare policies and adherence to ethical standards from a systems perspective. No prerequisites. Required for all students in healthcare administration concentration and an allowed elective for standard MBA students.

HCA 6013 Current Issues in Health Care Administration Study of the major operational and quality issues and challenges facing today's healthcare organizations and their relationship to the effective and efficient administration of these organizations. No prerequisites. Required for all students in healthcare administration concentration and an allowed elective for standard MBA students.

HCA 6243 Service Marketing Strategy Development Approaches for establishing distinctive marketing strategies in for-profit/not-for-profit firms relative to service demanded by customers are developed. Included will be analysis of various service providers competing successfully for customers in the global market.

HCA 6423 Strategic Management An integrated capstone course focusing on the role of management in crafting and implementing strategy to achieve "fit" between an organization and its environment. An action-based approach involves student teams in developing and presenting strategic plans for public, private, profit and not-for-profit organizations. Prerequisite: All core courses or last semester of enrollment.

HCA 6703 Internship in Healthcare Administration Provides practical healthcare administration experience by assigning students to work in a meaningful capacity in an organization. 120 clock hours onsite in required. A detailed paper will be required upon completion of assignment. Must have approval of proposal by graduate program director. Must have completed 15 hours of graduate courses toward the degree. For Healthcare Emphasis majors only.

International Business Studies

IBS 5103 International Trade The economic theory and history of international trade. Foreign exchange and balance of payments will be stressed. Prerequisites: ECON 2313, 2323.

IBS 6143 Seminar in International Human Resource Management International Human Resource Management provides an introduction to the critical issues facing organizations in simultaneously managing their human resources both at home and abroad. Extensive coverage of preparing expatriates for assignments abroad and the issues they will face as managers in a diverse cultural setting. Prerequisite: Admission to the MBA program.

IBS 6293 Seminar in International Corporate Social Responsibility This course consists of on-site examination of organizations, agencies, or locales in a various regions of the world. Students will be required to prepare a project that involves social entrepreneurship and/or social awareness in an expatriate setting. After project is prepared, students will be required to implement their respective projects in a 10 day semester break with the intent of making a difference in country other than their home country. Prerequisite: Admission to the MBA program.

IBS 6323 Emerging Markets Western business curriculum is founded on theory and research generated in developed countries, where political, economic, legal, and social institutions are well-developed. This course is designed to train future managers to successfully recognize and contend with the unique emerging market country environment. Prerequisite: Admission to the MBA program.

IBS 6343. International Business and Investment This course offers an integrated treatment of theory and policy in international business trade and investment. It deals with the role of government to regulate, restrict, promote or otherwise influence the conduct of international trade and investment. The structure, performance and business strategies of multinational corporations in transcending national jurisdictions are studied. The product planning for export markets and export pricing strategies are analyzed. Emphasis is given on European markets, less developed countries and the Soviet Union.

IBS 6593 Global Strategic Initiatives An integrated course examining the complex concepts and issues involved with competing in a global economy. Students will be placed in team competition to present cases to a panel of business professionals. Must be taken after successful completion of 24 hours of graduate work.

IBS 670V (3-6 hours) International Business Internship Provides practical international business experience by assigning students to work in a meaningful capacity in an outside organization. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours credit may be applied to degree requirements. Prerequisite: Must have completed 15 hours of graduate courses toward degree as eligibility for internship.

Law

LAW 6023 Law and Ethics in Business A wide variety of problems in business ethics will be considered and, where appropriate, related to case and statutory law. The legal relationship of employers with employees and the broader community will be discussed.

LAW 6033 Cyberlaw and E-Commerce A presentation of legal issues involved when transacting business electronically. Covered topics include online contracting, online marketing, e-commerce and dispute resolution, proper use of intellectual property, electronic privacy, and Internet-use policies. Prerequisite: LAW 2023 or permission of instructor.

MBA

MBA 500V Survey of Accounting Concepts of Accounting for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

MBA 501V Survey of Finance Concepts of Finance for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

MBA 502V Survey of Microeconomics Concepts of Microeconomics for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

MBA 503V Survey of Macroeconomics Concepts of Macroeconomics for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

MBA 507V Survey of Law Concepts of Legal Environment of Business for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

MBA 508V Survey of Statistics Concepts of Business Statistics for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

MBA 509V Survey of Operations Management Concepts of Operations Management for non-business majors pursuing graduate degrees in business. Intensive outside readings and assignments are required.

Management

MGMT 6001 Adventures in Leadership and Team Building Self assessment tools for developing leadership skills and practice in group dynamics. Individual growth and team building through an activity retreat. Must be taken during the first or second semester of the student's program.

MGMT 6003 Organizational Behavior in Healthcare Organizations Study of management theories and concepts describing human behavior applied in the healthcare organizations. Emphasis is placed on professionalism, medical staff relations, governance, stress, attitudes, leadership, instruction, communication, conflict resolution, and teamwork.

MGMT 6013 Human Resource Management for HealthCare Organizations Study of planning for, acquiring, retaining and maintaining human resources for healthcare services providers.

MGMT 6093 Directed Individual Study Detailed individual research directed by graduate faculty, resulting in a paper and presentation. Consent of instructor and approval of prospectus by graduate business programs director required.

MGMT 6143 Organization Theory Examines organizations as interdependent systems, stressing structural, environmental, and international considerations using theories and perspectives from sociology, economics, psychology, and strategic management. Stresses practical implications for managing dynamic organizations.

MGMT 6313 Management Consulting Focuses on requirements to become a successful management consultant. Students will experience a live consulting engagement with clients from a variety of sectors. Key activities include organizational diagnosis, progress review, preparation of consulting proposal, and presentation of consulting report to client. Prerequisites: ACCT 6003, FIN 6723, MIS 6413, and MKTG 6223.

MGMT 6403 Seminar in Organizational Behavior and Leadership Designed to introduce students to the ways individuals and teams work in organizations, with a special emphasis on practical applications for managers. The objective is to improve students' abilities to diagnose, analyze, and take effective action in their organizational work. Prerequisite: MGMT 3123 or MGMT 3153 or MBA 5023.

MGMT 6413 Industrial Relations The factors which condition labor-management relations. The nature and significance of labor disputes are analyzed, together with factors involved in their solution. Special attention is given to the growing importance of wage policies and their impact upon labor-management relations. Prerequisite: MGMT 3123.

MGMT 6423 Strategic Management An integrated capstone course focusing on the role of management in crafting and implementing strategy to achieve "fit" between an organization and its environment. An action-based approach involves student teams in developing and presenting strategic plans for public, private, profit and not-for-profit organizations. Prerequisite: All core courses or last semester of enrollment.

MGMT 6433 Entrepreneurship Explores the nature of entrepreneurial activity, the basics of business plan development, new venture creation, and small business strategic planning.

MGMT 6443 Management Development Strategies The Human Resource Management Function with emphasis on the development of business structures, policies and techniques used in developing human resources in the contemporary business organization.

MGMT 6453 Seminar in Contemporary Management Issues A comprehensive study of selected concepts and theories in the field of management. Prerequisite: permission of professor.

MGMT 6463 Leadership Leadership theories and their applications are examined. Development of leadership skills is emphasized.

MGMT 670V (3-6 hours) Management Internship Provides practical management experience by assigning students to work in a meaningful capacity in an outside organization. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours credit may be applied to degree requirements. Prerequisite: Must have completed 15 hours of graduate courses toward degree as eligibility for internship.

MGMT 6793 Business Ethics and Social Responsibility Examines ethical decision making and the various issues in business including social responsibility, environmental protection, privacy, individual rights, OSHA, product liability, equality of opportunity and the morality of capitalism.

Management Information Systems

MIS 6093 Directed Individual Study Detailed individual research directed by graduate faculty, resulting in a paper and presentation. Consent of instructor and approval of prospectus by graduate business programs director required.

MIS 6413 Management Information Systems The spectrum of the information needs of organizations. (1) Provides understanding of the uses of information by operational subsystems such as production, finance, marketing, personnel, etc. (2) Provides an analysis of the information needs of middle and top-level management, and the use of information systems to aid managers in the decision-making process. (3) Provide student with an understanding of the use of information systems to gain competitive advantage and how to manage information as an organizational resource. Prerequisite: MIS 3013 or MBA 505V.

MIS 6423 Network and Telecommunication Management Study of the technical and managerial issues related to design, operation and maintenance of computer networks. Topics include communication architectures, LANs and WANs, the World Wide Web, and the Internet.

MIS 6453 Global Electronic Commerce Provides an understanding of e-commerce as a modern business methodology that addresses the needs of organizations, merchants, and consumers for the delivery of goods and services using information technology. Prerequisite: Graduate standing, basic computer literacy.

MIS 6463 Information Systems Analysis and Design Covers basic structured analysis strategies and tools available for the systems study. Discusses the techniques for designing and implementing structured systems from logical designs.

MIS 6473 Data Mining Study of the knowledge discovery process, and how decision support systems (DSS) can be utilized to incorporate data mining algorithms for decision-making.

MIS 6483 Supply Chain and Enterprise Systems Study of the integration of internal and external supply chains. Adopts both managerial and information technology perspectives, including SCM, ERP, MRP II, and CRM along with supporting processes.

MIS 6493 Seminar for Information Systems A study of new concepts, topics, and issues in Information Systems as heralded in current literature. Students are expected to research and report on pertinent topics as to the effects on management and the impact on society

MIS 6513 Healthcare Informatics A study of the emerging field of health and medical informatics with emphasis on generating, storing and accessing healthcare information for management decision making, analyses and evaluation, and research.

MIS 6543 Business Analytics This course introduces MBA students to the basic tools in using data to make informed management decisions. This course presents a normative approach to making decisions in one's personal and professional life. It covers optimization, linear programming, simulation, business modeling, data mining and business intelligence. Prerequisite: admission to the MBA program.

MIS 6573 Advanced Data Mining An in-depth study of the knowledge discovery process and how it is harnessed for decision support systems (DSS). Emphasis is placed on various DSS models that result from data mining operations including multiple regression, logistic regression and artificial neural networks. Prerequisite: MIS 6473.

MIS 670V (3-6 hours) MIS Internship Provides practical MIS experience by assigning students to work in meaningful capacities in outside organizations. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours credit may be applied to degree requirements. Prerequisites: Must have completed 15 hours of graduate courses toward degree.

MIS 671V (1-6 hours) Thesis

Marketing

MKTG 6093 Directed Individual Study Detailed individual research directed by graduate faculty, resulting in a paper and presentation. Consent of instructor and approval of prospectus by graduate business programs director required.

MKTG 6213 Healthcare Marketing Management of the interface between healthcare providers and the external environment to promote and position healthcare organizations.

MKTG 6223 Strategic Marketing Examines the concepts and processes for gaining competitive advantage in the marketplace. Students will investigate and develop strategies relating to the escalating importance of providing customer satisfaction, responses to diversity in the marketplace, development of new products, and recognition of the challenges from global competition. Prerequisite: MKTG 3013 or MBA 5033.

MKTG 6233 Promotional Strategy Planning Planning and analysis of the promotion mix in the areas of advertising, public relations, personal selling, and sales promotion with particular emphasis upon the marketing implications and future direction of such issues. The focus is on current readings, case analyses, guest speakers, and development of promotional strategy plans.

MKTG 6243 Services Marketing Strategy Development Approaches for establishing distinctive marketing strategies in for-profit/not-for-profit firms relative to service demanded by customers are developed. Included will be analysis of various service providers competing successfully for customers in the global market.

MKTG 6253 Seminar in Logistics Management A comprehensive study of business logistics network design and functional activities as they relate to the competitive and supply chain strategies of companies. Prerequisite: MKTG 3013.

MKTG 6263 Seminar in Contemporary Marketing Issues A comprehensive study of selected concepts and theories in the field of marketing. Prerequisite: permission of professor.

MKTG 6283 Global Supply Chain Management Systematic review of concepts involved in supply chain management, with emphasis on service suppliers, the organized movement of goods between firms in more than one nation, and the unique aspects of international logistics processes.

MKTG 6513 Logistics Operations Study of logistics operations and management techniques applied to warehousing/distribution center operations, purchasing and operation of transportation services, and logistics personnel management.

MKTG 6523 Sourcing and Procurement This course addresses the strategic and operational aspects of purchasing functions in private and public organizations. Emphasis will be placed on the development and evaluation of suppliers.

MKTG 670V (3-6 hours) Marketing Internship Provides practical marketing experience by assigning students to work in a meaningful capacity in an outside organization. Detailed paper required. Must have approval of Internship Proposal by graduate business programs director and department chair. Only three hours credit may be applied to degree requirements. Prerequisite: Must have completed 15 hours of graduate courses toward degree as eligibility for internship.

COLLEGE OF COMMUNICATIONS

The College of Communications offers work leading to a Master of Science in Mass Communications and a Master of Arts in Communication Studies and a Specialist in Community College Teaching in the fields of Communication Studies.

Students must have a 3.00 GPA in all graduate coursework taken in the College of Communications and must be admitted to candidacy 1) to qualify to take the Comprehensive Examination and 2) to meet graduation requirements.

All general Graduate School requirements listed elsewhere in the bulletin are applicable to this degree program and the specific program requirements must be met.

MASTER OF ARTS DEGREE WITH A MAJOR IN COMMUNICATION STUDIES

Admission Requirements

Applicants seeking admission to the Master of Arts degree in Communication Studies must submit a sample of writing, which could be a recent term paper or research paper.

With approval of the adviser, a student may complete up to six hours in cognate courses.

Courses required of all candidates

SCOM 6203, Introduction to Graduate Study AND

SCOM 6043, Communication Theory

SCOM 6053, Quantitative Research Methods OR MCOM 6053, Research Methods in Mass Communication

MCOM 6253, Qualitative Research Methods in Communications

Minimum hours required for this program: 30

MASTER OF SCIENCE IN MASS COMMUNICATIONS DEGREE

The Master of Science in Mass Communications offers majors in journalism and in radio-television. Focusing on research and scholarship, the flexible curriculum provides opportunities for students interested in pursuing advancement in mass communications or preparing for doctoral studies and positions in higher education. Some students with limited mass communications background may be required to complete some undergraduate and graduate performance courses as part of their programs of study.

Admission Requirements

Admission to the Master of Science in Mass Communications program is based on a variety of evidence, including educational experience and record, professional experience, recommendations, and a written statement of purpose.

Courses required of all candidates

MCOM 6043, Theory of Mass Communications

MCOM 6053, Quantitative Research Methods in Communications

MCOM 6203, Introduction to Graduate Study

MCOM 6253, Qualitative Research Methods in Communications

Courses required of Journalism majors

Twelve hours selected from the following:
MCOM 5023, Public Opinion, Propaganda and the Mass Media
MCOM 5603, Crisis Communication
MCOM 6023, Advanced Studies in Communications Law
MCOM 6801-3, Independent Study
JOUR 5043, Studies in Newspaper Management
JOUR 5053, Public Affairs Reporting
JOUR 5083, Sports, Business and Opinion Writing
JOUR 5113, Integrated Communications Strategies
JOUR 5323, Race, Gender and Media
JOUR 5373, Internet Communications
JOUR 6013, Specialized Reporting Problems
JOUR 6023, Journalism Seminar

Courses required of Radio-Television majors

Twelve hours selected from the following
MCOM 5023, Public Opinion, Propaganda and the Mass Media
MCOM 6023, Advanced Studies in Communications Law
MCOM 6801-3, Independent Study
RTV 6073, International Communication Seminar
RTV 5323, News Production and Performance
RTV 5333, Special Topics
RTV 5363, Multimedia Storytelling
RTV 5373, Internet Communications
RTV 5473, Advanced Internet Communications
RTV 5553, Multimedia Reporting
RTV 5573, Sportscasting
RTV 6023, Advanced Studies in Broadcast Management
RTV 6033, The Broadcast Documentary
RTV 6223, Broadcasting Seminar

Electives required of all candidates

Six hours of graduate-level electives, subject to approval of student's adviser. The six hours may include six hours of thesis credit, courses in the college and/or courses outside the college. The topic of the thesis is subject to approval by the student's thesis committee. The thesis may be a continuation or extension of research begun in a Communications graduate class.

Minimum hours required for these programs: 30

CERTIFICATE IN HEALTH COMMUNICATION

The health care industry continues to grow in structure, size, and complexity with the advent of new technologies and the demands of an aging population. According to the U.S. Census Bureau's website, the nation's population will increase by 18 percent between 2000 and 2020. Thus, an additional 50 million people will need to have their health care needs met. Moreover, by 2020, persons 85 years and older will represent the fastest growing segment of the population. They will be major users of health care facilities and services.

Communication training for health care providers and consumers can help prepare individuals to effectively meet the communicative demands of health care practice. Specially, consumers must be able to communicate effectively with their health care providers to achieve their goals and providers must be able to communicate effectively with clients and co-workers to competently perform their duties. Moreover, the role of media and health information dissemination is an important variable in informing consumers about health related matters which may affect how they communicate with health care providers.

The courses selected for the certificate in health communication are chosen for their applicability for individuals working in the health care industry and for consumers who wish to understand the role of communication in health care processes and outcomes.

Core: 12 hours

- SCOM 5402, Seminar in Health Communication
- SCOM 5243, Interpersonal Communication OR SCOM 6243, Seminar in Interpersonal Communication
- SCOM 5253, Intercultural Communication
- NURS 6483, Ethics in Health Care

Electives: 6 hours

- COUN 6423, Psychological Aspects of Aging
- ELSE 6023, Characteristics of Individuals with Disabilities
- NHP 5103, Patient Education
- HP 5453, Health Care Administration
- HP 6023, Health Policy and Economic Issues
- HP 6113, US Health Care OR NURS 6833, American Health Care System
- NURS 6303, Health Care Issues and Policy
- MCOM 5603, Crisis Communication OR SCOM 5263 Organizational Communication
- MGMT 6003, Organizational Behavior in Health Care Organizations
- MGMT 6013, Human Resource Management for Health Care Organizations

Minimum hours required for this program: 18

SPECIALIST IN COMMUNITY COLLEGE TEACHING

The 60 graduate hours, including the Master's degree, which are required for the Specialist in Community College Teaching degree include the following:

Teaching Fields	39 Semester Hours
Community College Core	12 Semester Hours
Teaching Core	9 Semester Hours

A detailed description of this program, along with specific requirements, is presented in the Specialists in Education Degree program under the College of Education.

Minimum hours required for this program: 30 plus a master's degree

COLLEGE OF COMMUNICATIONS GRADUATE COURSE DESCRIPTIONS

Mass Communications

- MCOM 5023 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. (Also listed as PR 4023.)

MCOM 5603 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.

MCOM 6023 Advanced Studies in Communications Law An advanced study of communications law problems, issues, and responsibilities. Selected publications in the field will be examined. Individual projects concerning legal problems in freedom and responsibilities of the mass media.

MCOM 6043 Theory of Mass Communications Study of mass communications models, theory development, mass communications theories and theory relationships to research in mass communications.

MCOM 6053 Quantitative Research Methods in Communications Study of the tools and techniques of empirical research as they may be applied to mass communications.

MCOM 6063 Interpretative Research Methods in Mass Communication
This course is intended to provide the student with the basic skills needed for understanding, rather than predicting or controlling, phenomena. Included will be discussion of and practice in basic phenomenological description, structural analysis, research interviewing, and qualitative research reporting. Co-requisite: MCOM 6043 Theory of Mass Communication

MCOM 6163 Applied Research in Mass Communications Guided research dealing with practical problems in mass communications. A primary outcome of the course will be a formal research paper acceptable for publication. Prerequisite: MCOM 6053.

MCOM 6203 Introduction to Graduate Study Survey of research methods; evaluation of selected studies; preparation of thesis.

MCOM 6253 Qualitative Research Methods in Communication This course is designed to acquaint students with major approaches to qualitative inquiry in the field of communication. Students will gain experience in collecting, analyzing, and interpreting qualitative data as well as writing qualitative research reports.

MCOM 670V (1-6 hours) Thesis

MCOM 680V (1-3 hours) Independent Study

Journalism

JOUR 5043 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 promotion problems.

JOUR 5053 Public Affairs Reporting Instruction and practice in gathering material and writing stories on public affairs; emphasis on courts and government. Requires two hours of laboratory work per week. Prerequisite: JOUR 2013.

JOUR 5083 Sports, Business and Opinion Writing Techniques of news-writing

and information gathering in business and sports reporting. Techniques of opinion writing. Prerequisite: C or better in JOUR 2013 or permission of professor or chair.

JOUR 5113 Integrated Communications Strategies Focuses on the strategic integration of various channels and methods of communication for the purpose of delivering key messages to diverse target audiences in order to elicit responses, create a dialogue and engender relationship-building. Prerequisites: JOUR 3023; PR 3003; or MKTG 3013.

JOUR 5213 Social Media in Strategic Communication This course examines concepts and applications of social media within mass communications, news, advertising, and public relations industries. We will explore and apply social media tools, integrating them into an organization's overall communication strategy.

JOUR 5323 Race, Gender and Media Survey of the interface between Americans and the mass media in the United States.

JOUR 5373 Internet Communications Provides students with a thorough understanding and practice in the use of the Information Superhighway. Students will develop skills and strategies to access and create news, advertising, and public relations messages in this new electronic medium for mass communications. The course will also look at new opportunities for communications professionals, examine critical social, political, and economic issues for the medium, and prepare for future technological advances. Prerequisite: basic computer competency.

JOUR 5473 Advanced Internet Communications Advanced Internet Communication provides students with a thorough understanding and practice in interactive and online content production and/or delivery. The course also explores other new media opportunities available to communication professionals. Special Course Fees Apply.

JOUR 5913 Media Advisers Seminar To provide an overview of the issues and practices of scholastic journalism, and to enable secondary school journalism advisers to acquire and refine skills in writing, reporting, and design.

JOUR 6023 Journalism Seminar Study of the press as an institution; its problems, role, content, effects, and responsibilities as a cultural force in society.

Radio-Television

RTV 5053 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.

RTV 5303 Multimedia Reporting Apply the basics of traditional journalism skills in the digital media practice and develop the abilities of integrating audio, photographs, graphics and video as multimedia storytelling tools to enrich online news coverage. Prerequisite: Basic computer competency.

RTV 5323 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.

RTV 5333 Special Topics A seminar that addresses current topics in the area of communication.

RTV 5363 Multimedia Storytelling Introductory course in multimedia concepts, media elements, platforms, and production. Emphasis is placed on delivery of content across media platforms for diverse audiences.

RTV 5373 Internet Communications Provides students with a thorough understanding and practice in the use of the Information Superhighway. Students will develop skills and strategies to access and create news, advertising, and public relations messages in this new electronic medium for mass communications. The course will also look at new opportunities for communications professionals, examine critical social, political, and economic issues for the medium, and prepare for future technological advances. Prerequisite: basic computer competency.

RTV 5473 Advanced Internet Communications Advanced Internet Communication provides students with a thorough understanding and practice in interactive and online content production and/or delivery. The course also explores other new media opportunities available to communication professionals. Special Course Fees Apply.

RTV 5573 Sportscasting Theory and practical application of sportscasting for radio and television.

RTV 6023 Advanced Studies in Broadcast Management An advanced study of the elements, problems, and responsibilities of radio and television station management.

RTV 6033 The Broadcast Documentary This course provides for the graduate student in broadcasting an opportunity both to study the broadcast documentary, its structure and role, and to gain some hands-on practical experience in organizing, structuring, and producing this broadcast form.

RTV 6073 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.

RTV 6223 Broadcasting Seminar Topics include research in broadcasting, electronic media, or another area appropriate for advanced study and original research. The course topic coincides with the research needs of students and the expertise of the directing faculty members. Depending on the interests of participants and on the topic of the seminar, students may conduct research individually or may work together on research projects.

Communication Studies

SCOM 5203 Small Group Communication Group and conference techniques for classroom, business, and professional situations.

SCOM 5243 Interpersonal Communication Emphasis on increasing the student's capacity for openness, sensitivity, and objective appraisal.

SCOM 5253 Intercultural Communication Identification of barriers, and breakdowns to communication among cultures.

SCOM 5263 Organizational Communication Dynamics and theories of communication within an organization.

SCOM 5293 History and Criticism of American Public Address Historical background and significance of leading orators in America.

SCOM 5323 Communication in Personal Relationships The course covers interpersonal communication in the context of personal relationships such as romantic relationships, friendships, professional relationships, and family relationships.

SCOM 5373 Conflict Resolution The conflict and communication course examines conflict as a communication variable created through interpersonal interaction in dyads, small groups, families, and organizations.

SCOM 5383 Computer Mediated Communication This course considers how identities, relationships and communities are created and influenced by our use of computers and the internet. We will gain understanding of these processes by engaging new media scholarship and activities involving different forms of new media.

SCOM 5403 Seminar in Health Communication Study of the major cultural, interpersonal, and public communication issues affecting health communication.

SCOM 5423 Narratives in Health and Healing Explores the social construction of health, illness and healing through the study of narrative.

SCOM 6053 Quantitative Research Methods in Communications Study of the tools and techniques of empirical research as they may be applied to mass communications.

SCOM 6103 Communication Theory Theories, models, and approaches relevant to the study of human communication.

SCOM 6203 Introduction to Graduate Study Survey of research methods; evaluation of selected studies; preparation of thesis.

SCOM 6233 Communication Education A study of the history and philosophy of the pedagogy of communication studies, to include both theoretical and applied aspects of the discipline.

SCOM 6243 Seminar in Interpersonal Communication This course is designed to introduce students to foundational as well as current theory and research in interpersonal communication. Students will examine several interpersonal communication contexts and processes as well as methodologies in interpersonal communication.

SCOM 6253 Qualitative Research Methods in Communication This course is designed to acquaint students with major approaches to qualitative inquiry in the field of communication. Students will gain experience in collecting, analyzing, and interpreting qualitative data as well as writing qualitative research reports.

SCOM 660V (3-6 hours) Internship in Communication Studies Combines relevant work experience with classroom theory.

SCOM 670V (1-6 hours) Thesis

SCOM 680V (1-3 hours) Independent Study

COLLEGE OF EDUCATION

Mission Statement

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 leisure studies, 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 and professional growth.

The College of Education offers work leading to the following graduate degrees with emphasis areas as noted:

- A. Doctor of Education Degree in Educational Leadership
- B. Specialist in Community College Teaching Degree
 - 1. Physical Education
 - 2. Reading
 - 3. Community College Administration
- C. Specialist in Education Degree
 - 1. Educational Leadership
 - 2. Psychology and Counseling
 - 3. Reading
- D. Master of Arts in Teaching Initial Licensure
- E. Master of Rehabilitation Counseling Degree
- F. Master of Science in College Student Personnel Services
- G. Master of Science in Early Childhood Education
- H. Master of Science in Exercise Science
- I. Master of Science in Education Degree
 - 1. School Counseling
 - 2. Early Childhood Education
 - 3. Educational Leadership
 - 4. Curriculum and Instruction
 - 5. Theory and Practice
 - 6. Mid-Level Education
 - 7. Physical Education
 - 8. Reading
 - 9. Special Education
 - a. Instructional Specialist Grades P-4
 - b. Instructional Specialist Grades 4-12
 - c. Gifted, Talented, and Creative
- J. Master of Science in Sports Administration
- K. Certificate in Mental Health Counseling

All programs listed above are governed by the general requirements for graduate degrees conferred by the Graduate School unless specific requirements are designated.

Graduate Courses and Credit

Graduate students enrolled in courses numbered 5000 through 5999 must do special work in addition to that required of undergraduates in the courses numbered 4000 through 4999. Courses numbered 6000 or above are open to fully qualified graduate students only. Except for the introductory courses in Community College Teaching (CCED 7003 and CCED

7013), and the foundation courses in Educational Administration (EDFN 7773 and EDFN 7783), enrollment in 7000 level courses is restricted to those students who have been officially admitted to pursue the Specialist in Education of the Specialist in Community College Teaching degree and will not count toward the master's degree. Exceptions may be made for those holding an appropriate master's degree in a relevant field as accepted by the Department of Educational Leadership, Curriculum and Special Education. Enrollment in 7000-level courses with COUN and PSY prefixes requires admission to the Ed.S in Psychology and Counseling, unconditional admission to another university's accredited post-master degree program with a major in psychology or counseling, or (with permission) admission to the Ed.S in Educational Leadership, the Specialist in Community College Teaching Program, or the Ed.D in Educational Leadership. Enrollment in 8000 level courses is restricted to those who have been admitted to pursue doctoral degrees.

PROFESSIONAL EDUCATION FOR SECONDARY TEACHING FIELDS

The College of Education also offers a core of professional education courses for Master's degree students majoring in secondary teaching fields. The core of courses, from which students must take nine hours of professional education, consists of the following:

1. ELFN 6773, Introduction to Statistics and Research (3 hours)
2. ELFN 6763, Philosophies of Education, OR
 PSY 6513, Advanced Educational Psychology (3 hours)
3. ELFN 6763, Philosophies of Education, or PSY 6513, Advanced Educational Psychology (whichever was not taken to earn the three hours required under the second bullet) OR
 ELCI 5523, Middle School Curriculum, OR
 ELCI 6523, Secondary School Curriculum, OR
 ELCI 6063, Curriculum Management

Specific and academic requirements for majors under secondary teaching programs are listed under the various Colleges and Departments in the Graduate Bulletin.

DOCTOR OF EDUCATION DEGREE

Center For Excellence In Education

The Center for Excellence in Education is a teaching and research center within the College of Education. The primary mission of the center is to coordinate the efforts of a diverse faculty in delivery of the doctoral program in educational leadership and to facilitate basic research on the improvement of educational institutions and enhancement of educational settings. The director of the Center for Excellence in Education serves as the director of the Doctor of Education degree program. Inquiries regarding this program should be addressed to the director.

Purpose Of The Degree

The Doctor of Education degree in Educational Leadership provides the highest professional degree available in the field of education to students who aspire to administrative careers in either elementary, secondary, or collegiate levels. Although the degree requirements include a prescribed curriculum of required and elective courses, the doctoral degree is not awarded only on the basis of coursework completion. Following successful completion of the comprehensive examinations, doctoral students conduct a major research project resulting in the presentation and defense of the doctoral dissertation. This phase of the doctoral degree

provides students with an opportunity to develop and demonstrate possession of skill in intellectual problem solving.

Program Of Study

Each student will complete a program of studies determined in consultation with and approved by the student's advisory committee. This program will be designed to ensure breadth of professional knowledge and an appropriate specialization in educational leadership. At least 99 semester hours are required beyond the bachelor's degree, inclusive of applicable master's and specialist degree credit. The curriculum is specified to be distributed as follows:

Doctoral Knowledge Core (45 hrs)

- ELAD 8043 Adv. Organizational Theory and Inquiry
- ELAD 8313 Doc Sem: Educational Leadership Practices I
- ELCI 8213 Doc Sem: Curriculum and Instruction
- ELFN 8763 Doc Sem: Socio-Cultural Foundations of Education
- ELAD 8253 Education Policy and the Law
- ELAD 8203 Politics of Education
- ELFN 8773 Doc Sem: Educational Research and Evaluation
- ELFN 8783 Qualitative Research and Evaluation
- ELAD 8333 Organizational Development in Education
- ELAD 8343 Comparative Education
- ELAD 8211 Integrative Seminar I
- ELAD 8221 Integrative Seminar II
- ELAD 8231 Integrative Seminar III
- ELAD 8891-12 Dissertation

Research Foundations (9 hrs)

- ELFN 6773 Introduction to Statistics and Research
- ELFN 7773 Advanced Educational Research
- ELFN 7783 Advanced Educational Statistics

Socio-Cultural Foundations (choose one [3 hrs])

- ELFN 6763 Philosophies of Education
- SOC 6213 Sociology of Education
- HIST 5623 American Educational History

Psycho-Behavioral Foundations (choose one [3 hrs])

- PSY 6513 Advanced Educational Psychology
- PSY 7563 Theories of Learning
- ELCI 6533 Theories of Instruction
- ELAD 8243 Epistemology and Pedagogy

Leadership Foundations (18 hrs)

School Administration OR

- ELAD 6073 School Law
- ELAD 6053 Planning and Resource Allocation
- ELAD 6103 Ethical Leadership
- ELAD 6033 Administration & Supervision
of Special Education

College Administration

- ELAD 6273 Legal Aspects of Higher Education
- ELAD 6313 Higher Education Finance
- CCED 7003 The Community College
- CCED 7013 Comm College Curriculum
- CCED 7033 Spec Prob Comm Coll Teaching
- ELAD 6323 Org & Governance of H.E.

Choose two below...

- ELCI 6083 Supervision & Evaluation of Teaching
- ELAD 6063 Curriculum Management
- ELAD 6003 School & Comm. Relations
- ELAD 6326 Elementary Curriculum
- ELCI 6423 Middle School Curriculum
- ELCI 6523 Sec. School Curriculum

Cognate/Electives (21 hrs)

- | | |
|----------------------------------|---|
| ELAD 7063 Educational Facilities | ELAD 7013 School Personnel Administration |
| ELAD 7103 School District Admin. | ELAD 7023 School Business Management |
| ELAD 6423 Special Education Law | ELAD 7033 Contemporary Issues |
| ELAD 6593 Supervised Internship | ELCI 6583 Evaluation of Programs/Systems |
| | ELCI 7523 Curriculum Theory/Practice |

Minimum hours required for this program: 99

SPECIALIST IN COMMUNITY COLLEGE TEACHING

Purpose Of The Degree

The Specialist in Community College Teaching Program provides a sixth-year intermediate degree to prepare teachers and administrators for the Community College. Because the enrollee in a community college tends to be somewhat different from typical college, university, or trade school students, specialized personnel are needed to ensure that the investments made by students and institutions are maximally and mutually beneficial.

The teaching emphasis program of study will focus mainly upon the major field of specialization with adequate opportunities for breadth of preparation in the specialty area and cognate areas, and a background in research methods. Major fields of specialization are presented under degrees offered in the General Information section of the Bulletin. The administration-emphasis program of study will focus on a combination of generic higher education administration courses and specialized community college courses.

Admission Requirements

Admission requirements for the Specialist in Community College Teaching are those required by the Graduate School. Admission to the Specialist level will require admission to the Graduate School, a master's degree from an accredited institution, and a satisfactory score on the GRE or MAT.

Programs Of Study

The 60 graduate hours, including the Master's degree, which are required for the Specialist in Community College Teaching degree include the following:

Teaching Fields	39 Semester Hours
Community College Core	12 Semester Hours
Teaching Core	9 Semester Hours

Minimum hours required for this program: 30 plus a master's degree

NORMAL STEPS TO BE FOLLOWED IN COMPLETING THE SPECIALIST IN COMMUNITY COLLEGE TEACHING DEGREE

1. File an application for admission and official transcripts from all colleges and universities attended.
2. Obtain an official statement of admission to graduate study.
3. Familiarize yourself with the Graduate Bulletin, its general requirements, and the specific regulations pertaining to your particular program.
4. Complete CCED 7003, The Community College, and CCED 7013, Community College Teaching during the first 48 hours of graduate work leading to the program. NOTE: During these courses the student will have initial contact with the community college coordinator. The courses will enable students to grasp the philosophy of the community college, and through the processes of counseling and primary experiences, make a decision concerning continuance in the program.
5. Proceed with coursework at any registration period.
6. Complete the required standardized examinations during your first enrollment period.
7. Apply for Admission to Candidacy for the degree when you have satisfied any provisions attached to your admission and have completed 42 hours of graduate work with a 3.00 grade point average. The application for admission to candidacy must be filed no later than the completion of 48 semester hours of graduate credit. Failure to gain admission to candidacy at the time that no more than 48 hours have been accumulated may result in additional enrollment and will cause a delay in your graduation. Students accumulating 48 hours of graduate credit with less than a 3.00 grade point average will be dropped from the Graduate School.
8. Complete the coursework required for the degree, including 39 semester hours in the teaching fields.
9. File an Intent to Graduate Form at the registration period when you enroll for your last graduate coursework except that a student who expects to complete the requirements for the degree during the second summer term must make application for the degree not later than the registration date for the first summer term.
10. Successfully complete the comprehensive examination at the scheduled time during your last enrollment period.
11. Complete all requirements for the degree within six years exclusive of any time spent in the armed forces of the United States.

SPECIALIST IN EDUCATION DEGREE WITH A MAJOR IN READING

Purpose of the Degree

The Specialist in Education (Ed.S.) degree with a major in Reading offers educators an opportunity to expand their knowledge of reading instruction and literacy leadership beyond the Master's level. Candidates for the Ed.S. degree with a major in Reading degree will work with a faculty advisor who teaches graduate level reading courses in the Department of Teacher Education to develop a plan of study which incorporates 30-33 hours beyond the Master's level and includes a thesis.

Admission Requirements

Students seeking admission into the Specialist in Education (Ed.S.) degree with a major in Reading program must meet the admission requirements of the Graduate School. In addition, applicants must meet the following criteria for unconditional admission:

- Have a valid teaching license (Arkansas or other state)
- Have a Master's Degree in Reading or other field in education
- Have a minimum of a 3.25 graduate GPA
- Have documentation of a minimum raw score of at least 380 on the Miller Analogies Test (MAT) or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE
- Provide official transcripts for all previous undergraduate and graduate course work
- Provide a writing sample (minimum 10 pages, research-driven paper with citations and references)
- Participate in an interview with graduate reading faculty members upon receipt of all documents

Program of Study

Part A:

All candidates must take:

RDNG 7613 Survey of Quantitative and Qualitative Literacy Research (prerequisite: ELFN 6773; Statistics and Research, or equivalent) 3 semester hours

Part B:

Candidates must take 21-24 semester hours of the following core courses. Candidates will work with an Ed.S. faculty reading advisor to select one of the following tracks:

Track 1-Literacy Leadership: Advanced Perspectives

This track is designed for Ed.S. candidates who already have a Master's Degree in Reading.

RDNG 7543: New Literacies

RDNG 7473: Theories of Language Acquisition

RDNG 7283: Writing Pedagogy: Advanced Processes of Writing

RDNG 7653: Advanced Studies in Reading Comprehension

RDNG 7643: Social Foundations of Literacy

RDNG 7273: Multicultural Influences in Reading and Literature

RDNG 7393: Literacy Leaders as Community Advocates

Track 2-Literacy Leadership: Professional Practice

This track is designed for Ed.S. candidates who have a Master's Degree in another educational field.

RDNG 6313: Theory and Practice in Teaching Reading

RDNG 7473: Theories of Language Acquisition

RDNG 7283: Writing Pedagogy: Advanced Processes of Writing

RDNG 7653: Advanced Studies in Reading Comprehension

RDNG 6243: Reading in the Digital Age

RDNG 6563: Principles of Literacy Cognition

RDNG 6333: Reading Practicum I – Diagnosis and Intervention

RDNG 6353: Reading Practicum II – Leadership In Literacy

Part C – 6 semester hours:

All candidates must take:

RDNG 6451-6 Thesis (under supervision of Department of Teacher Education Graduate Reading Faculty)

Total Number of semester credit hours required for the program: 30-33 Hours

SPECIALIST IN EDUCATION DEGREE WITH A MAJOR IN EDUCATIONAL LEADERSHIP

Purpose Of The Degree

The Specialist in Education degree (Ed.S.) with a major in Educational Leadership offers educators a program designed to improve their general educational and specific professional competencies as leaders in the public school systems within one of the following areas. The Specialist Degree program is designed to provide study beyond the Master's degree and is based on recommendations from professional organizations and accrediting associations. Candidates complete performance-based activities in P-12 school sites and related settings.

Superintendency Track

Admission Requirements

To be considered for the Specialist degree program, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Three years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing central office administrator who will serve as a mentor during this program.

Program Of Study

ELAD 7013 School Personnel Administration
ELAD 7023 School Business Management
ELAD 7033 Contemporary Issues
ELAD 7043 Management of Operational Systems for Learning
ELAD 7073 Schooling in a Pluralistic Society
ELAD 7103 School District Administration
ELCI 7523 Curriculum Theory and Practice
ELFN 7583 Evaluation of Educational Programs and System
ELAD 7473 Field Study
ELAD 7493 Supervised Internship
(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. All candidates for the Ed.S. degree in Educational Leadership seeking district administrator licensure must have a standard building-level administrator license or a standard program administrator and must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores should be sent to Arkansas State University.

PRINCIPALSHIP TRACK

Admission Requirements

To be considered for the Specialist Degree-Principalship Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing building-level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues

ELAD 7073 Schooling in a Pluralistic Society

ELCI 7523 Curriculum Theory and Practice

ELFN 7583 Evaluation of Educational Programs and System

ELAD 6103 Ethical Leadership

ELAD 6073 School Law

ELAD 6003 School and Community Relations

ELCI 6063 Curriculum Management

ELCI 6083 Supervision and Evaluation of Teaching

ELAD 6593 Supervised Internship

(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a building-level administrator's license, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

CURRICULUM DIRECTOR TRACK

Admission Requirements

To be considered for the Specialist Degree-Curriculum Director Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher in an educational institution.
3. A current state-issued teaching license.
4. A written commitment from a practicing building-level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues
ELAD 7073 Schooling in a Pluralistic Society
ELCI 7523 Curriculum Theory and Practice
ELFN 7583 Evaluation of Educational Programs and System
ELAD 6103 Ethical Leadership
ELAD 6003 School and Community Relations
ELCI 6063 Curriculum Management
ELCI 6083 Supervision and Evaluation of Teaching
ELCI 6323 Elementary Curriculum
ELCI 6423 Middle School Curriculum
ELCI 6523 Secondary School Curriculum
ELCI 6493 Curriculum Internship
(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 36

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a curriculum director's license, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

SPECIAL EDUCATION DIRECTOR TRACK**Admission Requirements**

To be considered for the Specialist Degree-Director of Special Education Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a special education teacher in an educational institution.
3. A current state-issued special educator's teaching license.
4. A written commitment from a practicing special education director or central office administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues
ELAD 7073 Schooling in a Pluralistic Society
ELCI 7523 Curriculum Theory and Practice
ELFN 7583 Evaluation of Educational Programs and System
ELAD 6103 Ethical Leadership
ELAD 6423 Special Education Law
ELAD 6033 Administration and Supervision of Special Education
ELAD 6003 School and Community Relations
ELCI 6083 Supervision and Evaluation of Teaching
ELCI 6493 Curriculum Internship

(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a curriculum director's license, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

GIFTED, TALENTED, AND CREATIVE DIRECTOR TRACK

Admission Requirements

To be considered for the Specialist Degree-Director of Gifted, Talented, and Creative Track, each candidate must have, in addition to the admission requirements of the Graduate School, the following:

1. At least a 3.25 GPA in a master's degree from an accredited institution and program.
2. Two years of experience as a certified teacher of gifted, talented, and creative (GTC) in an educational institution.
3. A current state-issued(GTC) teaching license.
4. A written commitment from a GTC director or district level administrator who will serve as a mentor during this program.

Program of Study

ELAD 7033 Contemporary Issues
ELAD 7073 Schooling in a Pluralistic Society
ELCI 7523 Curriculum Theory and Practice
ELFN 7583 Evaluation of Educational Programs and System
ELAD 6103 Ethical Leadership
ELAD 6073 School Law
ELAD 6003 School and Community Relations
ELCI 6063 Curriculum Management
ELCI 6083 Supervision and Evaluation of Teaching
ELCI 6493 Curriculum Internship

(The internship must be completed during the semester in which a candidate completes the degree.)

Total Required Hours: 30

Assessment

Each candidate is required to compile a portfolio while completing the degree. This portfolio constitutes the exit assessment. To obtain a license as a director of gifted, talented, and creative programs, the candidate must pass the appropriate examination(s) required by the state(s) in which licensure is sought. A copy of the scores on the state mandated test(s) should be sent to Arkansas State University.

SPECIALIST IN EDUCATION DEGREE WITH A MAJOR IN PSYCHOLOGY AND COUNSELING

Purpose Of The Degree

The Specialist in Education degree (Ed.S.) with a major in Psychology and Counseling offers a planned program of studies designed to lead to state licensure in counseling, school psychology, and psychology. A Flexible Options Track is also available. Information about requirements for licensure can be obtained from the Arkansas Board of Examiners in Counseling, the Arkansas Department of Education, and the Arkansas Psychology Board and from the Program Coordinators in the Department of Psychology and Counseling. The design of each candidate's program is based on that student's previous academic preparation, professional experiences, and career aspirations.

NOTE: Enrollment in 7000-level courses with COUN and PSY prefixes requires admission to the Ed.S. in Psychology and Counseling, unconditional admission to another university's accredited post-master degree program with a major in psychology or counseling, or (with permission) admission to the Ed.S. in Educational Leadership, the Specialist in Community College Teaching Program, or the Ed.D. in Educational Leadership.

Program Admission Procedures

1. Contact the Graduate School for an application materials packet.
2. Submit to the Graduate School all application materials, including:
 - a. Completed Graduate School application form with specified application fee, proof of immunization for mumps, measles and rubella, selective service status form, and separate official transcripts of all undergraduate and graduate work from all colleges and universities attended.
 - b. Official report of scores, obtained within the last five (5) years, on the Graduate Record Examination (GRE) for Verbal and Quantitative sections.
 - c. A typed statement of personal, educational, and career goals and aspirations; personal perception of influences on the applicant's choice of training in the areas of psychology and/or counseling; and personal view of the role and value of the chosen area of training.
 - d. Four letters of appraisal and recommendation from persons qualified to speak with authority about the applicant's professional abilities and personal characteristics. At least two of these letters must come from faculty in the applicant's most recent academic program of study. When the applicant has not completed that program of study, a statement of status in that program also is required.
3. The Graduate School reviews the application file and, if applicant qualifies for admission to the Graduate School, forwards the file (including all materials listed above) to the appropriate Program Coordinator in the Department of Psychology and Counseling.
4. The appropriate Ed.S. Program Committee reviews the application file. This committee evaluates all materials submitted by the applicant and decides whether the applicant has the essential qualities to warrant an interview with the Committee.
5. Applicants who qualify for an interview appear before the Committee, which then decides whether the applicant meets program requirements and expectations. If an applicant is approved for admission to the program, the committee sets any conditions of admission and appoints an academic adviser.
6. Application file is returned to the Graduate School for notification to the applicant of the admission status. For applicants who are admitted, the notice also will include

identification of academic adviser and conditions of admission, if any.

Note: The school psychology track only accepts students in the fall semester of each semester of each academic year. Therefore, individuals who are applying for acceptance into the school psychology track of the program must submit their entire application to the Graduate School no later than April 15.

The mental health counseling track admits students by cohorts during the fall and spring semesters. Each student is required to commit to a full-time or part-time program of study determined in consultation with an assigned advisor at the time of enrollment. Deadlines for application materials are April 15th for the fall semester and October 1st for the spring semester.

Program Admission Requirements

To be considered for admission to the Ed.S. Program in Psychology and Counseling, applicants must hold an earned bachelor's or master's degree from an accredited institution and present evidence of qualities consistent with those required for effective practice in the chosen area of study. The written statement prepared by the applicant, combined with letters from references and the personal interview, will be used as the basis for committee members' judgment of the applicant's personal and interpersonal qualities. All persons admitted to the program are required to meet the same standard in regard to these qualities.

Applicants also must present evidence of potential ability to perform academic work at the advanced graduate level. Standardized test proficiency and past grade performance provide the primary data for judging academic ability; other indicators, such as quality of writing in the applicant's prepared statement and faculty references, also will be considered.

Based on the combination of test proficiency and past academic performance, an applicant may qualify for either unconditional or conditional admission status.

1. Unconditional Admission Status. Academic proficiency for unconditional admission may be established through satisfaction of either of the following criteria:
 - a. A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours of undergraduate work) and a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE, or
 - b. Unconditional admission to the Graduate School, a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE, and a minimum cumulative graduate grade point average of 3.25 on 12 or more hours with no grade less than a "B."
2. Conditional Admission Status. Academic proficiency for conditional admission may be established through satisfaction of either of the following criteria:
 - a. A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours of undergraduate work) and a minimum scaled score of 146 on the verbal reasoning section of the GRE and a minimum scaled score of 140 on the quantitative reasoning section of the GRE, or
 - b. Unconditional admission to the Graduate School, a minimum scaled score of 146 on the verbal reasoning section of the GRE and a minimum scaled score of 140 on the quantitative reasoning section minimum, and a minimum cumulative graduate grade point average of 3.00 on 12 or more semester hours with no more than one course with a grade of "C" and no grade less than a "C."

A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours of undergraduate work) and a minimum score of 800 on the combined verbal and quantitative sections of the GRE, or

Unconditional admission to the Graduate School, a minimum score of 800 on the combined verbal and quantitative sections of the GRE, and a minimum cumulative graduate grade point average of 3.00 on 12 or more semester hours with no more than one course with a grade of "C" and no grade less than a "C."

Eligibility To Continue In The Ed.S. Program

Students admitted in Conditional status must earn a cumulative grade point average of at least 3.25 on the next 12 hours of course requirements and have no grade less than "B" in any course in order to advance to Unconditional status. Students who fail to remove Conditional status in this manner will be dropped from the Ed.S. Program in Psychology and Counseling. Retention checkpoints for students admitted to the Ed.S.

Program in Psychology and Counseling include the following:

1. **Annual Review.** In addition to the academic standards for continuing enrollment, all students admitted to the Ed.S. Program will be subject to annual review by the appropriate Committee. This annual review will be conducted at some time during the spring semester. At this review, the Committee will assess current evidence of each student's personal and interpersonal qualities deemed essential for the chosen area of study. The Committee also will assess overall quality of academic performance, and any student having earned a grade of "C" in any course will come under close scrutiny. Outcomes at each review may be approval for unrestricted continuation in the program, approval for continuation in the program with specified contingencies, suspension from the program with specified contingencies, suspension from the program with specified contingencies for re-admission, or removal from the program.
2. **Admission to Candidacy.** Students who have attained Unconditional Status and completed 12 to 42 hours of required courses in the Ed.S. Program in Psychology and Counseling must file for candidacy status in compliance with Graduate School policy.
3. **Approval to Register for Practicum and Internship Courses.** Eligibility to enroll in supervised clinical training (i.e., COUN 6203, 6213, 7483-6, and PSY 7823-6) is subject to approval of the student's adviser and/or the program committee. To obtain this approval, a student must have successfully completed all prerequisites and be deemed to have shown evidence of readiness for the level of practice required in the particular course.
4. **Eligibility for Comprehensive Examination.** Students who have earned an overall graduate grade point average of 3.00, have earned a cumulative grade point average of at least 3.00 for all courses completed in the Ed.S. Program in Psychology and Counseling, and are enrolled for their final period of study will be eligible to sit for the comprehensive examination.
5. **Eligibility for Graduation.** Students who have earned an overall graduate grade point average of 3.00, have completed all courses required for the Ed.S. Program in Psychology and Counseling and earned a cumulative grade point average of at least 3.00 for these courses, and have passed the comprehensive examination will be eligible for conferral of degree.

Academic Credit

Graduate School policy prohibits credit toward degree requirements for any courses completed more than six years prior to completion of the degree program. In addition, both degree-seeking and non-degree seeking students enrolling in COUN and PSY courses are

expected to provide evidence that prerequisite knowledge is sufficiently current to support successful academic and/or clinical performance. Thus, students with dated courses may be asked to repeat such courses whether or not they have been used to fulfill requirements of another degree.

Thesis/non-thesis Option

Within the minimum number of hours required for the degree, candidates may elect to complete a six-hour thesis in either psychology or counseling. The topic of the thesis must be acceptable to the student's thesis committee. Candidates electing the thesis option must comply with the standards specified in the **Guide to Thesis and Dissertations: Preparation and Electronic Submission**, available on the Graduate School website, <http://www.astate.edu/graduate>. Candidates electing the non-thesis option will complete six hours of coursework in lieu of the six-hour thesis to acquire the minimum number of hours required for the degree.

Supervised Internship

Supervised internship requirements will be determined and pre-approved by the student's graduate adviser and the appropriate committee. These requirements will be based on the candidate's previous work experience, and in accord with the following guidelines:

1. Candidates with one to three years of professional experience acceptable to the degree major may be required to complete a three-semester hour supervised internship.
2. Candidates with no professional experience acceptable to the degree major will be required to complete three to six semester hours of internship.
3. The supervised internship will consist of the equivalent of full-time responsibility to the assigned duties for a period of nine weeks for each three semester hours of credit earned. The intern will be responsible for maintaining a log of time and activities to be submitted to the faculty supervisor at the conclusion of the internship assignment.
4. Candidates enrolled in a program of study that leads to professional licensure in psychology or counseling will complete supervised internship experiences that are consistent with state and/or national requirements/standards.

Admission To Candidacy

The student may apply for admission to candidacy when the following requirements have been met:

1. Removal of assessed deficiencies as determined by the Committee on Admissions.
2. Satisfactory completion of 12-18 hours of graduate coursework in the degree program.

The application for admission to candidacy must be filed no later than the completion of 18 semester hours of graduate degree credit in the program. Failure to gain admission to candidacy at the time that no more than 18 hours have been accumulated may result in additional enrollment and will cause a delay in graduation. Students accumulating 18 hours of graduate degree credit with less than a 3.00 grade point average will be dropped from the Graduate School.

Comprehensive Examinations

A written comprehensive examination must be completed. Because of its all-inclusive nature, candidates will take the examination during the final period of enrollment. An oral examination may be required at the option of the appropriate committee. Committee evaluation

of the examination (written, written and oral) will result in a recommendation for internship or graduation, a requirement of additional coursework or assignment(s) prior to repeating the comprehensive examination, or removal from the program as specified by the Graduate School.

Program Of Study

Each student's program will be planned with the assigned adviser during the initial enrollment period to ensure that the program complies with professional credentialing requirements, where such exist, and is relevant to the student's objectives. A minimum of 18 hours of 7000 level courses are required. A maximum of three hours of 5000 level courses beyond the master's degree and a maximum of 12 hours of 5000 level courses beyond the baccalaureate degree may be applied toward the Specialist in Education degree.

Candidates for the Ed.S. degree with a major in Psychology and Counseling who wish to seek a license from the Arkansas Department of Education must take the appropriate PRAXIS II Examination (e.g., School Psychology). The candidate must arrange for a score to be sent to Arkansas State University and must provide a copy of the individual score report to the school psychology coordinator.

MENTAL HEALTH COUNSELING TRACK

The Mental Health Counseling Track of the Specialist degree program requires a minimum of 30 hours beyond the master's degree or 60 hours beyond the baccalaureate degree. The program of study is designed to prepare students for positions as professional counselors in community, state, federal, and private social service agencies and for EAP positions in business and industry. Graduates provide services such as child, youth, adult, couple, family, employment, health, multicultural, gerontological, and/or wellness counseling. The program provides the opportunity for students to develop skills and competencies in working with a diversity of issues, including but not limited to, depression, anxiety, addiction and substance abuse, suicidal impulses, stress management, grief, and issues relating to family, which can include parenting, marital difficulties, or other relationship problems. The program structure is based on the professional standards established by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and is consistent with standards and requirements set forth by the Arkansas Board of Examiners in Counseling.

The curriculum emphasizes the acquisition of specialized knowledge and skills relating to theories of human behavior, human development, interpersonal relationships, and foundational therapeutic interventions. Ethical and competent counseling practices are stressed. Students will develop a professional identity as a competent ethical mental health counselor.

Course Requirements

COUN 6023 Introduction to Mental Health Counseling
COUN 6033 Social and Cultural Foundations of Counseling
COUN 6043 Career Development and Services
COUN 6053 Ethical, Legal, and Professional Issues in Counseling
COUN 6123 Group Dynamics
COUN 6203 Counseling Prepracticum
COUN 6213 Counseling Practicum
COUN 7463 Introduction to Couples and Family Counseling
PSY 6113 Theories and Techniques in Helping Relationships
PSY 6213 Statistics and Research Design in Psychology and Counseling
PSY 6543 Psycho-Social Aspects of Development
PSY 6573 Psychological Testing
PSY 6613 Professional Consultation
PSY 7103 Advanced Counseling Theories
PSY 7223 Research Design and Program Evaluation in Psychology and Counseling

PSY 7533 Psychopathology
PSY 7633 Physiological Psychology and Psychopharmacology
COUN 7473 Supervised Internship I
COUN 7493 Supervised Internship II

Note: Students must take an additional 3 credit hours of approved electives.

Students who complete the Mental Health Counseling Track of the program and are awarded the Ed.S. Degree in Psychology and Counseling are eligible to take the National Counselor Examination (NCE) offered by the National Board for Certified Counselors (NBCC) in order to qualify for both National Certified Counselor (NCC) and Arkansas Licensed Associate Counselor (LAC) status. The Mental Health Counseling Track faculty are committed to helping students/graduates become certified and/or licensed as professional counselors.

Additional information about the Mental Health Counseling Track can be obtained from the Mental Health Counseling Handbook, program faculty, and at the following Department of Psychology and Counseling website: <http://www.astate.edu/education/psychologycounseling>.

CERTIFICATE IN MENTAL HEALTH COUNSELING

This certificate is intended for individuals who already hold a graduate degree in counseling or a closely related field. The purpose of this certificate program is to (1) allow individuals currently working in mental health settings to upgrade their knowledge and skills related to working with clinical populations, (2) allow individuals who have learned a degree in counseling or a closely related field with fewer than the required minimum hours for professional counseling licensure to add the necessary hours, and/or (3) allow individuals with a license as a professional counselor to add one or more specialization licenses available through the Arkansas Board of Examiners in Counseling. To gain admission to this certificate program, applicants must meet requirements for admission to the Ed.S. degree in Psychology and Counseling (Mental Health Counseling track).

Students in this certificate program will complete a minimum of 15 hours from among existing courses approved for credit toward the existing Specialist in Education degree with an emphasis in Mental Health Counseling. Hours completed in fulfillment of a prior degree cannot be counted toward certificate requirements. Other relevant coursework completed while pursuing a prior degree, but not counted toward a prior degree, might be counted toward certificate requirements with approval of the advisor. The basic curriculum for the certificate program is comprised of the courses required by the licensure board that typically are not required by any of the programs that are identified as feeders to this certificate program.

BASIC CURRICULUM

Core Courses (9 hours)

COUN 7463, Couples and Family Counseling
PSY 7533, Psychopathology
PSY 7633, Physiological Psychology and Psychopharmacology

Electives (6 hours)

Electives are selected from courses approved for credit in the Specialist in Education degree with an emphasis in Mental Health Counseling as approved by the advisor based upon a student's individual needs and aspirations.

Minimum hours required for this certificate: 15

Note: If a student has already received degree credit for courses named in the basic curriculum, the student's advisor may modify that curriculum by substituting other courses approved for credit in the Ed.S. degree in Psychology and Counseling (Mental Health Counseling track). Individual student needs may indicate the value of requiring more than 6 hours of elective coursework and clinical experiences, but the total submitted for the certificate should not exceed 24 hours.

SCHOOL PSYCHOLOGY TRACK

The School Psychology Track of the Specialist degree program requires a minimum of 33 hours beyond the master's degree or 66 hours beyond the baccalaureate degree. The program of study is specifically designed to educate future school psychologists so that graduates have expert skills in data-based decision making, assessment, intervention (including prevention), consultation, research, and program planning, and evaluation to work with students, teachers, administrators, parents, and other professionals. Preparation is focused on comprehensive service delivery to meet the complex needs of the diverse clientele that is served. The structure of the program is based on the professional standards established by the National Association of School Psychologists (NASP). Program requirements are also consistent with licensure standards set by the Arkansas Department of Education (ADE) and the Arkansas Psychology Board (APB). The program of study has been approved by the National Association of School Psychologists (NASP) and ADE. The curriculum is rooted in the scientist-practitioner and ecological-behavioral models. Students are taught to be both consumers and producers of research. Professional accountability is stressed. Applicable laws, ethical principles and codes of conduct are emphasized. Program graduates are well educated in the problem-solving model. They are well equipped to draw upon strong foundations in psychology and education when providing direct and indirect services to meet the academic, social, and emotional needs of all students.

Course Requirements

Year 1

Fall

- PSY 6113 Theories and Techniques in Helping Relationships
- PSY 6213 Statistics and Research Design
- PSY 6573 Psychological Testing
- PSY 6603 Professional School Psychology

Spring

- PSY 6583 Individual Intelligence Testing
- PSY 6613 Professional Consultation
- PSY 6623 Child and Adolescent Psychopathology, Prevention, & Intervention in the Schools
- PSY 7563 Theories of Learning (rotates every spring w/PSY 7223 Research Design and Program Evaluation in Psychology & Counseling)

Summer I

- PSY 7513 Psycho-Educational Assessment of Persons with Disabling Conditions

Summer II

- PSY 6513 Advanced Educational Psychology

Year 2

Fall

- PSY 6523 Behavior Assessment and Intervention
- COUN 7463 Couples and Family Counseling
- PSY 7523 Psychoeducational Interventions
- PSY 7613 Practicum in School Psychology

Spring

- COUN 6033 Social and Cultural Foundations of Counseling
- PSY 7223 Research Design and Program Evaluation in Psychology and Counseling (rotates every spring w/PSY 7563 Theories of Learning)
- PSY 7583 Developmental and Differential Psychology
- PSY 7613 Practicum in School Psychology

Summer I

ELFN 6763 Philosophies of Education

Summer II

PSY 7633 Physiological Psychology and Psychopharmacology

Year 3**Fall**

PSY 7823-6 Supervised Internship

Spring

PSY 7823-6 Supervised Internship

Students who complete the School Psychology Track of the program and are awarded the Ed.S. Degree in Psychology and Counseling are eligible to take the Praxis II School Psychology Specialist Examination which is required for licensure as a School Psychology Specialist (SPS) by the ADE. These individuals may also elect to seek national certification as Nationally Certified School Psychologists (NCSP) through the NASP. Graduates of the program who have 600 hours of PSY 7823-6 Supervised Internship supervised by a licensed psychologist may also apply for licensure as Licensed Psychological Examiners (LPE) with the APB prior to December 31, 2013.

Additional information about the School Psychology Track can be obtained from the School Psychology Handbook, program faculty, and from the following Department of Psychology and Counseling website.

FLEXIBLE OPTIONS TRACK

The Flexible Options Track is designed to provide students with a planned but flexible advanced program of study in psychology or counseling. Students may design their program to meet the requirements for becoming instructors of psychology in two-year post-secondary institutions or to simply acquire advanced knowledge and skills in psychology. Upon graduation from the degree program some of these students may elect to pursue doctoral study in psychology or a related field. This is a non-licensure/certification program track.

Additional information about the flexible options track can be obtained from the school psychology program faculty and at the following Department of Psychology and Counseling website: <http://www.astate.edu/education/psychologycounseling>.

Minimum hours required for this degree: An appropriate master's degree plus 33 semester hours or a baccalaureate degree plus 66 semester hours.

MASTER OF REHABILITATION COUNSELING DEGREE

Purpose Of The Degree

The Master of Rehabilitation Counseling (M.R.C.) at Arkansas State University is a graduate degree offered through the Department of Psychology and Counseling within the College of Education. The Program is a minimum 48 semester-hour curriculum that is fully accredited by the Council on Rehabilitation Education (CORE). The M.R.C. Program is designed to meet the growing demand for professionally trained rehabilitation counselors.

Students complete coursework in the areas of (a) foundations of the rehabilitation process that includes an understanding of the philosophy, theory, sociological, environmental, and legal/ethical aspects of persons with disabilities, (b) medical, vocational, and psychosocial aspects of disabling conditions, (c) theories and techniques in individual and group counseling, and (d) care/disability management and career and lifestyle choices of persons with disabilities.

In addition to the required coursework, students must also complete a 100-clock-hour practicum and 600-clock-hours of internship experience in a private or public rehabilitation/health care facility or mental health setting by completing both COUN 6303 and COUN 6323.

Candidates for the M.R.C. degree must also pass a written comprehensive examination which is typically taken during the last semester of the student's program. Overall, students who complete the M.R.C. degree will be skilled and competent professionals who will be trained to provide rehabilitation counseling services to a diversity of persons with congenital and/or acquired mental/emotional, psychiatric, cognitive/neurological, physical, and psychosocial disabilities.

Upon completion of the M.R.C. degree, students are eligible to sit for the Certified Rehabilitation Counselor (CRC) certification exam. With additional course work, students will be eligible to sit for the NBCC/Licensed Professional Counselor (LPC) examination and/or the Commission on Certification of Work Adjustment and Vocational Evaluation Specialists (CCWAVES) examination which leads to the Certified Vocational Evaluator (CVE) credential. Students are strongly encouraged to obtain one or more of these professional certifications. Many students who will enter practice professionally in the field of rehabilitation counseling will be required either before or during their employment to obtain professional certification. Additional information about the M.R.C. program can be obtained at the following website: <http://www.astate.edu/education/psychologycounseling>.

Admission Requirements

Students seeking admission into the M.R.C. degree program must meet the admission requirements of the Graduate School for unconditional or conditional status and the specific program requirements. Applications to the M.R.C. program are accepted for any enrollment period. Applicants for the M.R.C. degree are expected to complete the program within five years beginning at the point of admission to the program. A completed application packet is due at least four weeks prior to the beginning of the student's first term of enrollment. In addition to the Graduate School application, applicants must complete the M.R.C. application.

Applicants must:

- Have three letters of recommendation from professionals in the fields of psychology, rehabilitation, or a related discipline sent directly to the Graduate School that will support the student's request for admission and address the student's academic skills, personal attributes, strengths, and/or limitations.
- Submit a completed M.R.C application and a letter that requests acceptance into the M.R.C. Program. Students should state their academic goals and interests.
- Submit verbal and quantitative scores on the Graduate Record Examination (GRE).
- Appear for an interview with the M.R.C. Admissions Committee prior to acceptance into the program.

Unconditional Admission

Applicants who are admitted will be placed in the unconditional admission status if they meet one of the following:

- a. A minimum undergraduate cumulative grade point average of 2.75 (or 3.00 on the last 60 hours), and a cumulative score of at least 290 on the combined verbal and quantitative sections of the GRE, or
- b. A minimum undergraduate cumulative grade point average of 3.00 (or 3.25 on the last 60 hours), and a cumulative score of at least 290 on the combined verbal and quantitative sections of the GRE, or
- c. Unconditional admission to the Graduate School, a minimum score of 290 on the combined verbal and quantitative sections of the GRE, and a minimum cumulative graduate grade point average of 3.00 on 12 or more semester hours with no more than one course with a grade of "C" and no grade less than a "C".

Conditional Admission

Applicants who are admitted will be placed in the conditional admission status if they meet

one of the following:

- a. A minimum undergraduate cumulative grade point average of 2.50 (or 2.75 on the last 60 hours), and a cumulative score of at least 290 on the combined verbal and quantitative sections of the GRE, or
- b. A minimum undergraduate cumulative grade point average of 3.00 on the last 60 hours of undergraduate work, or
- c. A minimum cumulative grade point average of at least 3.00 on at least 6 hours of previous graduate work with no more than one grade of "C" or below.

Note: With the exception of PSY 5753 Introduction to Rehabilitation, a Non-degree Student must have prior approval from an M.R.C. faculty member to enroll in any of the required M.R.C. courses.

Program Of Study And Curriculum

M.R.C. students, depending upon the adequacy of their academic backgrounds, will complete a minimum of 48 semester hours of coursework for the M.R.C. degree. The student's program of study will be planned and outlined with his/her academic adviser during the first period of enrollment. The following is a list of all required courses.

Required Courses (45 semester hours)

- PSY 5753, Introduction to Rehabilitation
- PSY 6113, Theories and Techniques in Helping Relationships
- COUN 6033, Social & Cultural Foundations of Counseling
- COUN 6053, Ethical, Legal, and Professional Issues in Counseling
- COUN 6203, Counseling Practicum (prerequisite: PSY 6113 or concurrently)
- COUN 6243, Case Management in Rehabilitation
- COUN 6263, Medical Aspects of Disability
- COUN 6123, Group Dynamics (prerequisite: PSY 6113)
- COUN 6043, Career Development and Services
- COUN 6253, Vocational Services in Rehabilitation
- PSY 6563, Psychosocial Aspects of Disability
- ELFN 6773, Introduction to Statistics and Research OR PSY 6213, Statistics and Research Design in Psychology and Counseling
- PSY 6573, Psychological Testing
- COUN 6283, Practicum in Rehabilitation Counseling (prerequisites: PSY 5753; PSY 6113; COUN 6123 or concurrently; COUN 6203; and permission of professor)
- *COUN 6303, Internship I in Rehabilitation Counseling
- *COUN 6323, Internship II in Rehabilitation Counseling

Minimum hours required for this program: 48

*NOTE: A student will be allowed to enroll in internship under the following conditions: 3.00 GPA, completion of all required courses, and permission of the MRC Degree Committee.

MASTER OF SCIENCE DEGREE WITH A MAJOR IN COLLEGE STUDENT PERSONNEL SERVICES

Purpose Of The Degree

The purpose of the M.S. degree in College Student Personnel Services is to train entry level professionals for a broad array of student services positions in higher education. The

program has a heavy emphasis on developing skills in the areas of psychology and counseling. There are two program tracks:

- Professional Practice and College Counseling. The Professional Practice track provides specialty training in organizational and systems issues for students who aspire to administrative careers in student service areas of higher education.
- The College Counseling track provides specialty training for students who aspire to counseling careers working with students in higher education.

Both tracks are designed to produce professionals who can support the philosophy of the Student Learning Imperative by helping college students become actively involved in high quality educational experiences both in and out of the traditional classroom.

The program is 48 semester hours. This includes a 15-hour core in college student personnel services, a 15-hour core in counseling and psychology, and 3 hours in statistics and research. Each track includes an additional 15 hours to provide specialized training to students seeking to enter professional practice or college counseling careers in student affairs. The program places a heavy emphasis on practical experience. Students in both tracks will complete a 100-clock-hour practicum in student affairs and a 600-clock-hour internship.

Students in the College Counseling track will complete an additional 100-clock-hour counseling practicum. Passage of a written comprehensive examination is required for completion of the program.

The College Student Personnel Services program is housed within the Department of Psychology and Counseling, but is a cooperative effort with the Division of Student Affairs and the Department of Educational Leadership, Curriculum, and Special Education. The program is designed to be consistent with the accreditation standards of the Council for Accreditation of Counseling and Related Programs (CACREP), and with the curriculum and training guidelines developed by the American College Personnel Association and approved by the Council for the Advancement of Standards in Higher Education (CAS).

Program Admission Procedures

1. Contact the Graduate School for an application materials packet.
2. Submit to the Graduate School all application materials, including:
 - a. Completed Graduate School application form with specified application fee, proof of immunization for measles and rubella (if date of birth is January 1957 or later), selective service status form, and separate transcripts of all undergraduate and graduate work from all colleges and universities attended.
 - b. Official report of a score, obtained within the last five (5) years, on the Graduate Record Examination (GRE).
 - c. A typed statement of the applicant's personal, educational, and career goals and aspirations; the factors motivating these goals and aspirations; and the applicant's personal view of the role and value of college student personnel services.
 - d. Three (3) appraisal/recommendation forms, with at least one completed by a faculty member in the applicant's most recent academic program of study. (If the applicant has not completed that program of study, an official statement of the applicant's status in that program is also required). Applicants who have not been enrolled in an academic program for more than two years may substitute a recommendation from a current or recent employer. The other two recommendations may be completed by anyone qualified to comment on the applicant's ability and/or character, except

that they may not be completed by a relative of the applicant.

3. Application file is reviewed by the Graduate School and, if the applicant qualifies for admission to the Graduate School, the file (including all materials listed above) is forwarded to the College Student Personnel Services Program Coordinator in the Department of Psychology and Counseling.
4. Application file is reviewed by the College Student Personnel Services Program Committee on Admissions. This committee evaluates all materials in the file to determine the applicant's eligibility for the program, determines whether or not the applicant will be admitted, establishes conditions of admission if needed, and as signs an adviser to admitted students.
5. Application file is returned to the Graduate School for notification of the applicant. For applicants who are admitted, notification will include identification of the academic adviser and conditions of admission, if any.

Program Admission Requirements

To be considered for admission to the M.S. degree program in College Student Personnel Services, applicants must hold an earned bachelor's or master's degree from a regionally accredited institution of higher education, present evidence of personal qualities consistent with those required for effective practice in student affairs, and present evidence of the academic abilities needed to complete graduate level work successfully. The indicated grade point averages and standardized test scores reflect minimum criteria for consideration of an applicant. Because a variety of factors are considered in admitting students, simply meeting the minimum criteria does not guarantee acceptance.

The appraisal/recommendation letters and the written statement of the applicant will provide the primary information used by admission committee members in forming their judgments of the applicant's personal qualifications. All applicants admitted to the program are required to meet the same high standard in regard to these qualities. The burden of providing affirmative evidence of these qualities rests with the applicant.

Previous academic work and GRE scores will provide the primary information used by admissions committee members in forming their judgment of an applicant's academic ability. Other indicators, such as the quality of the written statement provided by the applicant, may also be used. Based upon past academic performance and GRE scores, applicants who are admitted can be admitted on either an unconditional or a conditional basis.

1. **Unconditional Admission Status.** Applicants who are admitted will be placed in the unconditional admission status if they meet one of the following:
 - a. A minimum undergraduate cumulative grade point average of 2.75 (or 3.00 on the last 60 hours of undergraduate work), combined with a minimum score of 148 on the verbal section and a minimum score of 141 on the quantitative section of the GRE, or
 - b. Unconditional admission to the Graduate School, a minimum score of 148 on the verbal section and a minimum score of 141 on the quantitative section of the GRE, and a minimum cumulative graduate grade point average of 3.25 on 12 or more hours with no grade less than a "B".
2. **Conditional Admission Status.** Applicants who are admitted will be placed in the conditional admission status if they meet one of the following:
 - a. A minimum undergraduate cumulative grade point average of 2.50 (or 2.75 on the last 60 hours), and a minimum score of 144 on the verbal section and a minimum score of 140 on the quantitative section of the GRE, or
 - b. A minimum undergraduate cumulative grade point average of 3.00 on the last 60 hours of undergraduate work, or

- c. A minimum cumulative grade point average of at least 3.00 on at least 6 hours of previous graduate work with no more than one grade of "C" and no grade less than a "C", or
- d. A minimum cumulative undergraduate grade point average of 2.70, continuous employment (full or part-time) for at least the previous 12 months in a students affairs position at a regionally accredited institution of higher education, and submission of a letter from the Chief Student Affairs Officer of the employing institution attesting that the applicant has shown considerable promise for college student personnel work.

Eligibility To Continue In The College Student Personnel Services Program

To remove conditional status students must earn a cumulative grade point average of at least 3.00 on their next 12 hours of required courses, and must have no more than one course with a grade of "C." Students who fail to remove conditional status in this manner after their first 12 hours of required courses will be dropped from the program.

Retention checkpoints for students admitted to the College Student Personnel Services program include the following:

1. **Semi-Annual Review.** All students admitted to the program will be subject to semi-annual reviews conducted by the degree program committee during the last three weeks of every fall and spring semester. The committee will assess current evidence of a student's relevant personal qualities and his or her academic progress. Any student having earned more than one grade of "C" will come under close scrutiny. As an out come of the review, the committee will approve the student for continuation in the program without conditions, continuation in the program with specified conditions, suspension from the program with conditions for readmission, or removal from the program.
2. **Admission to Candidacy.** Students who attain Unconditional status and have completed 12 to 18 hours must file for candidacy status in compliance with Graduate School policy.
3. **Approval to Register for Practica and Internships.** Eligibility to enroll in practica and internships (i.e., COUN 6203, COUN 6213, COUN 6383, COUN 6393, & COUN 6493) is subject to approval by a screening committee. To obtain approval a student must submit a completed application form, have completed all prerequisites, and be deemed ready for the level of practice required in the particular practicum or internship.
4. **Eligibility for Comprehensive Examination.** Students who have earned an overall grade point average of 3.00 on all work in graduate school, a cumulative grade point average of 3.00 on courses in the College Student Personnel Services program, and are enrolled for their final period of study, will be eligible to sit for the comprehensive examination.
5. **Eligibility for Graduation.** Students who have completed all courses in the College Student Personnel Services program with a 3.00 cumulative grade point average, have a cumulative grade point average of 3.00 on all graduate work, and have passed the comprehensive examination will be eligible for conferral of the degree.

Academic Credit

Credit will not be given for any course completed more than six years prior to completion of the degree. In addition, students enrolling in COUN and PSY courses are expected to provide evidence that prerequisite knowledge is sufficiently current to support successful academic performance and/or clinical practice. Students with dated courses may be required

to repeat these courses or engage in other relevant experiences whether or not they have been used to fulfill requirements for another degree.

Consistent with the Graduate School residence requirement, students may transfer no more than nine (9) hours of course credit toward the M.S. in College Student Personnel Services. Without prior approval in writing from the program coordinator, practica and internships (i.e., COUN 6203, COUN 6213, COUN 6383, COUN 6393, & COUN 6493) must be completed through enrollment at Arkansas State University-Jonesboro. Such approval will be granted only when the program coordinator can verify that the quality of experience is comparable to that at Arkansas State University and that the student will be unable to complete his or her degree without the waiver. The burden of proof in providing these assurances rests with the student.

Course Requirements

Core Courses Required of all Candidates in College Student Personnel Services College Student Personnel Services (15 hours)

COUN 6333, Student Personnel Services in Higher Education

COUN 6343, College Student Development

COUN 6353, College and the Student

COUN 6383, Practicum in College Student Personnel Services

ELAD 6333, Organization and Administration of College Student Personnel Services

Statistics and Research (3 hours)

ELFN 6773, Introduction to Statistics and Research, or

PSY 6213, Statistics and Research Design in Psychology and Counseling Psychology and Counseling (15 hours)

COUN 6043, Career and Lifestyle Development

COUN 6123, Group Dynamics

PSY 6113, Theories and Techniques in Helping Relationships

PSY 6573, Psychological Testing

PSY 6613, Professional Consultation

Courses Required of Candidates in Professional Practice Track (15 hours)

CCED 7003 The Community College

COUN 6393, Internship in College Student Personnel Services

ELAD 6323, Organization and Governance of Higher Education

6 hours of electives approved by adviser

Courses Required of Candidates in College Counseling Track (15 hours)

COUN 6203, Counseling Prepracticum

COUN 6213, Counseling Practicum

COUN 6493, Internship in College Counseling

PSY 6543, Psycho-Social Aspects of Development

3-hour elective in Psychology or Counseling

Minimum hours required for this program: 48

Note: Students graduating from the College Counseling track must pass the National Counselor Examination (NCE) to be licensed as a counselor in Arkansas, Missouri, and most other states.

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SCHOOL COUNSELING

The School Counseling Program offered by the Department of Psychology and Coun-

seling is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). Applicants for school counselor license in Arkansas must hold a valid teaching license. Students completing this program are eligible in both Arkansas and Missouri.

Purpose Of The Degree

The purpose of the M.S.E. degree in School Counseling is to train school counseling professionals with expert skills in coordinating school counseling programs, supporting the teaching/learning process, counseling with students, and consulting with persons having significant influence on students' well-being and development. This program provides graduate-level study which is based on the comprehensive developmental model of school guidance and counseling. This program prepares K-12 counselors to promote development of skills and experiences needed by all students for success in school and later life, to develop prevention programs focused on predictable hindrances to development of identifiable groups of students, to conduct interventions for remediation of individual concerns, and to intervene with both groups and individuals in crisis situations.

Throughout the program, school counseling trainees are required to engage in experiences intended to increase their self-awareness and promote their own personal and professional development. The educational and developmental orientation of the School Counseling Program provides students with unique expertise that makes them the appropriate choice for counseling practice in a school setting. Students in the School Counseling Program experience a depth of training and acquire a level of expertise for practice in the school setting that is comparable to that of counselors in other settings.

Program Admission Procedures

1. Contact the Graduate School for an application materials packet.
2. Submit to the Graduate School all application materials, including:
 - a. Completed Graduate School application form with specified application fee, proof of immunization for measles and rubella (if date of birth is January 1957 or later), selective service status form, and separate official transcripts of all undergraduate and graduate work from all colleges and universities attended.
 - b. Official report of a score, obtained within the last five (5) years, on either the Miller Analogies Test (MAT) or the Graduate Record Examination (GRE).
 - c. A typewritten essay that addresses (1) personal, educational, and career goals and aspirations; (2) personal perceptions of influences on goals and aspirations; and (3) personal view of the role and value of school counseling.
 - d. Three appraisal/recommendation forms, with at least one completed by a work supervisor and at least one completed by a faculty member in the applicant's most recent academic program of study. (When the applicant has not completed that program of study, a statement of status in that program also is required.) Applicants who have not been enrolled in an academic program for more than five years may substitute a recommendation from a current or recent employer for the faculty recommendation. The third form may be completed by anyone who can attest to the applicant's ability and/or character, except that it may not be completed by anyone who is a relative of the applicant.
3. Application file is reviewed by the Graduate School and, if applicant qualifies for admission to the Graduate School, the file (including all materials listed above) is forwarded to the School Counseling Program Coordinator in the Department of

Psychology and Counseling.

4. Application file is reviewed by the School Counseling Program Committee on Admissions. This committee evaluates all materials submitted by the applicant, decides whether the applicant meets program requirements and expectations, appoints an academic adviser for the applicant who is admitted to the program, and sets any conditions of admission.
5. Application file is returned to the Graduate School for notification to the applicant of the admission status. For applicants who are admitted, the notice also will include identification of academic adviser and conditions of admission, if any.

Program Admission Requirements

To be considered for admission to the School Counseling Program, applicants must present evidence of qualities consistent with those required for effective school counseling practice. The written statement prepared by the applicant, combined with the appraisal/ recommendation forms from references, will be used as the basis for committee members' judgment of the applicant's personal and interpersonal qualities. All persons admitted to the program are required to meet the same standard in regard to these qualities.

Applicants also must present evidence of potential ability to perform academic work at the advanced graduate level. Standardized test proficiency and past grade performance provide the primary data for judging academic ability; other indicators, such as quality of writing in the applicant's prepared statement, also will be considered. Based on the combination of test proficiency and past academic performance, an applicant may qualify for either unconditional or conditional admission status.

1. For unconditional admission, academic proficiency must be established through satisfaction of one of the following formulas:

- A minimum undergraduate GPA of 2.75 and a minimum scaled MAT score of 350. Also, when the undergraduate GPA is multiplied by 200 and added to the MAT score, the total is at least 950.
- A minimum undergraduate GPA of 2.75 and a minimum composite GRE score of 280. Also, when the undergraduate GPA is multiplied by 200 and added to the GRE score, the total is at least 880.

For conditional admission, academic proficiency must be established through satisfaction of the following formula:

- A minimum undergraduate GPA of 2.50 AND either a minimum scaled MAT score of 350 or a minimum composite GRE score of 280. Any student granted conditional admission status will be advanced to Unconditional Admission Status at such time as the student completes 9 graduate semester hours in the M.S.E. program of study with cumulative graduate GPA of 3.0 or higher. Students who fail to remove conditional status upon completing 12 semester hours of graduate work in the program will be dropped from the program.

Eligibility To Continue In The School Counseling Program

Students admitted in Conditional status must earn a cumulative grade point average of at least 3.00 on the next 12 hours of course requirements and have no more than one course in these 12 hours with a grade of "C." Students who fail to remove Conditional status in this manner will be dropped from the School Counseling Program.

Retention checkpoints for students admitted to the School Counseling Program include the following:

1. Semi-Annual Review. In addition to the academic standards for continuing enroll

ment, all students admitted to the School Counseling Program will be subject to semiannual review by the Degree Program Committee. This semi-annual review will be conducted at some time during the last three weeks of the Fall and Spring semesters. At this review, the Committee will assess current evidence of each student's personal and interpersonal qualities deemed essential for effective school counseling practice. The Committee also will assess overall quality of academic performance, and any student having earned more than one grade of "C" will come under close scrutiny. Outcomes at each review may be approval for unrestricted continuation in the program, approval for continuation in the program with specified contingencies, suspension from the program with specified contingencies for re-admission, or removal from the program.

2. Approval to Register for Clinical Courses. Eligibility to enroll in supervised clinical training (i.e., COUN 6213, 6223, and 6233) is subject to approval of a Screening Committee. To obtain this approval, a student must have successfully completed all prerequisites and be deemed to have shown evidence of readiness for the level of practice required in the particular course.
3. Eligibility for Comprehensive Examination. Students who have earned an overall graduate grade point average of 3.00, have earned a cumulative grade point average of at least 3.00 on all courses completed in the School Counseling Program, and are enrolled for their final period of study will be eligible to sit for the comprehensive examination.
4. Eligibility for Graduation. Students who have earned an overall graduate grade point average of 3.00, have completed all courses required for the School Counseling Program and earned a cumulative grade point average of at least 3.00 on these courses, have earned a grade of "B" or better for clinical courses (i.e., COUN 6213, COUN 6223, and COUN 6233), have taken the appropriate PRAXIS II examination, and have passed the comprehensive examination will be eligible for conferral of degree.

Academic Credit

Graduate School policy prohibits credit toward degree requirements for any courses completed more than six years prior to completion of the degree program. In addition, both degree-seeking and nondegree-seeking students enrolling in COUN and PSY courses are expected to provide evidence that prerequisite knowledge is sufficiently current to support successful academic and/or clinical performance. Thus, students with dated courses may be asked to repeat such courses whether or not they have been used to fulfill requirements of another degree.

Course Requirements

ELFN 6773, Introduction to Statistics and Research OR
PSY 6213, Statistics and Research Design in Psychology and Counseling*
PSY 6513, Advanced Educational Psychology OR
PSY 6523, Behavior Assessment and Intervention
PSY 6113, Theories and Techniques in Helping Relationships
PSY 6543, Psycho-Social Aspects of Development
PSY 6573, Psychological Testing
PSY 6613, Professional Consultation*
COUN 6013, Introduction to School Counseling
COUN 6033, Social and Cultural Foundations of Counseling
COUN 6043, Career Development and Services

COUN 6073, Program Development, Implementation, and Evaluation in School Counseling*
COUN 6123, Group Dynamics*
COUN 6203, Counseling Prepracticum*
COUN 6213, Counseling Practicum*
COUN 6223, Counseling Internship—Elementary School*
COUN 6233, Counseling Internship—Secondary School*
A 3 hour graduate elective in Psychology or in Counseling
*See course descriptions for prerequisite requirements.

Minimum hours required for this program: 48

All candidates for the M.S.E. degree in School Counseling must take the PRAXIS II specialty area test in Professional School Counseling (#0421) before graduation. The candidate must arrange for a score to be sent to Arkansas State University and must provide a copy of the individual score report to the program coordinator.

MASTER OF SCIENCE DEGREE WITH A MAJOR IN EXERCISE SCIENCE

Purpose Of The Degree

"The Master of Science degree in Exercise Science offers both a thesis and a non-thesis program of study. Both program of study tracts require 33 credit hours. Specifically, the purpose of the Master of Science in Exercise Science degree is to serve students wanting to work in the areas of health and wellness in the clinical, corporate or commercial environments.

Admission Requirements

Students seeking admission into the Master of Science degree program in Exercise Science must meet the admission requirements of the Graduate School for unconditional or conditional status. In addition, applicants must meet specific program requirements. Candidates who do not meet the Exercise Science program admission requirement will be required to complete undergraduate coursework to meet identified deficiencies. Previously completed coursework will be evaluated on an individual basis to determine if any deficiencies exist in foundation courses for the discipline. Identified courses may be completed concurrently with graduate work, but must be completed before the student is admitted to candidacy for the degree. In addition, undergraduate deficiency course removal must be sequenced in order to provide the student with the appropriate background knowledge before enrollment into the respective graduate level course will be allowed.

Applicants must present evidence of potential ability to perform academic work at the advanced graduate level. Standardized test proficiency and past grade performance will be used to provide the primary data for judging academic ability. Other indicators, such as quality of writing in the Applicant's prepared statement and faculty references, will also be considered. Based on past academic performance, an applicant must qualify for either unconditional or conditional admission status.

- For unconditional admission, students are required to have a minimum 3.0 cumulative GPA or 3.25 GPA during the last 60 credit hours of university work.
- For conditional admission, students are required to have a 2.75 cumulative GPA or 3.0 GPA during the last 60 credit hours of university work.

Applicants are required to submit the following:

1. Official transcripts as verification of all coursework and degree(s).
2. A formal Statement of Goals which should explain in at least 500 words why he/she

is seeking admission into the program and what plans he/she has following the attainment of the degree.

3. A current resume.
4. At least two letters of recommendation from individuals who can speak to the applicant's academic potential and professional capabilities. Applicants must have at least one recommendation from a university faculty member who is familiar with the applicant's work as a student. The professional recommendation should come from a supervisor in which he/she has evaluated the applicant's current or prior work.
5. Official scores from the Graduate Record Examination (GRE).

In addition to the written credentials itemized above; in selected situations, faculty may elect to conduct interviews as part of the admission process. Interviews may be conducted via web, phone, or on-campus. Lastly, admission to the degree program may require completion of specific prerequisite undergraduate courses. Applicants will be considered for admission during a given review cycle only if all of the above materials have been received by the Graduate School's application deadlines. Incomplete applications will not be considered.

Program of Study

- I. Thesis Option
 - a. Exercise Science Requirements
 - ESPE 6513, Cardiovascular Physiology
 - ESPE 6533, Laboratory Techniques in Exercise Physiology
 - ESPE 6523, Physical Activity for Special Populations
 - ESPE 6623, Measurement and Statistics
 - ESPE 6653, Neuromuscular Physiology
 - ESPE 6673, Research Design
 - ESPE 6683, Biomechanical Analysis of Sport Skills
 - ESPE 6693, Motor Learning or ESPE 6663 Advanced Strength Training and Conditioning
 - ESPE 6543, Cellular Exercise Physiology
 - ESPE 678V, Thesis (6 hours)

Minimum hours required for this program of study: 33

- II. Non-Thesis Option
 - a. Exercise Science Requirements
 - ESPE 6513, Cardiovascular Physiology
 - ESPE 6533, Laboratory Techniques in Exercise Physiology
 - ESPE 6523, Physical Activity for Special Populations
 - ESPE 6623, Measurement and Statistics
 - ESPE 6653, Neuromuscular Physiology
 - ESPE 6673, Research Design
 - ESPE 6683, Biomechanical Analysis of Sport Skills
 - ESPE 6693, Motor Learning or ESPE 6663 Advanced Strength Training and Conditioning
 - ESPE 6543, Cellular Physiology in Exercise
 - Restricted ESPE Electives (6 Hours)

Minimum hours required for this program: 33

PROGRAM OF STUDY FOR THE MASTER OF SCIENCE IN SPORT ADMINISTRATION

Purpose of the Degree

The M.S. Sport Administration degree in the Department of Health, Physical Education & Sport Sciences is designed as a 36-credit hour program that serves graduate students interested in preparing for management or administrative opportunities in professional sports, intercollegiate and interscholastic athletics, sport facilities, and sports marketing and management agencies.

Admission Requirements

Applicants must meet the admission requirements of the ASU Graduate School and the specific program requirements. The minimum requirement for admission is the baccalaureate degree or its equivalent from an accredited institution.

Applicants must present evidence of potential ability to perform academic work at the advanced graduate level. Standardized test proficiency and past grade performance will be used to provide the primary data for judging academic ability. Other indicators, such as quality of writing in the Applicant's prepared statement and faculty references, will also be considered. Based on past academic performance, an applicant must qualify for either unconditional or conditional admission status.

- For unconditional admission, students are required to have a minimum 3.0 cumulative GPA or 3.25 GPA during the last 60 credit hours of university work.
- For conditional admission, students are required to have a 2.75 cumulative GPA or 3.0 GPA during the last 60 credit hours of university work.

Applicants are required to submit the following:

1. Official transcripts as verification of all coursework and degree(s).
2. A formal Statement of Goals which should explain in at least 500 words why he/she wants to be admitted into the program and what he/she plans to do with the M.S. in Sport Administration degree.
3. A current resume.
4. At least two letters of recommendation from individuals who can speak to the applicants academic potential and professional capabilities. Applicants must have at least one recommendation from a university faculty member who is familiar with the applicant's work as a student. The professional recommendation should come from a supervisor in which he/she has evaluated the applicant's current or prior work.
5. Official scores from the Graduate Record Examination (GRE).

In addition to the written credentials itemized above; in selected situations, faculty may elect to conduct interviews as part of the admission process. Interviews may be conducted via web, phone, or on-campus. Lastly, admission to the degree program may require completion of specific prerequisite undergraduate courses. Applicants will be considered for admission during a given review cycle only if all of the above materials have been received by the Graduate School's application deadlines. Incomplete applications will not be considered.

Program of Study

Required Core Coursework

ELAD 6103 Ethical Issues in Sport

ESPE 6113 Sport Law

ESPE 6123 Sport Marketing
ESPE 6133 Sport Finance & Budgeting
ESPE 6143 Sport Communications
ESPE 6153 Sport Leadership
ESPE 6163 Sport Governance & Operations
ESPE 6603 Sport in Society
ESPE 6643 Current Readings Seminar in Physical Education and Sport Science
ESPE 6673 Research Design
ESPE 681V Internship or ESPE 678V, Thesis (6 hours)

Minimum hours required for this program: 36

MASTER OF SCIENCE DEGREE WITH A MAJOR IN EARLY CHILDHOOD SERVICES

Purpose Of The Degree

The Master of Science in Early Childhood Services degree is a professional degree designed for individuals employed by agencies other than public schools that provide services directly or indirectly for young children. The individuals who work in these roles neither need nor desire licensure for public school teaching; therefore, there is no licensure requirement for entry into this program. The Master of Science in Early Childhood Services program will not lead to licensure to teach in a public school on any level.

Admission Requirements

Students seeking admission into the Master of Science degree program in Early Childhood Services must meet admission requirements of the Graduate School. In addition, full admission status requires satisfaction of the following criteria: (1) the candidate must hold a bachelor's degree in early childhood education or an allied field of study (i.e., social work, home economics, nursing, psychology, or child development); (2) the candidate must have completed course equivalents for at least 12 hours of the undergraduate Early Childhood Education core, to be assessed by the Early Childhood Education Graduate Committee; and (3) the candidate must document a minimum of one year of work experience in a program serving young children.

Candidates who do not meet the program admission requirements will be required to complete undergraduate coursework to meet identified deficiencies. Prior coursework will be evaluated on an individual basis to determine if any deficiencies exist in foundation courses.

Applicants who do not meet the work experience requirement prior to or during the course of the Master of Science in Early Childhood Services degree program must complete an additional six hours of early childhood education practicum as a graduation requirement. (These six hours will be required in addition to the 30-hour program requirement.)

General Course Requirements - 6 hours

Teacher Education Core
TE 6253 Perspectives on Professionalism in Education
ELFN 6773 Statistics and Research

Early Childhood Services Major - Choose 18 hours

ECH 6513 Developmental Perspectives
ECH 6423 Documenting Young Children's Learning and Development
ECH 6543 Administration and Supervision of Programs for Young Children
ECH 6533 Sources and Models of Early Childhood Curriculum
ECH 6773 Research in Early Childhood

ECH 6783 Leadership in Early Childhood
ECH 6583 Practicum in Early Childhood Education I
ECH 6593 Practicum in Early Childhood Education II

Early Childhood Services Electives

Six hours of prescribed electives which may include a Thesis

Minimum hours required for this program: 30

**MASTER OF SCIENCE IN EDUCATION DEGREE
WITH A MAJOR IN EARLY CHILDHOOD EDUCATION**

Purpose Of The Degree

The purpose of the M.S.E. degree in Early Childhood Education is to offer educators and educators-in-training a planned program of study focusing on the developmental and educational needs of young children. The program of study outlines herein leads to the successful completion of the graduate degree. This is not a "program of study" leading to initial teaching licensure.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Early Childhood Education must meet the admission requirements of the Graduate School. In addition, applicants must have completed a minimum of 18 semester hours of professional education courses including the requirements for a valid teaching certificate based on a four year teacher education program.

Unconditional Admission

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of either of the following admissions selection criteria:

A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) and a raw score of at least 380 on the Miller Analogies Test (MAT) or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE

OR

A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours) and a raw score of at least 388 on the MAT or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE.

Conditional Admission

In addition to Graduate School criteria for conditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

A minimum cumulative undergraduate grade point average of 2.5 and a score of at least 368 on the MAT (or a minimum scaled score of 146 on the verbal reasoning section of the GRE and a minimum scaled score of 140 on the quantitative reasoning section of the GRE).

General Course Requirements

Teacher Education Core - 12 hours
TE 6233 Teaching and Assessment

TE 6243 Technology as a Tool for Teaching
TE 6253 Perspectives on Professionalism in Education
ELFN 6773 Statistics and Research

Early Childhood Major - 15 hours
ECH 6513 Developmental Perspectives
ECH 6423 Documenting Young Children's Learning and Development
ECH 6533 Sources and Models of Early Childhood Curriculum
ECH 6773 Research in Early Childhood
ECH 6783 Leadership in Early Childhood

Early Childhood Specialty Areas

Administrator Specialty - 6hrs
ECH 6543 Administration and Supervision of Programs for young Children
TE 6283 Practicum in Teacher Education

National Board Specialty - 9hrs
TE 6263 Teachers as professionals: Working Toward National Teaching
TE 6283 Practicum in Teacher Education
ELCI 6083 Supervision and Evaluation of Teaching

Master Teacher Specialty - 6hrs
TE 6283 Practicum in Teacher Education
ELCI 6083 Supervision and Evaluation of Teaching

Early Literacy Specialty - 9hrs
ELED 6003 Literature and Book Selection in the Elementary School
RDNG 6513 Emergent Literacy: Birth through Primary Grades
TE 6283 Practicum in Teacher Education

Minimum hours required for this program: 33-36

Endorsement in Teaching Grades 5 and 6

The Arkansas Department of Education allows for teachers licensed in grades P-4 and 7-12 to attain an endorsement in teaching grades 5 and 6. Those individuals who wish to attain this endorsement must hold a P-4 or 7-12 license before beginning the endorsement process. Credentials to teach grades 5 and 6 are added to the P-4 or 7-12 license. In order to gain the endorsement, students must complete the following three courses with an overall cumulative grade point of 3.000 (B) or better with no grade of less than a C.

MLED 6403 The World of the Mid-Level Child
MLED 6413 Standards Based Instruction
MLED 6423 Teaming, Teaching, and Learning in the Mid-Level Education

Interested parties should contact the Department of Teacher Education for more information.

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN MID-LEVEL EDUCATION

Purpose Of The Degree

The purpose of the Master of Science in Education degree program in Mid-Level Educa-

tion is to offer educators and educators-in-training a planned program of study focusing on the development and educational needs of children in grades 4 - 8.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Elementary Education must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 semester hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program.

Unconditional Admission

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of either of the following admissions selection criteria:

A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) and a raw score of at least 380 on the Miller Analogies Test (MAT) or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE

OR

A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours) and a raw score of at least 388 on the MAT or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE.

Conditional Admission

In addition to Graduate School criteria for conditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

A minimum cumulative undergraduate grade point average of 2.5 and a score of at least 368 on the MAT (or a minimum scaled score of 146 on the verbal reasoning section of the GRE and a minimum scaled score of 140 on the quantitative reasoning section of the GRE).

Course Requirements

Teacher Education Core - 12 hours

TE 6233 Teaching and Assessment

TE 6243 Technology as a Tool for Teaching

TE 6253 Perspectives on professionalism in Education

ELFN 6773 Statistics and Research

Mid-level Major - 9 hours

MLED 6403 The World of the Young Adolescent Mid-Level Child

MLED 6413 Standards Based Instruction

MLED 6423 Teaming, Teaching, and Learning in the Mid-Level Grades

Mid-level Specialty Areas

Mid-Level Content Specialty Area - 9 - 12 hrs

6hrs. in any 2 specialty areas for a total of 12 hours or 9 hours in one specialty area.

Specialty Area courses are found within academic departments and related areas:

English

Mathematics

Science

Social Studies

The students and adviser will work to select appropriate courses;

National Board Specialty - 9hrs

TE 6263 Teachers as professionals: Working Toward National Teaching Standards

TE 6283 Practicum in Teacher Education
ELCI 6083 Supervision and Evaluation of Teaching

Middle Childhood Specialty - 9hrs-12 hrs

TE 6263 Teachers as professionals: Working Toward National Teaching Standards

COUN 6913 Child and Adolescent Counseling

ELED 6013 Home School Relations

ELED 5613 Techniques of Behavior management

RDNG 5343 Reading in the Content Area: Middle and Secondary School

RDNG 5313 Methods and Materials in Reading

ELED 6003 Literature and Book Selection in the Elementary School

ELCI 5513 Teaching Global Perspectives

ELED 6601-6 Thesis

Others with Prior Approval of Adviser 1-6

Total Degree Program Hours 30 - 33

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN READING

Purpose Of The Degree

The purpose of the M.S.E. degree in Reading is to offer educators and educators-in-training a planned program of study focusing on skills and techniques of teaching reading including the diagnosis and remediation of reading problems.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Reading must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 semester hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program.

Unconditional Admission

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of either of the following admissions selection criteria:

- A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) and a raw score of at least 380 on the Miller Analogies Test (MAT) or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE
- A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours) and a raw score of at least 388 on the MAT or a minimum scaled score of 150 on the verbal reasoning section of the GRE and a minimum scaled score of 141 on the quantitative reasoning section of the GRE.

Conditional Admission

In addition to Graduate School criteria for conditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

- A minimum cumulative undergraduate grade point average of 2.5 and a score of at least 368 on the MAT (or a minimum scaled score of 146 on the verbal reasoning section of the GRE and a minimum scaled score of 140 on the quantitative reasoning section of the GRE.

* Conditional admission requires the student to earn a minimum grade of B or better in the

first two classes of the graduate program.

Course Requirements

Teacher Education Core - 9 hrs

- TE 6243 Technology as a Tool for Teaching
- TE 6253 Perspectives on Professionalism
- ELFN 6773 Statistics and Research

Reading Major - 18 hrs

- RDNG 6513 Emergent Literacy Birth Through Primary Years 3
- RDNG 6553 Adolescent Literacy 3
- RDNG 6313 Theory and Practice in Teaching Reading 3
- RDNG 6333 Reading Practicum I -Diagnosis and Intervention 3
- RDNG 6353 Reading Practicum II - Leadership in Literacy 3
- RDNG 6563 Principles of Literacy Cognition 3

Reading Specialty - 6 hrs

- Reading for Diverse Learners:
- RDNG 6533 Literacy for Diverse Learners
- RDNG 6383 Reading Issues within a Multicultural and Pluralistic Society

National Board Specialty

- TE 6263 Teachers as Professionals: Working Toward National Board Certification
- RDNG 6373 Qualitative Methods in Reading Research

Literacy Leadership

- RDNG 6373 Qualitative Methods in Reading Research
- RDNG 6383 Reading Issues within a Multicultural and Pluralistic Society

Literacy Generalist

- 18 Reading Major hours + 6 hours of courses (MSE Reading offerings or approved by advisor prior to enrollment)
- Elective: 3 hours

Any of the course listed above in the Reading Specialty areas or one of the following:

- RDNG 6801-3 Independent Study (with approval of advisor)
- RDNG 6003 Literature and Book Selection
- RDNG 5803 Special Topics
- RDNG 5313 Materials and Methods in Reading (NTL)
- ENG 5083 Introduction to Linguistics
- ENG 6533 Teaching Writing in the Schools
- TE 6233 Teaching and Assessment

Thesis Option - 9 hrs/no elective

- RDNG 6801-6 Thesis (6 hours with approval and supervision)
- RDNG 6373 Qualitative Methods in Reading Research

Total Reading Hours 36

MASTER OF ARTS IN TEACHING INITIAL LICENSURE

Purpose Of The Degree

The purpose of this program is to provide an additional quality pathway to AR teacher licensure for our region and state. Individuals seeking to enter public school teaching with bachelor's degrees are eligible to earn initial licensure through the Master of Arts in Teaching (MAT) degree. The MAT includes Teacher Education core courses along with specialized courses to create a Masters Program for initial licensure in Early Childhood Education or Middle Level Education.

Admission Requirements

In relation to admission, contact the graduate office, fill out an application for graduate school, process the following items with the ASU Graduate School office.

Graduate School Criteria

1. Hold a bachelor's degree from a regionally accredited college or university (transcripts for undergraduate and graduate coursework must be submitted from all institutions attended).
2. Submit a minimum undergraduate GPA of 2.75 overall or a 3.0 on the last 60 hours.
3. Complete the ASU graduate school application and qualify for graduate admission.

Unconditional Admission

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of either of the following admissions selection criteria:

A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours) AND a raw score of at least 388 on the MAT

OR

A minimum of the following scores on the GRE: Verbal Reasoning – 142; Quantitative Reasoning – 142; Analytical Writing – 3.5.

General Course Requirements

Teacher Education Core - 9 hrs

TE 6223 Effective Teaching with Diverse Populations

TE 6243 Technology as a Tool for Teaching

TE 6253 Perspectives on Professionalism in Education

Reading Instruction Block * - 0-6 hrs

RDNG 6013 Theories, Issues, and Methods of Reading

RDNG 6493 Advanced Reading Methods and Interventions

Practicum - 9 hrs

TE 6299 MAT Internship in Teacher Education

(Completion of all teacher education core, reading instruction block, and specialty core courses required for enrollment.)

Total Teacher Education Core Hours 12

Early Childhood Major

ECH 6513 Developmental Perspectives

ECH 6423 Documenting Young Children's Learning and Development

ECH 6503 Early Childhood Curriculum and Environments

ECH 6783 Leadership in Early Childhood Education

Total ECH MAT 30-36

Total Teacher Education Core Hours 12

Middle Level Education Major

MLED 5013 Methods & Materials for Teaching Language Arts & Social Studies in the Middle Grades

MLED 5023 Methods & Materials for Teaching Mathematics & Science in the Middle Grades

MLED 6403 World of the Young Adolescent Child

MLED 6423 Team, Teach, and Learn in the Middle Grades

Total MLED MAT 30-36

* Students who have completed RDNG 480V Foundations of Reading and RNDG 480V Methods and Materials of Reading as part of the Arkansas Department of Education's Non-Traditional Teacher Licensure Program prior to admission to the MAT program may substitute these two undergraduate Reading courses for the two graduate Reading courses listed as requirements of the MAT program. Students must still complete a minimum of thirty hours of graduate coursework in order to graduate.

Specialized Requirements (Specialized accreditation requirements for the program, Licensure/certification requirements for student entry into the field.)

Attain minimum passing scores on the Praxis I (PPST) for reading, math and writing tests and appropriate Praxis II licensure tests prior to enrollment in TE 6299. These specialized requirements mirror those requirements for all initial teacher licensure programs within the Professional Education unit.

Additionally, for Arkansas state licensure, candidates must complete HIST 3038 History of Arkansas, and for Praxis II test, students must complete ELSE 3646 Exceptional Student in the Regular Classroom.

Finally, the MAT must meet required program SPA and NCATE standards in relation to ECH and MLED areas.

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN EDUCATIONAL LEADERSHIP

Purpose Of The Degree

The Masters Degree in Educational Leadership offers educators a planned program of study designed to improve their general educational and specific professional competencies as leaders in the public school systems. The degree is specifically designed to prepare building level administrators and is based on recommendations from professional organizations and accrediting associations.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Educational Leadership must meet the admission requirements of the Graduate School and the specific program requirements.

- Hold a valid teaching license.
- Achieved a minimum cumulative undergraduate grade point average of 2.75 (on a 4.00 scale) or a 3.00 GPA on the last 60 hours. All courses attempted, including any repeated courses, are considered in computing the GPA.
- Have two years of teaching experience.

- Have a written commitment from a practicing school principal who will function as your mentor during the program.

Program of Study

ELFN 6773 Introduction to Statistics and Research
 ELFN 6763 Philosophies of Education
 ELAD 6103 Ethical Leadership
 ELAD 6073 School Law
 ELAD 6003 School and Community Relations
 ELAD 6033 Administration and Supervision of Special Education
 ELAD 6053 Planning and Resource Allocation
 ELCI 6533 Theories of Instruction
 ELCI 6083 Supervision and Evaluation of Teaching
 ELCI 6063 Curriculum Management
 [One of the following curriculum courses]
 ELCI 6323 Elementary School Curriculum
 ELCI 6423 Middle School Curriculum
 ELCI 6523 Secondary School Curriculum
 ELAD 6593 Supervised Internship

Total Hours: 36

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN CURRICULUM AND INSTRUCTION

Purpose Of The Degree

The M.S.E. in Curriculum and Instruction is designed to prepare directors of Special Education Gifted, Talented, and Creative Curriculum Instructional Facilitators.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Curriculum and Instruction must meet the admission requirements of the Graduate School and the specific program requirements.

Unconditional Admission Status

- Hold a valid teaching license.
- Achieved a minimum cumulative undergraduate grade point average of 3.00 (on a 4.00 scale).
- Have two years of teaching experience.
- Have a written commitment from a practicing program director who is in your area of licensure and who will function as your mentor during the program.

Conditional Admission Status

Students who do not meet the requirements for unconditional admission may be granted conditional admission as follows:

- Hold a valid teaching license.
- Achieved a minimum cumulative undergraduate grade point average of 2.75 (on a 4.00 scale) or a 3.00 GPA on the last 60 hours. Any courses attempted, including any repeated courses, are considered in computing the GPA.
- Have two years of teaching experience.
- Have a written commitment from a practicing program director who is in your area

of licensure and who will function as your mentor during the program.

Coursework must be taken at through either ASU-Jonesboro or at an ASU degree center. Students who fail to remove conditional status upon completing 12 semester hours of graduate work in the program will be dropped from the degree program.

Course Requirements

ELFN 6773 Introduction to Statistics and Research
ELFN 6763 Philosophies of Education

Core Courses

ELAD 6103 Ethical Leadership
ELAD 6073 School Law
ELAD 6003 School and Community Relations
ELCI 6533 Theories of Instruction
ELCI 6083 Supervision and Evaluation of Teaching
ELCI 6063 Curriculum Management

COURSES FOR CURRICULUM DIRECTOR GIFTED, TALENTED, AND CREATIVE TRACK

(Complete each of the following.)

ELCI 6323 Elementary School Curriculum
ELCI 6423 Middle School Curriculum
ELCI 6523 Secondary School Curriculum

COURSES FOR SPECIAL EDUCATION DIRECTOR TRACK

(Complete the following two courses as well as one of the three courses listed under Curriculum Director.)

ELAD 6033 Administration and Supervision of Special Education
ELAD 6423 Special Education Law

COURSES FOR INSTRUCTIONAL FACILITATOR TRACK

(Complete the following two courses as well as one of the three courses listed under Curriculum Director.)

ELCI 5313 Coaching Assessment of Student Learning
ELCI 5403 Facilitating Instruction through Collaborative Partnerships with Adult Learners

Internship

ELCI 6493 Supervised Internship

Total Hours: 36

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN EDUCATIONAL THEORY AND PRACTICE

Online Academic Partnership Program--Non-Licensure Program

Purposes Of The Degree

Teachers who wish to improve their general understanding of curriculum theory and current practices and to increase their professionalism and competency in a variety of current educational issues. Some candidates in this constituency might also utilize this degree in seeking their National Board licensure.

Admission Requirements

- Hold a current teaching license
- Have a 2.75 GPA on undergraduate work or 3.0 in last 60 hours
- Must not be a felon
- Receive admission to the Graduate School

Program of Study

ELFN 6773 Introduction to Research and Statistics
ELFN 6763 Philosophies of Education
ELSE 5733 Gifted children in the Regular Classroom
ELSE 6053 Educational Procedures for Individuals with Mild Disabilities
ELCI 6063 Curriculum Management
ELCI 6533 Theories of Instruction
ELAD 6003 School and Community Relations
ELCI 6043 Reflective Teaching
TE 6263 Teachers as Professionals: Working Toward National Teaching Standards
ELCI 6773 National Teaching Standards Capstone Experience

Total Hours: 30

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN PHYSICAL EDUCATION

Purpose Of The Degree

The Department of health, Physical Education, and Sport Sciences currently offers two Graduate degrees. The Master of Science in Education degree with a major in Physical Education and the Master of Science degree with a major in Exercise Science. Each degree offers two programs of study options. The first program of study is a 30 credit hour program of study with a Thesis requirement and no elective course requirements. The second program of study is a 33 credit hour program of study that requires a Graduate Project and 6 credit hours of restricted electives. The Master of Science in Education degree in Physical Education is designed to provide a quality professional program in the field of Physical Education that meets standards at the graduate level, including the Professionally Emerging Teacher and the Emerging Profession.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Physical Education must meet the admission requirements of the Graduate School and specific program requirements. In addition, applicants must have completed a minimum of 18 semester hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program. Applicants who do not meet the requirements for a valid teaching certificate based on a four-year teacher education program will be required to complete the undergraduate courses required for such a certificate. These courses may be completed concurrently with graduate work, but must be completed before the student is admitted to candidacy for the degree. In addition, undergraduate deficiency course removal must be sequenced in order to provide the student with the appropriate background knowledge before enrollment into the respective graduate level course will be allowed.

Applicants must present evidence of potential ability to perform academic work at the advanced graduate level. Standardized test proficiency and past grade performance will be

used to provide the primary data for judging academic ability. Other indicators, such as quality of writing in the Applicant's prepared statement and faculty references, will also be considered. Based on past academic performance, an applicant must qualify for either unconditional or conditional admission status.

- For unconditional admission, students are required to have a minimum 3.0 cumulative GPA or 3.25 GPA during the last 60 credit hours of university work.
- For conditional admission, students are required to have a 2.75 cumulative GPA or 3.0 GPA during the last 60 credit hours of university work.

Applicants are required to submit the following:

1. Official transcripts as verification of all coursework and degree(s).
2. A formal Statement of Goals which should explain in at least 500 words why he/she is seeking admission into the program and what plans he/she has following the attainment of the degree.
3. A current resume.
4. At least two letters of recommendation from individuals who can speak to the applicant's academic potential and professional capabilities. Applicants must have at least one recommendation from a university faculty member who is familiar with the applicant's work as a student. The professional recommendation should come from a supervisor in which he/she has evaluated the applicant's current or prior work.
5. Official scores from the Graduate Record Examination (GRE).

In addition to the written credentials itemized above; in selected situations, faculty may elect to conduct interviews as part of the admission process. Interviews may be conducted via web, phone, or on-campus. Lastly, admission to the degree program may require completion of specific prerequisite undergraduate courses. Applicants will be considered for admission during a given review cycle only if all of the above materials have been received by the Graduate School's application deadlines. Incomplete applications will not be considered.

Program Of Study

I. Thesis Option

a. Professional Education for Secondary Teaching (6 Hours)

ELFN 6763, Philosophies of Education, OR
PSY 6513, Advanced Educational Psychology (3 hours)
ELFN 6763, Philosophies of Education, or

PSY 6513, Advanced Educational Psychology (whichever was not taken to earn the three hours required under number 1), OR
ELCI 5523, Middle School Curriculum, OR
ELCI 6023, Educational Media, OR
ELCI 6523, Secondary School Curriculum, OR
ELCI 6573, Educational Measurement

b. Physical Education Program Requirements (21 Hours)

ESPE 6623, Measurement and Statistics
ESPE 6633, Curriculum Construction in Physical Education
ESPE 6673, Research Design
ESPE 6683, Biomechanical Analysis of Sports Skills
ESPE 6693, Motor Learning or ESPE 6663 Advanced Strength Training and Conditioning

ESPE 6643, Current Readings
ELAD 6103, Ethical Leadership or ESPE 6113, Sport Law or ESPE 6133, Sport Finance

c. ESPE 6786, Thesis (6 Hours)

Minimum hours required for this program: 33

II. Non-Thesis Option

a. Professional Education for Secondary Teaching (9 hours)

ELFN 6763, Philosophies of Education OR

PSY 6513, Advanced Educational Psychology (3 hours)

ELFN, Philosophies of Education OR

PSY 6513, Advanced Educational Psychology (whichever was not taken to earn the three hours under number 1) or one of the ELCI course offerings listed below:

ELCI 5523, Middle School Curriculum

ELCI 6023, Educational Media

ELCI 6523, Secondary School Curriculum

ELCI 6573, Educational Measurement

ELAD 6103, Ethical Leadership

b. Physical Education Program Requirements (24 Hours)

ESPE 6623, Measurement and Statistics

ESPE 6633, Curriculum Construction in Physical Education

ESPE 6673, Research Design

ESPE 6683, Biomechanical Analysis of Sport Skills

ESPE 6693, Motor Learning or ESPE 6663 Advanced Strength Training and Conditioning

ESPE 6643, Current Readings

ESPE 6113, Sport Law

ESPE 6133, Sport Finance and Budgeting

Minimum hours required for this program of study: 33

**MASTER OF SCIENCE DEGREE WITH A MAJOR
IN SPECIAL EDUCATION INSTRUCTIONAL SPECIALIST GRADES P-4**

Purpose of the Degree

The purpose of the M.S.E. degree in Special Education - Instructional Specialist P-4 is to offer educators an advanced performance-based program of study based on the recommendations of professional organizations and accrediting associations such as the Council for Exceptional Child (CEC), Division of Early Childhood (CEC-DEC), and NCATE.

This program prepares personnel to work in a variety of professional roles with young children with disabilities, birth through grade 4, and their families. Upon completion of this M.S.E. degree program, students are eligible for endorsement in special education in Arkansas. Students seeking endorsement in special education without pursuing the M.S.E. degree should see an adviser for an analysis of completed courses and a suggested program of study.

Admission Requirements

Students seeking admission into the M.S.E. program in Special Education must meet the general admission requirements of the Graduate School.

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of the following admissions selection criteria:

- 2.75 GPA in undergraduate work or 3.0 in last 60 hours.
- Hold a teaching license.
- Have a written commitment from a practicing P-4 special education teacher who will function as your mentor during the program.

Course Requirements

ELFN 6763 Philosophies of Education

ELFN 6773 Introduction to Statistics and Research

ELSE 5033 Behavior Intervention and Consultation

ELSE 5743 Assessment of Young Children with Exceptionalities

ELSE 5753 Methods for Working with Young Children with Exceptionalities

ELSE 6023 Characteristics of Individuals with Disabilities

ELSE 6053 Educational Procedures for Individuals with Mild Disabilities

ELSE 6073 Educational Procedures for Individuals with Moderate-Profound Disabilities

ELSE 5083 Collaboration for Special Education Service Delivery

ELAD 6423 Special Education Law

ELSE 6813 Laboratory Experiences I P-4

ELSE 6823 Laboratory Experiences II P-4

Total Hours: 36

MASTER OF SCIENCE DEGREE WITH A MAJOR IN SPECIAL EDUCATION INSTRUCTIONAL SPECIALIST GRADES 4-12

Purpose of the Degree

The purpose of the M.S.E. degree in Special Education - Instructional Specialist 4-12 is to offer educators an advanced performance-based program of study based on the recommendations of professional organizations and accrediting associations such as the Council for Exceptional Children (CEC) and NCATE. Students completing this program gain expertise in teaching students exhibiting developmental, learning and behavioral disabilities, and in consulting with general education teachers who have students with disabilities in their classrooms.

Students seeking endorsement in special education without pursuing the M.S.E. degree, should see an adviser for an analysis of completed courses and the requirements of a program of study.

Admission Requirements

Students seeking admission into the M.S.E. program in Special Education must meet the general admission requirements of the Graduate School.

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of the following admissions selection criteria:

- 2.75 GPA in undergraduate work or 3.0 in last 60 hours.
- Hold a teaching license.
- Have a written commitment from a practicing 4-12 special education teacher who will function as your mentor during the program.

Course Requirements

ELFN 6763 Philosophies of Education,
ELFN 6773 Introduction to Statistics and Research
ELSE 5033 Behavior Intervention and Consultation
ELSE 5043 Educational Diagnosis and Assessment in Special Education
ELSE 6023 Characteristics of Individuals with Disabilities
ELSE 6053 Educational Procedures for Individuals with Mild Disabilities
ELSE 6063 Educational Procedures for Individuals with Emotional and Behavior Disorders
ELSE 6073 Educational Procedures for Individuals with Moderate-Profound Disabilities
ELSE 5083 Collaboration for Special Education Service Delivery
ELAD 6423 Special Education Law
ELSE 6853 Laboratory Experiences I 4-12
ELSE 6863 Laboratory Experiences II 4-12

Minimum Hours: 36

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SPECIAL EDUCATION-GIFTED, TALENTED, and CREATIVE

Purpose of the Degree

The purpose of the Master of Science in Education degree with a major in Special Education - Gifted, Talented, and Creative (GTC) - is to offer educators a planned performance-based program of study related to the education of gifted, talented, and creative students which is based on recommendations of professional organizations and accrediting associations such as the National Association for Gifted Children (NAGC), Council for Exceptional Children (CEC) and NCATE.

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Special Education - Gifted, Talented, and Creative must meet the admission requirements of the Graduate School and the specific program requirements.

In addition to Graduate School criteria, academic proficiency must be established through satisfaction of the following admissions selection criteria:

- 2.75 GPA in undergraduate work or 3.0 in last 60 hours.
- Hold a current teaching license.
- Have a written commitment from a practicing GTC educator who will function as your mentor during the program.

PROGRAM OF STUDY

Course Requirements

ELFN 6763, Philosophies of Education
ELFN 6773, Introduction to Statistics and Research
ELSE 5703, Identification, Nature and Needs of the Gifted, Talented, and Creative
ELSE 5713, Educational Procedures for the Gifted, Talented, and Creative
ELSE 5723, Assessment for Programming in the Classroom
ELSE 6033, Affective Programming in the Classroom
ELSE 6433, Creativity
ELSE 5813, Current Issues in Gifted Education

ELSE 6833, Practicum for Gifted, Talented, and Creative
ELSE 6843, Advanced Practicum for Gifted, Talented, and Creative

Minimum Hours: 30

CERTIFICATE IN STUDENT AFFAIRS

The purpose of the Certificate in Student Affairs is to allow individuals currently working in institutions of higher education to upgrade their knowledge and skills related to working with college students. This includes individuals with no prior training in student affairs, and individuals with prior training in students affairs seeking to update their training or to expand their career potential. This certificate program does not fully prepare students for professional-level career potential. This certificate program does not fully prepare students for professional level careers in student affairs and should not be considered a substituted for the Master of Science Degree with a major in College Student Personal Services. (MS-CSPS). To gain admission to the certificate program, students must meet the requirements for admission to the Graduate School, submit a statement of purpose indicating their reasons for seeking the certificate, and submit three professional letter of reference.

The Certificate in Student Affairs requires 15 semester hours of course work approved for credit in the MS-CSPS program. Hours completed in fulfillment of a prior degree cannot be counted toward certificate requirements. Hours completed in the certificate program, however, can be applied toward the MS-CSPS degree provided a student gains admission to the MS-CSPS program and the courses were completed within the time limits established by the Graduate School. Students transitioning from the certificate program to the MS-CSPS program will be subject to the admissions criteria and degree requirements in effect at the time of application to the degree program.

Students enrolled in the MS-CSPS program who no longer want to seek completion of this degree may accept a certificate in lieu of the degree. Acceptance of certificate officially terminates a student's enrollment in the MS-CSPS program. Students who accept a certificate and seek to continue pursuit of the MS-CSPS at a later date must reapply for admission to the MS-CSPS program. Such students will be subject to the admissions criteria and degree requirements in effect at the time of reapplication.

Basic Curriculum

Core Courses - 9 hrs

COUN 6333 Student Personnel Services in Higher Education
COUN 6343 College Student Development OR
COUN 6353 College and the Student
ELAD 6323 Organization and Governance of Higher Education OR
ELAD 6333 Organization and Administration of College Student Personnel Services

Electives - 6 hrs

Electives from courses approved for credit in the MS-CSPS program as approved by the advisor based upon a students individual needs.

Minimum hours required for this program: 15

Note. The basic curriculum shown above is designed for students with no prior course work in student affairs. If a student has already received degree credit for courses in the basic curriculum, his or her advisor may modify the curriculum by substituting other courses approved for credit in the MS-CSPS program for the courses already completed.

COLLEGE OF EDUCATION GRADUATE COURSE DESCRIPTIONS

Department of Educational Leadership, Curriculum, and Special Education Community College Education

CCED 7003 The Community College A study of the history, philosophy, nature, and functions of the community college movement

CCED 7013 Community College Teaching A study of the nature of the teaching learning process including emphases on community college curriculum planning, educational technology, and evaluation procedures

CCED 7023 Field Study An intensive study of a selected and approved problem in community college teaching Prerequisite: screening into SCCT degree program

CCED 7033 Special Problems in Community College Teaching Prerequisite: screening into SCCT degree program Curriculum and Instruction

Curriculum and Instruction

ESCI 6221 Supervised Teaching Teaching experience under the mentorship of faculty who assist the student in planning for the teaching assignment, observe and provide feedback to the student during the teaching assignment, and evaluate the student upon completion of the assignment.

ESCI 7251 Mentored Teaching Structured instruction/practice of concepts and strategies of college teaching for doctoral students in the Environmental Sciences. With this preparation, and sufficient topical background, students will be prepared to teach ASU 1000 level general education lecture sections in the natural and life sciences.

ELCI 5013 Curriculum and Assessment Instructional Theory and Practice The course will engage students in the application of basic instructional techniques and fundamentals of educational measurements relevant to classroom situations It is an option of candidates pursuing the Masters in Educational Theory and Practices

ELCI 5313 Coaching Assessment of Student Learning Focus on skills and knowledge needed to support collaborative inquiry to assess student learning in order to close the gap between preK-12 student learning and intended learning goals. This course is restricted to students enrolled in the Instructional Facilitator (IF) Certification program or with instructor permission.

ELCI 5403 Facilitating Instruction through Collaborative Partnerships with Adult Learners Focus on gaining skills and knowledge for facilitating collaborative partnerships with adult learners to increase their preK-12 students' academic achievement. This course is restricted to students enrolled in the Instructional Facilitator (IF) Certification program or with instructor permission.

ELCI 5513 Teaching Global Perspectives This course is intended to promote effective teaching of global perspectives through various subject matter in elementary and secondary schools Course emphasis is the identification, demonstration, and critical evaluation of appropriate instructional strategies and resources

ELCI 580V (1-6 hours) Special Topics Workshop A designed series of learning experiences to address the specific needs of in service teachers, administrators, or special

services personnel This course may not be used to satisfy any degree requirements Course can be repeated for credit

ELCI 6043 Reflective Teaching A focus on assisting teachers to enhance their reflective skills via observation data collection techniques. This course is restricted to students in the MSE in Educational Theory and Practice or with permission from the course instructor.

ELCI 6063 Curriculum Management Presents perspectives, skills, and processes necessary for administrators to manage district and building level curriculum and to formalize the curriculum decision-making process.

ELCI 6083 Supervision and Evaluation of Teaching This course combines attributes of supervising teaching with the formal aspects of teacher evaluation Emphasis is upon adult development, clinical supervision, and evaluation process and models extant in public schools

ELCI 6093 Educational Media This course is designed to provide teachers, administrators, supervisors, and librarians with the skills and knowledge required to effectively use

instructional media in the classroom and for professional presentations, and to provide them with an understanding of the requirements for an effective multimedia center

ELCI 6323 Elementary School Curriculum This course stresses principles and criteria for the selection and organization of instructional materials and activities for the elementary school

ELCI 6423 Middle School Curriculum A practical and contemporary study of the organization and development of middle school curricula Emphasis is on the study of subject field content trends, scheduling, curriculum scope and sequence, and student activities.

ELCI 6493 Curriculum Internship This capstone course provides students with practical hands-on clinical experience in a school setting The course will focus on authentic problems and activities that require students to demonstrate dispositions, skills, and practices integral to the performance of the curriculum specialist. Prerequisite: Completion of portfolio

ELCI 6523 Secondary School Curriculum Curriculum planning, improvement, and evaluation in the secondary schools Emphasis upon the selection and organization of content, the study of factors affecting curriculum revision, and current issues of curriculum development in the modern secondary school.

ELCI 6533 Theories of Instruction A review of learning theories followed by an intensive study of various models of teaching available to the classroom teacher with emphasis upon mastery of selected models.

ELCI 675V (1-6 hours) Thesis

ELCI 6763 National Boards Teacher Certification Experiential Learning This course may be used to provide graduate credit for Candidates receiving recommendations for three hours of graduate credit from the American Council on Education (ACE) for completing the process (i.e. having ten Scorable entries) for National Boards Teacher Certification. <https://apps.nbpts.org/ace/begin.cfm>

ELCI 6766 National Boards Teacher Certification Experimental Learning This course may be used to provide graduate credit for candidates receiving recommendations for six hours of graduate credit from the American council on Education (ACE) for receiving

National Boards Teacher Certification. <https://apps.nbpts.org/ace/begin.cfm>

ELCI 6773 National Teaching Standards Capstone Experience Capstone experience designed to help teachers develop descriptive, analytical, and reflective thinking and writing skills that demonstrate application of the National Board's five core propositions. ELCI 6773 is the last course students take in the MSE in Educational Theory and Practice. All other courses required for this program are prerequisites for ELCI 6773. This course is limited to students enrolled in the MSE in Educational Theory and Practice.

ELCI 680V (1-3 hours) Independent Study

ELCI 7523 Curriculum Theory and Practice A study of current curriculum innovations and their underlying theoretical bases Emphasis is given to current research on effective schools and to the translation of effective curriculum designs into practice Prerequisite: completion of an appropriate master's degree in educational administration or curriculum and instruction

ELCI 762V (1-6 hours) Special Topics in Curriculum

ELCI 7723 Field Study An intensive study of a selected and approved curriculum problem

ELCI 775V (1-6 hours) Thesis

ELCI 780V (1-3 hours) Independent Study

ELCI 8213 Doctoral Seminar: Curriculum and Instruction This course is a reflective analysis of school curriculum, grades P-12 Presentations and discussion will focus on the four prevailing curriculum conceptions: Humanistic, societal, technological and academic Prerequisite: Admission to doctoral program Educational Leadership

Educational Leadership

ELAD 6003 School and Community Relations A study of concepts, programs and procedures for establishing and maintaining positive relations between the school, its constituents, and related agencies Areas covered include media and public relations, publications, community and parental involvement Special emphasis is on transitional student support services through interagency collaboration with non-school agencies such as social services, law enforcement, and providers of direct services to persons with disabilities.

ELAD 6013 Secondary School Administration A study of the organization and administration of the secondary school Emphasis upon the pertinent research, and discussion of current issues facing the secondary principal.

ELAD 6023 Elementary School Administration A study of the organization and administration of the elementary school Emphasis upon the pertinent research, and discussion of current issues facing the elementary principal.

ELAD 6033 Administration and Supervision of Special Education This course will provide an in-depth study of and an exploration into the administrative processes of special education.

ELAD 6053 Planning and Resource Allocation This course addresses planning and resource allocation in public schools Special attention is given to site-based management responsibilities of the principal.

ELAD 6073 School Law A study of the legal aspects of education for the purpose of familiarizing school personnel with the legal features of school organization and administration. The course will consider constitutional and statutory provisions, but the major emphasis will be directed to the study of court decisions relating to education.

ELAD 6103 Ethical Leadership This course presents an overview of educational administration for practitioners within the context of ethical and professional behavior.

ELAD 6273 Legal Aspects of Higher Education A study of the legal aspects of education for the purpose of familiarizing college and university personnel with the legal features of higher education organization and administration. The course will consider constitutional and statutory provisions, but the major emphasis will be directly to the study of court decisions relating to American post-secondary education.

ELAD 6313 Higher Education Finance An examination of the economic principles and fundamental operational financial procedures which affect the American colleges and universities.

ELAD 6323 Organization and Governance of Higher Education The study of leadership in higher education for the purpose of familiarizing college and university personnel with organization and governance in higher education institutions.

ELAD 6333 Organization and Administration of College Student Personnel Services Study of the organization and administration of college student affairs programs and services. Organizational and management principles and practices used within college student affairs settings are discussed.

ELAD 6423 Special Education Law A study of the legal aspects of special education with emphasis given to the following six principles of special education law: (1) zero project, (2) nondiscriminatory classification, (3) individualized and appropriate education, (4) least restrictive placement, (5) due process, and (6) parent participation.

ELAD 650V (1-6 hours) Thesis

ELAD 6593 Supervised Internship This capstone course provides students with practical hands-on clinical experience in a school setting. The course will focus on authentic problems and activities that require students to demonstrate leadership skills, and practices integral to the performance of the school administrator at the building level. Prerequisite: Completion of portfolio.

ELAD 680V (1-3 hours) Independent Study

ELAD 7013 School Personnel Administration An examination of emerging professional responsibilities and ethical practices; current selection, retention, and promotion practices; and designs for salary schedules and fringe benefits.

ELAD 7023 School Business Management A consideration of systems and procedures for accounting, budget planning and preparation, auditing, purchasing, and bonding. Prerequisite: completion of a master's degree in the area of educational administration or curriculum and instruction, and ELAD 6053.

ELAD 7033 Contemporary Issues in American Education Analysis of significant contemporary issues confronting American education.

ELAD 7043 Management of Operational Systems for Learning A comprehensive study of educational facilities, transportation, and food services programs for school district administrators. Administrators learn to use data logically and systematically to provide effective services and make decisions.

ELAD 705V (1-3 hours) Special Problems in Educational Administration

ELAD 7073 Schooling in a Pluralistic Society An examination of diverse cultural backgrounds represented in the nation's schools. Emphasis is placed on understanding educational and cultural issues along with identifying agencies and programs that are designed to facilitate and nurture learning environments.

ELAD 7103 School District Administration An examination of the effective performance patterns for school district superintendents with emphasis given to the relationships among the local board of education, superintendent, school personnel, and the community.

ELAD 7473 Field Study An intensive study of a selected and approved administrative problem

ELAD 7493 Supervised Internship A supervised clinical experience in a school district with emphasis on authentic problems and activities that require students to demonstrate leadership, skills, and practices integral to the performance of the school district administrator. Prerequisite: Completion of all required program coursework, portfolio, and/or permission of department chair.

ELAD 750V (1-6 hours) Thesis

ELAD 780V (1-3 hours) Independent Study

ELAD 8043 Advanced Organizational Theory and Inquiry An examination of the theoretical assertions and empirical knowledge claims regarding the behavior of organizations with emphasis on implications of recent developments for leadership practice Prerequisite: Admission to doctoral program

ELAD 8053 Perspectives on an Academic Career in Higher Education A focus on preparing future faculty for balancing various roles in higher education, addressing freedoms and responsibilities associated with teaching, research, and service along with ideas for securing employment and advancing in a professorial career. This course is restricted to PhD students or with permission of instructor.

ELAD 8203 Politics of Education This course explores the political perspective of school administration and provides the practitioners with strategies and realizations critical to being a successful political influence in schooling Prerequisite: Admission to doctoral program

ELAD 8211 Integrative Seminar I Synthesizes concepts and knowledge from each corresponding seminar and previous course content to build a systems orientation toward change and an understanding of organizational culture Prerequisite: Admission to doctoral program

ELAD 8221 Integrative Seminar II Synthesizes concepts and knowledge from each corresponding seminar and previous course content to build a systems orientation toward change and an understanding of organizational culture Prerequisite: Admission to doctoral program Corequisites: ELAD 8253 and ELAD 8203

ELAD 8231 Integrative Seminar III Synthesizes concepts and knowledge from

each corresponding seminar and previous course content to build a systems orientation toward change and an understanding of organizational culture Prerequisite: Admission to doctoral program Corequisites: ELFN 8783 and ELFN 8773

ELAD 8243 Epistemology and Pedagogy An overview of the major concepts of epistemology and learning with emphasis on understanding research theories and best teaching practices. This course is restricted to students in the educational leadership doctorate program (Ph.D.).

ELAD 8253 Educational Policy and the Law A study of the relationship of law and policy, and legal decision and educational practice Among issues addressed are the relationship between schooling and the state, the nature and scope of students' and teachers' substantive and procedural rights, and the many meanings of educational opportunity Emphasis is given to consideration of the tension among political, professional, and legal authority at the local level and the distinctive policy role of the federal government Prerequisite: ELAD 6073 and admission to doctoral program

ELAD 8313 Doctoral Seminar: Educational Leadership Practices I A study of the professional applications of theoretical and empirically-based leadership practices with specific application to administration of educational institutions Prerequisite: Admission to doctoral program and permission of the professor

ELAD 8333 Organization Development in Education Application of research and practice to problems of change and innovation in education Assessment and intervention strategies for school improvement efforts will be examined Prerequisite: Admission to doctoral program

ELAD 8343 Comparative Education A study of international education with a focus on acquiring knowledge associated with global education practices and their implications in a rapidly changing society. This course is restricted to students in the educational leadership doctorate program (Ph.D. & Ed. D.).

ELAD 8411 Succeeding in the PhD Program Emphasis on tasks and roles students in PhD programs must master to maximize their opportunity for success. Prerequisite: Entry into the Center for Excellence in Education PhD program.

ELAD 8421 Designing Surveys Emphasis on constructing survey instruments, survey research methods, and an introduction to scaling methods. Prerequisite: ELAD 8411 Succeeding in a Doctoral Program. Course is open only to students in the CEE PhD program.

ELAD 8431 Experimental Research Design Emphasis on designing and conducting Experimental and Quasi-experimental research. Prerequisite: ELAD 8411 Succeeding in a Doctoral Program and ELAD 8421 Designing Surveys. Course is open only to students in the Center for Excellence in Education PhD program.

ELAD 889V (1-12 hours) Dissertation

EDAR 5523 Methods and Materials in the Teaching of 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 Prerequisite: Admission to Teacher Education Program

EDEN 5553 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 secondary schools Opportunities to develop skills

and strategies for teaching language, literature, and composition to culturally diverse students

EDLA 5633 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, technology, and research in foreign language education

EDMA 5563 Methods and Materials for teaching Mathematics in the Secondary School Historical and current trends in teaching mathematics and the secondary school level. Major Emphasis on content and concept development and their application in the mathematics classroom. Practice in use of appropriate technologies, applying teachings techniques, and formulating student evaluations will be emphasized.

EDMU 5573 Methods and Materials for Teaching Music A study of instrumental music programs, with in-depth study of program organization, teaching methods and marching band techniques Includes study of a variety of beginning, intermediate and advanced method books Focuses on ancillary concerns such as fund raising, instrument maintenance and inventory control.

EDMU 5643 Methods and Materials for Teaching Vocal Music An overview of the music curriculum K-12 Emphasis on teaching strategies incorporating cognitive, psychomotor and affective techniques appropriate to secondary school students in vocal music Opportunities to develop behavioral objectives, demonstrations, plan rehearsals, observe public school music students, and more

EDSC 5593 Methods and Materials for Teaching Science in the Secondary School Philosophical bases, teaching techniques, curriculum development, classroom management, facility resources, and equipment are emphasized

EDSS 5603 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

EDSP 5543 Methods and Materials for Teaching Speech Communication and Theatre In the Secondary Schools Methods and resources for teaching speech communication and theatre in the secondary schools. Emphasis is on teaching strategies for interpersonal communications, group dynamics, and critical thinking, reasoning, and diversity. The development of a portfolio is required.

TI 5826 Teaching Internship in Secondary Schools Culmination of the secondary education program Provides 16 weeks of directed teaching under the supervision of a qualified teacher Requires application of knowledge, skills, and demonstration of appropriate dispositions for teaching

VOED 5443 Advanced Methods of Teaching in Career and Technical Education The philosophy and objectives of teaching Career and Technical Education, including appropriate instructional principles and theories, instructional models, learning styles and learner-centered methods and techniques at both the secondary and post-secondary levels for career and technical education Educational Foundations

Educational Foundations

ELFN 6763 Philosophies of Education Presuppositions of various philosophies

with emphasis on the implications of these presuppositions on educational theory and practice

ELFN 6773 Introduction to Statistics and Research An introductory course in methods and techniques of research, and the statistical treatment and interpretation of research data

ELFN 7583 Evaluation of Educational Programs and Systems This course examines various techniques of program analysis and evaluation for individual schools and for the total school system

ELFN 7773 Advanced Educational Research An advanced study of the methodology of research including quantitative and non-quantitative procedures

ELFN 7783 Advanced Educational Statistics A study of inferential statistics utilizing parametric and nonparametric procedures Prerequisite: ELFN 6773 or equivalent

ELFN 8753 Multivariate Analysis A study of statistical analyses involving multiple dependent and independent variables. Prerequisites: ELFN 6773 Introduction of Research and Statistics or equivalent, ELFN 7773 Advanced Educational Research or equivalent, ELFN 7783 Advanced Educational Statistics or equivalent. This course is limited to those students in the Center for Excellence in Education PhD program.

ELFN 8763 Doctoral Seminar: Socio-Cultural Foundations of Education This course examines educational ideas, concepts, and issues as it describes the social, political and economic issues and trends related to schools in a pluralistic society Prerequisite: admission to doctoral program

ELFN 8773 Doctoral Seminar: Educational Research and Evaluation A study of research designs and statistical techniques to provide students with the opportunity to relate, integrate, and synthesize evaluation processes Study will focus on theories and practices of curriculum and environmental and educative roles of instruction Prerequisites: ELFN 7773, ELFN 7783, and admission to doctoral program

ELFN 8783 Qualitative Research and Evaluation Study of the theoretical, conceptual and methodological aspects of research and evaluation methods derived from traditions of ethnographic and ethnomethodological inquiry Prerequisites: ELFN 6773, ELFN 7773 and ELFN 7783, and admission to doctoral program

ELFN 8793 Doctoral Seminar: Proposal Development The study and application of research methodologies and data analysis techniques appropriate to the development of a dissertation The primary emphasis will be the completion of a dissertation proposal Prerequisites: admission to doctoral program and satisfactory completion of the comprehensive examination in Educational Leadership Special Education

Secondary Education

TI 5826 Teaching Internship in the Secondary School Culmination of the secondary education program Provides 16 weeks of directed teaching under the supervision of a qualified teacher Requires application of knowledge, skills, and demonstration of appropriate dispositions for teaching

TISP 5826 Teaching Internship in the Secondary School (Speech Communication and Theatre) This course is a culmination of the entire secondary education curriculum for speech and theatre. The course involves application of all materials and methods previously

learned in major coursework and professional education preparatory classes.

EDEN 5553 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 secondary schools Opportunities to develop skills and strategies for teaching language, literature, and composition to culturally diverse students

EDEN 5653 Methods and Materials in the Teaching of English in the Middle School

Middle school methods focuses on understanding the special needs of the middle school student and applying this to the techniques for teaching language, literature, and composition Through reading, research, demonstration, and class discussion, the students learn about and practice appropriate techniques for culturally diverse middle school students

EDLA 5633 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, technology, and research in foreign language education

EDSC 5593 Methods and Material for Teaching Science in the Secondary School

Philosophical bases, teaching techniques, curriculum development, classroom management, facility resources, and equipment are emphasized

EDSS 5603 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

EDSS 5663 Methods and Materials in the Teaching of Social Studies in the Middle School

This course is intended to promote effective instructional procedures and activity development in the middle school social studies classroom Emphasis will be on identification, demonstration development and evaluation of appropriate activities for the middle school social studies student (These courses cannot be used to establish an undergraduate six-year teaching certificate and for graduate credit also)

Special Education

ELSE 5033 Behavior Intervention and Consultation

Techniques of systematic behavioral analysis and intervention for students at-risk for school failure or students with disabilities Emphasis is placed on both direct and consultative interventions.

ELSE 5043 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.

ELSE 5083 Collaboration for Special Education Service Delivery

A study of the team planning process, working with families, and service delivery options for special education, including special class placement, consultation, and collaborative teaching.

ELSE 5633 Diagnostic and Corrective Reading Instruction for Individuals with Mild Disabilities

Developing comprehensive understanding of diagnostic and corrective needs of individuals with reading disabilities in special education classrooms

ELSE 5683 Methods for Working with Families Development of effective interpersonal communicative skills; conducting parent-teacher conferences; and designing training programs for parents

ELSE 5703 Identification, Nature, and Needs of the Gifted, Talented, and Creative A comprehensive study of gifted, talented and creative learners including characteristics, Identification procedures, appropriate educational services, and social needs of this population in a variety of educational settings.

ELSE 5713 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.

ELSE 5723 Assessment for Programming for Gifted, Talented, and Creative Review and administration of assessment instruments for the purpose of preliminary screening, identification, and differentiating programming for the gifted, talented, and creative.

ELSE 5733 Gifted Children in the Regular Classroom A study of effective strategies used by regular classroom teachers to serve learning needs of gifted. Specific topics related to giftedness will be studied including characteristics, identification, and differentiated instruction.

ELSE 5743 Assessment of Young Children with Exceptionalities A study of evaluative and diagnostic instruments and procedures used with young exceptional children from birth to five years of age.

ELSE 5753 Methods for Working with Young Children with Exceptionalities A study of current theories, practices, and procedures used to develop programs for exceptional children from birth to five years of age.

ELSE 5813 Current Issues in Gifted Education An examination of research and theory related to giftedness, and analysis of data-driven decision-making for effective classroom practice for gifted students.

ELSE 6013 Contemporary Issues in Special Education A study of current trends, research, publications, and programming

ELSE 6023 Characteristics of Individuals with Disabilities Advanced in-depth study designed to develop knowledge of the characteristics and issues related to individuals with disabilities.

ELSE 6033 Affective Programming in the Classroom An in-depth study of the social and emotional needs of children who have diverse learning needs.

ELSE 6053 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

ELSE 6063 Educational Procedures for Children with Emotional and Behavioral Disorders Theoretical orientations and specific procedures for providing services to children with emotional problems

ELSE 6073 Educational Procedures for Individuals with Moderate-Profound Dis-

abilities A study of the basic methods and materials to facilitate skill development for individuals who require an individualized functional independent living curriculum

ELSE 6103 Seminar - Studies of Research in Special Education An examination of the current issues and trends in special education as found in the professional literature as it relates to the individual student's area of interest A research project suitable for a poster session presentation is required Prerequisites: Admission to candidacy to the MSE program in Special Education

ELSE 6423 Special Education Law A study of the legal aspects of special education with emphasis given to the following six principles of special education law: (1) zero project, (2) nondiscriminatory classification, (3) individualized and appropriate education, (4) least restrictive placement, (5) due process, and (6) parent participation

ELSE 6433 Creativity An in-depth examination of creativity as a meaningful curriculum effort for the education of creative students. Emphasis is on the theoretical aspects of creative process, creative product, and practical application of theory to foster creativity in the classroom.

ELSE 6463 Program Evaluation for Special Education This course provides an introduction to program evaluations in special education Various areas will be explored, including accountability, needs assessments, evaluation designs, and effects of evaluation

ELSE 6673 Children with Emotional and Behavioral Disorders Concepts, practices, and trends in the education of children with emotional and behavioral disorders

ELSE 6713 Nature and Needs of Students with Exceptionalities An in-depth study of young students with exceptionalities with a focus on their developmental needs

ELSE 680V Independent Study

ELSE 6813 Laboratory Experiences I P-4 A series of field-based experiences in a P-4 special education classroom setting, designed to provide students opportunities to work with children with disabilities. Emphasis is focused on practical application of theoretical methods Prerequisites: Successful completion of required Praxis II exams and permission from advisor and completion of portfolio.

ELSE 6823 Laboratory Experiences II P-4 A series of field-based experiences designed as a continuation of ELSE 6813 Prerequisites: ELSE 6813 and permission of advisor.

ELSE 6833 Practicum for Gifted, Talented, Creative Learning experiences are provided which incorporate skills in classroom organization, management, planning, and teaching in a field setting for gifted, talented, creative. Permission required by program director.

ELSE 6843 Advanced Practicum for Gifted, Talented, Creative A focus on innovative teaching, research, program evaluation, and collaboration with stakeholders to meet the needs of gifted, talented, and creative students. Permission of program director required.

ELSE 6853 Laboratory Experiences I 4-12 A series of field-based experiences in a 4-12 special education classroom setting, designed to provide students opportunities to work with students with disabilities. Emphasis is focused on practical application of theoretical methods. Prerequisites: Successful completion of required Praxis II exams and completion of portfolio.

ELSE 6863 Laboratory Experiences II 4-12 A series of field-based experiences designed as a continuation of ELSE 6853. Prerequisites: ELSE 6853 and permission from advisor.

ELSE 689V Thesis

DEPARTMENT OF TEACHER EDUCATION

Early Childhood Education (MSE) - Early Childhood Services (MS)

ECH 5033 Learning and Development in Children A study of relevant child development data, encompassing development from conception to the middle years of childhood. Practical application of learning theory is provided to the student through a variety of hands-on experiences and observation.

ECH 5061 Early Childhood Education Symposium A symposium with an identified theme relating to current events or needs in the field of early childhood education. Designed for early childhood professionals (May be repeated).

ECH 6513 Developmental Perspectives In depth study of child development and developmental differences and influences with an emphasis on applying knowledge to creating learning environments for young children. Additional emphasis on creating collaborative relationships with families and communities to support children's development.

ECH 6423 Documenting Young Children's Learning and Development Creating, selecting and appropriately using a variety of documentation tools in multiple early childhood settings, including observational methods and standardized assessments; and partnering with families and other professionals with reference to assessment issues.

ECH 6503 Early Childhood Curriculum and Environments Introduction to current best practices in developing and implementing effective learning environments and curriculum in early childhood classrooms. Restricted to Master of Arts in Teaching candidates only. Prerequisites: TE 6223 Effective Teaching with Diverse Populations; ECH 6513 Developmental Perspectives; ECH 6423 Documenting Young Children's Learning and Development; Must be accepted to the Teacher Education program.

ECH 6533 Sources and Models of Early Childhood Curriculum Study and analysis of curriculum sources and models for the purpose of critiquing and creating appropriate curriculums.

ECH 6543 Administration and Supervision of Programs for Young Children A study of the important responsibilities of administrators of child care and preschool programs. Emphasis will be placed upon program design, policy formation, fiscal management, staff training, and decision-making.

ECH 6583 Practicum in Early Childhood Education I Application of theory and developmentally appropriate practices in an early childhood education setting. Includes development, implementation of a personal research project within the early childhood setting. Prerequisites: (1) elementary teaching certificate, (2) admission to candidacy, and/or (3) graduate adviser approval.

ECH 6593 Practicum in Early Childhood Education II Practicum Experience is developed to meet the student's professional interests and goals within a community-based early childhood education setting. Development and implementation of a personal research project required. Prerequisites: Instructor and advisor approval.

ECH 660V Thesis

ECH 6773 Research in Early Childhood Education In-depth examination of current research that documents effective and best practices in early childhood settings
Prerequisite: ELFN 6773

ECH 6783 Leadership in Early Childhood Education Building upon professional development such as leadership, advocacy and collaboration, this course connects students to the broader contexts of early childhood education and responsibilities to children families, and the profession.

ECH 680V (1-3 hours) Independent Study

ELED 5053 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

ELED 5613 Techniques of Behavior Management The 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 ELSE 5613)

ELED 5803 Special Topics Current subjects of interest to graduate Elementary Education, Early Childhood Education or other educational professionals with appropriate sub-titles Course may include intensive study of such subjects to meet the need of professional educators All Special Topics Courses must be approved by the Elementary Education Department Curriculum Committee One (three-hour) 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

ELED 6013 Home-School Relationships A study of various techniques of communicating with the home and community All facets of parent involvement, including parent education, will be explored

ELED 6023 Curriculum Construction—Elementary This course stresses principles and criteria for the selection and organization of instructional materials and activities for the elementary school

ELED 6043 Social Studies in the Elementary School Relates human and natural resources to the child as a social being in an interdependent world and includes four or five selected field trips

ELED 6053 Principles and Practices for Language Arts Instruction A methods course which provides for the development of knowledge, skills, and attitudes necessary for teaching the language arts: listening, speaking, reading, and writing

ELED 6063 Educational Media This course is designed to provide teachers, administrators, supervisors, and librarians with the skills and knowledge required to effectively use instructional media in the classroom and for professional presentations, and to provide them with an understanding of the requirements for an effective multimedia center

ELED 6073 Teaching Natural Science in the Elementary School A graduate level methods course which provides an opportunity for the development of effective elementary

science instructional procedures and explores current problems relating to elementary science teaching

ELED 6083 Mathematics in the K-6 Curriculum The course will acquaint K-6 teachers with the curriculum and evaluation standards in mathematics and with ways to implement these standards for elementary classrooms

ELED 660V (1-6 hours) Thesis

ELED 680V (1-3 hours) Independent Study

Mid-Level Education

MLED 5013 Methods and Materials for Teaching Language Arts and Social Science in the Middle Grades Prepares MAT candidates to develop, plan, enact, and reflect on lessons in middle grades language arts and social studies.

MLED 5023 Methods and Materials for Teaching Mathematics and Science in the Middle Grades Methods, materials, and activities to promote effective instructional strategies in the middle school mathematics and science classrooms. Emphasis on philosophical bases, national standards, assessment, and current problems related to teaching middle school mathematics and science.

MLED 6403 The World of the Mid-Level Child A focus on the developmental characteristics of the young adolescent ages (10-14) set against a matrix of racial, ethnic, gender, socioeconomic, family, and community issues in order to create developmentally responsive practices and programs for all mid-level learners.

MLED 6413 Standards Based Instruction Addresses integrated instructional practices; discipline based methodology, using exploratory and mini-courses for mid-level students while maintaining alignment with state and national standards.

MLED 6423 Teaming, Teaching and Learning in the Mid-Level Education A study of school and classroom organizational practices that include: grouping for instruction, scheduling instruction, curricular organization, and classroom management. The leadership and professional role of the teacher will be explored.

Reading

RDNG 5313 Methods and Materials in Reading A course which focuses on techniques and materials for teaching students with different learning styles. Emphasis is on the basal reader, whole language, linguistic, language experience, and individualized approaches

RDNG 5343 Reading in the Content Areas: Middle and Secondary Schools A course for classroom teachers, reading specialists, and other educators. Emphasis is on the relationship between learning strategies and reading content materials in the subject areas normally taught in grades four through twelve

RDNG 5803 Special Topics Study of current topics related to literacy / reading.

RDNG 6003 Literature and Book Selection Approaches in building an effective literature program in educational settings.

RDNG 6013 Theories, Issues, and Methods of Reading Synthesis of theories and models of reading, past and current reading issues, examination of current research that discusses instruction of reading areas, spelling and writing; overview of reading and instruction for diverse and struggling learners. Prerequisite: Enrollment in the Graduate Program within the College of Education.

RDNG 6243 Reading in the Digital Age A focus on infusing reading components with various forms of information and communication technologies directed towards improving K-12 student's reading skills, motivation to read, and use of technology. Prerequisite: Admission to MSE Reading program or instructor permission.

RDNG 6313 Theory and Practice in Teaching Reading A study of reading and the reading process. The symbolic nature of reading is emphasized. Comparisons are made with the traditional presentations of reading and implications for instructional decision-making are suggested.

RDNG 6333 Reading Practicum I—Diagnosis and Intervention Clinical experiences in assessment and intervention in reading, and related areas. Prerequisite: RDNG 6313, and permission of professor.

RDNG 6353 Reading Practicum II—Leadership in Literacy Clinical experiences in the correction of reading difficulties with emphasis on utilizing assessment data for professional development as a reading specialist in organizing and supervising school wide reading reform. Prerequisite: RDNG 6333, or permission of professor.

RDNG 6373 Qualitative Methods in Reading Research A research course about qualitative research methods and practices, in which students explore the methods, techniques and reasons for conducting research to support best practices.

RDNG 6383 Reading Issues within a Multicultural and Pluralistic Society A comprehensive survey of multicultural and pluralistic societal issues and their impact on reading as well as on school, teachers, and instructional groupings.

RDNG 645V (1-6 hours) Thesis

RDNG 6493 Advanced Reading Methods and Intervention Examines latest trends in research based reading instructional methodology and development, implementation, and monitoring of intervention for struggling readers. Prerequisite: RDNG 6313 theory and Practice in Teaching Reading (or equivalent); and enrollment in a Graduate Program within the College of Education.

RDNG 6513 Emergent Literacy Birth - Primary Grades Focuses on the development of literacy skills, birth through primary grades, including the process of exposure to words, print, and the opportunity to write as a part of the literacy process. This course maintains alignment with state and national standards.

RDNG 6533 Literacy for Diverse Learners Examines literacy issues in the context of multicultural education and culturally responsive pedagogy with a focus on the differentiation of literacy needs among various student cultures and special needs students. Presentation and rehearsal of explicit literacy instruction to enhance comprehension. Restricted to MSE Reading major or permission of instructor.

RDNG 6553 Adolescent Literacy Analyzes current federal initiatives and reform policies related to adolescent literacy. Examines the social and cognitive processes related to adolescent literacy. Study of methods to facilitate literacy learning for adolescents in all

curricular areas. Restricted to MSE Reading major or permission of instructor.

RDNG 6563 Principles of Literacy Cognition An examination of current research on literacy cognition, reading disorders, and research - based methodologies for reading instruction, with implications for instruction.

RDNG 680V (1-3 hours) Independent Study

RDNG 7273 Multicultural Influences in Reading and Literature Survey of contemporary literary theory and criticism including an examination of the role of multiple perspectives and diverse voices in literature as a transformative agent in schools and society. Restricted to graduate students in education programs or permission of instructor.

RDNG 7283 Writing Pedagogy: Advanced Processes of Writing An examination of varied perspectives of the processes of writing, with a focus on recursive practices in authentic, academic, and personal settings; reflection on personal and academic writing practices and research of writing pedagogy facilitating the study of effective application. This course is restricted to Ed.S. degree Reading candidates or other graduate students with permission of the instructor.

RDNG 7393 Literacy Leaders as Community Advocates Examination of the role of literacy leaders within the school, community, and family context with a focus on literacy advocacy project development, implementation, and evaluation. Restricted to MSE-Reading or Ed.S.-Reading candidates or approval of the instructor

RDNG 745V Thesis Thesis is specific as the capstone for the Specialist in Education Reading (Ed.S. Reading) Program and enrollment is restricted to those students.

RDNG 7473 Theories of Language Acquisition Overview of theoretical and practical orientations regarding language acquisition with a focus on English Language Learners including an examination of language acquisition models and their application in schools and classrooms. Limited to MSE-Reading and Ed.S.-Reading students or approval of the instructor. Prerequisite: RDNG 6313 Theory and Practice in Teaching Reading (or equivalent).

RDNG 7543 New Literacies An overview of theoretical and pedagogical frameworks of the New Literacies with an emphasis on the intersection of student lives, culture, and technology. Restricted to Ed.S.-Reading Candidates or graduate students with permission of the instructor. Prerequisite: RDNG 6313 Theory and Practice in Teaching Reading (or equivalent).

RDNG 7613 Survey of Quantitative and Qualitative Literacy Research An overview of research design, framework, and methodological approaches that spans qualitative and quantitative paradigms, including a mixed methods approach, within the context of literacy. Restricted to Ed.S Candidates or graduate students with permission of the instructor Prerequisite: ELFN 6773, Statistics and Research (or equivalent).

RDNG 7643 Social Foundations of Literacy An overview of the social foundations of literacy within the context of sociocultural and sociopolitical theory. Limited to MSE-Reading and Ed.S.-Reading students or approval of the instructor. Prerequisite: RDNG 6313 Theory and Practice in Teaching Reading (or equivalent).

RDNG 7653 Advanced Studies in Reading Comprehension An in-depth examination of the dimensions of understanding in literacy learning, the complexities of comprehension strategy instruction as they pertain to the learning of essential concepts, and how they impact literacy learning environments and professional development for teachers.

Restricted to Ed.S Reading Candidates or graduate students with permission of the instructor.

Teacher Education

TE 6223 Effective Teaching with Diverse Populations Theory and practice for effective teaching of diverse students, application through the creation of unit and lesson plans.

TE 6233 Teaching and Assessment Designed to provide teachers with a broad survey of teaching methodology and student assessments. Instructional decision making will be explored in the context of standards, principles of learning, teaching methodology, student assessment and student development.

TE 6243 Technology as a Tool for Teaching This course will include evaluation of educational software and websites. Students will research instructional design principles and procedures and will utilize their learning to create technology integrated educational materials for their respective areas.

TE 6253 Perspectives on Professionalism in Education This course helps develop perspectives that are essential for educators to understand and fulfill ethical and professional responsibilities in their respective areas, including communication with various audiences, reflection, self assessment and advocacy within the context of cultural diversity and democratic pluralism

TE 6263 Teachers as Professionals; Working Toward National Board of Professional Teaching Standards Emphasis on the National Board of Teaching Standards (NBPTS) to improve student learning in classrooms. NBPTS provides the framework for the course. Prerequisite: ELFN 6773 Statistics and Research.

TE 6283 Practicum in Teacher Education Practicum serves as a capstone experience in which the student collaborates with faculty to apply knowledge and skills gained in the program. A written proposal must be approved the semester prior to the Practicum and follow published department timelines.

TE 6299 MAT Internship in Teacher Education Supervised internship focused on educational practice and performance for individuals seeking alternative licensure to teach in grades PK-12. Prerequisite: Restricted to Master of Arts (MAT) in Teacher Education. Students must complete all other MAT coursework and pass Praxis I and Praxis II examinations prior to enrollment.

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION, AND SPORT SCIENCES

Physical Education

ESPE 580V (1-6 hours) 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 This course may not be used to satisfy any degree requirements Course can be repeated for credit

ESPE 6103 Ethical Issues in Sport This course examines contemporary views of moral and ethical issues within various sport environments. Course includes discussion of major social criticisms and constructs of sport, analysis of relevant ethical theories in sport, application of critical self-evaluation, and synthesizing ethical reasoning knowledge and skills.

ESPE 6113 Sport Law In-depth understanding on a variety of legal issues pertaining to the amateur and professional sport environment. Tort law, negligence, contract, antitrust, labor, premise operator, exculpatory, and licensing law will be analyzed in the context of sports-related cases.

ESPE 6133 Sport Finance & Budgeting Topics as they relate to fiscal and budgetary control of professional and amateur sport organizations. Included are: public sport facility financing, ownership, financial analysis, feasibility and economic impact studies. Analyzes financial challenges and strategies of professional and intercollegiate.

ESPE 6143 Sport Communications Provides students with advanced knowledge, skills and understanding relating to all aspects of the sport media and communication industry and how each is integral to the management, marketing, and operational goals of sport organizations at all levels. Use of technology in sport communications also covered.

ESPE 6153 Sport Leadership Provides students with advanced knowledge, skills and understanding relating to leadership principles and aspects in sport organizations. Course content includes organizational goals, strategy, environments, culture, power, conflict, leadership, and change affecting sport managers and organizations.

ESPE 6163 Sport Governance and Operations Provides students with knowledge and understanding of the governance policies and procedures in professional and collegiate sports. Also covers essential elements of facility and game operations within intercollegiate, professional sports, and major sports events.

ESPE 6543 Cellular Physiology in Exercise An examination of human physiology at the cellular and subcellular levels in response to acute and chronic physical activity.

ESPE 6513 Cardiorespiratory Physiology The study and practical applications of cardiovascular and respiratory physiology and research related to exercise and sports programs

ESPE 6523 Physical Activity for Special Populations The purpose of the course is to facilitate understanding of specific disease states as they relate to health and fitness and to provide information and practical experience for developing an exercise prescription at the appropriate level for the older adult, the physically disabled, and those with chronic diseases

ESPE 6533 Laboratory Techniques in Exercise Physiology. This course provides and in-depth understanding of the laboratory techniques used in exercise physiology to measure physiological fitness and to assess physiological changes that occur due to exercise. Prerequisites: ESPE 6653, Neuromuscular Physiology and ESPE 6513 Cardiorespiratory Physiology. Summer I

ESPE 6593 Sport and Exercise Psychology The study and practical applications of relevant psychological theories and research related to physical education, exercise and sport programs

ESPE 6603 Sport in Society An introduction to sport sociology with special emphasis on issues that relate directly to the practicing physical educator and/or coach.

ESPE 6623 Measurement and Statistics Application of measurements and evaluation to the programs of exercise science and physical education Emphasis is placed on development, selection, and application of tests.

ESPE 6633 Curriculum Construction in Physical Education A critical study of

principles, problems, and procedures in the construction of a physical education program Attention will be given to the application of the principles and procedures to the construction of a course of study for a specific situation

ESPE 6643 Current Readings Seminar in Physical Education and Sport Science Study and critical analysis of recent trends and significant contemporary issues in Exercise Science, Physical Education and Sport

ESPE 6653 Neuromuscular Physiology A study of how the systems of the body function during activity; the physiological adaptations during work; and the lasting changes which result from different levels of performance Practical experience with selected experimental procedures Prerequisite: ES 3543

ESPE 6663 Advanced Strength Training and Conditioning An in depth study of the scientific principles and techniques related to the strength and conditioning of exercise and athletic populations The course is designed to provide the necessary background for certification as a strength and conditioning specialist

ESPE 6673 Research Design A study of basic research techniques and design utilized in physical education and allied fields

ESPE 6683 Biomechanical Analysis of Sports Skills An advanced study of biomechanical concepts and their application to human movement and sport skills Prerequisites: ES 3543 and ES 4763

ESPE 6693 Motor Learning The study and analysis of the developmental and acquired components of human behavior related to motor learning and performance

ESPE 678V Thesis

ESPE 679V Graduate Project

ESPE 680V Independent Study

ESPE 681V Internship

DEPARTMENT OF PSYCHOLOGY AND COUNSELING

Counseling

ACCESS TO COUN COURSES BY NON-DEGREE STUDENTS

In general, courses with COUN prefixes that do not have specified prerequisites are open to enrollment by students admitted to the Graduate School as Nondegree Students. Courses that have specified prerequisites may be open to enrollment by Graduate Nondegree Students when they submit verification of successful completion of such prerequisites within a time judged by the Committee on Admissions to provide current required knowledge. Graduate Non-degree Students are directed to the COUN course descriptions below for further information about access to these courses.

COUN 580V (1-3 hours) Special Topics Workshop A study of selected professional topics This course may not be used to satisfy any degree requirements Course can be repeated for credit

COUN 6013 Introduction to School Counseling A study of professional roles and

functions, goals and objectives, organizations and associations, history and trends, ethical and legal standards, professional preparation standards and credentialing of the school counselor.

COUN 6023 Introduction to Mental Health Counseling A competency based course in counseling techniques with experimental emphasis including micro counseling and role playing. The student must receive a "B" or better in order to proceed to COUN 6213. Prerequisite: PSY 6113 must be taken prior to, or concurrent with COUN 6203. The student must be accepted into an appropriate graduate counseling program.

COUN 6033 Social and Cultural Foundations of Counseling A study of societal changes and trends, human roles, societal subgroups, social mores and interaction patterns, and differing lifestyles as they relate to the application of professional counseling assessments and techniques

COUN 6043 Career Development and Services A study of career development theories, and lifestyle and career decision making models. The application of the theories and models across the life span and populations utilizing occupational information, assessment instruments and computer/Internet resources as career counseling tools will be addressed.

COUN 6053 Ethical, Legal, and Professional Issues in Counseling An in-depth study of the issues that contribute to the development of a professional identity that leads to an understanding of all aspects of professional functioning, including history, roles, organizational structures, ethics, standards of practice, legal statutes, and credentialing.

COUN 6073 Program Development, Implementation, and Evaluation in School Counseling A study of practices involved in planning, organizing, and coordinating a comprehensive developmental school counseling program, including principles and applications of needs assessment and program evaluation Prerequisite: COUN 6013

COUN 6123 Group Dynamics A study of the principles of group dynamics; group leadership styles; applications of helping relationship theories in group settings; group counseling methods and skills; and other group approaches Prerequisite: PSY 6113

COUN 6203 Counseling Prepracticum A competency-based course in counseling techniques with experimental emphasis including micro-counseling and role-playing. The student must received a "B" or better in order to proceed to COUN 6213. Prerequisites: PSY 6113 must be taken prior to, or concurrent with COUN 6203. The student must be accepted into an appropriate graduate counseling program.

COUN 6213 Counseling Practicum Supervised practice in group and individual counseling and consultation with children, adolescents, and adults. Prerequisites: COUN 6203 and PSY 6113. COUN 6123 must be taken prior to, or concurrent with COUN 6213. Student must earn a grade of "B" or better to advance to COUN 6223/6233/7483.

COUN 6223 Counseling Internship Elementary School Supervised practice including individual counseling, group work, developmental classroom guidance, consultation, and program coordination activities in an elementary school setting Prerequisites: COUN 6073, COUN 6213, and permission of screening committee Student must earn a grade of "B" or better to advance to COUN 6233

COUN 6233 Counseling Internship Secondary School Supervised practice including individual counseling, group work, developmental classroom guidance, consultation, and program coordination activities in a secondary school setting Prerequisites: COUN 6073, COUN 6213, and permission of screening committee Student must earn a grade of "B" or better to advance to COUN 6223.

COUN 6243 Case Management in Rehabilitation Counseling A study of a rapidly growing and dynamic profession within the healthcare and disability management system. Students will apply a proactive, integrated, and coordinated process of assessment, planning, coordinating, and implementing rehabilitation counseling services for persons with acquired and congenital disabilities.

COUN 6253 Vocational Services in Rehabilitation Counseling A comprehensive study of occupational theory, vocational evaluation, job analysis, work adjustment, and job development and placement as they apply to persons with congenital and acquired disabilities.

COUN 6263 Medical Aspects of Disability A study of a variety of congenital and acquired chronic illnesses and disabilities with a focus on the etiology, symptomatology, prognosis, diagnostic procedures and evaluations, functional limitations, occupational factors, and treatment interventions associated with each impairment.

COUN 6273 Special Problems in Rehabilitation A systematic study of an approved rehabilitation topic which is summarized in a written report.

COUN 6283 Practicum in Rehabilitation Counseling A 100 clock-hour supervised practicum within a rehabilitation-related agency or organization. Students will also acquire practical and applied rehabilitation counseling skills in a clinical/laboratory setting on campus. Prerequisite: Permission of Program Coordinator and PSY 5753; PSY 6113; COUN 6123 or concurrently and COUN 6203.

COUN 6303 Internship I in Rehabilitation Counseling A 300-clock-hour supervised experience in a rehabilitation-related agency or organization. Students may enroll and be placed in an approved internship site by the MRC Program Coordinator after all core required coursework is completed. Prerequisite: Permission of the Program Coordinator.

COUN 6313 Alcohol and Drug Abuse A course intended to familiarize students with the psychological, social, and economic aspects of substance abuse.

COUN 6323 Internship II in Rehabilitation Counseling A 300-clock-hour supervised experience in a rehabilitation-related agency or organization. Internship II is an extension of COUN 6303, Internship I and may be taken concurrently with Internship I. Students may enroll and be placed in an approved internship site by the MRC Program Coordinator after all core required coursework is completed. Prerequisite: Permission of the Program Coordinator.

COUN 6333 Student Personnel Services in Higher Education An overview of higher education with emphasis on student personnel service components.

COUN 6343 College Student Development A study of contemporary theory and research related to student development with emphasis on applications to college student personnel services.

COUN 6353 College and the Student Study of the contemporary American college student including subcultures, values and beliefs, lifestyles, academic and personal problems, and environmental influences. Methods of assessment, and implications for student affairs policy and programming are discussed.

COUN 6383 Practicum in College Student Personnel Services Supervised practice (minimum of 100 clock hours) in a broad array of services typical of student affairs. Requires at least 40 hours of direct service with clients, including individual counseling and a minimum 10 hours of group work; at least one hour per week of individual supervision with a program faculty member or designee; and at least one and one-half hours per week of group

supervision with a program faculty member [Prerequisites: COUN 6333, COUN 6343, COUN 6353, and permission of degree program committee COUN 6333 must be taken before or concurrently with COUN 6383] Offered Fall semesters

COUN 6393 Internship in College Student Personnel Services Supervised practice (a minimum of 600 clock hours) in one or more student affairs settings Must include at least 240 clock hours of direct service to clients, at least one hour per week of individual supervision with the site supervisor, and at least one and one-half hours per week of group supervision with a program faculty member [Prerequisite: Completion of all coursework prior to or concurrent with the internship hours and approval of the degree program committee] Offered Spring Semester

COUN 6423 Psychosocial Aspects of Aging Explores the complex interaction of physical, social, psychological, sociocultural, and attitudinal factors that contribute to both society's and the individual's perceptions of the aged population

COUN 6473 Child and Adolescent Counseling Theory and techniques for treating emotional and psychological disorders in children and adolescents with a focus on various counseling approaches to treatment and treatment evaluation Prerequisite: Nine hours in a appropriate graduate program

COUN 6493 Internship in College Student Counseling Supervised practice (a minimum of 600 clock hours) in one or more student affairs settings Must include at least 240 clock hours of direct service to clients, at least one hour per week of individual supervision with the site supervisor, and at least one and one-half hours per week of group supervision with a program faculty member [Prerequisite: Completion of all coursework prior to or concurrent with the internship hours and approval of the degree program committee]

COUN 650V (1-6 hours) Thesis

COUN 680V (1-3 hours) Independent Study Advanced study of a specific topic or content in counseling not addressed in the curriculum. Student must submit a written proposal in advance

that outlines the topic or content and expected products for evaluation. This proposal also requires written approval of the professor and the department chair. This course is not intended to replace any course in the curriculum.

COUN 7443 Counselor Supervision A study of the models of counseling supervision; stages of counselor development; supervision methods and techniques; supervisory relationship; ethical, legal, and professional regulatory issues; evaluation; and supervised practice with master-level practicum students Prerequisite: Permission of screening committee

COUN 745V (1-3 hours) Special Problems in Counseling Advanced study of a specific problem in counseling. Student must submit a written proposal in advance that outlines the study and expected products for evaluation. This proposal also requires written approval of the professor and the department chair. This course is not intended to replace any course in the curriculum.

COUN 7463 Couples and Family Counseling The study of couple and family systems theory, assessment, and intervention. Content will promote the understanding of couple and family dynamics and introduce basic family counseling interventions including several foundational family counseling theories. Prerequisite: PSY 6113 and permission of the instructor.

COUN 7473 Supervised Internship I Supervised experience in an appropriate professional setting. Prerequisite: Must have completed all course work prior to beginning or

concurrently with internship hours and have permission of the Ed.S. committee

COUN 7493 Supervised Internship II Supervised experience in an appropriate professional setting. Prerequisite: Must have completed all course work prior to beginning or concurrently with internship hours and have permission of the EdS committee

COUN 750V (1-6 hours) Thesis

COUN 780V (1-3 hours) Independent Study Advanced study of a specific topic or content in counseling not addressed in the curriculum. Student must submit a written proposal in advance that outlines the topic or content and expected products for evaluation. This proposal also requires written approval of the professor and the department chair. This course is not intended to replace any course in the curriculum.

Psychology

ACCESS TO PSY COURSES BY NON-DEGREE STUDENTS

In general, courses with PSY prefixes that do not have specified prerequisites are open to enrollment by students admitted to the Graduate School as Nondegree Students. Courses that have specified prerequisites may be open to enrollment by Graduate Nondegree Students when they submit verification of successful completion of such prerequisites within a time judged by the Committee on Admissions to provide current required knowledge. Graduate Non-degree Students are directed to the PSY course descriptions below for further information about access to these courses

PSY 5753 Introduction to Rehabilitation Counseling An overview of the profession of rehabilitation counseling which is a systematic process that assists persons with physical, mental, developmental, cognitive, and emotional disabilities to achieve their personal, career, and independent living goals in the most integrated setting possible through the application of the counseling process. This course must be taken at the graduate level for it to apply towards counselor licensure and certification

PSY 6113 Theories and Techniques in Helping Relationships A study of theories and their applications in helping relationships; helper and client characteristics that influence helping processes; and basic helping skills

PSY 6213 Statistics and Research Design in Psychology and Counseling The nature, computation, and interpretation of statistics in the context of psychology and counseling research and literature. Includes descriptive statistics, with a primary emphasis on the integration of inferential statistics and research design. Prerequisite: Undergraduate statistics class or equivalent, or permission of instructor

PSY 6413 Learning and Cognition in Adulthood Focuses on learning and cognition across adulthood, with an emphasis on the relations between learning and aging

PSY 6513 Advanced Educational Psychology A study of learning processes with emphasis on applications to structured situations

PSY 6523 Behavior Assessment and Intervention An examination and application of methods and techniques in behavior assessment and intervention with children and adults in applied settings

PSY 6543 Psycho-Social Aspects of Development A study of psychological theories of development across the life span, including the influence of environmental factors

upon personality, normal and abnormal behavior, and adjustment

PSY 6553 Social Psychology An examination of the various situation/social factors which influence attitudes and behavior Representative topics include pro/anti-social behavior, social influence processes, and models of attribution

PSY 6563 Psychosocial Aspects of Disability A study of the adjustment and adaptation process with both congenital and acquired chronic illness and disability This course focuses on a holistic treatment perspective which includes, but is not limited to: medical, physical, psychological, spiritual, emotional, social and vocational aspects

PSY 6573 Psychological Testing A study of the principles of measurement as applied to intelligence, aptitude, interest, and achievement testing.

PSY 6583 Individual Intelligence Testing A study of the theory and techniques of individual intelligence testing with a major focus on the Wechsler scales. Prerequisite: Permission of professor and PSY 6573 Psychological Testing.

PSY 6603 Professional School Psychology Models of practice in school psychology; social, ethical, and legal issues; professional roles; problems of professional practice in school and community settings.

PSY 6613 Professional Consultation A study of roles and characteristics of consultants and consultees, legal and ethical issues in consultation, and evaluation of consultation practices Includes practical experiences for skills development Prerequisite: PSY 6113

PSY 6623 Child & Adolescent Psychopathology, Prevention, & Intervention Biological, cultural and social influences on child and adolescent psychopathology with emphasis on prevention, intervention, and crisis intervention in the schools. Prerequisite: PSY 4533 Abnormal Psychology or equivalent.

PSY 7103 Advanced Counseling Theories A study of counseling theories, with emphasis on the student developing a personal counseling approach Prerequisite: permission of professor

PSY 7223 Research Design and Program Evaluation in Psychology and Counseling A study of quantitative research designs, qualitative research techniques, and appropriate statistics in the context of psychology and counseling with emphasis on evaluating published research and designing and evaluating intervention programs. Prerequisite: PSY 6213 or equivalent and permission of professor.

PSY 7513 Psycho-Educational Assessment of Persons with Disabling Conditions A study of psychological assessment of individuals with a focus on those with disabling conditions Emphasis will be placed on the process and content of writing reports based on psychological measures Prerequisites: PSY 6583 or Permission of professor

PSY 7523 Psychoeducational Intervention Exploration and utilization of evidence-based educational and psychological interventions for the purpose of preventing and intervening in school-based learning and behavioral problems Prerequisite: Permission of Professor

PSY 7533 Psychopathology An examination of selected adult and childhood mental disorders with emphasis on assessment, classification, and intervention Prerequisite: PSY 4533, Abnormal Psychology or equivalent

PSY 7563 Theories of Learning An examination of various learning theories and their implications for human behavior Prerequisite: permission of professor

PSY 7583 Developmental and Differential Psychology Developmental aspects of psychological functioning, with emphasis on individual differences Prerequisites: Undergraduate development psychology class or equivalent or permission of professor.

PSY 7613 Practicum in School Psychology Supervised practice in school psychology in an appropriate setting Prerequisites: PSY 6573, PSY 6583, PSY 6603, PSY 7513, permission of the school psychology committee and the professor

PSY 7633 Physiological Psychology and Psychopharmacology This course focuses on the interaction of biological structure and function with behavior and the role of endogenous chemicals in this interaction. The course addresses biological correlates associated with major mental disorders and exogenous chemical agents used in treatment. Prerequisite: permission of the instructor. Summer.

PSY 770V (1-3 hours) Special Problems in Psychology Advanced study of a specific problem in psychology. Student must submit a written proposal in advance that outlines the study and expected products for evaluation. This proposal also requires written approval of the professor and the department chair. This course is not intended to replace any course in the curriculum.

PSY 772V (1-3 hours) Independent Study Advanced study of a specific topic or content in psychology not addressed in the curriculum. Student must submit a written proposal in advance that outlines the topic or content and expected products for evaluation. This proposal also requires written approval of the professor and the department chair. This course is not intended to replace any course in the curriculum.

PSY 780V (1-6 hours) Thesis

PSY 782V (3-6 hours) Supervised Internship Supervised experience in an appropriate professional setting Prerequisite: Must have completed all coursework prior to beginning internship hours and must have permission of the school psychology committee and the professor

COLLEGE OF ENGINEERING

Mission

The mission of the College of Engineering is 1) to provide broadly based, interdisciplinary graduate programs for engineering students to support the needs of existing businesses and industries and to promote state, regional and national economic development, and 2) to provide a means for bachelor's degree graduates in engineering to obtain additional college-level credits and/or a master's degree that may be required for professional licensure. The goal is to provide an educational experience focusing on the knowledge and technical skills of advanced engineering and business management that will allow program graduates to be successful in engineering, manufacturing, and other high-tech organizations.

MASTER OF ENGINEERING MANAGEMENT DEGREE

The Engineering Management program, a one-year master's degree plan consisting of 30 semester credit hours, is designed for all engineers on management career paths as well as for those charged with managing technology in engineering, manufacturing, and other high-tech organizations. The master's degree program will also benefit engineers pursuing licensure in states where candidates for professional licensure are required to have an additional 30 semester credit hours of coursework beyond the bachelor's degree or a master's degree in engineering. The curriculum consists of courses offered by the ASU College of Engineering and the ASU College of Business.

Specific program outcomes are listed below. Program graduates will have:

1. An ability to plan, make decisions, implement actions, and measure results related to human resources and capital aspects of engineering management;
2. An ability to identify critical issues, formulate realistic solutions, evaluate alternatives, and solve engineering management problems;
3. A good understanding of statistical concepts and methods and an ability to apply this knowledge to engineering and management problems;
4. A good understanding of quality control and improvement techniques and an ability to apply this knowledge to manufactured products and other engineering applications;
5. A good understanding of deterministic modeling and ability to apply this knowledge to engineering management problems including design of experiments;
6. An ability to function on multi-disciplinary management teams; and
7. An ability to communicate effectively, both orally and in writing.

Admission Requirements

Students seeking admission into the Master of Engineering Management degree program must meet the admission requirements of the Graduate School. In addition, applicants for the master's program in Engineering Management will be evaluated by the College of Engineering based upon their undergraduate academic record, scores on the Graduate Record Examination, resume, and letters of recommendation. Students judged to be deficient in some areas of undergraduate preparation may be required to complete certain undergraduate preparatory courses. Minimum specific requirements for unconditional admission include: 1) 18 undergraduate hours in engineering with a grade of C or better, a grade of C or better in upper-level mathematics courses, and an overall undergraduate grade point average of 2.75 or greater (on a 4.0 scale); 2) A minimum GRE score of 143 on verbal reasoning; 3) two letters of recommendation; and 4) a resume.

Applicants not meeting all of the above criteria may be admitted on a conditional basis if they meet other Graduate School admission requirements. New students not having completed the GRE may be admitted on a conditional basis, but they must complete this requirement

prior to finishing the first semester of coursework. New students are normally admitted for the fall semester with applications due by June 1. Applications submitted after June 1 or any other time during the year will be considered based on qualifications and space availability.

A candidate for the Master of Engineering Management must pass a comprehensive exam in addition to completing the 30 hours required for the degree.

Courses required of all candidates

The number of semester credit hours for the master's degree is 30. Students are required to complete 9 core courses (24 semester credit hours) and two elective courses (6 semester credit hours).

Core Courses - 24 hrs required

- EGRM 6003 Engineering Statistics
- EGRM 6013 Quality Control and Improvement
- EGRM 6023 Engineering Management I
- EGRM 6033 Engineering Management II
- EGRM 6043 Operations Research
- MBA 500V Survey of Accounting
- MBA 501V Survey of Finance
- MBA 507V Survey of Law
- MKTG 6223 Strategic Marketing

Electives - 6 hrs required

Option 1 – Those pursuing Professional Engineering Licensing in states that require coursework beyond the B.S. degree in Engineering

- One CE/EE/ME/ENGR 5000 co-listed, engineering course
- Plus one EGRM course from Option 2

Option 2 – Those not pursuing Professional Engineering Licensing

- EGRM 6073 Special Problems in Engineering Management
- ECON 6353 Environmental Economics
- MGMT 6413 Seminar in Organizational Behavior and Leadership
- MIS 6413 Management Information Systems

MASTER OF SCIENCE IN ENGINEERING DEGREE

The Master of Science in Engineering (MSE) program provides an educational experience focusing on the integration of research and technology development that allows graduates to be successful in deriving solutions to society's most challenging technical problems. To achieve this goal, the program's objectives are to discover new scientific principles, apply novel engineering solutions, and develop cutting-edge technology toward achieving efficient and sustainable use of resources; to integrate cross-disciplinary research and teaching that produces engineering professionals equipped to take on the more complex problems that face our state and country; and to establish and grow industry-university partnerships that drive toward and prepare the region for a diverse, knowledge-based economy.

Specific program outcomes are listed below. Program graduates will have:

1. Knowledge of advanced experimental methods and the ability to design experiments and collect data;
2. A good understanding of statistical concepts and an ability to apply this knowledge to

- achieve engineering solutions that most efficiently use information and resources;
3. A practical knowledge of fabrication and manufacturing techniques, specifically at the micro- and nano-scales;
 4. An ability to apply advanced mathematical concepts to model physical systems and engineering processes to drive knowledge based design;
 5. An advanced, cross-disciplinary understanding of engineering sciences, and an ability to relate physical concepts from multiple engineering disciplines;
 6. An ability to identify critical issues, formulate realistic solutions, evaluate alternatives, and carry out independent research to provide novel solutions to technical problems; and
 7. A demonstrated ability to make novel, significant contributions to the scientific and engineering body of knowledge.

Admission Requirements

Each applicant must have an undergraduate GPA of at least 2.75 on a 4.00 scale and a bachelor's degree in engineering. Applicants that do not have a bachelor's degree in engineering, for example those having a bachelor's degree in physics, or those having an undergraduate GPA below 2.75, will be considered on a case-by-case basis and must show equivalent experience and training and have completed the required pre-requisites for the courses. Applicants must present Graduate Record Examination (GRE) scores for the Verbal, Quantitative, and Analytical tests. The minimum combined Verbal and Quantitative reasoning scores must be 300 for the revised GRE test or equivalent scores for general GRE. Applicant not having completed GRE scores may be admitted conditionally, but must complete this requirement prior to finishing the first semester of course work. Applications submitted throughout the year for the following semester and in accordance to Graduate School deadlines will be considered based on qualification and space availability. All application materials must be received by the College of Engineering during the semester prior to the student's official enrollment in ASU-J courses. Official transcripts, two letters of recommendation, a resume, and a statement of purpose not exceeding three pages are also required for admission. International students require additional proof of English proficiency to meet the admission requirements of the Graduate School.

Degree Requirements

The number of semester credit hours for the M.S.E. degree is 30. Students are required to complete four core courses (ENGR 6013, 6023, 6033, and 6043) for 12 semester credit hours, a minimum of two 6000 level graduate engineering elective courses for 6 credit hours, two additional approved graduate elective courses for 6 credit hours, and two semesters of thesis research for 6 credit hours.

The MSE curriculum is structured as a two year program (four semesters)

Year 1 (18 semester credit hours)

- ENGR 6013 Advanced Experimental Methods (3)
- ENGR 6023 Advanced Engineering Math (3)
- ENGR 6033 Micro and Nanomanufacturing (3)
- ENGR 6043 Applied Probability and Estimation (3)
- Engineering Electives (6)

Year 2 (12 semester credit hours)

- Electives (6)
- Thesis Research (6)

COLLEGE OF ENGINEERING GRADUATE COURSE DESCRIPTIONS

CE 5223. Transportation Engineering Principles of highway survey and locations, geometric design, highway materials, pavement design, highway drainage, and pavement management. A highway design project is required. Prerequisites, C or better in CE 3223, CE 4203, CE 4251 and CE 4253. Dual listed as CE 4223.

CE 5233. 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. Corequisite, CE 4253. Dual listed as CE 4233.

CE 5243. 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. Dual listed as CE 4243.

CE 5253. Soil Mechanics Physical properties of soils as used in design, specific gravity, grain size distribution, plasticity, shrinkage, permeability, compressibility, consolidation and shear strength. Foundation design for consolidation. Corequisites, ENGR 3473 and CE 4251. Dual listed as CE 4253.

CE 5263. 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 waste treatment applications are required. Prerequisites, C or better in CE 3273. Dual listed as CE 4263.

CE 5283. 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. Dual listed as 4283.

EE 5303. Engineering Field and Waves II Study of electromagnetic waves in free space, dielectrics, and conductors, transmission lines, polarization, reflection, refraction, diffraction, waveguides, resonators, antennas, and radiation. Prerequisites, MATH 4403 and C or better in EE 3343. Dual listed as EE 4303.

EE 5313. Control Systems Analysis and design of linear feedback systems. Transfer functions, state-space analysis, transient and steady state characterization, and stability determination. Closed loop analysis and design using root locus and frequency domain methods. Prerequisites, C or better in EE 3403. Corequisite, EE 3353. Dual listed as EE 4313.

EE 5323. Electrical Machinery Introduction to the analysis and design of electromechanical energy conversion systems, magnetic circuit theory, general transformer and machinery theory, and DC and AC motors and generators. Prerequisite, C or better in EE 3313 or ENGR 3473, and ENGR 3423. Dual listed as EE 4323.

EE 5333 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 EE 3353 (Continuous and Analog Systems) and ENGR 3403 (Electronics 1). Dual listed as EE 4333.

EE 5344. Microprocessor and PLC Applications A microcomputer hardware

interfacing course for senior level engineers. A survey of small computers and their 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 EE 3333 and EE 3331. Dual listed as EE 4344.

EE 5353. Power Systems Generation, transmission, and distribution of large scale electrical power, associated energy losses and practical design problems and complications. Transmission line analysis. Three phase power networks. Load monitoring and control. Prerequisite, C or better in EE 3313 and ENGR 3423. Corequisite, MATH 4403. Dual listed as EE 4353.

EE 5373. Electronics II A continuation of EE 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 EE 3313, ENGR 3443, and EE 3403. Dual listed as EE 4373.

EE 5383. Digital Electronics II Continuation of the study of digital circuit design with emphasis on the design of larger systems and use of LSI components. Register transfer logic, computer interfacing and design, microcomputer based system design. Prerequisite, C or better in EE 3333. Dual listed as EE 4383.

EE 5393. Discrete and Digital Systems Analysis and application of discrete and digital systems including finite difference based recursion equations, ztransforms, delay elements and memory devices, discrete and digital simulation of continuous and analog systems, and digital filter applications. Prerequisite, C or better in EE 3353. Dual listed as EE 4393.

EE 5703. 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 EE 3353. Dual listed as EE 4703.

EE 5713. Semiconductor Materials and Devices II Continuation of EE 3363, including configuration and operation of advanced solid state junction devices. Large scale to ultra large scale integration and miniaturization of electronics into integrated circuits. Metallization and shaping technology and manufacturing aspects. Prerequisite, C or better in EE 3363. Dual listed as EE 4713.

EE 5723. Power Electronics and Control Electrical and electronic circuits for switching, relaying, shaping, and amplifying large current, voltage, and power signals, including relays, transformers, MOSFETs, diacs, triacs, SCRs, unijunction transistors, optorelays, optocouplers, rectifiers, and push, pull amplifiers. High voltage circuitry. Representative industrial applications and practical constraints and specifications. Prerequisites, C or better in EE 3333, EE 3403, and EE 3401. Dual listed as EE 4723.

EGRM 6003 Engineering Statistics Basic concepts and methods of descriptive and inferential statistics including graphical techniques, measures of central tendency and dispersion, interval estimation, hypothesis and goodness of fit tests, comparisons of two populations, and analysis of variance. Prerequisite MATH 2204 calculus I.

EGRM 6013 Quality control and Improvement A brief review of the evolution of quality control and improvement theory particularly as influenced by key pioneers such as Deming, Juran, and Taguchi. Extensive coverage of selected quality improvement techniques includes statistical process control, inspection sampling, and design of experiments. Prereq-

quisites EGRM 6003 Engineering Statistics.

EGRM 6023 Engineering Management I Basic principles and practices of engineering management activities including planning, organization, leadership, controlling, motivating, ethics, communications, and decision making; group research of special topics with written and oral presentations is required. This course is restricted to graduate students majoring in Engineering Management.

EGRM 6033 Engineering Management II Principles and practices of engineering management including marketing management, globalization, time management, forecasting, finance, cost, accounting, managing technology, engineering management in the new millennium; invited lectures and seminars covering projects of interest to civil, electrical, mechanical, and manufacturing engineers in management positions. Prerequisite, MBA 500V, MBA 501V, and EGRM 6023. This course is restricted to graduate students majoring in Engineering Management.

EGRM 6043 Operations Research Quantitative techniques for decision making; break-even analysis, economic models, Gaussian distributions, inventory control, production models, and mathematical programming. Prerequisite: EGRM 6003, Engineering Statistics.

EGRM 6073 Special Problems in Engineering Management A capstone, project-based course consisting of an investigation of an engineering management topic approved by the faculty; weekly project meetings, a formal engineer's log book of activities, progress reports, oral presentation, and a comprehensive written report are required. Prerequisite, EGRM 6033. This course is restricted to graduate students in Engineering Management and can only be taken during the first semester prior to graduation.

ENGR 5703 Environmental, Safety, and Health Engineering Survey and analysis of contemporary environmental, safety, and health-related topics pertinent to engineering and technology applications and practice, including technical, regulatory, economic, and other non-technical aspects. Prerequisite: admission into the Engineering Management graduate program.

ENGR 6013 Advanced Experimental Methods Concepts of advanced measurement methods, measurements, analysis, and reporting. Topics include design of experiment, interfacing, photography and basic optics, image processing, flow visualization, high speed motion analysis, radiation detectors, monochromators, flame emission spectroscopy/scanning, flame probe and phase transition characteristics.

ENGR 6023 Advanced Engineering Math Advanced analytical techniques for the solution of engineering problems including applications in vibrations, electricity and magnetism, optics, and thermodynamics. Topics include introduction to modeling, linear algebra, tensor calculus, linear/nonlinear system solution, boundary value problems, transforms, and complex analysis.

ENGR 6033. Micro and Nanomanufacturing Advanced manufacturing technology based on the integration of science, engineering, and technology. Topics include micro and nanosciences, micro electro-mechanical system (MEMS/NEMS) machining and fabrication, measurement using advanced microscopes, and device applications such as sensors and actuators.

ENGR 6043 Applied Probability and Estimation Application of probability to the analysis of engineering systems with inherent randomness to achieve efficient use of information in engineering analysis. Topics include random variables, statistics, probability density functions, noise, nonrandom parameter estimation, bounds, Bayesian estimation, detection, and filters. Prerequisite: ENGR 6023 Advanced Engineering Math

ENGR 6113. Materials Science and Engineering Principle concepts and advanced studies in materials science and engineering for graduate level students. Fundamental topics such as material properties in microstructures and modern solid state physics and quantum mechanics are introduced.

ENGR 6123. Engineering Optimization Formulation and modeling aspects of engineering problems using various optimization techniques to seek optimum value and design under specific requirements. Set-up numerical formulations and algorithms, introduction of design of experimental methods, and application to practical engineering problems included.

ENGR 6133 Engineering Electrodynamics Dynamic theory of material interactions with electricity, magnetism, and light based on conservation of energy and momentum. Examples include modern applications of optical manipulation such as optical tweezers and optical binding of matter. Prerequisite: ENGR 6023 Advanced Engineering Math and an undergraduate course in electromagnetics.

ENGR 6143 Advanced Heat and Mass Transfer Conservation laws, steady/unsteady conduction, mass diffusion, exact/numerical solutions of PDE, FDM, Fourier/Laplace transform in heat transfer, convection, heat transfer in Couette/Poiseuille/Falkner-Skan flows, heat transfer in laminar/turbulent boundary layer, natural convection and radiation. Prerequisite: Undergraduate coursework in fluid mechanics and heat transfer.

ENGR 6153 Advanced Fluid Mechanics Principal concepts and advanced topics in fluid mechanics including vector analysis, kinematics, control volume theorem, continuity, momentum, Navier-Stokes, Euler and Bernoulli equations, potential flow, circulation, vorticity, similarity, boundary layers approximation and turbulence. Prerequisite: Undergraduate course in fluid mechanics.

ENGR 689V Thesis

ME 5503. 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 3473 and ENGR 3443. Dual listed as ME 4503.

ME 5523. 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 ENGR 2413. Dual listed as ME 4523.

ME 5543. 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 2413. Dual listed as ME 4543.

ME 5553. Heat Transfer Application of theories of heat transfer by conduction, convection, and radiation to manufacturing processes and industrial applications. Prerequisites, C or better in MATH 4403, ENGR 2423, ENGR 3443, and ENGR 3473. Dual listed as ME 4553.

ME 5583. 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 3443. Dual listed as ME 4583.

ME 5593. Design of Heating, Ventilating, and Air-Conditioning Systems

Design of HVAC systems to modify environmental conditions. Prerequisite, C or better in ENGR 3443. Dual listed as ME 4593.

ME 5613. Introduction to Mechatronics With an emphasis on modeling, the course focuses on the performance characteristics and application of microprocessors, analog and digital electronics, and modern mechatronic systems and intelligent manufacturing, particularly smart sensors, controllers, and actuators. Prerequisite, C or better in ME 3613. Dual listed as ME 4613.

COLLEGE OF FINE ARTS

The College of Fine Arts offers work leading to the Master of Arts degree in Art, the Master of Music Education degree, the Master of Music degree, and the Specialist in Community College Teaching degree in the teaching field of Music Education. The Master of Arts degree in Art is designed to educate professional artists and to provide a foundation for additional advanced work. The Master of Arts degree in Art is not designed to meet Arkansas Master's degree teacher certification requirements. The Fine Arts graduate curriculum is designed to elevate the student's standards of performance and scholarship.

The Department of Music requires auditions and examinations prior to or soon after the first registration for graduate study. These examinations may be used as placement and/or entrance criteria. Final project requirements for the Master of Music Education degree include passing written and/or aural comprehensive examinations in music history, theory and music education; for the Master of Music degree written and/or aural comprehensive examinations in music theory and music history must be passed. Master of Music candidates in voice must present or achieve proficiency in two foreign languages and keyboard candidates in one.

The Specialist in Community College Teaching is a 60-semester hour, intermediate graduate degree designed to prepare teachers for the community college. All general requirements of the Graduate School apply to these degree programs and the student should refer to these requirements listed elsewhere in this bulletin and the specific program requirements.

MASTER OF ARTS DEGREE IN ART

Admission Requirements

Applicants seeking admission to the Master of Arts in Art (Studio Art or Art Education emphasis) must possess an undergraduate degree appropriate to their course of study. A 2.75 cumulative GPA for all undergraduate and/or graduate studies in Studio Art/Art History/Art Education is required. The Master of Arts in Art - Art Education emphasis also requires that all applicants must be licensed to teach art in the public schools. In addition to Graduate School application materials, the Department of Art requires applicants to (1) submit a portfolio of original work (20 digital images), (2) three letters of recommendation evaluating the applicant's potential for graduate level work in art and (3) a personal statement regarding the applicant's goals, attitudes about their subject matter, media, and influences. All materials must be received by the Department of Art on or before the deadlines noted below. These requirements are in addition to all other requirements of Arkansas State University. All application forms and other supportive materials must be submitted in accordance with the Arkansas State University Graduate School and Department of Art deadlines.

Students may be admitted or admitted conditionally. A conditional student may be required to take undergraduate courses to fulfill deficiencies in course work or portfolio requirements. These students must also remain at the 5000 level until the conditions are fulfilled.

Art Department Deadlines

Applications to the Department of Art are accepted throughout the year for the following semester and in accordance to Graduate School deadlines. All application materials must be received by the Department of Art during the semester prior to the student's official enrollment in ASU-J courses.

Studio Degree Requirements

After admission to the program, and before the initial registration period, the student must form a graduate advisory committee, which will advise a course of study based on a continuing review of the student's portfolio and other materials.

No single set of prescribed courses is required of all candidates. Instead, each plan of study is based upon the goals and needs of the individual student. The Master of Arts degree requires the successful completion of at least 30 hours of study, which may include no more

than 12 hours at the 5000 level and 18 to 30 hours at the 6000 level. A review by the graduate advisory committee is required before a student may advance from the 5000 to the 6000 level.

Master of Arts, Studio Art Emphasis Course Requirements:

Electives:

Three hours of approved electives AND

Art History and Theory

ARTH 5803 Art Theory and Criticism

Three hours of Art History

Studio Art

Fifteen hours of Studio Art or Art History with a minimum of 12 hours at the 6000 level

Thesis Exhibition

Six hours of ART 6341-6 Thesis Exhibition. This is a graduate thesis exhibition with supporting position paper.

ART 5330

All MA, Studio Art students are required to take ART 5330 Graduate Art Seminar every semester. If a student receives no credit for ART 5330 for two consecutive semesters, they must reapply to the program.

Master of Arts, Art Education Course Requirement:

Courses required for the Master of Arts in Art, Art Education Emphasis:

(All courses must be graduate level and all candidates must be licensed to teach art in the public schools.)

Electives

Six hours approved electives

Art History/Theory

Three hours Art History

Studio Art

Six hours Studio Art (three hours at 6000 level)

Art Education

Fifteen hours Art Education which must include:

ARED 5703, Concepts in Art Education

ARED 5763, Qualitative Research Methodology for Art Education

Thesis

ARED 6721-6, Six hours of Thesis. This is a research thesis which could also include an exhibition component.

Minimum hours required for this program: 30

MASTER OF MUSIC EDUCATION DEGREE

Admission Requirements

Students seeking admission into the Master of Music Education degree program must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have a valid teaching certificate based on a four-year teacher education program. Applicants who do not meet the requirements for a valid teaching certificate based on a four-year teacher education program will be required to complete the undergraduate courses leading to licensure. These courses may be completed concurrently with graduate work, but must be completed before the student is admitted to candidacy for the degree. Applicants must also take the ASU Department of Music entrance examinations in music education, music history, and written and aural music theory.

Admission into the MME program requires the submission of:

1. Official transcripts for coursework and degree completion verification in music education or an approved equivalent.
2. A Letter of Interest (minimum of 500 words, maximum of 750) stating current professional status and goals after obtaining the MME degree.
3. Resume or Curriculum Vitae.
4. A minimum of three (3) professional letters of recommendation. At least one letter from a College/University faculty member and another letter from an administrator or supervisor of your current (most recent) teaching position.
5. A video recording of you teaching an ensemble/group music lesson (minimum of 5 minutes, maximum of 10 minutes).

In addition to the above requirements, the following grades and scores must be achieved.

Unconditional Admission – A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours), and a minimum Graduate Record Examination (GRE) Verbal Reasoning section score of 149 and Quantitative Reasoning section score of 148.

Conditional Admission - A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours), and a minimum Graduate Record Examination (GRE) Verbal Reasoning section score of 146 and Quantitative Reasoning section score of 145.

Core Graduate Music Courses - 10 hrs

- MUS 6212 Introduction to Research Writing, and Bibliography
- MUS 6222, Teaching and Learning Music
- Three hours Music Theory (6000 level)
- Three hours Music History (6000 level)

Core Music Education Courses - 12 hrs

- MUED 6623 Historical and Philosophical Foundations in Music Education
- MUED 6533 Research in Music Education
- MUED 6653 Assessment and Statistics in Music Education
- MUED 6613 Leadership and Trends in Music Education

Emphasis Area - choose one - 4 hrs

- Choral Emphasis
 - MUED 6312 Pedagogy and Performance - Vocal Literature and Styles

General Emphasis

MUED 6322 Pedagogy and Performance - General Music Curriculum Approaches

Instrumental Emphasis

MUED 6332 Pedagogy and Performance - Instrumental Literature and Styles

All emphasis areas choose one additional course from the list below or an approved alternative in consultation with the Graduate Program Supervisor.

MUSP 6111-2 Applied Voice, Instrument, or Conducting

MUSP 6121-2 Pedagogy and Performance

MUED 6801-2 Independent Study

Music Education Research Project OR Thesis – choose one

Music Education Research Project Option - 6 Hrs

Electives (4 Hours) Chosen in consultation with the Graduate advisor from amongst Music courses and/or courses outside the music department such as the College of Education/Fine Arts and/or related fields of study.

AND

MUED 6662, Music Education Research Project (2 Hours)

This written work is directed by the Graduate Advisor and/or specific Faculty Topic Advisor after approval by the Research Project Committee and Music Chair.

Electives - 4 Hrs

All electives are chosen in consultation with the Graduate Program Supervisor from amongst music courses and/or courses outside the Department of Music such as the College of Education, College of Fine Arts and/or related fields of study.

Thesis Option - 6 Hrs

MUED 6641-6 Thesis

This written work is directed by the Graduate Advisor and/or specific Faculty Topic Advisor after approval by the Thesis Committee and Music Chair.

Minimum hours required for this program: 32

MASTER OF MUSIC DEGREE

Admission Requirements

Applicants seeking admission to the Master of Music degree program must take the ASU Department of Music entrance examinations in music history and written and aural music theory. The results of this examination assist in planning each student's exact course of study. A grade of "A" or "B" must be achieved in any remedial coursework. Remedial coursework may not be counted as credit toward the degree. Arkansas State University graduates who begin graduate studies within eighteen months of graduation will not be required to take the entrance examination providing they received an "A" or "B" on all undergraduate music theory and history coursework. Students seeking admission to the Master of Music in Performance with an emphasis in Instrumental or Vocal Performance must audition for the appropriate applied faculty member prior to initial enrollment. At the discretion of the applied faculty member a three to five member committee may be convened to hear the audition. The applied faculty member (or committee) will evaluate the performance and report the results to the Graduate Program Supervisor. All graduate instrumental and vocal performance students are required

to perform a proficiency jury at the end of the first semester of applied study. Students will receive written comments from the jury panel.

Students seeking admission to the Master of Music in Performance with an emphasis in Instrumental or Choral Conducting must submit a videotape or DVD to the appropriate applied conducting faculty member prior to initial enrollment, or conduct two pieces in live audition. At the discretion of the applied faculty member, a three to five member committee may be convened to evaluate the videotape or live audition. Contents of the videotape or DVD should include two or more numbers of contrasting styles with a total time of no less than eight minutes. The video should be a front view of the conductor, not the ensemble. The conducting faculty (or committee) will evaluate the videotape and report the results to the Graduate Program Supervisor.

Courses required of all candidates:

MUS 6212, Introduction to Research, Writing, and Bibliography in Music
MUS 6222, teaching and Learning Music

Performance Major, Instrumental or Vocal:

One Hour Graduate Recital*
Eight Hours Applied Major
Three Hours Large Ensembles
Six Hours Music History (6000 level)
Six Hours Music Theory (Must be at 6000 level)
Two Hours Pedagogy
Languages for Voice and Keyboard Major

The Master of Music degree in performance requires language proficiency as follows: Majors in voice must demonstrate reading proficiency in two foreign languages, and majors in keyboard instruments in one foreign language. French and/or German are the recommended languages.

**Piano and guitar majors are required three hours of large ensembles and/or advised electives.

Piano Pedagogy Major:

Eight Hours Applied Lessons
One Hour Graduate Recital
Six Hours Pedagogy
Six Hours Music History
Three Hours Music Theory
Two Hours Advised Electives

Composition Major:

Eight Hours Applied Composition
Three Hours Applied Electronic Music Techniques, MUSP 6111-2
Six Hours Music Theory
One Hour Graduate Recital*
Six Hours Music History Electives
Two Hours Pedagogy

Conducting Major:

Eight Hours Applied Conducting
One Hour Graduate Recital*
Two Hours Pedagogy and Performance
Six Hours Music History (6000 level)

Six Hours Music Theory (6000 level)
Three Hours Advised Ensembles and Electives

Minimum hours required for these programs: 30

*All students pursuing the Master of Music Degree are required to submit a scholarly document to accompany the Graduate Recital. Specifications regarding this document **may be obtained from the Graduate Program Supervisor in the Music Department.**

SPECIALIST IN COMMUNITY COLLEGE TEACHING

The 60 graduate hours, including the Master's degree, which are required for the Specialist in Community College Teaching degree include the following:

Teaching Field	39 Semester Hours
Community College Core	12 Semester Hours
Teaching Core	9 Semester Hours

A detailed description of this program, along with specific requirements, is presented in the Specialists in Education Degree program under the College of Education.

Minimum hours required for this program: 30 plus a master's degree

COLLEGE OF FINE ARTS GRADUATE COURSE DESCRIPTIONS

DEPARTMENT OF ART

Art Education

ARED 5703 Concepts in Art Education A study of historical and contemporary philosophical concepts in art education. Prerequisite: Acceptance into the ASU Teacher Education Program and an undergraduate degree or teacher certification.

ARED 5753 Special Problems in Art Education Independent study of approved topics in art education. Prerequisite: Permission of professor. (This course may be repeated for credit.)

ARED 5763 Qualitative Research Methodology for Art Education A methodology course designed to introduce students to qualitative research strategies for the social sciences as they pertain specifically to art education. It also provides opportunity for practical implementation of these research strategies.

ARED 6713 Contemporary Trends in Art Education A study of present day practices in art education. Prerequisite: Permission of professor.

ARED 672V (1-6 hours) Thesis

ARED 6731 Seminar in Art Education Individual research in some facet of art education with group discussions of material reviewed. Prerequisite: Permission of professor.

ARED 6733 Curriculum Construction in Art Education Studies of secondary school art curriculums currently being used in a variety of school types and sizes. Prerequisite: Permission of professor.

ARED 5523 Methods and Materials in the Teaching of 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. Prerequisite: Admission to Teacher Education Program

Studio Art

ART 5330 Graduate Art Seminar Presentation and discussion of contemporary and historical issues involving art. This course is graded on a credit/no credit basis. If a student receives no credit for ART 5330 for two consecutive semesters, they must reapply to the program.

ART 535V (1-3 hours) 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. Prerequisite: Permission of professor. (This course may be repeated for credit.)

ART 602V (1-6 hours) Problems in Composition

ART 603V (2-6 hours) Drawing

ART 606V (3-6 hours) Painting

ART 608V (3-6 hours) Printmaking

ART 609V (3-6 hours) Ceramics

ART 610V (3-6 hours) Sculpture

ART 613V (2-6 hours) Drawing

ART 616V (3-6 hours) Painting

ART 618V (3-6 hours) Printmaking

ART 619V (3-6 hours) Ceramics

ART 620V (3-6 hours) Sculpture

ART 633V (1-6 hours) Thesis

ART 634V (1-6 hours) Thesis Exhibition This exhibition will be accompanied by a supporting paper.

ART 635V (1-6 hours) Studio Problems

ART 642V (3-6 hours) Applied Design

ART 643V (3-6 hours) Illustration

ART 644V (3-6 hours) Applied Design

ART 645V (3-6 hours) Illustration

ART 680V (1-3 hours) Independent Study

Art History

ARTH 530V Studies in Art History Individual directed study and investigation of pertinent areas in the history of art.

ARTH 5443 19th-Century European Art This course examines major artists and works of art in Europe from the beginning of the french Revolution to the end of the nineteenth century (ca. 1785-ca. 1900).

ARTH 5503 History of Photography History, aesthetics, and application of photography.

ARTH 5513 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 the results of research.

ARTH 5533 Renaissance Art History Artists, styles, and development of art during the Renaissance Period in Italy and northern Europe.

ARTH 5553 Medieval Art History A study of the formation and development of art from the early Christian through the Gothic period.

ARTH 5563 Baroque and Rococo Art A study of artists, styles, and developments of Baroque and Rococo Art immediately following the Renaissance.

ARTH 5573 History of Graphic Design The historical development of visual communication with emphasis on fifteenth-century printing and typography through the impact of industrial technology to contemporary graphic design.

ARTH 5583 Non Western Art History An introduction to the visual arts and cultures of non-European people. Specific focus will vary depending on student interest and professor's expertise.

ARTH 5593 Greek Art and Architecture A Survey of Greek Art and Architecture from the early Classical through Hellenistic periods.

ARTH 5603 Art of the 20th and 21st Centuries This Course examines major artists and works of art in western culture from the beginning of the twentieth century to the present day.

ARTH 5613 American Art History This survey of American Art from colonial times to the present examines major artistic and cultural developments in the United States, within the context of American history, and against the backdrop of European activity.

ARTH 5623 Roman Art and Architecture This course examines monuments and art styles in the city of Rome and the Roman provinces from the Republic to the Imperial period, with the reign of Constantine the Great.

ARTH 5693 Contemporary Art: 1970 - Present This course examines major artists and works of art in Western culture from 1970 to the present day.

ARTH 5803 Art Theory and Criticism This course develops a link between art criticism and studio practice, relating contemporary art production and critical theory. In-

cludes written reports and oral presentations concerning methodology and results of research.

ARTH 653V Studies in Art History and Theory Individual directed study and investigation of pertinent areas in art theory and the history of art.

ARTH 655V Problems in Art History Individuals directed study and investigation of pertinent areas in the history of art.

DEPARTMENT OF MUSIC

Basic Music

MUS 5223 Graduate Piano Literature Prerequisite: Master's level piano major, or non-major with the completion of the Piano Proficiency exam. Offered as needed. This would be the graduate section of the current undergraduate course, MUS 3533.

MUS 5412 Form and Analysis Analysis of basic and larger forms of music. Additional requirements will consist of analysis of scores appropriate to the major performance area.

MUS 6212 Introduction to Research, Writing, and Bibliography in Music An introduction to bibliography of music resources and its application in research and writing.

MUS 6413 Graduate Theory I Styles of the Medieval, Renaissance, and Baroque periods examined through parametric analysis.

MUS 6423 Graduate Theory II Styles, forms, and compositional techniques of the Classic, Romantic, and Twentieth Century periods examined through parametric analysis.

MUS 6433 Advanced Conducting An advanced study of conducting techniques combined with practical score reading application. This course is for the experienced choral and/or instrumental conductor.

MUS 6513 Symphonic and Chamber Literature A study of the development in style, form, structure, and instrumental techniques in symphonic and chamber music extending from its beginnings to the twentieth century.

MUS 6523 Choral and Opera Literature A study of the development in style, form, structures, and techniques in choral music from the medieval period to the present and in opera music from the sixteenth through the twentieth centuries.

MUS 6662 Music Education Research Project This course is a culmination of the MME body of work for students not choosing the Thesis option. In consultation with music faculty advisors, a research topic is chosen that is meaningful to the music education profession. This capstone project should be of the highest professional quality, demonstrate breadth of competence and the growth achieved through MME degree coursework, and meet the rigorous scholarship demands of academia. Prerequisite: All MME coursework and any remediation(s) must be completed with a minimum grade of "B" in all coursework and a cumulative GPA of 3.0 as well as successful completion of comprehensive exams prior to course enrollment.

MUS 680V (1-3 hours) Independent Study

Music Education

MUED 5623 Music in the Elementary School The emphasis is placed on current philosophies and practices in curriculum planning for the elementary school. Non-music majors who have had some experience with classroom music may be accepted via permission of professor.

MUED 5642 Piano Pedagogy Prerequisite: Master's level piano performance or piano performance and pedagogy major, or non-major with the completion of the Piano Proficiency exam, or with permission of instructor. Offer as needed. Emphasis on teaching piano to children from preschool through grade 12.

MUED 5651 Instrument Repair A laboratory approach to the maintenance and repair of wind instruments.

MUED 612V (1-2 hours) Pedagogy and Performance The study of the literature and pedagogical techniques as related to performance. (May be repeated one time.)

MUED 6433 Advanced Conducting An advanced study of conducting techniques combined with practical score reading application. This course is for the experienced choral and/or instrumental conductor.

MUED 6533 Research in Music Education Students will develop a framework of research areas within music education by undertaking analytical reading and discussion of the major scholarly journals in the field. Additionally, students will learn the parameters involved in assessing and designing sound research practices.

MUED 6613 Leadership in Contemporary Music Students will examine current trends in music education including Arts advocacy and policy, standards-based education, inclusion, music program administration, and teacher and leadership characteristics. Furthermore, they will explore possible music education developments in coming years.

MUED 6623 Historical and Philosophical Foundations in Music Education Students will explore the historical roots of music education within society and specifically in Pre K-12 settings. Intertwined in this exploration will be a discussion on the major philosophies that have and continue to influence music education practices.

MUED 6632 Graduate Piano Pedagogy Prerequisite: Piano Pedagogy (MUED 4642) and Pedagogy and Performance (MUSD 6122), or by permission of instructor. Offered as needed. Emphasis on teaching Keyboard Skills classes for non-piano music majors, and teaching college non-piano music majors.

MUED 664V (1-6 hours) Thesis

MUED 6653 Assessment and Statistics in Music Education This course introduces the various components of assessment in music education. Specifically, students will learn about the use of statistics and how they help measure and evaluate student learning within the preK-12 school music curriculum. Prerequisites: MUS 6212 Introduction to Research, Writing, and Bibliography in Music.

MUED 680V (1-3 hours) Independent Study

EDMU 5573 Methods and Materials for Teaching Music A study of instrumental music programs, with in-depth study of program organization, teaching methods and march-

ing band techniques. Includes study of a variety of beginning, intermediate and advanced method books. Focuses on ancillary concerns such as fund raising, instrument maintenance and inventory control.

EDMU 5643 Methods and Materials for Teaching Vocal Music An overview of the music curriculum K-12. Emphasis on teaching strategies incorporating cognitive, psychomotor and affective techniques appropriate to secondary school students in vocal music. Opportunities to develop behavioral objectives, demonstrations, plan rehearsals, observe public school music students, and more.

Performance Courses

MUSP 6111-4 Performance (may be repeated for credit).

MUSP 6111-2 Applied Electronic Music Techniques (may be repeated for credit).

MUSP 6111-4 Applied Conducting (may be repeated for credit). Maximum of three semester hours of Applied Conducting may be applied toward the Master of Music Education degree.

MUSP 6121-2 Pedagogy and Performance The study of the literature and pedagogical techniques as related to performance. (may be repeated for credit).

MUS 6131 Graduate Recital A full length formal recital with an accompanying scholarly document.

Ensembles-Choral and Instrumental

MUS 6141 Small Ensemble (may be repeated for credit).

MUS 6222 Teaching and Learning Music Students will explore the combined academic fields of psychology, sociology, teaching methods, motivation, and developmental aspects within learning music. Students will benefit learning how music performance can be enhanced through understanding how people learn music.

MUS 6311 Wind Ensemble

MUS 6321 Symphonic Band

MUS 6331 Marching Band

MUS 6341 Jazz Ensemble

MUS 6351 Concert Choir

MUS 6361 University Singers

MUS 6471 Opera Production A course in the study and performance of selected opera literature. Emphasis placed on directing and production.

MUS 6481 Orchestra

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

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
- 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
- for competing in professional and graduate schools
- 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 work leading to the Master of Arts degree with majors in English, history, political science, and sociology; to the Master of Public Administration degree; to the Master of Science in Education degree with majors in English and social science; and to the Specialist in Community College Teaching degree in the teaching fields of English, history, political science, and sociology.

The College of Humanities and Social Sciences coordinates programs of research and study leading to the Doctor of Philosophy in Heritage Studies. Designed for those interested in public sector work in museums, archives, folk arts centers, historical societies and similar agencies, the Heritage Studies program is interdisciplinary. It involves faculty from several departments and colleges at Arkansas State University.

The Master of Arts programs have been planned for flexibility and offer courses of general cultural and educational value. They are designed not only to provide knowledge in special fields but also to enhance professional qualifications for careers in teaching, law, writing, and governmental service; to provide a humanistic foundation for most other careers; and to prepare students for more advanced work at other institutions of higher learning.

The Master of Public Administration degree program provides a course of study for students who wish to serve in various levels of local, state, and national government and in international public management.

The graduate programs leading to the Master of Science in Education degree are designed for graduates who plan careers in secondary school teaching. Twenty-one hours of major field courses and nine hours of professional education courses are required.

The Specialist in Community College Teaching is a 60-semester hour, intermediate graduate degree designed to prepare teachers for the community college.

All general requirements of the Graduate School are applicable to these degree programs. The student should refer to the requirements which are listed elsewhere in this bulletin.

DOCTOR OF PHILOSOPHY DEGREE IN HERITAGE STUDIES

This interdisciplinary Ph.D. program educates students for advanced careers in the heritage professions. Policies and requirements are shown below and in the section of this Bulletin entitled "Program of Study for the Doctor of Philosophy Degree in Heritage Studies"

in the College of Humanities and Social Sciences. Applicants are advised that admission to the Graduate School does not imply admission to the Heritage Studies Ph.D. Program.

The mission of the doctoral program in Heritage Studies is to produce heritage professionals with the knowledge and skills needed to support the identification, assessment, preservation, interpretation, management and promotion of historic and cultural resources for non-specialist or "public" audiences. Our program is interdisciplinary, using multiple perspectives to explore and understand the interrelationships of history, culture, and geography in distinctive regions, such as the Mississippi River Delta and in other regions of the United States and the world. The concept of region is central to the Heritage Studies degree. Through case study of a region, the Mississippi River Delta, our students gain an understanding of cultural resource management and interpretation that is applicable in other settings

While universal in scope and method, the Heritage Studies doctoral program uses the distinctive history, attributes, resources, and interests of the Mississippi River Delta as a laboratory. Our students study regional history, anthropology, archaeology, folklore, regional and ethnic literature, and the social sciences. Students develop and refine the traditional doctoral-level research skills, but as heritage professionals their expertise will be applied, practical, and public dissemination of history and culture.

Employment opportunities include senior executive staff positions in cultural and historical agencies, parks and cultural tourist sites, historical societies, museums, archives, federal, state, and local public and nonprofit agencies, and private consulting firms. This degree is not primarily designed for college and university teaching, although students may be qualified to do so.

MASTER OF ARTS DEGREE WITH A MAJOR IN HERITAGE STUDIES

Only students admitted to the Ph.D. program in Heritage Studies will be eligible for the Master of Arts (MA) in heritage Studies. This MA degree is granted "en route" to the Ph.D. To receive this master's degree, the doctoral student must complete the requirements in core courses (12 semester credit hours minimum), specialty area (12 semester credit hours minimum), and enrichment (12 semester credit hours minimum), and the capstone research seminar (3 semester credit hours). This capstone seminar is the culmination of a student's class work and will result in an intensive research paper that demonstrates the student's comprehensive understanding of Heritage Studies when focused on a specific topic. The research paper from this course is the equivalent of a written exam for the MA degree in Heritage Studies. All requirements for approval of credit in core courses, specialty area, and enrichment that apply for the Ph.D. program also apply for a doctoral student who requests the MA in Heritage Studies.

Admission Requirements

Students seeking admission into the Doctor of Philosophy in Heritage Studies program must meet the admission requirements of the Graduate School and the specific program requirements.

Applicants to the Doctor of Philosophy in Heritage Studies program must hold a baccalaureate or master's degree (BA, BS, MA, or MS) from an accredited institution in a related field of study such as Archaeology, anthropology, English, folklore, geography, history, historic preservation, museum studies, political science, public administration, or sociology. Applicants admitted to the program without a master's degree will be required to complete a minimum of 18 hours of graduate work before they will be allowed to take 7000 level courses. Only in rare cases will applicants be admitted who have not completed an appropriate master's degree before they begin their doctoral studies.

Transcripts should reflect a strong background in social sciences and humanities. Applicants lacking this background who are otherwise exemplary may be granted provisional admission to the program, but will be required to make up these deficiencies. These course credits cannot be applied toward fulfillment of doctoral requirements. Up to eighteen hours in addition to the semester hours of credit required for the Ph.D. in Heritage Studies may be necessary in graduate classes that provide a suitable foundation for doctoral work in Heritage

Studies. In some cases, documented work experience in the Heritage professions may be substituted for specific preparatory courses and, in exceptional cases, may be used as a criterion for admission.

In addition to application materials required by the Graduate School, applicants to the Doctor of Philosophy in Heritage Studies program must submit a letter explaining their interests in Heritage Studies and personal career goals. The Heritage Studies Admissions Committee will carefully review this statement and three letters of reference from former professors or professionally based supervisors or peers as well as the applicant's undergraduate and graduate transcripts. All applicants also are required to submit an example of research and writing on a scholarly topic and to have an interview with the director or associate director of the Ph.D. program.

Curriculum

Core Courses: (12 hrs from the following courses)

HS 7003, Introduction to Heritage Studies, Research, and Writing

HS 7103, Concepts of Culture

HS 7113, Regional Cultures: History of the Mississippi River Delta

HS 7123, Management Issues in the Heritage Professions

HS 7133, Cultural Resource Methods

Most students will take all five core classes, one of which will be applied to the Specialty Area or the Enrichment classes explained below. Some students may have taken a class equivalent to one of the five core courses and with the permission of the student's doctoral advisory committee will be permitted to take only four core classes.

Specialty Area: (12 hrs)

Four courses that demonstrate the doctoral student's area of specialization within Heritage Studies. Under the direction of the doctoral advisory committee that is chaired by the individual student's graduate advisor, the four courses will establish an area of expertise that combines interdisciplinary emphasis and multi-cultural content with professional training (in archiving or museum work, for example). A maximum of one internship for three hours credit may be applied to the Specialty Area.

Enrichment: (12 hrs)

Four courses that demonstrate study and professional training beyond the individual student's Specialty Area. Under the direction of the doctoral advisory committee these four courses will address areas that will enrich the student's research and work in Heritage Studies with special attention to expanding interdisciplinary skills and knowledge. A maximum of one internship for three hours credit may be applied to Enrichment.

Required Capstone

HS 7213, Research Seminar (3 hours)

Practicum

Students must complete 300 work hours as a quasi-professional in a culture, heritage, or public history environment. After completion of this work experience, students will provide a written assessment of the Practicum. At the discretion of the doctoral advisory committee, adjustments may be made for students with extensive professional experience in public heritage programs.

Qualifying and Candidacy Exams

After completion of the curriculum and the practicum, the doctoral advisory committee will schedule a qualifying examination of the student's work in the doctoral program.

Successful completion of this qualifying examination will allow the committee to schedule

a candidacy exam. The format of the qualifying and candidacy exams for all students is established by the Heritage Studies Program Committee. Successful completion of the candidacy exam which includes approval of a dissertation proposal allows the student to be formally recognized as a candidate for the Doctor of Philosophy in Heritage Studies.

Dissertation (18 hrs)

Each candidate for the Doctor of Philosophy in Heritage Studies must execute an original and rigorous research project culminating in the completion, public presentation, and defense of a dissertation.

General Requirements for the Degree

Doctoral students are required to complete a minimum of 57 semester hours beyond the master's degree. For students without a master's degree, the Doctoral Advisory Committee and the Heritage Studies Ph.D. Program Committee, on a case-by-case basis, may require additional hours of credit beyond the minimum of eighteen semester hours indicated below. No more than nine credits earned while completing a master's degree may be applied toward the 57 credit requirement unless approved by the Heritage Studies Ph.D. Program Committee at the request of the student's Doctoral Advisory Committee. Applicants admitted to the program without a master's degree will be required to have completed a minimum of eighteen hours of graduate work before they will be allowed to take level 7000 courses. These eighteen hours are in addition to the 57 semester hours of credit required for the Ph.D. in Heritage Studies. If a student completed a portion of these eighteen hours before admission to the Ph.D. program, up to nine semester hours of those graduate level courses may be applied as Transfer Credit (see below). In some cases, documented work experience in the Heritage professions may be substituted for specific courses.

Advisory Committees

It is the responsibility of the Doctoral Advisory Committee to work with a student to develop a specific course of study. Each student is expected to initiate this process by identifying a doctoral dissertation advisor who will chair the advisory committee. The members of Doctoral Advisory Committees must be drawn from Arkansas State University graduate faculty. Each committee must have at least three members. No more than two members may represent the same academic discipline. Committee membership is subject to the approval of the Heritage Studies Ph.D. Program Committee.

The Director of the Heritage Studies Ph.D. Program will serve as the initial advisor for students entering the program. In this capacity, the Director will institute a tentative curriculum for the student pending establishment of the Doctoral Advisory Committee. Before the end of the first 12 months after beginning the program full time, or before completing 18 semester credit hours of study, the student in consultation with the Director is expected to have selected a dissertation advisor, formed a Doctoral Advisory Committee, and declared a course of study.

The course of study set by the committee must meet program requirements and match the student's academic goals, scholarly aspirations and career preparation needs. Each Doctoral Advisory Committee will meet at least once a year to review the student's progress.

The committee is to review the student's dissertation proposal and to provide guidance toward the successful completion of this substantial project. Once the student has passed the Qualifying and Candidacy Exams and has an approved dissertation topic, the Doctoral Advisory Committee may add new members to help with directing and assessing the dissertation work. In these cases, it is strongly recommended that at least one new member of the Doctoral Advisory Committee be an individual of national repute with extensive professional experience at an appropriate public program in cultural heritage.

Membership of advisory committees may be changed if either the student or a member of the committee feels that such a change is appropriate. The requested change must be reviewed and approved by Director of the Heritage Studies Ph.D. Program and then approved by the Program Committee.

Degree Plan

A course of study, to be developed by the student and approved by the student's Doctoral Advisory Committee, is to be submitted to the Director of the Heritage Studies Ph.D. Program before the end of the first 12 months after beginning the program full time, or before completing 18 semester credit hours of study.

As a reflection of the interdisciplinary nature of the program, each student is expected to develop a course of study tailored to his or her own scholarly interests, research program, and proposed career direction. The specific quantity and content of each student's course of study will be worked out with that student's Advisor and the Doctoral Advisory Committee within the parameters set forth for the program as a whole.

Level of Work Required

57 semester credit hours are required for completion of this program. Only in the most exceptional cases will any class that is not designated a master's or doctoral-level (5000 and above at Arkansas State) be accepted. These exceptions must be approved by the Doctoral Advisory Committee, the Program Director, and the Program Committee. Doctoral Advisory Committees also will take great care when approving any course at the 5000 level. Special justification will be needed for such courses and typically no more than six semester hours of 5000 level course work will be approved for a student's program of study. With permission of the professor, advanced master's level students may enroll in doctoral level Heritage Studies classes.

Transfer Credit

No more than nine master's level credit hours earned before admission to the Heritage Studies Ph.D. Program may be applied toward the 57-credit-hour requirements unless requested by the student's Doctoral Advisory Committee and approved by the Heritage Studies Ph.D. Program Committee. Decisions regarding acceptability of transfer credits are to be made by the Program Committee, upon recommendation from a student's Doctoral Advisory Committee, within the context of that student's course of study and subject to approval by the Graduate School. Students will be held responsible on the qualifying and candidacy exams for the content of all courses within their course of study.

Grades and Credit

Courses completed during prior master's work must have received a grade of B or better to be credited towards the degree. A single grade of C will be accepted for courses in the Ph.D. program. A second instance of a grade of C or a single instance of a grade below C will be cause for the review of the student's status within the program by the Heritage Studies Program Committee. After such review, the Heritage Studies Program Committee may recommend dismissal of the student from the program.

Qualifying and candidacy exams

After completion of the curriculum and the practicum, including the capstone Research Seminar the Doctoral Advisory Committee will schedule a qualifying examination of the student's work in the doctoral program. Successful completion of this qualifying examination will allow the committee to schedule a candidacy exam. The format of the qualifying and candidacy exams for all students is established by the Heritage Studies Program Committee. Successful completion of the candidacy exam which includes approval of a dissertation proposal allows the student to be formally recognized as a candidate for the Doctor of Philosophy in Heritage Studies.

The qualifying and candidacy examinations are designed to test general knowledge of Heritage Studies as well as the student's expertise in specialized areas of research and interest. Students are expected to successfully complete each exam in the first full semester following completion of all course work in the course of study. These exams have a mandatory oral component. In advance of each oral exam, a student prepares a portfolio. Exams will be administered no later than one week before the close of fall and spring semesters. Students intending to take qualifying and candidacy exams must submit an intent form to the office of the program director no later than the end of the sixth week after the beginning of classes in

the semester in which they intend to take the exam.

Each student will create a Portfolio before each exam that will be examined by the Doctoral Advisory Committee which also will serve as the examination committee. The Portfolio must be available to the committee two weeks before the scheduled exam. The exam itself will consist of an oral interview of no more than one hour for the qualifying exam and no more than two hours for the candidacy exam. At each exam the student will explain and defend what is in the Portfolio.

The Portfolio for the Qualifying Exam will contain:

- A major example of the student's work from EACH of the four-course clusters in the curriculum (the core, specialty area, and enrichment). These THREE EXAMPLES from the student's course work are improved and enhanced before they are placed in the portfolio. These THREE items will demonstrate breadth and depth in terms of the student's studies. At least one of these should be a significant example of the student's writing.

The Portfolio for the Candidacy Exam will contain:

- A meaningful essay of no more than twelve-hundred (1,200) words that gives the student's scholarly and intellectual explanation of what is "Heritage Studies" accompanied by an extensively annotated list that will contain 20 sources, at least 10 of which must be books. The list may also include important articles, films, archives, festivals, museums or other substantial examples that are vital for the interpretation of "Heritage Studies".
- A written report that assesses the student's 300-hour Practicum accompanied by a letter from the supervisor, or coordinator, of the Practicum.
- The final version of the student's dissertation proposal.

The oral component for the qualifying and candidacy exams are conducted by the student's Doctoral Advisory Committee. In case of failure, the exam may be retaken if the committee feels that improvements in the Portfolio are justified and can be carried out by the student within an additional period of time as specified by the committee. A second failure of either the qualifying or candidacy exam will result in dismissal from the program. Students may not undertake the candidacy exam until after they have successfully completed the qualifying exam.

Admission to Candidacy

A student may apply for admission to candidacy upon successful completion of the oral component of the comprehensive candidacy examination.

Continuous Enrollment

Prior to the completion of the candidacy exam, any leave from the program of six months or less must be approved by the Program Director. Any leave of six months or longer must be approved by the Director and the Program Committee. Students who have taken leave from the program for more than two years, at the determination of the Director and Program Committee, may be required to apply formally for readmission and to update specific courses.

Students must maintain continuous enrollment subsequent to passing the candidacy examination. They must maintain a minimum of one semester hour of dissertation credit during each regular semester, including at least one summer term each year, until the dissertation has been accepted by the Dean of the Graduate School.

Time to Degree

All requirements for the degree must be completed within eight calendar years of admission to the program. Requirements subsequent to the candidacy examination must be completed within four calendar years of the date of successful completion of that examination. Students exceeding the time limit may be required to repeat the candidacy exam, replace out-of-date

credits with up-to-date ones, and/or show other evidence of being current within both the core curriculum and the student's area of specialization. Extension of the eight-year requirement will be granted only if a student has obtained prior approval from his or her Doctoral Advisory Committee, the Heritage Studies Program Committee and the Arkansas State University Graduate School.

Dissertation

Approval of Dissertation Research

The student's Doctoral Advisory Committee must approve the dissertation proposal at the Candidacy Exam. As the student progresses in completing the dissertation, minor modifications of the proposal may be approved by the chair of the student's Doctoral Advisory Committee who is also the director for the dissertation itself. Any major changes in the dissertation proposal require the approval of the on-campus members of the expanded Doctoral Advisory Committee. Students are also advised to seek the appropriate institutional approval of proposed research, as necessary, from the Institutional Review Board.

Dissertation Defense

After the research is completed the student will submit a draft to his or her advisory committee. Upon the recommendation of the committee, the candidate will arrange with the chair of his or her advisory committee to schedule and conduct an open, public presentation of the results to which members of the faculty and master's and doctoral students will be invited. In advance of this public presentation, the candidate will also be required to orally defend the dissertation before the expanded Doctoral Advisory Committee including any new members from outside Arkansas State University such as cultural heritage professionals. Arrangements for the public presentation and dissertation defense will be made through the Heritage Studies Program Office. Students are advised to be aware of the **deadlines** set by the Graduate School for submission of defense results and dissertations.

The defense must occur at least four weeks before the date of graduation. The defense is failed if more than one negative vote is cast by the members of the Doctoral Advisory Committee who are members of the Arkansas State University graduate faculty. In this case the student is placed on probation. A student who fails the defense must wait at least one semester before attempting a second defense of the dissertation. A second public presentation will not be required. If a repeat defense is failed, the Doctoral Advisory Committee will recommend the student's removal from Ph.D. candidacy standing.

Final Form

The completed dissertation may consist of several elements, such as a museum exhibition curated by the student or a video documentary. Nonetheless, all dissertations will include, an extensive written statement that places the dissertation in its scholarly, intellectual context as a representation of heritage studies. Other important parts of the dissertation project may be written as well and a completed dissertation may include extensive appendices. The written component of the dissertation will follow the style and format requirements from the most recent edition of the Chicago Manual of Style unless an alternate scholarly style is approved by the Doctoral Advisory Committee and the Graduate School. It is the responsibility of candidates to assure that this written component of the dissertation follows the appropriate, designated format. Before submission to the Graduate Dean, the entire on campus membership of the advisory committee must approve the completed dissertation. Candidates will submit electronically a copy of the dissertation according to the Guide to Theses and Dissertations: Preparation and Electronic Submission. The bound copies will be on file with the ASU Library, the Graduate School, the Heritage Studies Program Director, and the chair of the advisory committee.

The Abstract

Candidates will be responsible for the preparation of an abstract of the dissertation, which will be submitted at the same time as the completed dissertation project. The abstract must not exceed 300 words and will be bound with the written component of the dissertation.

Deadline for Submission

The completed dissertation and abstract, signed by all members of the advisory committee, must be submitted electronically by the deadline set for accepting dissertations. The date for each semester and summer term is given in the University Calendar.

Checklist for the Last Semester Before Graduation

In the last semester before graduation, candidates must:

1. Register for the Graduation fee.
2. File an intent to graduate form with the graduate dean by the relevant dead line.
3. Complete the oral defense of the dissertation.
4. Submit the dissertation by the relevant deadline

MASTER OF ARTS DEGREE IN CRIMINAL JUSTICE

This program is designed to be consistent with the nationally accepted standard in the field set out by the Academy of Criminal Justice Sciences. It is intended to serve two purposes. First, the program will assist in developing additional analytical skills for in-service practitioners with BA/BS in the field or in a closely related field. Second, the program will provide a good foundation for students who wish to pursue doctoral studies.

In order to fulfill the requirements of the program, students are required to select a graduate committee comprised of at least three faculty members from the graduate faculty, at least two of whom must be from the department of Criminology, Sociology, and Geography. The selection of the committee should take place no later than the end of a student's second semester in the program. Additionally, students are required to submit a graduate plan to the committee for consideration, which shall indicate the courses that a student plans to take to fulfill the degree requirements. At least two members of the committee must approve of the plan.

Admission Requirements

- BA or BS in Criminal Justice, Criminology, Political Science, Psychology, Sociology, or other closely related field.
- Two letters of recommendation.
- Statement of purpose, AND
- A minimum cumulative undergraduate GPA of 3.0;
- A minimum grade of B in the following undergraduate courses, or their recognized equivalents:
 - SOC 3383, Social Statistics, and SOC 3381, Social Statistics Laboratory
 - SOC 4293, Methods of Social Research

Degree Requirements

Core Required Courses (12 hours)

- SOC 6233 Criminal Justice Systems
- SOC 6133 Police and Society
- SOC 6513 Seminar in Community and Institutional Corrections
- SOC 6523 Seminar in Criminal Behavior OR
- SOC 6403 Seminar in Juvenile Delinquency

Methods Courses (3 hours) selected from the following

- SOC 6343 Methods of Social Research
- SOC 6253 Qualitative Methods of Social Research
- SOC 6383 Advanced Data Analysis
- SOC 5343 Geographical Information Systems for the Social Sciences

SOC 5323 Applied Research
POSC 6003 Techniques of Political and Public Administration Research
POSC 6533 Public Policy and Evaluation

Electives (18 hours) selected from the following:

SOC 5003 Perspectives in Death and Dying
SOC 5063 Sociology of Disasters
SOC 5073 Sociology of Family Violence
SOC 5223 Urban Sociology
SOC 5233 Social Organization
SOC 5253 Rural Sociology
SOC 5263 Terrorism as a Social Movement
SOC 5313 Seminar on Organized Crime
SOC 560V Special Problems
SOC 6113 Seminar in Contemporary Sociology: (subtitle varies)
SOC 6123 Aging, Law and Social Issues
SOC 6203 Social Psychology
SOC 6403 Seminar in Juvenile Delinquency (if not taken to satisfy core requirement)
SOC 6423 Seminar in Race, Gender and Class
SOC 6523 Criminal Behavior (if not taken to satisfy core requirements)
POSC 6503 Managing Local Government
POSC 6523 Decision Making
POSC 6533 Seminar in Human Resource Management
POSC 6553 Public Budgeting and Finance
POSC 6563 Seminar in Public Administration
POSC 6573 Grant Writing and Administration

Any of the Methods courses listed above not taken to satisfy the Methods requirement.

Other courses require approval from the Director of the MACJ program and the Chair of the Criminology, Sociology, and Geography Department.

Other Requirements for the Degree

A student must write and defend a professional paper on a topic approved by the student's graduate committee. The committee must agree that the defended paper is of a quality comparable to one that may be presented at a professional conference or submitted to a refereed journal.

At least fifty percent of the course credit hours must be completed at the 6000 level.

Admissions are competitive.

Application deadlines: April 1 (for Fall admission); November 1 (for Spring admission).

Minimum hours required for this program: 33

MASTER OF ARTS DEGREE WITH A MAJOR IN ENGLISH

Admission Requirements

Students seeking admission into the Master of Arts in English must meet the admission requirements of the Graduate School and the specific program requirements.

Applicants must hold a baccalaureate degree from an accredited four-year institution with the appropriate undergraduate background in the field of the proposed academic em-

phasis and a grade point average of 3.00 on the last 60 hours of undergraduate work, or a 2.75 average on all undergraduate work (A-4, B-3, C-2, F-0). The appropriate undergraduate background must include a minimum of 18 semester hours of coursework, exclusive of any basic education courses, in the proposed field of the graduate major. All courses attempted, including any repeated courses, are considered in the computation of the grade point average.

Students who do not meet the requirements as stated above may be granted admission at the master's degree level provided they have a grade point average of 2.50 overall or a 2.75 average on the last 60 hours.

1. Applicants for admission to the master's degree program who have not completed the appropriate undergraduate background will be assessed under graduate course deficiencies.
2. Applicants from an unaccredited college, who have satisfactory grades and a satisfactory undergraduate program, may be admitted with an entrance condition of 12 semester hours.

Newly admitted students must take a preliminary examination immediately after completing six to nine hours of graduate course work. This preliminary examination is a proctored, impromptu written explication of a relatively brief poem or prose passage, the text of which will be presented to the student at the time of the examination. Students will have two hours in which to write this explication, which will be administered once each semester during the regular academic year and graded by a three-member committee. For information on the exam schedule, contact the graduate adviser.

Students failing the preliminary examination must retake it in the next consecutive full semester. Students who fail the explication a second time must complete a non-credit Independent Study in explication until they can pass an explication graded by three members of the English graduate faculty. Students may not take comprehensive exit exams for the degree until the explication requirement has been satisfied.

Courses required of all general candidates:

ENG 6133, Methods of World Literature Study; OR

ENG 6153, Methods of British Literature Study; OR

ENG 6173, Methods of American Literature Study

Twenty-seven hours of English electives (three hours may be chosen from a related discipline) to be selected in consultation with the faculty adviser.

A knowledge of one foreign language is a requirement for the Master of Arts degree in English. The language requirement may be met by completing the intermediate level of a foreign language with a grade of "C" or above, by achieving a score of 500 or more on the Educational Testing Services examination, by passing an examination administered by the language faculty, or by completing the reading courses FR 3023 or GER 3023 with a grade of "B" or better.

The foreign language requirement must be met before the comprehensive examination can be taken.

Minimum hours required for this program: 30

MASTER OF ARTS DEGREE WITH A MAJOR IN HISTORY

Admission Requirements

Applicants must have completed a minimum of 18 undergraduate semester hours in History in addition to three semester hours of freshman-level World Civilization and three semester hours of sophomore-level United States History (both are considered to be part

of the general education requirements). Applicants for the M.A. program in History will also be evaluated by the department for academic qualification based upon their undergraduate academic records, GRE scores and letters of reference. In addition to meeting the Graduate School's requirements applicants must:

1. Submit acceptable GRE scores
2. Submit two letters of reference from professors familiar with the applicant's work.

Applicants who finished their undergraduate degrees seven or more years prior to applying are urged to contact the department if they are having difficulty getting letters of reference.

There is no foreign language requirement for the Master of Arts degree in History. Students who plan to pursue the Ph.D. degree, however, are encouraged to complete the intermediate level of a foreign language.

Courses required of all candidates

HIST 6003 Introduction to Graduate Study

Six hours of World History

Six hours of U.S. History

Twelve hours of History electives

HIST 6301-6, Thesis (or 6 hours of approved History electives)

Course work must include at least one HIST 6253, Graduate Readings Seminar and one HIST 6263, Graduate Research Seminar.

Minimum hours required for this program: 33

MASTER OF ARTS DEGREE WITH A MAJOR IN HISTORY, PUBLIC HISTORY EMPHASIS

Admission Requirements

Applicants must have completed a minimum of 18 undergraduate semester hours in history in addition to three semester hours of freshman-level world history and three semester hours of sophomore-level United States History (as general education requirements). Applicants for the M.A. in History, Public History Emphasis, will also be evaluated by the department for academic qualification based upon their undergraduate academic records, GRE score and letters of reference. In addition to meeting the Graduate School's requirements applicant's must:

1. Submit acceptable GRE Scores
2. Submit two letters of reference from professors familiar with the applicant's work.

Holders of the M.A. in history from ASU or another accredited graduate program may apply up to 15 hours of earned credit from a previous degree program to the completion of this degree, provided that those credits were earned within the six-year limit for completion of the second degree.

There is no foreign language requirement for the M.A. in History, Public History Emphasis.

Courses required of all candidates

HIST 6003 Introduction to Graduate Study

12 hours of U.S. History

12 hours of Public History (excluding HIST 6623-6)

6 hours of HIST 6301-6, Thesis and/or HIST 6623-6, Internship in Public History

Minimum hours required for this program: 33

MASTER OF ARTS DEGREE WITH A MAJOR IN HISTORY, GLOBAL HISTORY EMPHASIS

Admission Requirements

Applicants must have completed at least 21 undergraduate semester hours in history, including three semester hours of freshman-level world history and nine semester hours of upper-division world history. Applicants for the M.A. in History, Global History emphasis, will be evaluated by the department for academic qualification based upon their undergraduate academic records, GRE scores and letters of reference. In addition to meeting the Graduate School's requirements applicant's must:

1. Submit acceptable GRE scores
2. Submit two letters of reference from professors familiar with the applicant's work.

Holders of the M.A. in History from ASU or another accredited graduate program may apply up to 15 hours of earned credit from a previous degree program to the completion of this degree, provided that those credits were earned within the 6-year limit for completion of the second degree.

Courses required of all candidates

HIST 6003 Introduction to Graduate Study
HIST 6513, Theory and Practice of Global History
HIST 5613, Seminar in Global History
9 hours of Global History courses
15 hours of History courses
Course work must include at least one HIST 6253, Graduate Readings Seminar and one HIST 6263, Graduate Research Seminar.

Minimum hours required for this program: 33

MASTER OF ARTS DEGREE WITH A MAJOR IN POLITICAL SCIENCE

Admission Requirements

The Master of Arts degree is designed to develop students' analytical skills and to deepen their substantive knowledge in political science. Students who meet the admission requirements of the Graduate School and the specific program requirements may specialize in any of four subfields: American politics, comparative politics, international relations, or political theory.

Courses required of all candidates

POSC 6003, Techniques of Political and Public Administration Research
Nine hours of major study in American politics, comparative politics, international relations, or political theory
Six hours of minor study in American politics, comparative politics, international relations, public administration, or political theory
POSC 6656, Thesis, AND six hours of approved electives, OR 12 hours of approved electives

Minimum hours required for this program: 30

MASTER OF ARTS DEGREE WITH A MAJOR IN SOCIOLOGY

Admission Requirements

Students seeking admission into the Master of Arts degree program in Sociology must meet the admission requirements of the Graduate School. The specific program requirements are as follows. The student must have:

- a minimum cumulative undergraduate average of 3.00;
- a minimum of eighteen (18) undergraduate hours in Sociology;
- an overall minimum GPA of 3.00 in undergraduate Sociology courses;
- a minimum grade of B in the following undergraduate courses, or their recognized equivalents:

SOC 2213, Introduction to Sociology
SOC 3383, Social Statistics, and SOC 3381, Social Statistics Laboratory
SOC 4293, Methods of Social Research
SOC 4243, Social Theory.

Courses required of all candidates (9 hours)

SOC 6303, Contemporary Sociological Theory
SOC 6343, Methods of Social Research
One additional research methods course, selected from the following:
SOC 5323 Applied Research
SOC 5343 Geographical Information Systems for the Social Sciences
SOC 6353 Qualitative Methods of Social Research
SOC 6383 Advanced Data Analysis in Sociology
Other research methods courses, upon approval of the department graduate director

Sociology Electives (21 hours)

Students must complete twenty-one (21) hours of electives: fifteen (15) of these hours must be Sociology courses; up to six (6) hours may be taken outside the field of Sociology with approval of a student's graduate advisor.

Students electing to complete an internship, with consent of the overseeing faculty member and approval of the Department Graduate Studies Committee, may take SOC 6603, Internship, as an elective course.

Thesis Option

Students electing to complete a thesis will take six (6) hours of SOC 670v, Thesis, with the consent of the overseeing faculty member, in lieu of a corresponding number of hours of elective courses. (Note: receipt of credit for thesis hours is contingent upon successful completion and defense of the thesis.)

Other Requirements for the Degree

A minimum of eighteen (18) hours for the degree must be in courses numbered at the 6000 level.

All students must pass a comprehensive examination for the degree. For the thesis option, this requirement is met by successfully completing and defending the thesis. Students not completing a thesis may apply to take the comprehensive exam after earning a minimum of eighteen (18) hours in the program, including SOC 6303, Contemporary Social Theory, and SOC 6343, Methods of Social Research.

Admissions are competitive.

Application deadlines: April 1 (for Fall admission); November 1 (for Spring admission).

Minimum hours required for this program: 30

MASTER OF PUBLIC ADMINISTRATION DEGREE

Admissions Requirements

The Master of Public Administration at Arkansas State University exists to enhance individual, organizational, social and governmental capacity in the public and non-profit sectors by equipping pre-service and mid-career students with sound management skills and a public/non-profit philosophy to lead public institutions of the future with integrity, innovation, excellence and professionalism.

To be considered for admission to the MPA program, in addition to meeting Graduate School admission requirements applicants must provide:

- Three letters of recommendation;

Moreover, an applicant's undergraduate background must include courses with grades of "C" or higher in American national government and principles of economics or their equivalents. If the student is deficient, these courses must be taken in addition to the graduate course requirements specified below. Such undergraduate deficiencies must be completed prior to or during the first graduate enrollment period.

For unconditional admission, a student must have a minimum cumulative undergraduate grade point average of 3.0 (or 3.2 in the last 60 hours).

For conditional admission, academic proficiency must be established by a minimum cumulative undergraduate grade point average of 2.75

Courses required all of all candidates:

POSC 6563 Seminar in Public Administration
POSC 6533 Public Policy Analysis & Evaluation
POSC 6553 Public Budgeting & Finance
POSC 6543 Administrative Behavior
POSC 6003 Techniques of Political & Public Administration Research
POSC 6633 Public Information Management
POSC 6593 Seminar in Human Resources Management
POSC 6573 Grant Writing & Administration
POSC 6613 Administrative Leadership
POSC 6623 Administrative Ethics

Six hours chosen from the three options listed below

POSC 6523 Decision Making
POSC 6503 Managing Local Government

OR

POSC 6603-6, Internship in Public Administration*

OR

POSC 6656, Thesis in Public Administration

*Internships are strongly encouraged for all pre-service students and are normally undertaken

after a student has completed 18 credit hours. Internships are open only to students with a grade point average of no less than 3.0.

*All students are required to complete and submit a set of comprehensive case study analyses during their final enrollment period. Case studies and instructions for completion are provided when students file for graduation.

Minimum hours required for the program: 36

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN ENGLISH

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in English Education must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program. Applicants who do not meet the requirements for a valid teaching certificate based on a four-year teacher education program will be required to complete the undergraduate courses required for such a certificate. These courses may be completed concurrently with the graduate work, but must be completed before the student is admitted to candidacy for the degree.

For unconditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

1. A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) and a score of at least 383 on the Miller Analogies Test (MAT) or a minimum score of 292 on the combined verbal and quantitative sections of the Graduate Record Examination (GRE).
2. A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on the last 60 hours) and a score of at least 391 on the MAT or a minimum score of 292 on the combined verbal and quantitative sections of the GRE.

For conditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

1. The total undergraduate GPA is 2.50 AND when the undergraduate GPA is multiplied by the MAT score the total is at least 927.
2. The total undergraduate GPA is 2.50 AND when the undergraduate GPA is multiplied by the GRE score the total is at least 720.

All newly admitted students must take a preliminary examination during their first semester of graduate study. (In unusual circumstances, and with the written permission of the graduate adviser, this preliminary examination may be deferred until the student's second semester of graduate study.) The preliminary examination in English is a proctored, impromptu written explication of a relatively brief poem, the text of which will be presented to the student at the time of the examination. Students will have two hours to write this explication.

Students failing the preliminary examination the first time must retake it in the next consecutive full semester. The examination may be taken no more than twice. Failure to pass the preliminary examination the second time terminates the student's enrollment in the program.

Courses required of all candidates

Core of Professional Education Courses

Nine hours of Professional Education for Secondary Teaching Fields

ELFN 6773, Introduction to Statistics and Research (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology

OR ELCI 5523, Middle School Curriculum,

OR ELCI 6523, Secondary School Curriculum,

OR ELCI 6063, Curriculum Management

Courses in the Major Field

Three hours from the following courses:

ENG 5023, Advanced Creative Writing

ENG 5083, Introduction to Linguistics

ENG 6013, Seminar: Composition Theory

ENG 6533, Teaching Writing in the Schools

Three hours from the following courses:

ENG 6133, Methods of World Literature Study

ENG 6153, Methods of British Literature Study

ENG 6173, Methods of American Literature Study

Fifteen hours of English electives

Minimum hours required for this program: 30

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN SOCIAL SCIENCE

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Social Science must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program. Applicants who do not meet the requirements for a valid teaching certificate based on a four-year teacher education program will be required to complete the undergraduate courses required for such a certificate. These courses may be completed concurrently with the graduate work, but must be completed before the student is admitted to candidacy for the degree.

For unconditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

1. A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) and a score of at least 383 on the Miller Analogies Test (MAT) or a minimum score of 292 on the combined verbal and quantitative sections of the Graduate Record Examination (GRE).
2. A minimum cumulative undergraduate grade point average of 2.75 (or 3.00 on

the last 60 hours) and a score of at least 391 on the MAT or a minimum score of 292 on the combined verbal and quantitative sections of the GRE.

For conditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

1. The total undergraduate GPA is 2.50 AND when the undergraduate GPA is multiplied by the MAT score the total is at least 927.
2. The total undergraduate GPA is 2.50 AND when the undergraduate GPA is multiplied by the GRE score the total is at least 720.

Courses required of all candidates

Core of Professional Education Courses

Nine hours of Professional Education for Secondary Teaching Fields

ELFN 6773, Introduction to Statistics and Research (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology

OR ELCI 5523, Middle School Curriculum,

OR ELCI 6523, Secondary School Curriculum,

OR ELCI 6063, Curriculum Management

Courses in the Major Field

Six hours of history electives

HIST 6213, The Practice of History (Only required for candidates who have not previously taken an equivalent course. Not counted toward 30 hours required for a degree.)

Six hours in United States History

Three hours in World History

Six hours of electives in Social Science (Political Science, Geography, Sociology, Economics)

Minimum hours required for this program: 30

SPECIALIST IN COMMUNITY COLLEGE TEACHING

The 60 graduate hours, including the Master's degree, which are required for the Specialist in Community College Teaching degree include the following:

Teaching Field	39 Semester Hours
Community College Core	12 Semester Hours
Teaching Core	9 Semester Hours

A detailed description of this program, along with specific requirements, is presented in the Specialists in Education Degree program under the College of Education.

Minimum hours required for this program: 30 plus a master's degree

**COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
GRADUATE COURSE DESCRIPTIONS**

**DEPARTMENT OF CRIMINOLOGY, SOCIOLOGY, AND GEOGRAPHY
Geography**

GEOG 5113 Water Resource Planning A study of the basic concepts of hydrology and the major issues associated with water resources planning and management.

GEOG 5223 Urban Geography A study of the structure, function, and problems of cities. Emphasizes patterns of population movement, growth, land use, industrial location, and city-region relationships.

GEOG 5313 Advanced Perspectives in Historical Geography Examines issues that are both chronological and spatial in nature including settlement patterns, migration, and population trends.

GEOG 5613 Conservation of Natural Resources Current problems associated with the conservation of natural resources.

GEOG 5623 Environmental Management A study of 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.

GEOG 5633 Climatology Climatic regions of the world; controlling factors of weather.

GEOG 5643 Geography of Arkansas A study of Arkansas' physical, historical, and cultural landscapes.

GEOG 5813 Special Topics in Geography An intensive study of a region or pertinent topic in geography. May be repeated once when topic changes.

Sociology

SOC 5003 Perspectives on Death and Dying A multidisciplinary overview of major themes and perspectives on dying, death and bereavement, including historical, cultural, social, and psychological aspects; medical, legal and ethical issues; grief and bereavement; the death system; violent death, disasters and megadeath; and beyond death.

SOC 5063 Sociology of Disasters Discusses Socio-cultural aspects of natural and human-made disasters, with an emphasis on social causes and consequences.

SOC 5073 Sociology of Family Violence Overview of the causes, prevalence, and consequences of child abuse, intimate partner violence, and elder abuse.

SOC 5223 Urban Sociology Urban structure, ecology, planning, populations, and role in region and nation.

SOC 5233 Social Organization A study of the 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.

SOC 5243 Social Theory Examination of the context, content and contributions of sociological thinkers up to the early 20th century.

SOC 5253 Rural Sociology Multidimensional examination of the range of rural places, people, institutions, cultures, economies and change with a focus on the United States and Arkansas.

SOC 5263 Terrorism as a Social Movement This course examines domestic and international terrorism, including the history of terrorism. Philosophical and religious ideologies justifying terrorism, the social, political, economic, psychological and legal impacts of terrorism. Terrorist groups motives, and tactics, and methods of counter terrorism.

SOC 5273 Population and Demography Basic concepts and measures of the three central demographic processes of fertility, mortality and migration and introduction of contemporary population related issues.

SOC 5313 Seminar on Organized Crime Understand organized crime through historical and cultural frameworks, review the relationship between organized crime and federal, state, and local authorities and examine the policies to prevent organized crime. Prerequisite: Have a BA/BS in Criminal Justice, Criminology, Political Science, Psychology, or Sociology.

SOC 5323 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 SOC 4293.

SOC 5333 Sociology of Youth Subcultures Sociological study of youth subcultures from American, British, and new sub cultural perspectives, plus a range of historical and contemporary youth subcultures. Also covers various analytic topics such as identity, resistance, style, music, response, and consumption. Prerequisite: SOC 2213

SOC 5343 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.

SOC 5353 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.

SOC 5363 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. Prerequisite: permission of the instructor.

SOC 5373 Sustainable Developments 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. Prerequisite: permission of the instructor.

SOC 560V Special Problems Seminar in sociology and criminology for graduate students. Must be arranged in consultation with a professor, and approved by the department chair. Restricted to graduate students.

SOC 6103 Social Change An examination of the sources, mechanisms, and conse-

quences of social and cultural change.

SOC 6113 Seminar in Contemporary Sociology: (subtitle varies) Controlled discussion of major social issues and problems as they relate to ongoing sociological research. (May be repeated for credit with different subtitle. ONLY six hours with the same course number will count toward the degree.)

SOC 6123 Aging, Law and Social Issues The operation and impact of various laws, policies, and regulations in the U.S. that affect later-life individuals and their families, with a discussion of possibilities for future trends.

SOC 6133 Police and Society Study of the evolution of policing and law enforcement as an instrument of formal social control including policing policy, organizational structure and design and various reform initiatives which have been attempted over time, including crime prevention and community problem solving.

SOC 6203 Social Psychology A survey of major theoretical approaches in social psychology, with an emphasis on communication and social interaction.

SOC 6213 Sociology of Education The study of schools as social systems in a social environment.

SOC 6233 Criminal Justice Systems A study of the general functions of the individual agencies and the duties and responsibilities of the individuals who perform these functions.

SOC 6303 Contemporary Sociological Theory A critical examination of significant contemporary sociological theories. Analysis of the relation between theoretical development and current research emphasis. Prerequisite: SOC 4243 or SOC 5243.

SOC 6343 Methods of Social Research An examination of the logic of scientific inquiry and some commonly used research techniques in sociology with applications to selected examples of sociological research.

SOC 6353 Qualitative Methods of Social Research An introduction to the use of intensive interviewing, participant observation, narrative analyses, and related ethnographic techniques in sociological research.

SOC 6383 Advanced Data Analysis Assumptions, principles, and applications of ordinary least squares and logistic regression techniques including the basic model, dummy variables, and special functional forms. Emphasis on data acquisition, management, analysis, and report writing in sociological practice. Prerequisite: SOC 3383 or equivalent (PSY 3103, STAT 3233, ECON 2113, POSC 3003)

SOC 6403 Seminar in Juvenile Delinquency An analytical survey of current research in juvenile delinquency involving causation, prevention, control, and treatment.

SOC 6413 Seminar in the Family This course is oriented toward contemporary theory and research dealing with family structure and change.

SOC 6423 Seminar in Race, Gender and Class Introduce perspectives, methods, concepts and general findings of sociologists as they apply to race, gender and class. Application of sociological framework to analyze social difference, inequality, power, and resistance.

SOC 6513 Seminar in Community and Institutional Corrections A study of the nature and effects of custodial institutions on the inmates; a review of community treatment programs and alternatives to incarceration.

SOC 6523 Seminar in Criminal Behavior An analysis of criminal patterns of behavior and criminal typologies.

SOC 6603 Internship

SOC 670V (1-6 hours) Thesis

SOC 680V (1-3 hours) Independent Study

DEPARTMENT OF ENGLISH AND PHILOSOPHY

English

ENG 5023 Advanced Creative Writing A workshop in writing poetry, fiction, or drama. (By permission of professor.)

ENG 5083 Introduction to Linguistics A study of phonetics, phonemics, morphology, syntax, and semantics.

ENG 5103 Introduction to Contemporary Literary Theory An introduction to major literary/critical schools of thought in the twentieth century.

ENG 5113 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.

ENG 5183 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.

ENG 5213 Medieval Literature A study of English literature during the Middle Ages. Selected continental writings may be included.

ENG 5223 Milton An intensive study of selected works of John Milton.

ENG 5233 Sixteenth-Century Literature English literature during the sixteenth century. Selected continental writings may be included.

ENG 5243 Seventeenth-Century Literature English literature during the seventeenth century. Selected continental writings may be included.

ENG 5253 Restoration and Neoclassical Literature A study of English literature during the late seventeenth and eighteenth centuries. Selected continental writings may be included.

ENG 5263 Romantic Literature A study of major currents and figures of the English Romantic movement. Selected background writings may be included.

ENG 5273 Victorian Literature A study of major currents and figures in the Victorian Age. Selected background writings may be included.

ENG 5283 Modern British Literature English literature in the twentieth century. Selected background writings may be included.

ENG 5333 American Romanticism A study of American literature in the first half of the nineteenth century.

ENG 5353 American Realism and Naturalism A study of American literature in the last half of the nineteenth century and the early twentieth century.

ENG 5373 Modern American Literature American literature since World War I.

ENG 5383 Minority Literature Selected works of American minority writers from such groups as Blacks, Native Americans, or Chicanos.

ENG 5473 Women Writers A study of literature written by women.

ENG 5623 Mythology An examination of the content, structure, and belief systems, of various mythologies from the perspective of selected mythographers.

ENG 5633 Material Folk Culture The analysis and interpretation of traditional skills, services, and art/craft objects provided in folk societies. (Will not count for English MA/MSE.)

ENG 6013 Seminar: Composition Theory Intensive study of composition theory using selected works of major composition and rhetorical theorists.

ENG 6133 Methods of World Literature Study Development of skills in explication, library research, and the practice of criticism by studying one or more broad issues in world literature.

ENG 6153 Methods of British Literature Study Development of skills in explication, library research, and the practice of criticism by studying one or more broad issues in British literature.

ENG 6173 Methods of American Literature Study Development of skills in explication, library research, and the practice of criticism by studying one or more broad issues in American literature.

ENG 6213 British Authors Through the Renaissance Intensive study of a major British author or group of related authors who flourished during the Middle Ages or Renaissance.

ENG 6233 Shakespeare An intensive study of selected works of Shakespeare.

ENG 6253 Seminar: Topics in British Literature Intensive study of a theme, motif, pattern of images, or other significant feature of several works of British literature. Topic to be selected. May be repeated when topic changes.

ENG 6263 British Authors from the Renaissance Through the Romantic Period Intensive study of a major British author or group of related authors who flourished during the seventeenth or eighteenth centuries or the romantic period.

ENG 6283 British Authors Since the Romantic Period Intensive study of a major British author or group of related authors who flourished during the Victorian, modern, or contemporary periods.

ENG 6353 Seminar: Topics in American Literature Intensive study of a theme, motif, pattern of images, or other significant feature of several works of American literature. Topic to be selected. May be repeated when topic changes.

ENG 6363 American Authors Before 1865 Intensive study of a major American author or group of related authors who flourished before the Civil War.

ENG 6383 American Authors Since 1865 Intensive study of a major American author or group of related authors who flourished after the Civil War.

ENG 6453 Seminar: Topics in World Literature Intensive study of a theme, motif, pattern of images, or significant feature of several works of world literature. Topic to be selected. May be repeated when topic changes.

ENG 6533 Teaching Writing in the Schools A survey of theories and methods of teaching composition with special emphasis on practical applications in teaching writing at all levels.

ENG 6563 Teaching Literature in the Schools A course in methods of teaching literature in the public schools and two-year colleges. Develops theories, rationales, strategies, and projects related to teaching literature.

ENG 6613 Seminar: Special Topics Intensive study of special issues related to literature and language such as folklore, genre theory, or the history of literary criticism. Topic to be selected. May be repeated when topic changes.

ENG 6623 Seminar: Folklore Intensive treatment of the concepts, theories, methods, materials, and history of folklore study.

ENG 674V (1-6 hours) Thesis

ENG 680V (1-3 hours) Independent Study (See department guidelines.)

EDEN 5553 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 secondary schools. Opportunities to develop skills and strategies for teaching language, literature, and composition to culturally diverse students.

Philosophy

PHIL 5723 Aesthetics An analysis of the nature of art, designed to help students respond intelligently to works of art.

PHIL 5733 Environmental Ethics An investigation of the ethical dimensions of environmental issues. Prerequisite: PHIL 1103.

HERITAGE STUDIES

HS 7003 Introduction to Heritage Studies, Research, and Writing This core

class required for the Ph.D. program provides an introduction to important concepts and significant readings that delineate Heritage Studies. Also examined are resources for scholarly research and methods for effective writing.

HS 7061 Heritage Studies Seminar A graduate seminar/colloquium that examines and critiques trends, issues, and opportunities in the heritage professions through discussions of research and internship experiences; materials and methods; theory and practice; and events, regions, and individuals.

HS 7103 Concepts of Culture Seminar that examines the theoretical and methodological approaches to the study of culture of the disciplines within Heritage Studies through topics such as race, class, gender, region, religion, and issues of rural and urban life.

HS 7113 Regional Culture: History of the Mississippi River Delta A graduate seminar that examines the history and culture of the Mississippi River Delta. Areas of particular focus include the economic, political, and social development of the region from the era before European contact to the present.

HS 7123 Management Issues in the Heritage Professions A graduate seminar that examines management issues affecting the Heritage Professions. Specific emphasis is placed on planning for the preservation, preparation, and presentation of heritage to non-specialist or public audiences.

HS 7133 Cultural Resource Methods This course examines interrelationships between ethnography, field research, and the presentation of culture and history. Students learn field research methods and read ethnographic studies.

HS 7203 Special Topics in Heritage Studies: (subtitle varies) Intensive consideration of interdisciplinary topics related to the field of Heritage Studies. Specific subject of seminar to be selected. May be repeated when topic changes.

HS 7213 Research Seminar: (subtitle varies) A doctoral seminar that focuses on resources and concepts important to the development of independent scholarly work on a selected topic appropriate for the Heritage Studies Ph.D. program. The seminar provides extensive work with original research materials and intensive writing. May be repeated.

HP 722V (1-3 hours) Independent Study: (subtitle varies) Independent reading and/or research directed by faculty. Topics addressed through independent study will vary. May be repeated.

HP 730V (1-3 hours) Heritage Studies Internship: (subtitle varies) Off-campus or on-campus directed experience in public institutions such as museums, libraries and archives, historical societies and state parks, cultural tourist sites, community heritage programs, federal, state, and local agencies. A professional work experience directed by faculty and mentored by sponsors. Prerequisites: admission to the Ph.D. program or consent of faculty and sponsor. May be repeated.

HS 731V (1-9 hours) Research and Practicum Experience Supervised research and professional work experience approved by the student's graduate advisor resulting in a report. Undertaken before completion of the comprehensive exam for either the master's degree or the doctoral degree in Heritage Studies. May be repeated.

HS 889V (1-9 hours) Dissertation

DEPARTMENT OF HISTORY

General History

HIST 5303 The Idea of History A study of the idea of history in its chronological, practical, and historiographical manifestations.

HIST 5713 Computers in the Social Studies Classroom Experience in evaluating, creating and using history websites and software, and developing computer presentation skills for the social studies classroom. No prerequisites.

HIST 6213 The Practice of History An experiential study of historical scholarship— research, writing, and criticism.

HIST 630V (1-6 hours) Thesis

HIST 680V (1-3 hours) Independent Study

EDSS 5603 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.

Public History

HIST 5313 Introduction to Public History Introductory overview of the field of public history, including areas of specialization such as archival management, museum work, oral history and folklore, historic preservation, and public parks.

HIST 5323 Management of Archives and Manuscripts Management of archival collections in academic, public, and private institutions, including traditional and digital technologies for preservation and access, and current issues confronting archivists.

HIST 5333 Historic Preservation Practical introduction to preservation of historic buildings, sites, and districts; surveys the history of the preservation movement, federal and state law and policy, the economics of preservation projects, and a variety of historic sites in the surrounding region.

HIST 5513 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.

HIST 5763 Public History Seminar This course will examine the philosophical, ethical, and practical aspects of applying the historians craft and training outside the classroom.

HIST 622V (3-6 hours) Internship in Public History Practical experience with public agencies or private businesses in history-related subjects.

Global History

HIST 5613 Seminar in Global History: (subtitle varies) Intensive research seminar examining major questions in global history. May be repeated for credit with different subtitle.

HIST 6513 Theory and Practice of Global History Theoretical and practical issues facing teachers and practitioners of global history.

HIST 6523 Africa, Slavery, and World History Africa's role in larger global historical processes as a result of the slave trade.

HIST 6533 Indian Ocean World Since 1100 The Indian Ocean as a coherent unit of historical study, the sources and extent of this unity, and several explanations for its decline.

HIST 6543 History of the Crusades The medieval Crusades as multi-national military efforts, inter-cultural transactions and inter-religious conflicts, with emphasis on global consequences.

HIST 6553 Black Death in Global Perspective Research seminar on the history and historiography of the great 14th-century pandemic, seen from a global perspective.

United States History

HIST 5413 Colonial North America Colonial development from Jamestown through the American Revolution.

HIST 5423 Foundations of the American Republic, 1783-1850 A study of the major political and social developments between the Revolution and the Civil War.

HIST 5453 United States Civil War and Reconstruction An intensive study of the Civil War period and the resulting problems of Reconstruction.

HIST 5463 U.S. Gilded Age/Progressive Era Explores the dramatic economic, social, and political upheavals of 1880-1917.

HIST 5473 U.S. Southern Women's History Examines the history and changing status of women in the U.S. South from the 1400s to the present.

HIST 5483 History of Sexuality in America Forces which have shaped American beliefs and practices concerning sexuality, and the roles played by gender, race and class.

HIST 6283 Special Topics in American History: (subtitle varies) (May be repeated for credit with different subtitle).

HIST 6333 Seminar in Arkansas Studies Intensive research seminar covering various aspects of Arkansas history.

HIST 6403 Studies in African-American History: (subtitle varies) This course will focus on the reading, analysis, and research of primary sources dealing with the African-American experience. (May be repeated for credit with different subtitle.)

HIST 6413 American Regional History: (subtitle varies) Studies in the history of select American regions. (May be repeated for credit with different subtitle.)

HIST 6433 American Cultural and Social History: (subtitle varies) Studies in select cultural and social topics in American history. (May be repeated for credit with different subtitle.)

HIST 6443 American Groups in Conflict: (subtitle varies) Studies in the history of select American groups. (May be repeated for credit with different subtitle.)

HIST 6453 American Period Studies: (subtitle varies) Studies in select periods of American history. (May be repeated for credit with different subtitle.)

World History

HIST 5113 Imperial Russia Russian history to the Revolution of 1917.

HIST 5123 Soviet and Post-Communist Russia The U.S.S.R. and Post-Soviet states.

HIST 5133 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).

HIST 5143 Rise of Modern China Major developments in Chinese history with emphasis on the twentieth century.

HIST 5213 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.

HIST 5223 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.

HIST 5263 Early Christianity Growth and influence of Christianity in Mediterranean and European lands, to 600 C.E.

HIST 5273 History of Mexico A survey emphasizing contemporary developments and relations with the United States.

HIST 5553 History of Medicine Worldwide survey of medicine, disease, and health from prehistoric times to the present.

HIST 6003 Introduction to Graduate Study of History Introduction to graduate-level history, covering fundamental research skills needed for graduate work and an overview of the study of historiography.

HIST 6253 Graduate Readings Seminar An in-depth look at the historical literature on a specific topic; content varies and the course may be repeated for credit.

HIST 6263 Graduate Research Seminar Closely guided examination of a body of documentary evidence, leading to a major research paper based on primary sources; content varies and the course may be repeated for credit.

HIST 6273 Special Topics in World History: (subtitle varies) (May be repeated for credit with different subtitle.)

HIST 6613 Studies in Civilization: (subtitle varies) Studies in the history of civilization before modern times. (May be repeated for credit with different subtitle.)

HIST 6623 European History: (subtitle varies) Studies in select topics in the history of Europe. (May be repeated for credit with different subtitle.)

HIST 6633 Eurasian History: (subtitle varies) Studies in select topics in the history of Eastern Europe, Russia, and the Eurasian Plain. (May be repeated for credit with different subtitle.)

HIST 6653 Asian History: (subtitle varies) Studies in select topics in the history of Asia. (May be repeated for credit with different subtitle.)

DEPARTMENT OF LANGUAGES

French

FR 5503 Special Topics Advanced study in a genre, movement, author, culture or other specialized topics. May be repeated when topic changes. Prerequisite: permission of professor.

FR 560V (1-3 hours) Special Project in Teaching An independent study and practical application of selected professional topics in language teaching. May not be used to satisfy any degree requirements. Prerequisite: BSE majors only with at least 21 hours above FR 2023 and permission of professor.

FR 680V (1-3 hours) Independent Study

Spanish

SPAN 5503 Special Topics Intensive study of a theme, motif, literary movement, genre, author, or a significant feature of several works of Spanish literature. May be repeated when topic changes. Prerequisite: SPAN 3413 or permission of professor.

SPAN 560V (1-3 hours) Special Project in Teaching An independent study of selected professional topics in language teaching. This course may not be used to satisfy any degree requirements. May be repeated for up to six hours credit. Prerequisite: BSE majors only with at least 21 hours above SPAN 2023 and permission of professor.

SPAN 680V (1-3 hours) Independent Study

DEPARTMENT OF POLITICAL SCIENCE

General Political Science

POSC 6003 Techniques of Political and Public Administration Research Develops a working knowledge of the substance of contemporary research in political science and public administration and of alternative research strategies and techniques of data analysis in contemporary research. Prerequisite: POSC 3003 or equivalent or permission of professor.

POSC 660V (3-6 hours) Internship in Public Administration

POSC 665V (1-6 hours) Thesis

POSC 680V (1-3 hours) Independent Study

American Politics

POSC 5113 American Legislative Process A study of the structure and organization of legislative bodies and a detailed study of legislative processes.

POSC 5143 Public Opinion and Public Policy The function of public opinion in political systems, and methods for revealing public preferences; with principal focus on the U.S. case.

POSC 5233. Life Sex Death or Body Politics in Comparative Perspective A cross-national study of policy and policy change with respect to state regulation of the body. Completion of POSC 6003 or permission of instructor.

POSC 6113 Intergovernmental Relations A survey of federalism, grant-in-aid programs, and federal, state, local relations in the United States.

POSC 6123 Urban Politics An analysis of urban political processes and urban policy alternatives.

POSC 6133 Seminar in Political Parties and Political Behavior An analysis of selected aspects of American political parties and electoral behavior. May be repeated only once when topic changes.

POSC 6143 Seminar in American Government and Politics An examination of selected aspects of American governmental institutions and processes. May be repeated only once when topic changes.

POSC 6153 The Supreme Court, Politics and Law An analysis of the role of the Supreme Court as a political institution and its impact on public policy and the Constitution.

POSC 6163 Political Organizations Exploration of various forms of political organization in the United States, ranging from political parties to popular movements.

POSC 6173 Environmental Policy Processes Analysis of attitudes, values, processes and institutions that affect environmental policy and the environmental issues currently being faced at local, state, national and international levels.

Comparative Politics

POSC 5213 Politics of the Former Soviet Lands 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.

POSC 5223 Middle Eastern Political Systems Major Middle Eastern political systems, with concentration on their common characteristics and major differences.

POSC 5233 Life Sex Death or Body Politics in Comparative Perspective A cross-national study of policy and policy change with respect to state regulation of the body. Prerequisite: Completion of POSC 6003 or permission of instructor.

POSC 6213 Major Asian Political Systems An examination of the political institutions of selected Asian countries.

POSC 6223 Seminar in Comparative Politics A review of the theory and method of comparative political study with an analysis of governmental institutions in Western and non-Western countries.

POSC 6233. Seminar on Politics and Religion Investigates variations in the extent to which, and the means by which, faith and faith institutions influence politics.

International Relations

POSC 5313 International Organization Development, structure, and politics of international organizations such as the United Nations.

POSC 6313 Contemporary International Relations A study of contemporary international problems and issues as they are related to the foreign policies of major powers.

POSC 6323 Revolutions and Foreign Policy A study of the revolutionary process in selected countries and its implications for foreign policy.

POSC 6333 International Relations Theory An in-depth examination of theories of international relations, such as realism, balance-of-power, pluralism, and globalism.

POSC 6343 The Environment and World Politics A study of the politics of the global environment, including disputes between industrialized countries and the Third World over population policies, deforestation, global warming, and use of the oceans.

Public Administration

POSC 5533 Environmental Law and Administration Overview of current environmental law, its administration and enforcement.

POSC 6503 Managing Local Government An analysis of how public administrators manage municipal government, with special reference to such topics as community and economic development, housing, recreation, public safety, waste disposal, etc.

POSC 6513 Administrative Law A study of the rules and procedures of bureaucratic organizations and their applications.

POSC 6523 Decision Making An examination of decision-making models for individuals, small groups, and large organizations in the public sector.

POSC 6533 Public Policy Analysis and Evaluation Provides a theoretical and technical framework for understanding the fundamentals of policy analysis and evaluation.

POSC 6543 Administrative Behavior An examination of administrative structures and patterns of behavior in public sector organizations.

POSC 6553 Public Budgeting and Finance A study of political processes and administrative methods associated with governmental revenues, expenditures, and fiscal control of public organizations.

POSC 6563 Seminar in Public Administration An examination of the development of public administration as a profession; its history, political environment, ethics, and its method.

POSC 6573 Grant Writing and Administration Emphasis is placed on a step-by-step process through all stages of writing successful proposals and on providing technical expertise and knowledge through campus outreach efforts of faculty and students to strengthen the nonprofit and nongovernmental organizations that serve the local communities.

POSC 6593 Seminar in Human Resources Management An examination of policies, procedures, strategies, laws and regulations implemented in human resources management for public and nonprofit organizations.

POSC 6613 Administrative Leadership A study of the techniques and practices that successful managers employ to get their work done through politicians, subordinates, and citizens. Emphasis is placed on issues that are faced by first time managers.

POSC 6623 Administrative Ethics An analysis of the theoretical, philosophical, and practical tools needed for making appropriate decisions in the role of an administrator in a public or not for profit organization.

POSC 6633 Public Information Management An analysis of how various governmental units juggle the competing demands of sound management and playing politics when devising communication strategies with emphasis placed on crisis management and how information is marketed for maximum impact.

Political Theory

POSC 5453 Analysis of Contemporary Political Theory 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.

POSC 6413 Seminar in Political Theory An examination of selected works of one or more major political philosophers.

COLLEGE OF NURSING AND HEALTH PROFESSIONS

The College of Nursing and Health Professions offers six graduate level programs: the Graduate Certificate in Aging Studies, the Graduate Certificate in Health Sciences Education, the Master of Communication Disorders (M.C.D.), the Doctor of Physical Therapy (D.P.T.), the Master of Science in Health Sciences (M.S.H.S.), and the Master of Science in Nursing (M.S.N.).

DOCTOR OF PHYSICAL THERAPY

The Doctor of Physical Therapy (DPT) is the preferred degree by the Commission on Accreditation in Physical Therapy Education (CAPTE) and the American Physical Therapy Association's (APTA) and it reflects the current level of study that is required to meet the latest standards for physical therapy education.

Admission Requirements

Admissions requirements include an earned bachelor's degree in a related field, acceptance to ASU, Graduate School and satisfactory completion of pre-requisite courses. Completing admission requirements does not ensure acceptance into the DPT program as students are admitted on a competitive space-available basis.

Application Deadlines

Application deadline is February 1st each year. Students may acquire detailed information about the application process and pre-requisite courses by contacting the Department of Physical Therapy at 870-972-3591 or visiting the department's website at <http://www.astate.edu/conhp/pt>.

The D.P.T. Degree and Physical Therapy Licensure

The D.P.T. is the entry-level degree for the practice of physical therapy. The Curriculum associated with the degree prepares graduates for physical therapy practice while paying particular to the health and rehabilitation concerns of residents of the Delta region. Licensure to practice physical therapy is granted by the individual states and issued on scores obtained on the National Licensing Examination administered by the Federation of State Boards of Physical Therapy. Graduation from an accredited educational program is a prerequisite to sit for the licensing exam. The DPT program at ASU is accredited by the Commission on Accreditation of Physical Therapy Education.

Course Requirements

The DPT consists of 109 semester credit. The courses are a mixture of didactic and clinical learning experiences including several sections of extended weeks of full time clinical education. The sequence of courses appears below.

Course Sequence

Fall Year 1

PT 7113 Gross Anatomy

PT 7213 Movement Science

PT 7624 Electrotherapy & Physical Agents

PT 7534 Clinical Procedures: Introductory Test, Measures, Interventions

PT 7512 Professional Issues 1: Introduction to PT Practice

PT 7612 Methods of Instruction & Consultation

Spring Year 1

PT 7314 Exercise Physiology
PT 7123 Intro to Research and Evidence Based Practice
PT 7224 Neuroscience
PT 8245 Musculoskeletal 1
PT 7243 Integumentary

Summer Year 1

PT 7733 Clinical Education 1
PT 7413 Pathophysiology & Differential Diagnosis

Fall Year 2

PT 7141 Research 1
PT 8143 Neuromuscular 1
PT 8255 Musculoskeletal 2
PT 7444 Cardiopulmonary
PT 7343 Administration

Spring Year 2

PT 8151 Research 2
PT 8653 Neuromuscular 2
PT 8754 Neuromuscular 3
PT 8352 Health & Wellness
PT 7252 Psychosocial Issues
PT 7832 Clinical Education 2

Summer Year 2

PT 8163 Clinical Education 3
PT 8263 Clinical Education 4
PT 7323 Imaging & Pharmacology

Fall Year 3

PT 8571 Research 3
PT 8674 Musculoskeletal 3
PT 8773 Neuromuscular 4
PT 8272 Professional Issues in PT 2
PT 8872 Clinical Decision Making
PT 8373 Special Topics in Physical Therapy

Spring Year 3

PT 8585 Clinical Education 5
PT 8685 Clinical Education 6
PT 818V Independent Study & Culminating Experience

All students in the Graduate Program in Physical Therapy at ASU must pass a comprehensive examination prior to beginning the final clinical internships in the Spring of Year 3. Progression to these clinical internships can be delayed or denied if a passing grade for the comprehensive examination is not achieved.

Minimum hours required for this program: 109

TRANSITIONAL DOCTOR OF PHYSICAL THERAPY (tDPT)

The transitional Doctor of Physical Therapy degree (tDPT) provides a program of study that bridges the educational gap between bachelors and masters degree entry-level practitioners in physical therapy and Doctor of Physical Therapy entry-level graduates. The Doctor of Physical Therapy (DPT) is the preferred degree by the Commission on Accreditation in Physical Therapy Education (CAPTE) and the American Physical Therapy Association's (APTA) and it reflects the current level of study that is required to meet the latest standards for physical therapy education. The tDPT program is designed specifically for practicing physical therapy professionals who earned their entry level professional degree at the masters or bachelor degree level. The primary purpose of ASU's tDPT program is to serve our Physical Therapy alumni interested in attaining the doctor of physical therapy degree. Masters and bachelors level physical therapists from other programs may also apply for admission.

Admission Requirements

Earned Master of Physical Therapy degree; currently licensed and practicing as a physical therapist; physical therapy license history must not include licensure revocations or other disciplinary sanctions. Applicants with earned Bachelor of Physical Therapy degree will be considered for admission but additional clinical experience and/or graduate coursework will be required for tDPT graduation.

Application Deadlines

Application deadline is May 1. Students may acquire detailed information about the application process by contacting the Department of Physical Therapy at 870-972-3591 or by visiting the department's website at <http://www.astate.edu/conhp/pt>.

The DPT Degree and Physical Therapy Licensure

Licensure to practice physical therapy is granted by the individual states and issued on scores obtained on the National Licensing Examination administered by the Federation of State Boards of Physical Therapy. Graduation from an accredited physical therapist educational program with a doctorate, master's or bachelor's degree is a prerequisite to sit for the licensing exam. Students enrolled in the tDPT program are expected to hold and maintain an active physical therapy license in good standing and to continue to practice throughout the course of the program.

Course Requirements

The tDPT consists of 28 semester credits for students with an earned Master of Physical Therapy degree. Additional semester credits are required for students who earned the Bachelor of Physical Therapy degree. The courses are a mixture of didactic and clinically applied learning experiences. The descriptions of required courses appear below.

Course Sequence

Fall Year 1

PT 7512 Professional Issues I

PT 7612 Methods of Instruction and Consultation

Spring Year 1

PT 7123 Introduction to Research and Evidence Based Practice

Summer Year 1

PT 7413 Pathophysiology and Differential Diagnosis

Fall Year 2

PT 8573 Special Topics in Physical Therapy (tDPT students enroll in two sections for a total of 6 credits toward the tDPT)

Spring Year 2

PT 8352 Health and Wellness

PT 7252 Psychosocial Issues in Physical Therapy

Summer Year 2

PT 7323 Imaging and Pharmacology

Fall Year 3

PT 8872 Clinical Decision Making

PT 8573 Special Topics in Physical Therapy (tDPT students enroll in two sections for a total of 6 credits toward the tDPT)

Spring Year 3

PT 818V Independent Study and Cumulating Experience (tDPT students enroll in 3 sections for a total of 3 credits toward the tDPT)

Minimum hours required for this program: 28

GRADUATE CERTIFICATE IN HEALTHCARE EMERGENCY MANAGEMENT

Program Description

The Graduate Certificate in Healthcare Emergency Management is an interdisciplinary program that begins the preparation for professionals to engage in disaster preparedness, mitigation, planning, response and recovery. The program requires 18 hours of graduate-level courses related to disaster health. Hours completed in the certificate program may be applied toward the MSDPEM degree. Students may transition from the certificate program to the MSDPEM program with permission of the graduate faculty.

Admission Requirement

Students interested in pursuing a Graduate Certificate in Healthcare Emergency Management must have a bachelor's degree in any discipline. Applicants must meet the admission requirements of the Graduate School, <http://www.astate.edu/graduate>. Send completed graduate application form, required application fee, and official transcripts of all undergraduate and graduate course work to the Graduate School. Students wishing to complete the certificate must meet the same prerequisites (listed below) as for the MS degree in Disaster Preparedness and Emergency Management.

Students must schedule a personal interview with a MSDPEM adviser. Venues for the interview can be face-to-face, telephone or electronic. During this interview, the adviser will outline in detail the requirements of the certificate program. The adviser and the student will analyze the appropriateness of the certificate consistent with the student's goals and career objectives, the certificate requirements and the student's academic progress to date. Admission to the certificate program is conditional upon completion of prerequisite course(s) required, and acceptance by the Center for Domestic Preparedness into the courses offered by the Center for Domestic Preparedness (Anniston, AL). The Center for Domestic Preparedness has the authority to review applications to ensure eligibility requirements are met for clinical placement prior to program entry, <http://cdp.dhs.gov/registration/index.html>.

Pre-Requisites

The United States Government has instituted a National Incident Management System to standardize the countries response to disasters and other emergencies. The Incident Command System (ICS) describes the chain-of-command and organizational structure of managing emergencies. Completion of courses in ICS is required by employers and is necessary to receive reimbursement from the Federal Government when a federal declaration of a disaster has been obtained. Courses in the graduate certificate and MSDPEM build on this foundational knowledge. Therefore, students wishing to be admitted to the MSDPEM degree must have completed these four courses prior to admission. They are offered free of charge, on-line, from the Federal Emergency Management Institute: <http://www.training.fema.gov/IS/NIMS.asp>.

The required pre-requisite ICS courses include:

- Introduction to Incident Command System (ICS – 100) There are several discipline specific ICS-100 courses. Students need only complete one and should choose the one most relative to their career goals.
- Incident Command System (ICS – 200) for Single Resources and Initial Action Incidents
- Incident Command System (ICS – 700) Introduction to the National Incident Management System
- Incident Command System (ICS – 800) Introduction to the National Response Framework

In addition to the Incident Command System prerequisites, students must have current Core and Basic Disaster Life Support certifications. Information regarding these certifications can be obtained from the Regional Center for Disaster Life Support in the College of Nursing and Health Professions, American Medical Association or the National Disaster Life Support Foundation.

The following courses comprise the Graduate Certificate Disaster Health

DPEM 5613 Radiological Emergencies

DPEM 6223 Epidemiology of Disasters

DPEM 6253 Multi-Agency Response in Disaster Preparedness and Emergency Management

DPEM 6273 Vulnerable Populations in Disasters

DPEM 6543 Pandemic Planning

DPEM 6553 Leading Hospital Response to Mass Casualties

Total Hours: 18

MASTERS OF SCIENCE DEGREE IN DISASTER PREPAREDNESS & EMERGENCY MANAGEMENT

Program Description

The Master of Science degree in Disaster Preparedness & Emergency Management (DPEM) is an interdisciplinary degree program that prepares professionals to effectively meet the demands of disaster preparedness, mitigation, planning, response and recovery. The program requires 36 hours of graduate-level courses that include a variety of teaching methodologies and activities. All courses completed for the Graduate Certificate in Disaster Health apply to the MSDPEM. Some courses include student experiences at the Center for Domestic Preparedness in Anniston, AL. The degree culminates in an internship, research project or thesis

Admission Requirements

Students interested in pursuing a Master of Science in Disaster Preparedness & Emer-

gency Management degree must have a Bachelor's degree in any discipline. Applicants must meet the admission requirements of the Graduate School. To apply, obtain an application form from the Graduate School. They should send completed application form, required application fee, and official transcripts of all undergraduate and graduate course work to the Graduate School. Applicants must schedule a personal interview with a MSDPEM adviser. Venues for the interview can be face-to-face, telephone or electronic. During this interview, the adviser will outline in detail the requirements of the MSDPEM program. The adviser and the student will analyze the appropriateness of the degree consistent with the student's goals and career objectives, the degree's requirements and the student's academic progress to date. Admission to this degree program is conditional upon completion of prerequisite course(s) required and acceptance by clinical agencies for practicum experiences. Admission to the MSDPEM program is conditional upon completion of prerequisite course(s) required, and acceptance by the Center for Domestic Preparedness into the courses offered by the Center for Domestic Preparedness (Anniston, AL). The Center for Domestic Preparedness has the authority to review applications to ensure eligibility requirements are met for clinical placement prior to program entry, <http://cdp.dhs.gov/registration/index.html>.

Pre-Requisites

The United States Government has instituted a National Incident Management System to standardize the countries response to disasters and other emergencies. The Incident Command System (ICS) describes the chain-of-command and organizational structure of managing emergencies. Completion of courses in ICS is required by employers and is necessary to receive reimbursement from the Federal Government when a federal declaration of a disaster has been obtained. Courses in the graduate program build on this foundational knowledge. Therefore, students wishing to be admitted to the MSDPEM degree must have completed these four courses prior to admission. They are offered free of charge, on-line, from the Federal Emergency Management Institute: <http://www.training.fema.gov/IS/NIMS.asp>.

The required pre-requisite ICS courses include:

- Introduction to Incident Command System (ICS – 100) There are several discipline specific ICS-100 courses. Students need only complete one and should choose the one most relative to their career goals.
- Incident Command System (ICS – 200) for Single Resources and Initial Action Incidents
- Incident Command System (ICS – 700) Introduction to the National Incident Management System
- Incident Command System (ICS – 800) Introduction to the National Response Framework

In addition to the Incident Command System prerequisites, students must have current Core and Basic Disaster Life Support certifications. Information regarding these certifications can be obtained from the Regional Center for Disaster Life Support in the College of Nursing and Health Professions, American Medical Association or the National Disaster Life Support Foundation.

Arkansas State University Requirements

Completion of MSDPEM Core Courses (18 hours)

DPEM 6103 Health Care Issues and Policies Related to Disaster Preparedness and
Emergency Management

DPEM 6113 Theory Development in Disaster Preparedness and Emergency Management

DPEM 6123 Research Design and Methodologies in Disaster Preparedness and Emergency
Management

DPEM 6133 Ethics and Legal Considerations in Disaster Preparedness and Emergency
Management

DPEM 6143 Global Perspectives in Disaster Preparedness and Emergency Management

DPEM 6153 Crisis Communication in Disaster Preparedness and Emergency Management

Completion of MSDPEM Emphasis requirements (18 hours)

9 hours Emphasis 5000–6000 Level--In consultation with their advisor, students select courses within one area of emphasis. See emphasis courses in DPEM listed below. Total of 9 hours required.

3 hours Practicum 6000 level In consultation with their advisor, students select courses within the practicum courses. See practicum courses in DPEM listed below. Total of 3 hours required.

6 hours DPEM 665V (1-6 hours) Internship, Thesis or Research Project at the direction and with permission of the faculty. Total of 6 hours required.

Select 9 hours from these Emphasis Courses in DPEM

DPEM 5513 Incident Command System (ICS) Instructor Course

DPEM 5523 Law Enforcement Protection Instructor Course

DPEM 5533 All Hazards Awareness Instructor Course

DPEM 5543 Teaching Emergency Response

DPEM 5613 Radiological Emergencies

DPEM 6563 Leading Hospital Response to Mass Casualties Instructor Course

DPEM 6573 Complex Radiological Emergencies

DPEM 6213 Informatics in Disaster Preparedness and Emergency Management

DPEM 6223 Epidemiology of Disasters

DPEM 6253 Multi-Agency Response in Disaster Preparedness and Emergency Management

DPEM 6263 Geographical Information Systems in Disaster Preparedness and Emergency Management

DPEM 6273 Vulnerable Populations in Disasters

DPEM 6543 Pandemic Planning

DPEM 6553 Leading Hospital Response to Mass Casualties

Select 6 hours from these Practicum Courses in DPEM

DPEM 661V Seminar Topics in Disaster Preparedness and Emergency Management

(1 -3 credit hours)

DPEM 662V Research Assistant (1-3 credit hours)

DPEM 6631 Disaster Preparedness and/or Emergency Management Conference Presentation

DPEM 6643 Practicum Experience – 60 contact hours

Total Hours for MSDPEM: 36

Full Time - 18-24 months

6 Modules

The MSDPEM program is designed by 6 modules. Each module will contain 2 courses and students can enter the program in any module. The Internship, Thesis or Project will be completed in Module VI regardless of the module in which they entered the program. Module VI will be taken after the student completes the other 5 modules, regardless of the order in which they were taken. Each module will be 7 weeks duration. Four to five modules/calendar year will be offered. Should a student choose to take only one course of a module, they can take the remaining course the next time that module is offered.

Module I – Theoretical Framework for Disaster Preparedness and Emergency Management Core Course(s)

DPEM 6113 Theory Development in Disaster Preparedness and Emergency Management

Emphasis Course 3 hours OR
Practicum Courses 1-3 hours

Module II – Communication in Disaster Preparedness and Emergency Management

Core Course(s)

DPEM 6153 Crisis Communication in Disaster Preparedness and Emergency Management

Emphasis Course OR
Practicum Courses 1-3 hours

Module III – Research Topics in Disaster Preparedness and Emergency Management

Core Course(s)

DPEM 6123 Research Design and Methodologies in Disaster Preparedness and Emergency Management

Emphasis Course 3 hours OR
Practicum Courses 1-3 hours

May take Internship, Project or Thesis hours after completing this module

Module IV – Humanitarian Perspectives in Disaster Preparedness and Emergency Management

Core Course(s)

DPEM 6143 Global Perspectives on Disaster Preparedness and Emergency Management

DPEM 6133 Ethics and Legal Considerations in Disaster Preparedness and Emergency Management

Module V – Collaboration in Disaster Preparedness & Emergency Management

Emphasis Courses (Choose 2)

DPEM 6103 Health Care Issues and Policies Related to Disaster Preparedness and Emergency Management

Emphasis course 3 hours OR
Practicum Courses 1-3 hours

Module VI – Internship, Research Project or Thesis

DPEM 665V 1-6 HOURS

MASTER OF SCIENCE IN HEALTH SCIENCES

The Master of Science in Health Sciences is a generic degree that allows prospective students who are members of the healthcare workforce to advance their education. This is necessary to assure that leadership and educational positions such as lab managers, health systems analysts, college professors, department heads, etc. are filled by individuals with the requisite skills and knowledge for those positions. Graduates of this program will have a foundation in understanding the health care delivery system and in research and management principles to function in those roles. The healthcare workforce will be enhanced with a more sophisticated professional and in a complex medical marketplace, this is necessary. Students are increasingly seeking advanced degrees to make an investment for the future. Graduates are employed in both the public and private sectors.

Admission Requirements

Applicants must meet the admission requirements of the Graduate School. To apply, obtain an application form from the Graduate School. Send completed application form, required application fee, and official transcripts of all undergraduate and graduate course work to the Graduate School.

Course Requirements

The Master of Science in Health Sciences degree consists of a minimum core of 21 semester hours beyond the Bachelor's degree and a 21 semester hour graduate certificate option (Health Sciences Education, Health Care Management or Aging Studies) or 18 semester hour graduate certificate option + 3 approved elective hours appropriate to the discipline (Addiction Studies)—see program descriptions below).

GENERAL COURSE REQUIREMENTS

Core Electives (15 credits):

- HP 6113, U.S. Health Care
- NURS 6103, Research Design and Methodology
- HP 6033, Data Analysis in Health Professions
- NURS 6843, Ethics of Health Care
- HP 6023, Health Policy and Economic Issues

Other (6 credits):

- HP 6701-6, Thesis
- HP 6601-6, Internship

Minimum hours required for this program: 42

MASTER OF COMMUNICATION DISORDERS (M.C.D.) DEGREE

The Master of Communication Disorders degree program is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). This accreditation means that the master's degree program has met or exceeded the rigorous standards set by the CAA. The CAA will continuously monitor the program to ensure that these standards are maintained.

Admission Requirements

To be considered for admission to the M.C.D. degree program, applicants must meet the admission requirements of the Graduate School and the specific program requirements. However, meeting minimum requirements for admission to graduate study does not necessarily ensure acceptance into the M.C.D. program. The Communication Disorders (CD) program admits students on a competitive, space-available basis.

In order to complete the application process for the Communication Disorders program, the applicant must submit the following:

1. Submit a letter that requests acceptance into the program and states your goals and interests.
2. Arrange for completion and submission of three Graduate Readiness Rating forms by persons qualified to speak with authority of your professional abilities and personal characteristics. Narrative letters of recommendation will not be considered unless attached to the completed, required form. The form is available on the Communication Disorders website at: <http://www.astate.edu/dotAsset/260205.pdf>.
3. Submit an official transcript from each institution that you have attended. To be considered, applicants must possess an overall GPA of 3.00 or higher or a GPA of

- 3.25 (on a 4.00 scale) for the last 60 hours of undergraduate work.
4. Submit score for all subtests of the Graduate Record Examination (GRE).
5. Submit a current resume.

All materials listed above, as well as materials required for admission by the Graduate School, must be mailed to:

ASU Graduate School
P.O. Box 60
State University, AR 72467-0060

Applications for admission will be considered by the Communication Disorders Admissions and Credits Committee in the weeks following the application deadline.

To be eligible for consideration all applicants must have a complete application file and must meet the admission requirements of the Graduate School.

Applicants With Undergraduate Degrees in Majors Other Than Speech-Language Pathology. Applicants with undergraduate degrees in an area other than communication disorders will be considered for admission only after having completed a minimum of 15 semester hours of the 28 credit hours of undergraduate deficiencies specified by the CD program. Applicants must identify the specific year for which they are applying. Such applicants will be considered for admission only after indicating in writing that they understand admission for the targeted year is contingent on their provision of evidence (in the form of official grade slips or an official transcript) of having successfully completed all but one of the core specified deficiency courses. Such evidence must be received prior to the first day of classes for the targeted year. In the event documentation is not provided by that time, the admission decision will be considered null and void. The applicant may, however, re-apply for admission for a subsequent year.

Deadline for Receiving Applications

The graduate admission period is the first term of summer school annually, and applications for that admission period are due by February 15 each year.

The M.C.D. Degree

The Master of Communication Disorders degree is offered for the purpose of educating individuals to a high level of competence in the management of speech, hearing, and language disorders. This program provides graduates with the necessary academic and clinical practice requirements for ASHA's Certificate of Clinical Competence (CCC-SLP), licensure to practice speech-language pathology in the State of Arkansas, and the Speech Pathology Certificate issued by the Arkansas Department of Education. Programs will be individually designed to prepare initial entry candidates as well as those with prior training and experience.

Course Requirements

The Master of Communication Disorders degree consists of a minimum of 49 semester hours beyond the Bachelor's degree including credit for clinical practice. Clinical practice consists of supervised, direct clinical experience approved and supervised by the faculty and licensed clinical supervisors. Each candidate and the adviser will plan and design a program of study to ensure that professional requirements will be met. Deficiencies in undergraduate preparation may be assigned as prerequisites. The successful student is expected to have demonstrated expertise and in-depth knowledge of the normal communication processes, development, and disorders thereof; evaluation procedures to assess the bases of such disorders; and clinical techniques that have been shown to improve or eradicate them. In addition, competency must be demonstrated in the related areas of human anatomy and physiology, psychological dynamics, and research.

GENERAL COURSE REQUIREMENTS

CD 5751, Clinical Practice I

CD 6053, Research in Communication Disorders
CD 6153, Voice Disorders
CD 6243, Motor Speech Disorders
CD 6303, Augmentative and Alternative Communication
CD 6353, Language Intervention for At-Risk Infants and Toddlers
CD 6363, Language and Learning Disorders
CD 6503, Intervention in Communication Disorders
CD 6513, Advanced Aural Rehabilitation
CD 6603, Diagnosis in Communication Disorders
CD 6653, Contemporary Issues and Practices in Communication Disorders
CD 6713, Swallowing Disorders
CD 6743, Neurogenic Language and Associated Cognitive Disorders
CD 6761, Clinical Practice II
CD 6773, Clinical Practice III
CD 6787, Clinical Practice IV
CD 6001 Instrumentation in CD

Students who select the thesis option may substitute six semester hours of Thesis for CD 6513, Advanced Aural Rehabilitation and CD 6653, Contemporary Issues and Practices in Communication Disorders.

Minimum hours required for this program: 49

All candidates for the M.C.D. degree must take the appropriate PRAXIS II Examination required for licensure in Arkansas and for the Certificate of Clinical Competence (CCC). A copy of the scores must be sent to the Communication Disorders Program Director, College of Nursing and Health Professions, Arkansas State University, P.O. Box 910, State University, AR 72467-0910.

MASTER OF SOCIAL WORK

The MSW program at Arkansas State University-Jonesboro was granted initial accreditation by CSWE in October 2011. This accreditation includes the academic years 2008-2009 to October 2015.

The MSW offers one concentration which is rural based clinical social work practice. Students learn the fundamental knowledge, skills, values and ethics that guide social work practice and the populations traditionally served by the profession. Students are prepared to acknowledge and utilize the less formal social exchanges between people and systems that exist in rural communities. Students learn how to identify and develop resources, and how to use natural helping networks. Students are expected to employ a broad range of approaches, theories and models in their practice and to develop skills that enable them to perform multiple roles in the helping process. Additionally, students learn the importance of examining issues related to diversity and social work values and ethics; as well as how to identify, prevent and interrupt social and economic injustice, and the importance of community empowerment.

Admission Requirements

Students seeking admission to the MSW program must possess a bachelor's degree from a regionally accredited college or university. There are two program options. The requirements for each program follow.

1. Standard Program: This option is available to applicants who received their bachelor's degree in any discipline or who graduated from a CSWE accredited BSW program more

than six years ago and any other student who does not meet requirements for the Advanced Program. For admission to the Standard Program, students must have a cumulative grade point average of 3.0 or better on a 4.0 scale for the last 60 hours of undergraduate degree work. If the applicant has a master's degree from an accredited institution, his or her graduate GPA may be considered. Under exceptional circumstances, applicants with a GPA of less than 3.0 may be considered for Conditional Admission Status to the Standard Program. Any student granted Conditional Admission Status will be advanced to Unconditional Admission Status at such time as the student completes 12 graduate semester hours, has a minimum 3.00 GPA on these 12 hours, with no more than one course in the 12 hours with a grade of "C", and meets unconditional or program admission requirements. All students admitted to the Standard Program must successfully complete the Foundation Curriculum and the Concentration Curriculum.

2. Advanced Program: Available only to applicants who graduated from a CSWE accredited BSW program within six years of the application date. Persons admitted to the Advanced Program complete only the Concentration Curriculum. For admission to the Advanced Program, students must have a 3.2 or better on a 4.0 scale in the last 60 credit hours of the BSW degree. There is no conditional admission to the Advanced Program.

Applications Deadlines

Deadlines for applying to the Advanced and Standard Programs will be posted on the MSW website. The admission period for the Advanced Program will be the first summer term of that year. The admission period for the Standard Program will be for the fall term of that year.

Application Requirements

1. Graduate School Application.
2. A bachelor's degree from a regionally accredited college or university (official transcripts must be provided).
3. Three completed Department of Social Work Graduate Admission Applicant Reference Forms from individuals who can objectively assess the student's potential for graduate work (i.e., Field Supervisor, Field Liaison, Faculty, Co-worker, Other Professional).
4. For persons seeking admission into the Standard Program the following pre-requisites must be completed with a grade of "C" or better prior to applying: American Government, Human Biology, Introduction to Psychology, Introduction to Sociology, Social Statistics and Introduction to Social Work (undergraduate or graduate).
5. Computer literacy demonstrated through prior course work (Web-based classes or Computer Class).
6. A Personal and Professional Orientation statement (See the MSW website application information for details).
7. Current resume.

Course Requirements

Minimum hours required for each program:

33 graduate course hours is required for the Advanced Program (Concentration Curriculum only)

60 graduate course hours is required for the Standard Program (Foundation Curriculum and Concentration Curriculum)

Foundation Curriculum Required Courses (27 semester hours)

SW5003, Human Behavior and the Social Environment I

SW5333, Human Behavior and the Social Environment II (Prerequisite SW5003)

SW5023, Foundations of Social Work Practice I

SW5043, Foundations of Social Work Practice II (Prerequisite SW5023)
SW5053, Social Welfare Policy and Services
SW5063, Social Justice and Diversity

3 hours of Social Work Graduate Electives

SW5803, Full-time Foundation Field I

SW5813, Full-time Foundation Field II (Prerequisite SW5803)

Or

SW5802, Part-time Foundation Field I

SW5812, Part-time Foundation Field II (Prerequisite SW5802)

SW5822, Part-time Foundation Field III (Prerequisite SW5812)

Concentration Curriculum Required Courses (33 semester hours)

SW6003, Psychopathology for Social Workers

SW6013, Social Work Ethics

SW6023, Social Work Evaluation and Research

SW6033, Clinical Practice with Individual

SW6043, Clinical Practice with Families

SW6053, Clinical Practice with Groups

SW6063, Social Work Policy Analysis

SW6073, Integrative Research Project

3 hours of Social Work Graduate Electives

SW6803, Full-time Advanced Field I

SW6813, Full-time Advanced Field II (Prerequisite SW6803)

Or

SW681V, Part-time Advanced Field I

SW682V, Part-time Advanced Field II (Prerequisite SW681V)

SW683V, Part-time Advanced Field III (Prerequisite SW682V)

SW684V, Part-time Advanced Field IV (Prerequisite SW683V)

Elective Course(s) selected from approved options

MASTER OF SCIENCE IN NURSING (M.S.N.) DEGREE

The M.S.N. program prepares nurses with the complex practice skills and theoretical knowledge necessary for advanced nursing practice in the contemporary health care system. Graduate study in nursing is the basis for professional growth in advanced practice roles and the foundation for doctoral study in nursing.

The Master of Science in Nursing Program is accredited by the National League for Nursing Accrediting Commission (3343 Peachtree Road NE, Suite 850 Atlanta, Georgia 30326, Telephone 404-975-5000, Fax 404-975-5020).

The program is designed for individuals who hold the Bachelor of Science in Nursing degree. Students who have successfully completed all except the senior year of the B.S.N. program with a grade point average of 3.00 may take a graduate level course in each of the final two semesters of ASU's B.S.N. program. The total number of credits per semester may not exceed 15. Students enrolled under this option must complete the undergraduate courses within the first two semesters of enrollment in graduate work. If the undergraduate work is not completed at the end of the second semester, the student will be dropped from the Graduate School. After admission a Graduate Information Guide (GIG) is available that explains policies and requirements unique to the graduate nursing program. All students on admission are

required to attend orientation to the MSN program.

MSN students are required to successfully complete a comprehensive exam or thesis (with a minimum of 6 credit hours) during their plan of study. Students selecting thesis must be continuously enrolled in thesis credits until graduation. Students considering doctoral education are strongly encouraged to select the thesis option.

Admission Requirements

Students seeking admission into the Master of Science in Nursing program must meet the admission requirements of the Graduate School and the specific program requirements. Completed Graduate School application forms and School of Nursing application forms must be received in the Graduate School by April 15 for applicants seeking admission for full or part time study in the following Fall semester, and September 15 for admission to the following Spring semester for the Adult Health option; and by February 1 for admission to the following Fall semester for the Family Nurse Practitioner option. Visit the ASU Graduate School website <http://graduateschool.astate.edu>, for admission requirements.

Applicants to the MSN program complete the application process to the School of Nursing, including submission of the MSN application form and a personal interview. All students on admission are required to attend orientation to the MSN program. The MSN application form and admission requirements may be found on the School of Nursing website, <http://www2.astate.edu/a/conhp/nursing/majors/master-of-science-in-nursing/>. Students are offered admission to their selected specialty only. Should the student desire to change specialty focus, the procedure and requirements may be found on the website.

In addition to the general requirements for graduate degrees conferred by the Graduate School, applicants to the M.S.N. program must:

- Hold a Baccalaureate degree in nursing (BSN) from an accredited institution.
- Have a minimum Cumulative Grade Point Average of 2.75 (4.0 scale) overall or 3.0 on the last 60 hours of undergraduate work.
- Hold a current, unencumbered license to practice as a Registered Nurse. The unencumbered RN license must be active in the state where clinical practice is scheduled or a compact state.
- Individuals admitted pending NCLEX-RN examination results are required to withdraw from the program at the end of the first semester if the examination is not passed. The individual may reapply for admission upon successful completion of the licensing examination.
- Have completed an undergraduate course in health assessment (minimum of a B). If the student has a "C" in health assessment, proficiency may be demonstrated.
- Have successfully completed a graduate-level descriptive and inferential statistics course with a grade of B or above.

Evidence of the following is required before registering for each clinical course or practicum.

1. CPR certification (professional level) valid through the academic year.
2. TB skin test/chest x-ray valid through the academic year.
3. Evidence of Hepatitis B immunization or signed declination statement.
4. Copy of professional liability insurance. Minimum 1,000,000/3,000,000.
5. Copy of unencumbered RN license valid in the state of practice.
6. Verified Credentials

CRIMINAL BACKGROUND CHECKS

Arkansas law requires that applicants for licensure, including advanced practice licensure, submit to criminal background checks. Students graduating and planning on applying for advanced practice licensure should submit applications four (4) to six (6) months in advance of graduation in order to allow time for processing.

ADULT HEALTH NURSING PROGRAM REQUIREMENTS

The Adult Health Nursing major prepares nurses as clinical specialists in caring for adults with acute and chronic health problems.

Core Courses Required of Adult Health Nursing option:

- NURS 6103, Research Design and Methodology
- NURS 6203, Theory Development in Nursing
- NURS 6303, Health Care Issues and Policy
- NURS 6402, Professional Role Development in Advanced Nursing

Support courses required of Adult Health Nursing option:

- NURS 6003, Advanced Clinical Physiology
- NURS 6013, Advanced Clinical Pharmacology
- NURS 6023, Advanced Assessment and Diagnostic Evaluation
- NURS 6762, Applied Clinical Research and Role Seminar
- NURS 689V, Thesis Option

Additional Courses required for Adult Health Nursing:

- Advanced Practice courses—
 - NURS 6443, Advanced Adult Health Nursing I
 - NURS 6453, Advanced Adult Health Nursing II
 - NURS 646(1-6), Advanced Adult Health Nursing Practicum
 - NURS 6473, Advanced Adult Health Nursing Clinical Synthesis

Electives

Three hours of graduate-level electives to be approved by the student's adviser.

Minimum hours required for this program: 40

FAMILY NURSE PRACTITIONER PROGRAM REQUIREMENTS

The Family Nurse Practitioner program prepares nurses to deliver primary care to clients across the life span. Courses required for Family Nurse Practitioner:

Core Courses required for the Family Nurse Practitioner

- NURS 6103 Research Design and Methodology
- NURS 6203 Theory Development in Nursing
- NURS 6303 Health Care Issues and Policy
- NURS 6402 Professional Role Development in Advanced Nursing

Support courses required of the Family Nurse Practitioner

- NURS 6003, Advanced Clinical Physiology
- NURS 6013, Advanced Clinical Pharmacology
- NURS 6023, Advanced Assessment and Diagnostic Evaluation
- NURS 689V, Thesis Option

Advanced Practice courses required of the Family Nurse Practitioner

- NURS 6513, FNP Clinical Management I
- NURS 6514, FNP Clinical Management I Practicum

NURS 6613, FNP Clinical Management II
NURS 6614, FNP Clinical Management II Practicum
NURS 6753, FNP Synthesis Seminar
NURS 6818, FNP Clinical Synthesis

Minimum hours required for this program: 45

NURSE EDUCATOR OPTION

The Adult Health Nursing offers an option in Nursing Education. Course work in the Advanced Adult Health Nursing Option includes: NURS 6003, 6013, 6023, 6103, 6203, 6303, 6402 and 6762. Students earning a degree and completing the Nurse Educator option will be required to take: NURS 6643, 6453, 646V and 6473. Students earning a degree and completing the Nurse Educator option must be enrolled in a MSN track, such as adult health or family nurse practitioner.

Courses in the Nurse Educator option are:

NURS 6623, Curriculum Development in Health Professions
NURS 6853, Teaching in Advanced Nursing Roles
NURS 6713, Practicum in Nursing Education
HP 6043, Measurement and Evaluation in Health Sciences

Minimum hours required for this option: 44

NURSE ADMINISTRATION OPTION

The Nursing Administration emphasis is available to MSN students. Course work in the Advanced Adult Health Option includes: NURS 6103, 6203, 6303, 6402. Students earning a degree and completing the Nursing Administration option will be required to take: NURS 6443, 6453, 646V, and 687V. Nursing Thesis is Optional (NURS 689V).

Additional Courses in the Nurse Administrator option are:

- NURS 6313 Power, politics and influence
- NURS 6353 Budgeting and financial management
- HP 6323 Healthcare Law and Quality Improvement
- MGMT 6013 Human resource management for healthcare organizations
- NURS 687V Healthcare Management Seminar

Minimum hours required for this option: 38

The MSN in Nurse Anesthesia is a 28 month, 85 credit hour full time program. Additional requirements for the Nurse Anesthesia program include the submission of the Graduate Record Examination (GRE) general test scores. In addition, a minimum of two years of critical care experience as a Registered Nurse during which time the applicant has had the opportunity to function as an independent decision maker, demonstrate advanced psychomotor skills, and use and interpret advanced hemodynamic monitoring techniques. Review additional admission requirements for the Nurse Anesthesia program under the NA specialty link <http://www2.astate.edu/a/conhp/nursing/majors/master-of-science-in-nursing/nurse-anesthesia/index.dot>.

Program requirements for Nurse Anesthesia option include:

NURS 6523, Basic Principles of Anesthesia I

NURS 6113, Anesthesia Pharmacology I
NURS 6223, Anatomy, Physiology and Pathophysiology I
NURS 6042, Technology and Equipment for Nurse Anesthesia
NURS 6413, Advanced Chemistry and Physics Related to Anesthesia
NURS 6311, Clinical Practicum I
NURS 6533, Advanced Principles of Anesthesia I
NURS 6123, Anesthesia Pharmacology II
NURS 6233, Anatomy, Physiology and Pathophysiology II
NURS 6043, Regional Anesthesia and Analgesia
NURS 6322, Clinical Practicum II
NURS 6543, Advanced Principles of Anesthesia II
NURS 6243, Anesthesia Pharmacology III
NURS 6253, Anatomy, Physiology and Pathophysiology III
NURS 6333, Clinical Practicum III
NURS 6553, Advanced Principles of Anesthesia III
NURS 6103, Research Design and Methodology
NURS 6346, Clinical Anesthesia Practicum IV
NURS 6203, Theory Development in Nursing
NURS 6423, Professional Aspects of Nurse Anesthesia
NURS 6736, Clinical Internship I
NURS 6723, Synthesis Seminar I
NURS 6787, Clinical Internship II
NURS 6773, Synthesis Seminar II
NURS 6797, Clinical Internship III

Minimum hours required for this program: 85

GRADUATE CERTIFICATE IN HEALTH SCIENCES EDUCATION

The goal of this program is to provide the foundation framework for those seeking didactic or clinical education roles. Students will be exposed to a variety of educational theories and methodologies.

Core (15 credits):

CI 6533, Theories of Instruction
HP 6053, The Professorate
HP 6043, Measurement and Evaluation in Health Sciences
ELFN 6763, Philosophies of Education
NURS 6623, Curriculum Development in Health Professions

Electives (6 credits):

HP 5103, Patient Education: Teaching and Learning in Health Professions
HP 5113, Leadership in Health Professions
HP 6022, Clinical Education Methods
NURS 6001, Health Care Information Resources
NURS 6833, American Health Care Systems: Historical Perspectives
HP 6201-3, Independent Study

Minimum hours required for this certificate: 21

GRADUATE CERTIFICATE IN HEALTH CARE MANAGEMENT

The goal of this program is:

- To provide students with knowledge of the critical issues and concepts for effective management of health care organizations.
- To facilitate integration of key elements of effective health care management and how they work jointly to enhance the quality of healthcare and the performance of health care managers, and thus, the overall performance of the health care organization itself.
- To emphasize the importance of all aspects of health care management and their relationship in achieving and maintaining professionalism in internal/external customer relationships.
- To facilitate effective decision making in the day-to-day operations of the management of health care organizations.
- To provide the understanding of health care management processes and practices as they apply to diverse health care settings in such a way that they support long-term advancement and career opportunities in health care management.

Required Courses

Core (18 hours)

HP 6313 Topics in Healthcare Management
HP 6323 Healthcare Law and Quality Improvement
NURS 680V Healthcare Management Seminar
MGMT 6003 Organizational Behavior in Healthcare Organizations
FIN 6813 Healthcare Finance
MIS 6513 Healthcare Informatics

Electives (3 hours)

MKTG 6213 Healthcare Marketing
MGMT 6013 Human Resource Management for Health Care Organizations

Minimum hours required for this certificate: 21

GRADUATE CERTIFICATE PROGRAM IN AGING STUDIES

The goal of this program is to provide the foundation and interdisciplinary framework necessary for understanding aging processes and issues. The program enhances the development of an understanding and appreciation for the aging processes through knowledge of physical, psychological and social aspects of aging.

OBJECTIVES

- Understand the variety of contexts in which aging can be examined and their implications for practice;
- Identify how older persons are affected by the person-environment interaction;
- Identify and describe bio/psycho/social concepts and theories used to study aging;
- Recognize the influence of theories of aging on policies and procedures in practice;
- Understand the challenges and opportunities facing individuals, families and societies as members age chronologically and functionally;
- Recognize the relevance of age-related differences and changes over time in processes associated with aging within the context of applied research;
- Understand the ethical, legal, legislative, leisure and educational dimensions important in the field of aging;

- Understand critical thinking, problem-solving, and effective communication techniques relative to life-span development that affect personal awareness and behavior.

Admission Requirements

Applicants must meet the admission requirements of the Graduate School. To apply, obtain an application form from the Graduate School. Send completed application form, required application fee, and official transcripts of all undergraduate and graduate course work to the Graduate School.

Courses required for the Certificate in Aging Studies

Core (15 credits)

NURS 5013, Physical Health and Aging
 COUN 6423, Psychosocial Aspects of Aging
 SOC 5353, Sociology of Aging
 SOC 6123, Seminar: Aging, Law & Social Issues
 HP 6013, Interdisciplinary Capstone-Aging Studies

Electives (6 credits)

PSY 6413, Learning and Cognition in Adulthood
 SOC 5323, Applied Research
 SCOM 5403, Seminar in Health Communications
 SOC 5003, Perspectives on Health & Dying

Minimum hours required for this certificate: 21

GRADUATE CERTIFICATE IN ADDICTION STUDIES

This program is centered on rural social work practice centers in Northeast Arkansas. The curriculum is designed to equip social work practitioners in the application of evidence based practice and the 12-step planned change process of Alcoholics Anonymous. The curriculum is designed to teach graduates how to assess and treat addictions. Therefore, field placements must be in a substance abuse treatment setting or in an agency whose primary clients are in substance abuse recovery.

Track A (Social Work Students)

SW 6003 Psychopathology for Social Workers
 SW 5323 Substance Abuse and Dependence Interventions
 SW 6053 Clinical Practice with Group
 SW 6033 Clinical Practice with Individuals
 SW 6803 Full-Time Advanced Field I
 SW 6813 Full-Time Advanced Field II
 OR
 SW 6821 Part-Time Advanced Field I
 SW 6822 Part-Time Advanced Field II
 SW 6831 Part-Time Advanced Field III
 SW 6832 Part-Time Advanced Field IV

Total Hours: 18

Track B (Other Majors)

PSY 6533 Psychopathology
SW 5323 Substance Abuse & Dependence Interventions
COUN 6123 Group Dynamics
PSY 6113 Theories & Techniques in Helping Relationships
SW 5273 Practicum in Addiction Studies I
SW 5293 Practicum in Addiction Studies II

Total Hours: 18

**COLLEGE OF NURSING AND HEALTH PROFESSIONS
GRADUATE COURSE DESCRIPTIONS**

DEPARTMENT OF HEALTH PROFESSIONS

Communication Disorders

CD 5103 Fluency Disorders A study of speech as a time related adaptive behavior. Discussion of various types of fluency disorders, their identification, assessment and intervention. Restricted to students in the Communication Disorders graduate program and/or post degree students completing deficiency requirements.

CD 5254 Neurological Bases and Disorders of Human Communication A survey of the normal structure and function of the nervous system in human communication and resulting disorders that occur due to neurological dysfunction.

CD 5303 Language Intervention for Individuals with Mild Disabilities Assessment procedures for evaluating language disorders and language intervention procedures for individuals with mild disabilities.

CD 5403 Aural Rehabilitation Methods of instruction in auditory training, speech reading, and hearing aid orientation.

CD 5502 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 professor. Graduate enrollees will demonstrate research in communication with the deaf.

CD 5553 Craniofacial Anomalies and Communication Disorders A study of the speech, language, hearing, and swallowing disorders associated with cleft palate and other craniofacial syndromes.

CD 5703 Articulation and Phonological Disorders Principles and procedures for assessment, treatment, and facilitative techniques in disorders of articulation and phonology affecting various ages and cultures. Restricted to students in the Communication Disorders graduate program and/or post degree students completing deficiency requirements.

CD 5751 Clinical Practice I Stresses assessment, report writing, development of IEP and lesson plans. All students must complete this practicum under the supervision of ASU Speech and Hearing Center personnel. A minimum of 50 clock hours of clinical practice is required.

CD 580V Special Topics Workshop A specifically 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 can be repeated for credit.

CD 6001 Instrumentation in Communication Disorders "Hands-on" electro-physiological, electroacoustic, and psychoacoustic methods and procedures in the diagnosis, treatment, and research of communication disorders. Summer II.

CD 6003 Experimental Phonetics Study of the physical (acoustic), physiologic, and perceptual properties of the speech signal, its production and perception.

CD 6053 Research in Communication Disorders Study of problems and methods in communication disorders research. Critical examination of research design, procedures, and reporting of research studies in communication disorders.

CD 6063 Multicultural Issues in Communication Disorders A study of multicultural issues applicable to providing speech-language-hearing services. Nonbiased assessment and culturally relevant intervention procedures and strategies will be offered.

CD 6153 Voice Disorders Advanced study of voice anatomy and physiology; theories of voice production; voice disorders and pathologies and their treatment.

CD 6203 Cleft Palate and Cerebral Palsy Study of the speech, language, and hearing problems associated with these organic disorders.

CD 6243 Motor Speech Disorders A study of the clinical assessment and management of dysarthria, and apraxia of speech in adults and children.

CD 6253 Aphasia Study of models of language behavior. Evaluation of aphasic behavior and methods of rehabilitation. Neural anatomy and physiology underlying aphasic behavior examined.

CD 6303 Augmentative and Alternative Communication Theories, procedures, and materials for language intervention with individuals with moderate-profound disabilities. Alternative communication systems will be emphasized.

CD 6353 Language Intervention for At-Risk Infants and Toddlers The course explores language disorders associated with at-risk infants and toddlers as well as strategies for facilitating communication development to be implemented by professionals and family members. Prerequisite: CD 3303.

CD 6363 Language and Learning Disorders Study of the language demands encountered by school-age children, and the effects of language disorders on written language acquisition. Assessment and intervention will be emphasized.

CD 6503 Intervention in Communication Disorders Principles, methods, and procedures for providing clinical intervention to individuals with communication disorders.

CD 6513 Advanced Aural Rehabilitation Methods and procedures of complete hearing evaluation, hearing aid fitting, and aural rehabilitation.

CD 6603 Diagnosis in Communication Disorders Theory, practice, and in-

strumentation associated with assessing the communication skills of individuals with communication disorders.

CD 6653 Contemporary Issues and Practices in Communication Disorders A study of current issues which significantly impact the profession of communication disorders. These issues include, but are not limited to, best practices in service delivery for a variety of communication disorders, national health care reform, establishing a private practice, third party payment, and professional ethics.

CD 6713 Swallowing Disorders A study of the normal and disordered swallow (dysphagia). Emphasis on the clinical assessment and management of adult and pediatric swallowing and its disorders, from the perspective of a speech-language pathologist.

CD 6743 Neurogenic Language and Associated Cognitive Disorders An advanced study of language and associated cognitive behavior following neurologic pathology, from the perspective of a speech pathologist. Examination of the theoretical basis for the behaviors and their treatment. Includes detailed discussion of assessment and management strategies.

CD 6761 Clinical Practice II Stresses different types of intervention approaches and counting and charting responses. A minimum of 50 clock hours of clinical practice is required.

CD 6771 Clinical Practice III Stresses refinement of the clinical process and may include an internship in external settings to help in development of career goals. A minimum of 50 clock hours of clinical practice is required.

CD 6787 Clinical Practice IV Stresses refinement of the clinical process in an intensive internship setting. A minimum of 200 clock hours of clinical practice is required. Students can expect to obtain significantly more clock hours in this internship than the minimum requirement of 200. Completion of the internship as assigned by the clinic director is mandatory regardless of the date of completion of the minimum clock hour requirement.

CD 680V (1-3 hours) Independent Study

CD 689V (1-6 hours) Thesis

Disaster Preparedness & Emergency Management

DPEM 5513 Incident Command System Instructor Course Prepares students to utilize presentation techniques, conduct practical application, and prepare and maintain lesson plans appropriate to Incident Command System (ICS) requirements. Prerequisite: DPEM 3053 & DPEM 4053.

DPEM 5523 Law Enforcement Protection Instructor Course Provides students, future law enforcement supervisors and trainers, with the ability to train law enforcement responders in Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) -specific skills, reinforcing their ability to identify suspicious activity and respond to a CBRNE event. Prerequisite: DPEM 3053 & DPEM 4053.

DPEM 5533 All Hazards Awareness Instructor Course Provides instruction and guidance on educational methodologies to train others in Awareness Level Weapons of Mass Destruction. Students will participate in and/or develop training opportunities for response professionals. Prerequisite: DPEM 3053 & DPEM 4053.

DPEM 5543 Teaching Emergency Response Provides students, future emer-

agency responders, with the knowledge and skills to create and deliver Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) instruction to the adult learning audience. Prerequisite: CBRNE training course.

DPEM 5613 Radiological Emergencies Students review, discuss information, and practice skills necessary to effectively respond to a radiological incident. Topics include Radiological Concepts, Radiological Response Team Operations, Commercial Nuclear Power Facilities, Plume Modeling, Radiological Instrumentation, and Personal Protective Equipment (PPE) and Decontamination.

DPEM 6103 Health Care Issues And Policies Related To Disaster Preparedness And Emergency Management Evaluates existing governmental and institutional policies related to disaster preparedness and emergency management (DPEM). Formulation, implementation and evaluation of policy will be discussed. Students will propose and develop one new policy related to DPEM.

DPEM 6113 Theory Development In Disaster Preparedness And Emergency Management Incorporates the process of theory development in disaster preparedness and emergency management to facilitate formation of a conceptual basis for advanced knowledge and practice. Includes the analysis of various models and case studies.

DPEM 6123 Research Design And Methodologies In Disaster Preparedness And Emergency Management Considers quantitative and qualitative research methods in disaster preparedness and emergency management (DPEM). Review of current research in the field will be conducted. The course culminates in a research proposal in DPEM.

DPEM 6133 Ethics And Legal Considerations In Disaster Preparedness And Emergency Management Probes national and international ethical and legal frameworks of disaster preparedness and emergency management. Course content includes human rights and injustices associated with disasters and other emergencies and codes of ethics in emergency management.

DPEM 6143 Global Perspectives in Disaster Preparedness in Disaster Preparedness and Emergency Management Evaluates disaster preparedness around the world including the economic, health, political, psychosocial, cultural and religious impact of current and major historical disasters.

DPEM 6153 Crisis Communication In Disaster Preparedness And Emergency Management Analyzes the private and public exchange of information before, during and after a disaster. Multiple communication strategies will be explored, including the use of social media.

DPEM 6163 Managing Incidents In Disaster Preparedness And Emergency Management Concentrates on the management of disasters. Emphasis will be placed on the National Incident Management System and the five pillars of emergency management: prevention, preparedness, mitigation, response and recovery. A practicum experience is included.

DPEM 6213 Informatics In Disaster Preparedness And Emergency Management Incorporates the use of telecommunications and technology to support response efforts during and after a disaster. Public health biosurveillance will be examined. Legal and ethical considerations in information technology will be analyzed.

DPEM 6223 Epidemiology Of Disasters Measurement of adverse health effects of natural and human disasters as well as factors contributing to those effects. Assesses needs of disaster-affected populations and then matches resources to prevent further adverse

health effects. Evaluates program effectiveness and plans for contingencies.

DPEM 6253 Multi-Agency Response In Disaster Preparedness And Emergency Management Examines multi-agency response to disasters and other emergencies to include government agencies, non-government organizations and the private sector. Cooperation and collaboration among the agencies will be analyzed. Pre and post-disaster planning and mobilization of resources will be emphasized.

DPEM 6263 Geographical Information Systems In Disaster Preparedness And Emergency Management Utilizes geographic information systems (GIS) to support planning, response and recovery efforts during and after a disaster. Includes a laboratory experience in GIS.

DPEM 6273 Vulnerable Populations In Disasters Analyzes the effects of disaster on vulnerable populations. Conceptual frameworks and characteristics of vulnerable population will be utilized to determine preparedness, planning, mitigation, response and recovery during disasters for these groups of people.

DPEM 6543 Pandemic Planning Promotes knowledge and skills to effectively plan and prepare for a pandemic, culminating in a practical exercise. Steps for developing an effective planning and preparedness program and development of a pandemic annex are included.

DPEM 6553 Leading Hospital Response To Mass Casualties Prepares hospital leadership to utilize the Hospital Incident Command System (HICS). Integrates the community emergency response network with the operation of an Emergency Treatment Area (ETA). Includes hospital personnel as first responders during a Mass Casualty Incident involving patient contamination. Prerequisite: DPEM 1101, DPEM 1111 and DPEM 1121.

DPEM 6563 Leading Hospital Response To Mass Casualties Instructor Course Provides students with instructional presentation guidance specific to Hospital Emergency Response Training (HERT) course materials. Upon completion students may serve as trainers for a hospital emergency response team. Prerequisite: DPEM 6553.

DPEM 6573 Complex Radiological Emergencies Provides students with skills necessary to respond to and manage incidents involving radiological hazards through a practical, performance-oriented, team-response approach. Includes lectures, hands-on training, and exercises, culminating with an exercise utilizing emergency response skills and training learned. Prerequisite: DPEM 1101, DPEM 1201 and DPEM 3013.

DPEM 661V Seminar Topics In Disaster Preparedness & Emergency Management This course is discussion driven by current events related to disaster preparedness and emergency management. Discussion will focus on analysis of a current event, applicable research, historical events of similar significance and other emergency management issues in the news.

DPEM 662V Research Assistant/Practicum Students will be assigned a mentor who is currently conducting research in disaster preparedness and emergency management. Students may enroll for one, two or three credits per semester.

DPEM 6631 Disaster Preparedness And/Or Emergency Management Conference Presentation Students develop, submit and present either a poster or platform presentation at a disaster preparedness and/or emergency management conference. This will require coordination with the faculty of record prior to submitting abstract to conference planners.

DPEM 6643 Practicum Experience Students will work with an expert in disaster preparedness or emergency management. The mentor must be approved by the faculty. The student may suggest mentors or the faculty may assign a mentor.

DPEM 665V Internship, Research Project Or Thesis In Disaster Preparedness & Emergency Management A culminating experience that is one of the following: an internship with a subject matter expert, a research project or a thesis in Disaster Preparedness & Emergency Management. Prerequisite: Permission of the faculty.

Health Professions

HP 5103 Patient Education: Teaching and Learning in Health Professions This course provides a framework for understanding the linkage between teaching and learning. Teaching strategies and methodologies that compare and contrast teacher centered versus patient-centered approaches are presented.

HP 5113 Leadership in Health Professions This course examines models of leadership, both historical and contemporary, and how these models can be applied in the health care setting.

HP 5133 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.

HP 6013 Interdisciplinary Capstone - Aging Studies Provides the learner with an integrated, multidisciplinary approach to the study of aging and the opportunity to apply issues within the field of aging in a collaborative fashion. Topics investigated include the social, psychological, and physical perspectives of aging, administration issues, and health promotion.

HP 6022 Clinical Education Methods Provides the learner with an integrated, multidisciplinary approach to the study of clinical education and the opportunity to apply issues within the field of clinical education in a collaborative fashion.

HP 6023 Health Policy and Economic Issues This course will focus on the principles of health economics essential to understanding current trends in the health care field and the development and implementation of health policy.

HP 6033 Data Analysis in Health Professions This course addresses the theory and mechanics of data analysis related to basic and applied research in the health professions. The course includes the use of statistical analysis using computerized programs such as SPSS. Topics range from basic descriptive statistics to inferential analysis.

HP 6043 Measurement and Evaluation in Health Sciences This course presents the theories of evaluation as related to the student and the various educational activities. Types of evaluation, appropriate application, preparation, and scoring of evaluation instruments are all critical topics included in this course.

HP 6053 The Professorate The role and responsibilities of faculty in health education including how to access literature, improving teaching skills, correlate health research information, and maintain a balance between scholarship, service and teaching.

HP 6113 U.S. Health Care This course examines the American health care system in terms of how the system is constructed, how it is administered, how it is financed, and how

the health care manager can effectively interact within the system.

HP 620V (1-3 hours) Independent Study Student may select, with permission of their adviser and faculty supervision, an area for intensive study, practice or investigation related to their plan of study.

HP 6313 Topics in Healthcare Management A survey of topics in the American healthcare system, providing an introductory understanding in the history of healthcare finance and delivery; ethics in the finance and delivery of healthcare; healthcare economics; healthcare stakeholders and policy-making; and healthcare marketing.

HP 6323 Healthcare Law and Quality Improvement A study of law and quality improvement in healthcare management that will consider an overview of the role and the primary regulation promulgated by public and private regulators of healthcare; and statistical process controls to improve the quality of healthcare services. Nursing administration students must take prior to enrollment in first clinical course.

HP 660V (1-6 hours) Internship in Health Sciences This program is designed to provide a purposeful experience in settings appropriate to the student's graduate emphasis. This course provides comprehensive, independent practice experiences under the guidance of a faculty approved preceptor. Must be enrolled for subsequent semesters until completion of the internship (6 credits).

HP 670V (1-6 hours) Thesis Completion of Thesis research under the direction of a faculty thesis adviser and committee. Must be enrolled in subsequent semesters until completion of thesis (6 credits).

Physical Therapy

PT 7113 Gross Anatomy Study of the structure and function of the human limbs, spine, head and neck; regional description with emphasis on the muscular, skeletal, nervous, and vascular systems of the limbs and spine. Restricted to Doctor of Physical Therapy majors.

PT 7123 Introduction to Research and Evidence Based Practice Provide learners with the prerequisite integrated knowledge and skills required to assimilate, prepare, and present research necessary for evidence based practice. Restricted to Doctor of Physical Therapy majors.

PT 7141 Research I The first of three mentored research courses designed to culminate in a project suitable for presentation or publication. Students will work with an assigned faculty advisor and develop projects related to the faculty advisor's area of knowledge and interest. Restricted to Doctor of Physical Therapy majors.

PT 7213 Movement Science Anatomical and biomechanical analysis of normal and abnormal human motion, including posture and gait, and their implications for physical therapy. Restricted to Doctor of Physical Therapy majors.

PT 7224 Neuroscience Analysis of the structure and function of the human nervous system for physical therapy majors. Restricted to Doctor of Physical Therapy majors.

PT 7243 Integumentary Pathologies, impairments, functional limitations, and disabilities of individuals with integumentary system dysfunction; review of relevant anatomy, physiology and pathophysiology of the integumentary system; physical therapy management

of individuals with compromised integumentary system. Restricted to Doctor of Physical Therapy majors.

PT 7252 Psychosocial Issues in Physical Therapy Physical therapists' role in management of psychosocial issues affecting patient care including loss and grieving, self concept, socio-cultural considerations, stress and coping, motivational issues and terminal illness. Restricted to Doctor of Physical Therapy majors.

PT 7314 Exercise Physiology Provides learners with an integrated knowledge and application of physiological principles related to the provision of patient care in physical therapy. Topics include musculoskeletal, neurological, renal, and cardiopulmonary systems at rest and with acute/chronic exercise. Restricted to Doctor of Physical Therapy majors.

PT 7323 Imaging and Pharmacology An overview of radiologic imaging and pharmacology in physical therapy practice, with the radiology portion covering the indications, uses, limitations and advantages of imaging techniques, and the pharmacology portion covering the pharmacokinetics and pharmacodynamics of various pharmacologic interventions. Restricted to Doctor of Physical Therapy majors.

PT 7343 Administration This course addresses principles of health care administration, with an emphasis on the US healthcare system including acute, skilled nursing, home health, outpatient, and hospice care; legal and ethical issues, business basics, risk management and accreditation. Restricted to Doctor of Physical Therapy majors.

PT 7413 Pathophysiology and Differential Diagnosis This course examines the influence of disease on different body systems. Content examines the effects of pathological and age-related changes on health and human movement. The course includes differential diagnosis and basic pharmacological principles for a variety of pathologies. Restricted to Doctor of Physical Therapy majors.

PT 7444 Cardiopulmonary Addresses the physical therapy of management cardiopulmonary dysfunction, with emphasis on pathologies, impairments, functional limitations, and disabilities associated with the dysfunctions, and the development of a systematic approach to examination, evaluation, diagnosis, prognosis, and intervention. Restricted to Doctor of Physical Therapy majors.

PT 7512 Professional Issues I: Introduction to DPT Practice Introduction to the Guide to Physical Therapist Practice, professional association, professional behaviors, leadership, and regulation of the profession. Students are introduced to the various aspects of physical therapist practice including components of the physical therapist examination process with emphasis on acquiring skill in history, interviewing, systems review and clinical documentation; fundamental skills in patient handling and physical examination are also introduced. Restricted to Doctor of Physical Therapy majors.

PT 7534 Clinical Procedures: Introductory Tests, Measures and Interventions Tests and measures of range of motion, muscle performance, posture, gait & balance are introduced. The clinical intervention procedure introduced is therapeutic exercise covering basic principles and techniques of flexibility exercises; strength and power exercises; and aerobic exercises. Restricted to Doctor of Physical Therapy majors.

PT 7612 Methods of Instruction and Consultation This course addresses the role of the therapist as educator, with emphasis on principles and methods of effective instruction, feedback, and consultation along with the various forms of educational and instructional technologies. Restricted to Doctor of Physical Therapy majors.

PT 7624 Electrotherapy and Physical Agents Introduction to the theory and applications of thermal modalities and electrotherapy to human tissue. Indications, contraindications, and precautions for thermal modalities, and electrotherapy are covered. Clinical decision making and appropriate applications of the modalities are emphasized. Restricted to Doctor of Physical Therapy majors.

PT 7733 Clinical Education I One of a series of supervised clinical education courses, which provides students an opportunity to integrate previously learned academic coursework into actual clinical practice, culminating with entry level performance at conclusion of all clinical education courses. Restricted to Doctor of Physical Therapy majors.

PT 7832 Clinical Education II One of a series of supervised clinical education courses, which provides students an opportunity to integrate academic coursework into clinical practice in inter-professional and non-traditional settings. Restricted to Doctor of Physical Therapy majors.

PT 8143 Neuromuscular I Theoretical foundations of neuromuscular rehabilitation including normal and abnormal movement, neuroplasticity, motor control, and motor learning. Basic treatment principles are introduced. Restricted to Doctor of Physical Therapy majors.

PT 8151 Research II The second of three mentored research courses designed to culminate in a project suitable for presentation or publication. Students will continue developing projects related to the faculty advisor's area of knowledge and interest. Restricted to Doctor of Physical Therapy majors.

PT 8163 Clinical Education III One of a series of supervised clinical education courses, which provides students an opportunity to integrate previously learned academic coursework into actual clinical practice, culminating with entry level performance at conclusion of all clinical education courses. Restricted to Doctor of Physical Therapy majors.

PT 818V Independent Study and Culminating Experience This is an independent study that is designed to meet the individual needs of the student. The course work is designed on an individual basis. Restricted to Doctor of Physical Therapy majors.

PT 8245 Musculoskeletal I Management of musculoskeletal cases of the upper and lower extremities incorporating anatomy, biomechanics, pathology, clinical diagnosis, and intervention. Emphasis is on clinical decision making in all patient-therapist interaction. Education, prevention, ergonomics, pain management, and conditioning also covered. Restricted to Doctor of Physical Therapy majors.

PT 8255 Musculoskeletal II Management of musculoskeletal cases of the spine and TMJ incorporating anatomy, biomechanics, pathology, clinical diagnosis, and intervention. Emphasis is on clinical decision making in all patient-therapist interaction. Education, prevention, ergonomics, pain management, and conditioning also covered. Restricted to Doctor of Physical Therapy majors.

PT 8263 Clinical Education IV One of a series of supervised clinical education courses, which provides students an opportunity to integrate previously learned academic coursework into actual clinical practice, culminating with entry level performance at conclusion of all clinical education courses. Restricted to Doctor of Physical Therapy majors.

PT 8272 Professional Issues II Exploration of the roles of physical therapist in clinical practice and ethical and legal dilemmas faced by physical therapists; design of a professional development plan. Restricted to Doctor of Physical Therapy majors.

PT 8352 Health and Wellness This course covers wellness, fitness, prevention and health promotion from an interdisciplinary perspective. Students will be introduced to concepts of wellness that include physical, social, environmental, emotional, intellectual and spiritual components. Restricted to Doctor of Physical Therapy majors.

PT 8571 Research III The final research course designed to culminate in a project suitable for presentation or publication. Restricted to Doctor of Physical Therapy majors.

PT 8573 Special Topics in Physical Therapy This course provides the opportunity for students to gain knowledge and skills in advanced and specialty areas of physical therapy practice. Restricted to Doctor of Physical Therapy majors.

PT 8585 Clinical Education V One of a series of supervised clinical education courses, which provides students an opportunity to integrate previously learned academic coursework into actual clinical practice, culminating with entry level performance at conclusion of all clinical education courses. Restricted to Doctor of Physical Therapy majors.

PT 8653 Neuromuscular II Examination, assessment and treatment planning for pediatric population with a broad spectrum of neurological conditions, including cerebral palsy, genetic disorder, etc. Restricted to Doctor of Physical Therapy majors.

PT 8674 Musculoskeletal III The terminal course in Musculoskeletal sequence. Intended to offer the student an opportunity to engage in an intensive and comprehensive immersion into the management of the patient with musculoskeletal dysfunction leading to effective clinical practice. Restricted to Doctor of Physical Therapy majors.

PT 8685 Clinical Education VI One of a series of supervised clinical education courses, which provides students an opportunity to integrate previously learned academic coursework into actual clinical practice, culminating with entry level performance at conclusion of all clinical education courses. Restricted to Doctor of Physical Therapy majors.

PT 8754 Neuromuscular III Management of neuromuscular conditions associated with upper motor neuron pathology. Focus will include physical therapy examination, evaluation, diagnosis, prognosis and treatment planning/strategies. Restricted to Doctor of Physical Therapy majors.

PT 8774 Neuromuscular IV Management of neuromuscular conditions associated with lower motor neuron pathology. Focus will include physical therapy examination, evaluation, diagnosis, prognosis and treatment planning/strategies. Restricted to Doctor of Physical Therapy majors.

PT 8872 Clinical Decision Making models for clinical reasoning and decision making; factors influencing clinical decisions; management of complex patient problems. Restricted to Doctor of Physical Therapy majors.

Social Work

SW 5003 Human Behavior and the Social Environment I This course provides the student with a broad understanding of how individuals develop from birth to older age from psychological, psychiatric, Sociological, Social psychological, and human diversity perspectives. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5023 Foundations of Practice I This course will introduce the student to social work practice with individuals. Social, psychological, economic, and biological stressors are

considered as they impact on the individual. The development approaches are the major orientations presented, augmented by various intervention modalities. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5043 Foundations of Practice II Focus of this course is on the theory and practice of social group work in clinical settings. Consideration is given to such issues as group dynamics, leadership, composition, direct and indirect intervention, the use of group activities under various conditions and different settings. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5053 Social Welfare Policy/Services The purpose of this course is to establish the subject area of social welfare policy as a central concern of social work. The goals of the course are to help students identify socio-cultural and economic bases of social welfare in America. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5063 Social Justice and Diversity This course focuses on issues of diversity, oppression and social justice. It is designed to prepare social work students to be knowledgeable of people's biases. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5113 Graduate Intro to Social Work This is a graduate level introductory course for students who have baccalaureate degrees in fields other than social work. This course will provide students with an opportunity to explore the social work profession.

SW 5223 Rural Social Work This course is designed to explore the unique aspects of social work practice in rural areas using an ecosystems perspective. The roles and functions of social workers will be addressed as well as the ethical dilemmas frequently encountered in rural practice. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5233 International Social Work The course examines the effects of globalization on human needs. Special attention is given to linkages between human rights, social justice, and social work. The course explores specific problems such as HIV, street children and domestic violence in developing countries as well as strengths and resiliency demonstrated by these countries. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5273 Practicum in Addiction Studies The first practicum experience of 180 hours in an agency whose primary clients are in substance abuse recovery. Students will receive onsite supervision from clinical supervisors with special training and credentials in substance abuse. Students will meet as a group weekly for faculty supervision. Prerequisite: SW 5323 Substance Abuse: Intervention and Treatment.

SW 5293 Practicum in Addiction Studies II The second practicum experience of 180 hours in an agency whose primary clients are in substance abuse recovery. Students are expected to have responsibility for clients within an approved agency. Further the student will demonstrate proficiency in outcome measurement and goal attainment. Prerequisite: SW 5323 Substance Abuse: Intervention and Treatment, SW 5273 Practicum in Addiction Studies I

SW 5323 Substance Abuse and Dependence Interventions The course is designed to assist students to deepen and extend their assessment and intervention skills in Substance Abuse and Dependence Interventions.

SW 5333 Human Behavior and the Social Environment II This course examines individual growth from a macro perspective. Examined is how families, groups, organizations, and communities impact individual develop from birth to older age from psychological, psychiatric, sociological, Social psychological and human diversity perspectives. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5373 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.

SW 560V Independent Study Individually directed problems in Social Work. Must be arranged with the professor and approved by department chair. Restricted to graduate social work students.

SW 5802 Part-Time Foundation I This part-time foundation field placement focuses on the development of rural-based generalist practice knowledge and skills. Placements in the foundation curriculum are designed to provide students with opportunities to integrate and enhance social work values, ethics, and develop generalist practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5803 Full-Time Foundation Field I This first full-time foundation field placement focuses on the development of rural-based generalist practice knowledge and skills. Placements in the foundation curriculum are designed to provide students with opportunities to integrate and enhance social work values, ethics, and develop generalist practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5812 Part-Time Foundation Field II This second part-time foundation field placement continues to focus on the development of rural-based generalist practice knowledge and skills. Placements in the foundation curriculum are designed to provide students with opportunities to integrate and enhance social work values, ethics, and develop generalist practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5813 Full-Time Foundation Field II This second full-time foundation field placement continues to focus on the development of rural-based generalist practice knowledge and skills. Placements in the foundation curriculum are designed to provide students with opportunities to integrate and enhance social work values, ethics, and develop generalist practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 5822 Part-Time Foundation Field III This third part-time foundation field placement continues to focus on the development of rural-based generalist practice knowledge and skills. Placements in the foundation curriculum are designed to provide students with opportunities to integrate and enhance social work values, ethics, and develop generalist practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6003 Psychosocial Pathology for Social Work Practice This course provides students with knowledge of psychopathology as an aspect of human behavior and cultural labeling. Primary focus is on the interaction between physiological, development, emotional, biological, and social aspects of adult and child psychopathology. Prerequisite: This course is restricted to Graduate Social Work Students and students completing the Graduate Addictions Studies Certificate.

SW 6013 Social Work Ethics This course will review the ethical dimensions of the mission of the profession of social work. The purpose of this course is to enable students to become sensitive and responsive to ethical issues and dilemmas at all levels of social work practice. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6023 Social Work Evaluation & Research This course focuses on the development of knowledge and skills necessary to evaluate rural-based clinical practice with individuals, families, and small groups. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6033 Clinical Practice with Individuals This course is designed to assist students in development of their clinical assessment and intervention skills with individuals. The course presents the theoretical basis of individual focused models of assessment and intervention in rural-based clinical social work practice. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6043 Clinical Practice with Families This course is designed to assist students to deepen and extend their assessment and intervention skills in rural-based clinical practice with families. The course presents the theoretical basis of family focused models of assessment and intervention. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6053 Clinical Practicum with Groups This course focuses on the theory and practice of rural-based clinical social work practice with groups. Students will master an understanding of group work theories, interventions and techniques applied to persons with a range of issues. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6063 Social Work Policy Analysis This graduate course builds on SW 5053 (Social Welfare Policy and Services I) and/or SW 4303 (Social Welfare Policy) and focuses on the use of various conceptual frameworks in studying and analyzing current social policy issues. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6073 Integrative Research Project The purpose of the course is for graduate social work students to critically analyze and demonstrate the ability to integrate knowledge and proficiency within the broad philosophical base of social work practice. Prerequisite: Graduate Social Work Student

SW 6323 Clinical interventions with Substance Abuse & Dependence This course is designed to provide practitioners with strategies for interventions with persons who abuse or are dependent on mind altering or mood altering substances. Prerequisite: This course is restricted to graduate students who have completed SW 5323.

SW 6343 Clinical Intervention with Children This course is designed to provide advanced clinical practice, knowledge, and skills for intervention with children and youth primarily in the context of the rural environment. The special needs and vulnerabilities of high-risk children and youth are also addressed. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6803 Full-Time Advanced Field I This first full-time advanced field placement focuses on the development of rural-based clinical practice knowledge and skills. Placements are designed to provide students with opportunities to integrate and enhance social work values, ethics, and to develop clinical practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 6813 Full-Time Advanced Field II This second full-time advanced field placement focuses on the development of rural-based clinical knowledge and skills. Placements are designed to provide students with opportunities to integrate and enhance social work values, ethics, and to develop clinical practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 681V Part-Time Advanced Field I This first part-time advanced field placement focuses on the development of rural-based clinical practice knowledge and skills. Placements are designed to provide students with opportunities to integrate and enhance social work values, ethics, and to develop rural-based clinical practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 682V Part-Time Advanced Field II This second part-time advanced field placement focuses on the development of rural-based clinical practice knowledge and skills. Placements are designed to provide students with opportunities to integrate and enhance social work values, ethics, and to develop rural-based clinical practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 683V Part-Time Advanced Field III This third part-time advanced field placement focuses on the development of rural-based clinical practice knowledge and skills. Placements are designed to provide students with opportunities to integrate and enhance social work values, ethics, and to develop rural-based clinical practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SW 684V Part-Time Advanced Field IV This fourth part-time advanced field placement focuses on the development of rural-based clinical knowledge and skills. Placements are designed to provide students with opportunities to integrate and enhance social work values, ethics, and to develop rural-based clinical practice skills. Prerequisite: This course is restricted to Graduate Social Work Students.

SCHOOL OF NURSING

Nursing and Health Professions

Master of Science in Nursing

NURS 5013 Physical Health and Aging — Interdisciplinary Aging Studies A multidisciplinary course addressing normal physical aging and health related issues of aging. Emphasis is on acute and chronic illnesses and disorders associated with aging, use of health services, caregivers, and health promotion.

NURS 6001 Health Care Information Resources Designed to equip learner with the necessary attitudes and behaviors to effectively use current and emerging electronic information resources to facilitate provision of health care.

NURS 6003 Advanced Clinical Physiology Complex physiological processes in adults which occur with disease, adaptation, and therapeutic intervention. Must be taken prior to clinical nursing courses.

NURS 6013 Advanced Clinical Pharmacology Designed to provide a basis for making clinical decisions in the pharmacologic management of commonly-occurring health problems of primary care patients. Prerequisite: Undergraduate course in pharmacology; admission to the graduate nursing program; NURS 6003 or concurrent enrollment. NOTE: FNP students are required to take the semester immediately prior to beginning clinical portion of FNP option.

NURS 6023 Advanced Assessment and Diagnostic Evaluation Presents theoretical and clinical basis for comprehensive assessment and diagnosis in primary health care settings, including all age groups. Emphasis is on clinical decision-making, differentiation of normal from pathological findings, risk assessment screening, diagnostic testing and interpretation of findings. Prerequisites: Undergraduate Health Assessment course (minimum of a B). If a student has a "C" in physical assessment, proficiency may be demonstrated. NURS 6003 or concurrent enrollment. [NOTE: FNP students are required to take the semester immediately prior to beginning clinical portion of FNP option].

NURS 6042 Technology and Equipment for Nurse Anesthesia The course focus is on equipment, monitoring, and technology related to perioperative anesthesia practice. Prerequisites: Registered Nurse admitted to Nurse Anesthesia program.

NURS 6043 Regional Anesthesia and Analgesia The course focus is on anatomy,

pharmacology and anesthetic techniques of regional anesthetics and analgesia. Prerequisites: Registered Nurse admitted to Nurse Anesthesia program.

NURS 6103 Research Design and Methodology Analysis and critical evaluation of nursing research appropriate to the study of nursing phenomena. Students develop a research proposal. Prerequisite: Undergraduate research and graduate level statistics.

NURS 6113 Anesthesia Pharmacology I General principles of pharmacology, including pharmacokinetic and pharmacodynamics, classifications of drugs and clinical pharmacology in anesthetic practice. Focus is primarily on inhaled anesthetics, intravenous anesthetics, muscle relaxants/antagonists and local anesthetics. Prerequisites: Registered Nurse admitted to Nurse Anesthesia program.

NURS 6123 Anesthesia Pharmacology II The focus of this course is on the pharmacodynamics, pharmacokinetics, anaphylaxis and drug interactions of autonomic and cardiovascular drugs, CNS drugs, diuretics and herbal medicine used in perioperative anesthetic practice. Prerequisites: NURS 6113 and Registered Nurse admitted to Nurse Anesthesia program EXCEPT in nurse anesthesia program.

NURS 6203 Theory Development in Nursing Examines the process of theory development in nursing and facilitates formation of a conceptual basis for advanced knowledge and practice. Includes analysis of various models and their application to advanced clinical practice. Must be taken prior to clinical nursing courses except in Nurse Anesthesia program.

NURS 6223 Anesthesia Anatomy, Physiology and Pathophysiology I Course focus is on the effects of anesthesia at the cellular level progressing to the advanced study of the cardiovascular, hematological and renal systems. Prerequisites: Registered Nurse admitted to Nurse Anesthesia program.

NURS 6233 Anesthesia Anatomy, Physiology and Pathophysiology II This course is a continuation of the advanced study of anatomy, physiology and pathophysiology with focus primarily on the respiratory, central nervous, endocrine and hepatic systems. Prerequisites: NURS 6223 and Registered Nurse admitted to Nurse Anesthesia program.

NURS 6243 Anesthesia Pharmacology III In-depth study of pharmacology of the cardiovascular, nervous, respiratory systems, and local anesthetics. Prerequisites: NURS 6123.

NURS 6253 Anesthesia Anatomy, Physiology and Pathophysiology III An in-depth concise study of anatomy, physiology and pathophysiology that is relevant to the perioperative anesthesia management. Prerequisites: NURS 6233.

NURS 6303 Health Care Issues and Policy Critical analysis of health care issues and policy which influence advanced nursing practice and the health care system. Prerequisites: NURS 6402 or permission of instructor.

NURS 6311 Clinical Practicum I Clinical activities include performing a complete anesthesia apparatus checkout, assembling basic drugs and monitors for an anesthetic, perioperative anesthesia assessment, formulating an anesthesia management plan for an ASI I patient, documentation, philosophy and ethical considerations in anesthesia practice. Prerequisites: NURS 6013, NURS 6003, Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6313 Power, Politics and Influence This course will analyze and evaluate the implementation of roles and functions of nursing administrative executives and managers in health care organizations. Leadership strategies and evidence based decision making are included. Prerequisite: NURS 6303

NURS 6322 Clinical Practicum II Clinical activities emphasize patient safety, monitoring and infection control. Residents have the opportunity to participate in the administration of anesthetics for patients requiring all types of anesthesia including pain management. Prerequisites: NURS 6013, NURS 6003, NURS 6311, NURS 6523, NURS 6113, NURS 6223, NURS 6042, NURS 6413, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6323 Case Management Across the Care Continuum Methodology for evolving case management theory and techniques in changing health care environment. Principles of managed care are incorporated including utilization management and quality improvement techniques. Prerequisites: Admission to graduate study.

NURS 6333 Clinical Practicum III Clinical experience in a hospital setting will correlate with concepts taught in Advanced Principles of Anesthesia II and III. Residents will begin to develop expertise in the administration of all types of general and regional anesthesia including pain management to all types of patients. Prerequisites: NURS 6533, NURS 6123, NURS 6233, NURS 6043, NURS 6321, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6346 Clinical Practicum IV Clinical experience in the clinical setting will correlate with concepts taught in Advanced Principles of Anesthesia III and IV. Residents begin to develop expertise in the administration of all types of general and regional anesthesia including pain management to all types of patients. Prerequisites: NURS 6543, NURS 6333, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6353 Budgeting and Financial Management This course will provide an understanding of theoretical and practical applications of healthcare economics and incorporate these concepts into nursing practice, nursing leadership and health care delivery. Emphasis is on financial planning, budgeting, and reimbursement. Nursing administration students must take prior to enrollment in first clinical course.

NURS 6402 Professional Role Development in Advanced Nursing The study of role development with an emphasis on role making, intra- and interdisciplinary communication and strategies for role implementation. Must be taken prior to, or concurrent with first clinical course.

NURS 6413 Advanced Chemistry and Physics Related to Anesthesia Principles of chemistry and physics related to anesthetic practice. Basic knowledge for administering safe, physiologic anesthetic, utilizing the machine and monitoring devices. Prerequisites: Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6423 Professional Aspects of Nurse Anesthesia Focuses on professional roles and issues, changes in healthcare, and influence of CRNAs in the marketplace and policy arena. Prerequisites: Students enrolled in the Nurse Anesthesia program.

NURS 6443 Advanced Adult Health Nursing I Study of problems of adult populations with acute illnesses. Emphasis on theories, models and concepts that facilitate recovery and return to optimal health. Prerequisites: NURS 6003, NURS 6013, NURS 6023, NURS 6203. Pre- or co-requisite: NURS 6103, NURS 6402.

NURS 6453 Advanced Adult Health Nursing II Study of problems with adult populations with chronic illness. Emphasis on theories, models and concepts that facilitate maintenance of chronic health problems and contribute to quality of life. Prerequisites: NURS 6003, NURS 6013, NURS 6023, NURS 6203. Pre- or co-requisite: NURS 6103, NURS 6402.

NURS 646V Advanced Adult Health Nursing Practicum Required practicum

with application of theories, models, and concepts for acute and chronic health problems. Emphasis on evidence based interventions and measured nursing outcomes. Prerequisites: NURS 6003, NURS 6013, NURS 6023, NURS 6203. Pre- or corequisite: NURS 6103, NURS 6402, NURS 6443 or NURS 6453.

NURS 6473 Advanced Adult Health Clinical Synthesis Culminating clinical course for implementation of clinical nurse specialist role in an area of emphasis. Pre-requisites: NURS 6443, NURS 6453, completion of required clinical hours in NURS 646(1-6).

NURS 6512 FNP Clinical Management I Practicum Clinical application of theoretical bases for management of clients and families who are well or have minor health problems. Prerequisites: NURS 6003, NURS 6013, NURS 6023, NURS 6203; acceptance to FNP track. Pre- or co-requisites: NURS 6103, NURS 6402. Co-requisite: NURS 6513.

NURS 6513 FNP Clinical Management I Study of theoretical and clinical bases for management of clients and families who are well or have minor health problems. Application of principles through case studies of clients across the lifespan. Prerequisites: NURS 6003, NURS 6013, NURS 6023, NURS 6203; acceptance to FNP track. Pre- or corequisite: NURS 6103, NURS 6402. Co-requisite: NURS 6514.

NURS 6514 FNP Clinical Management I Practicum Clinical application of theoretical bases for management of clients and families who are well or have minor health problems. Prerequisites: NURS 6003, NURS 6013, NURS 6023, acceptance to FNP track, Pre or co-requisites NURS 6103, NURS 6402, Co-requisite NURS 6513.

NURS 6523 Basic Principles of Anesthesia I The study of basic principles of anesthesia techniques and procedures including perioperative assessment, formulation of anesthesia management plans, positioning, airway management, and orientation to safe use and care of equipment. Prerequisites: NURS 6013, NURS 6003, Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6533 Advanced Principles of Anesthesia I Advanced principles of perioperative anesthetic management including anatomy, physiology, pathophysiology, pharmacology and techniques and procedures related to pediatrics, obstetrics, and geriatrics. Prerequisites: NURS 6523, NURS 6113, NURS 6042, NURS 6223, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6543 Advanced Principles of Anesthesia II Advanced principles of anesthetic management including anatomy, physiology, pathophysiology, pharmacology and techniques and procedures related to cardiovascular, thoracic, head and neck, orthopedic and laser surgery. Prerequisites: NURS 6533, NURS 6123, NURS 6233, NURS 6312, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6553 Advanced Principles of Anesthesia III Advanced Principles of anesthetic management including anatomy, physiology, pathophysiology, pharmacology and techniques and procedures related trauma, burns and neurosurgical anesthetics.

NURS 6613 FNP Clinical Management II The study of theoretical and clinical bases for management of clients and families who have minor or chronic health problems. Application of principles through case studies and development of protocols for clients across the lifespan. Prerequisites: NURS 6003, NURS 6013, NURS 6023, NURS 6203; Pre- or co-requisites: NURS 6103, NURS 6402, NURS 6513.

NURS 6614 FNP Clinical Management II Practicum The clinical application of theoretical bases for management of clients and families who have minor or chronic health

problems. Pre-requisites: NURS 6402, NURS 6103, NURS 6513, NURS 6512, NURS 6613. Pre- or co-requisite: NURS 6303.

NURS 6623 Curriculum Development in Health Professions This course explores curriculum development in health professions. Emphasis is on education and competency practice links.

NURS 6713 Practicum in Nursing Education Experiential course in the role of nurse educator. Opportunity to apply models of teaching in classroom and clinical situations. Admission to graduate study; permission of instructor. Prerequisites: NURS 6623, NURS 6853, HP 6043.

NURS 6723 Synthesis Seminar I A comprehensive review and synthesis of basic sciences, equipment, basic principles, advanced principles, and professional issues of nurse anesthesia practice. Prerequisites: NURS 6553, NURS 6343, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6736 Clinical Internship I Clinical experience in clinical setting will correlate with concept taught in Synthesis Seminar I. Residents begin independent management of all types of general and regional anesthesia including pain management to patients undergoing all procedures with clinical instructors in consultation. Prerequisites: NURS 6553, NURS 6343, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6753 FNP Clinical Synthesis Seminar Culminating course for analysis of application of nursing theory and research/role concepts, and exploration of issues specific to the role implementation, in family nurse practitioner practice. Final semester of enrollment. Pre-requisites: NURS 6613, NURS 6616. Concurrent enrollment in NURS 6818.

NURS 6762 Applied Clinical Research and Role Seminar Culminating course for analysis of clinical outcomes and roles in advanced practice with adult populations and/or nursing administration or nurse educator options. Required professional paper. Prerequisites: NURS 6443, NURS 6453, completion of required clinical hours in NURS 646(1-6) or will complete clinical hours in NURS 646(1-6). Concurrent enrollment in NURS 6473, NURS 6713 or NURS 687V.

NURS 6773 Synthesis Seminar II A continuing comprehensive review and synthesis of anatomy, physiology, pharmacology, basic and advanced principles of anesthesia covering the full scope of anesthesia practice in preparation for the national qualification examination. Prerequisites: NURS 6723, NURS 6733, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6787 Clinical Internship II Clinical experience in clinical setting will correlate with concept taught in Synthesis Seminar I. Residents begin independent management of all types of general and regional anesthesia including pain management to patients undergoing all procedures with clinical instructors in consultation. Prerequisites: NURS 6723, NURS 6733, and Registered Nurse admitted to the Nurse Anesthesia program.

NURS 6797 Clinical Internship III Clinical experience focus is on the perioperative anesthesia management of all categories of patients undergoing all types of surgery, utilizing all variety of anesthetic techniques in a variety of clinical settings. Emphasis will be on independent management of anesthesia with the instructor as a consultant. Prerequisites: NURS 6723, NURS 6783.

NURS 6818 FNP Clinical Synthesis Culminating clinical course for family nurse practitioner students. Includes intensive clinical practice with a preceptor. Final semester of

enrollment. Concurrent enrollment in NURS 6753.

NURS 682V (1-3 hours) Independent Study

NURS 6833 The American Health Care System: Historical Perspectives Focus on the development of scientific, professional medicine, nursing and other health care occupations. Emphasizes the interaction of various health issues and their effect on the social history of the United States.

NURS 6843 Ethics of Health Care This course examines the traditional and emerging roles of the health professional as an individual moral agent and as a moral participant in team decisions. Methods of rational moral deliberation based on ethical theories and principles will be applied to ethical dilemmas.

NURS 6853 Teaching in Advanced Nursing Roles Focuses on development of knowledge and skill in teaching clinical information in advanced practice roles. Designed for nurses involved in formal and informal teaching of nurses and patients. Prerequisite: Permission of professor.

NURS 6863 Family Nursing: Advanced Interventions Study of concepts, theories, and research in family nursing care. Emphasis placed on application and interventions in family development and problem situations. Prerequisite: admission to graduate study; permission of professor.

NURS 687V HealthCare Management Seminar This capstone course in health-care management utilizes management and leadership skills to develop practical, successful, and innovative solutions for problems in health care. Students focus on synthesizing theories, models, techniques and strategies to solve multi faceted problems in health care. Pre-requisites: NURS 6443, NURS 6453, completion of required clinical hours in NURS 646(1-6) or permission of the instructor

NURS 689V Thesis Option Learning opportunity to complete supervised research experience under direction of faculty thesis advisor and committee. Final semester of enrollment or must be enrolled in subsequent semesters until completion of thesis. Students considering doctoral education are strongly encouraged to select the thesis option. Students who select the thesis may substitute 3 semester hours of electives. Approval of instructor required.

COLLEGE OF SCIENCES AND MATHEMATICS

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 mathematics, the natural sciences, and computer/information sciences. 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 relevant to the Mississippi River Delta and globally.

The College of Sciences and Mathematics provides to all Arkansas State University students the foundation on which all higher education stands: 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 and innovative teaching;
- Recruiting, training and retaining highly-skilled and professional students and faculty;
- Providing the finest possible research and teaching facilities, beginning with the library, and including computer, classroom and laboratory technology.
- Responsible and proactive citizenship in a global culture. 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 offers work leading to the Master of Arts degree in biology; to the Master of Science degree with majors in biology, chemistry, computer science, environmental sciences, and mathematics; to the Master of Science in Education degree with majors in biology, chemistry, and mathematics; and to the Specialist in Community College Teaching degree in the teaching fields of biology and chemistry.

The College of Sciences and Mathematics coordinates a program of research and study leading to the Doctor of Philosophy in Environmental Sciences. The Graduate Program (PhD and MS) in Environmental Sciences is multidisciplinary, designed for specific career objectives with course offerings across several departments and colleges at Arkansas State University.

Each candidate for the degree of Master of Arts with a major in Biology must complete a major and minor scholarly project as approved by the student's thesis committee. The graduate programs leading to the Master of Science in Education degree are designed for graduates who plan careers in secondary school teaching. Twenty-one hours of major field courses and nine hours of professional education courses are required.

The graduate program leading to the Master of Science in Environmental Science includes a thesis track as well as a practicum track. The Practicum track is specifically designed for graduates who plan careers in industry, consulting, and government agencies.

The Specialist in Community College Teaching is a 60-semester hour, intermediate graduate degree designed to prepare teachers for the community college. All general requirements of the Graduate School are applicable to these degree programs.

The student should refer to the requirements which are listed elsewhere in this bulletin.

DOCTOR OF PHILOSOPHY DEGREE IN ENVIRONMENTAL SCIENCES

The mission of the program is to produce scientists with the knowledge needed to support the assessment, maintenance and recovery of environmental resources. This includes an appreciation of the economic, social, political and aesthetic context that shapes our interaction with and knowledge of the environment. Measuring and understanding the balance between environmental protection, sustainable resource management, and economic growth is a major integrating theme within the program.

Admission Requirements

Admission to the Graduate Program in Environmental Sciences

Applicants to the Graduate Program in Environmental Sciences Program must hold a baccalaureate or master's degree (BA, BS, MA, or MS) from an accredited institution in a relevant field of study. Students should apply to either the PhD or MS program. For both programs, applicants must submit the following to the Graduate School:

1. A completed application for admission to the Graduate Program in Environmental Sciences. Applicants are encouraged to submit the application no later than January 15th for the fall semester and August 15th for the spring semester. Forms are available from the Graduate School.
2. A nonrefundable application fee. PhD application fee is 50.00, Master's application fee is \$30.00. Checks must be made payable to Arkansas State University. If applications are received without payment, the Graduate school will hold all application materials and notify the applicants that no action will be taken until payment is received. International students may utilize a check or an International Postal Money Order to remit payment in the U.S. currency.
3. One copy of official transcripts of all previous undergraduate and graduate course work attempted, to be sent directly from the institution(s) previously attended. The Graduate School will compute the graduate GPA by counting all graduate courses completed, including any repeated courses. Applicants to the Graduate Program in Environmental Sciences must possess a baccalaureate degree from an accredited four year institution and meet the admission requirements of the Graduate School. Applicants should be aware that the breadth of the course work in this program demands that students have a basic background in several disciplines. Preparatory courses for this program may include:

Mathematics: Calculus I as well as an applied statistics course or second semester Calculus course,

Chemistry: A first and second semester chemistry course sequence.

Biology: A first and second semester biology course sequence.

Earth Science: A first and second semester earth science course sequence.

Economics: An introductory level economics course.

Political Science: American government, United States history or world history.

Students should contact the Program Director for details regarding course requirements

for specific focus areas within the program. Students lacking the appropriate courses for their chosen focus area can be admitted into the program but may be required to complete preparatory course work before enrolling in specific graduate core courses. Applicants are also

expected to have a working knowledge of computer systems and software. In some cases, the Environmental Sciences Graduate Program Committee may agree to substitute equivalent, documented work experience in the environmental field for specific courses, and in rare cases, these criteria for admission. Contact the Program Director for questions in these matters.

4. These letters of recommendation to be reviewed by the Environmental Sciences Graduate Program Committee. Note that both recommendation by the Environmental Sciences Graduate Program Committee and approval by the Dean of the Graduate School are required for admission to the program.
5. Scores from the Graduate Record Examination showing a score of 150 on both the verbal and quantitative tests, which are recommended for acceptance.
6. International student applications must demonstrate a satisfactory level of proficiency in the English language if English is not their native language. To do so, they must submit a score of 213 computer based on the Test of English as a Foreign Language or must satisfactorily complete advanced level II of the university's Center for English as a Second Language program.
7. Statement of Purpose. In essay form, state your reasons for undertaking graduate study in the Environmental Sciences. Please describe your qualifications for the academic program to which you are applying and your objectives in undertaking this program. Applicants to the doctoral program should clearly outline their research interests. We are interested in how the applicant's interests would complement those research interests of the faculty. Applicants to master's program should discuss their plans for their academic and professional career and how the Graduate Program in Environmental Sciences will help them attain their goals.
8. Resume C.V. List all colleges and universities attended, major extracurricular activities, and employment, detailing particularly those relevant to your proposed field of study, any honors or prizes awarded, and publication and research projects with which you have been associated.

Applicants are strongly encouraged to provide a personal statement describing their goals in terms of graduate education and research focus interests. Applicants should also submit a curriculum vitae describing pertinent employment and/or research experiences such as presentations and publications.

Curriculum

Ph.D. students are required to take one class in each of three core categories:

- a. Environmental Chemistry/ Soil and Water Science
CHEM 5043 Environmental Chemistry
PSSC 5713 Soil Quality Assessment and Interpretation
PSSC 5853 Soil and Water Conservation
PSSC 5813 Soil Fertility
GEOG 5633 Climatology
- b. Environmental Policy, Law & Economics
POSC 6173 Environmental Policy Processes
POSC 5533 Environmental Law and Admin
ECON 6353 Environmental Economics
- c. Interdisciplinary Environmental Studies
BIO 6623 & 6621 Case Studies in Ecosystem Management Lecture and Lab

BIO 5613 Conservation Biology
ESCI 6303 Global Water Issues
AGRI 6243 Environmental Sustainab

Additional Requirements

Ethics (1 hour)

ESCI 7151 Responsible Conduct in Research

Seminars (4 hours, at least 2 hours of Topical Seminar)

ESCI 7111 Environmental Science Seminar

ESCI 7121, Topical Seminar in Environmental Sciences

Statistics (6 hours)

STAT 6613 Nonparametric Statistics

STAT 6623 Statistical Methods with SAS Programming

STAT 6643 Multivariate Analysis

STAT 6653 Data Analysis I: Regression Analysis

STAT 6663 Data Analysis II: Analysis of Variance (ANOVA)

STAT 6673 Design of Experiments

STAT 6833 Biostatistics

AGRI 6213 Experimental Designs

AGRI 5233 Experimental Agricultural Statistics

BIO 5683 Biological Data Analyses

BIO 6603 & 6601 Environmental Systems Analysis Lecture and Lab

Dissertation (18 hours)

ESCI 889V (1-12 hours) Dissertation

Substitution of equivalent courses may be made upon the recommendation of the doctoral advisory committee with the approval of the Environmental Sciences Graduate Program Committee. In addition, each student will normally take courses in their specialty area sufficient to bring the total number of credits to the minimum of 72 required for the Ph.D. in Environmental Sciences beyond the bachelor's degree or 42 beyond the master's degree. Any additional course work requirements will be determined by the Doctoral Advisory Committee to meet the student's specific program needs. Each candidate for the Ph.D. in Environmental Sciences must execute an original and rigorous research project culminating in the completion and defense of a dissertation.

DOCTOR OF PHILOSOPHY DEGREE IN MOLECULAR BIOSCIENCES

Program Description

The cross-disciplinary Molecular Biosciences field is revolutionizing discovery and technological advances in disciplines ranging from agriculture to medicine, from forensics to environmental sciences, from food sciences to renewable energy. The Molecular Biosciences Doctoral Program provides training and research opportunities that integrate molecular, genomic, cellular and developmental information, with a strong emphasis on interdisciplinary approaches, state-of-the-art technologies and innovations addressing real world problems.

Admission Requirements

Students seeking admission into the Doctor of Philosophy in Molecular Biosciences

Program must meet the admission requirements of the Graduate School in addition to the Program's specific requirements.

Each applicant must have a minimum of a B.S. in a basic or applied science, although preference may be given to M.S. level applicants. Some required MBS courses have prerequisites which must be met in order to succeed in these classes. These courses may include general and organic chemistry, biochemistry, introductory biological science, and cellular biology. Based on previous undergraduate coursework, students may be required to pass one or more of these prerequisite courses before attempting graduate level study in this field.

All candidates for a Ph.D. degree in Molecular Biosciences are required to complete or have completed the specified core courses and elective courses, or their equivalent, as directed by the student's Doctoral Advisory Committee. All candidates must attend every Molecular Biosciences Seminar when in residence on campus. Each Ph.D. student must complete a minimum of 15 hours of Molecular Biosciences approved course work (including the specified 9 credits in Core Technical courses, 1 credit in Responsible Conduct in Research and 4 credits from the Techniques in Molecular Biosciences course). Students must also take the Seminar in Molecular Biosciences every semester plus a minimum of 18 hours of dissertation research credits along with any other academic studies required by the student's Doctoral Advisory Committee. The committee may alter or require additional academic work as it deems appropriate to meet the student's specific program needs. The committee will also provide a written plan of study by semester for each student.

Courses required of all candidates:

- MBS 6213 Advanced Cell Biology
- MBS 6233 Specialized Biochemistry
- MBS 6243 Molecular Genetics and Genomics
- MBS 6251-3 Techniques in Molecular Biosciences
- MBS 7111 Seminar in Molecular Biosciences (every semester)
- MBS 7151 Responsible Conduct in Research
- MBS 8891-12 Dissertation

Any additional coursework requirements will be determined by the Doctoral Advisory Committee to meet the student's specific program needs. Each candidate for the Ph.D. in Molecular Biosciences must execute an original and rigorous research project culminating in the completion and defense of a dissertation.

Minimum hours required for this program: 72 or 45 plus a master's degree

MASTER OF ARTS DEGREE WITH A MAJOR IN BIOLOGY

Admission Requirements

Students seeking admission into the Master of Arts degree program in Biology must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants for the M.A. Program in Biology will be evaluated by the department for academic qualification based upon their undergraduate academic record, score on the Graduate Record Examination, and letters of reference. Specific requirements include:

1. A minimum of 18 undergraduate hours in the biological sciences and an undergraduate grade point of 2.75 or greater (on a 4.0 scale). Students judged to be deficient in some areas of undergraduate preparation might be assigned certain undergraduate prerequisite courses.
2. A recommended Graduate Record Exam (GRE) combined verbal and quantitative

score of 290.

3. Three letters of reference.
4. A statement of educational objectives and career goals.

Applicants not meeting all of the above departmental criteria may be admitted on a conditional basis if they meet the Graduate School admission requirements.

Courses required of all candidates

1. BIOL 6003 and BIOL 6001 in addition to a minimum of three 6000 level courses with at least two coming from the Biological Sciences course listing, exclusive of Independent Study and the M.A. Practicum.
2. M.A. Practicum, three hours as approved by the graduate committee. A major and minor scholarly project must be completed that encompasses the scope of the program of study.
3. Tool 3-4 hours, as approved by graduate committee.
4. Elective courses in biology or graduate elective courses as approved by graduate committee, as needed to complete 36 hours.

Minimum hours required for this program: 36.

MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCES

Admission Requirements

Students seeking admission into the Master of Science in degree program in Environmental Sciences must meet the admission requirements of the Graduate School and the specific program requirements. The Environmental Sciences master's degree program accepts students with a variety of undergraduate and graduate majors, including the humanities, social sciences, natural sciences, and engineering. Preparation for the required program coursework should include the following courses:

Mathematics - applied statistics and introductory calculus.

Sciences - three quarters or two semesters in any combination of chemistry, biology, physics, earth science, or atmospheric science. At least one semester/quarter must be in chemistry.

Students lacking some of this preparation may be accepted for admission, but expected to address such deficiencies prior to entrance by means of formal coursework or other arrangements agreed upon by the applicant and the Graduate Program Committee. Potential students must have a sponsoring graduate faculty member within Arkansas State University, who will act as advisor until a thesis topic or practicum is designated. For advisor selection suggestions, contact the program office or go to the departmental web pages to research faculty research interests and then contact them directly and relate your interests.

Applicants are also expected to have a working knowledge of computer systems and software.

For unconditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

1. A minimum cumulative undergraduate grade point average of 3.00 in the last 60 hours or established graduate level proficiency.

2. Applicants should furnish two letters of reference from former professors or associates acquainted with their academic qualifications. Lastly, a letter of intent from the applicant is needed detailing the nature of their interests and career goals.

International student applicants must demonstrate a satisfactory level of proficiency in the English language if English is not their native language. To do so, they must submit a score of 213 (computer based) on the Test of English as a Foreign Language or must satisfactorily complete Advanced Level II of the university's Center for English as a Second Language program.

Curriculum:

M.S. students are required to take one class in each of three core categories:

- a. Environmental Chemistry/ Soil and Water Science
 - CHEM 5043 Environmental Chemistry
 - PSSC 4713/5713 Soil Quality Assessment and Interpretation
 - PSSC 4853/5853 Soil and Water Conservation
 - PSSC 4813/5813 Soil Fertility
 - GEOG 4633/5633 Climatology
- b. Environmental Policy, Law & Economics
 - POSC 6173 Environmental Policy Processes
 - POSC 5533 Environmental Law and Admin
 - ECON 6353 Environmental Economics
- c. Interdisciplinary Environmental Studies
 - BIO 6623 & 6621 Case Studies in Ecosystem Management Lecture and Lab
 - BIO 5613 Conservation Biology
 - ESCI 6303 Global Water Issues
 - AGRI 6243 Environmental Sustainability

Additional Requirements

Ethics (1 hour)

ESCI 7151 Responsible Conduct in Research

Seminars (2 hours, at least 1 hour of Topical Seminar)

ESCI 7111 Environmental Science Seminar

ESCI 7121, Topical Seminar in Environmental Sciences

Statistics (6 hours)

STAT 6613 Nonparametric Statistics

STAT 6623 Statistical Methods with SAS Programming

STAT 6643 Multivariate Analysis

STAT 6653 Data Analysis I: Regression Analysis

STAT 6663 Data Analysis II: Analysis of Variance (ANOVA)

STAT 6673 Design of Experiments

STAT 6833 Biostatistics

AGRI 6213 Experimental Designs

AGRI 5233 Experimental Agricultural Statistics

BIO 5683 Biological Data Analyses

BIO 6603 & 6601 Environmental Systems Analysis Lecture and Lab

Thesis /Practicum/ Internships hours (6 hours)

ESCI 689V Thesis

ESCI 614V Environmental Sciences Internship (Practicum)

ESCI 613V Independent Research in Environmental Sciences (Internships)

In addition, each student will normally take courses in their specialty area sufficient to bring the total number of credits to the minimum of 30 required for the M.S. in Environmental Sciences beyond the bachelor's degree.

MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCES PROGRAM

As a reflection of the interdisciplinary nature of the program, a course of study will be tailored to each student's own scholarly interest, research, and proposed career direction. The specific quantity and content of each student's course of study will acquire approval by the student's Master's Advisory Committee. General course requirements are outlined below and in the section of this Bulletin entitled Program of Study for the M.S. in Environmental Sciences. Applicants are advised that admission to the Graduate School Does not imply admission to the M.S. in Environmental Sciences Program.

Master's Advisory Committees

Each student is expected to identify a master's advisory Committee chair during the first year of their program of study. The Master's Advisory Committee will consist of members of the graduate faculty and other professionals as deemed appropriate and approved by the Environmental Sciences Graduate Program Committee and the Graduate Council. Each committee must have at least three members and at least one member must be from outside the student's emphasis area. Committee membership is subject to the approval of the Environmental Sciences program director, review by the dean's office, and final approval by the Graduate Dean. The committee is to review the student's thesis or practicum proposal and to provide guidance toward the successful completion of the research or practicum project. Students in the program without a designated committee chair during their first semester will be assigned an interim adviser by the Environmental Sciences Graduate Program Committee. The primary role of the interim adviser will be to establish a tentative curriculum for the student pending establishment of the Master's Advisory Committee. An interim adviser may serve for a maximum of one year until the student selects a permanent Advisory committee chair.

Membership of advisory committees may be changed if either the student or a member of their committee feels that such a change is appropriate and the requested change is approved by the Environmental Sciences Graduate Program Committee and the Graduate dean. Such a change will not be approved except in clearly unusual circumstances. If approval is given, the student will be notified in writing by the Graduate School. A Master's Advisory Committee chair must be a member of the graduate faculty and must be approved to direct the research of doctoral students by the Graduate Council and the graduate dean.

Minimum hours required for this program: 30

Program of Study

A program of study, to be developed by the student in consultation with the Master's Advisory Committee, is to be submitted to the Director of the Environmental Sciences Program for approval no later than one calendar year after admission to the program. Programs of study must change to meet course requirements and match the student's academic goals, scholarly aspirations and career preparation needs. Each Master's Advisory Committee will meet at least once a semester to review and provide record of the student's progress.

Satisfactory Progress

Students are required to earn a grade of "B" or better in all graduate courses. Any student who receives a C must repeat the course (or equivalent) regardless of GPA. If a student receives a C and is placed on academic probation they will have one semester to increase

the GPA above a 3.0 or will be removed from the program. A student who receives 2 C's in one semester or who received an additional C prior to re-taking the course in which the first C was earned or who receives a C while on probation will be terminated from the program. Any student who receives an F or D in any course will be removed from the program. If the GPA is below 3.0 students will not be eligible for program support.

Time to Degree

A minimum of four semesters of graduate study beyond the baccalaureate degree is required. All requirements for the degree must be completed within eight calendar years of admission to the program. A student exceeding the time limit may be required to repeat the qualifying examinations, replace out-of-date credits with up-to-date ones, and/or show other evidence of being current within both the core curriculum and the student's emphasis area. Extension of the eight-year requirement will be granted only if a student has obtained prior approval from his or her Master's Advisory Committee, the Environmental Sciences Graduate Program Committee and the Arkansas State University Graduate School.

Residence Requirement

One year of full-time residence at Arkansas State University normally will be required. This requirement may be waived under special circumstances if approved by the student's Master's Advisory Committee, the Environmental Sciences Graduate Program Committee and the Arkansas State University Graduate School.

Comprehensive Examination – Thesis Track

This examination is required by the Program, but takes a variety of forms in the case of individual students. The precise requirements is determined by the student's choice of emphasis area and the student's advisory committee and approved by the Director of the Graduate Program in Environmental Sciences. The goal of the examinations is to assess the student's preparedness for master's level study and assess the student's potential in their chosen field. The examination of may be written or oral in part or in whole. The subject(s) of the examination may include core course work and/or work relevant to the student's specialty area. Possible outcomes of the examination are (i) pass, (ii) fail with the option to retake (one time only) the examination, or (iii) fail. Students who fail initially or after the second attempt will be removed from the program. It should be noted that there is a Program Requirement that ten calendar weeks must pass before a retake of this examination may be scheduled. This examination must be taken prior to the end of the third semester in residence.

Thesis Proposal – Thesis Track

Each M.S. Thesis track student must pass the oral research proposal defense examination. Possible outcomes of the examination are (i) pass, (ii) fail with option to retake (one time only) the examination, or (iii) fail. The oral defense of the research proposal occurs after successful completion of the comprehensive examination. Students who have not defended their proposal by end of their third semester or who have not passed by the end of their fourth semester will no longer be in good standing in the M.S. Program. It should be noted that there is a Program requirement that ten calendar weeks must pass before retake of the oral proposal defense may be scheduled.

It is imperative that each student register the time and date of the oral proposal defense with the Graduate School two weeks in advance of the proposal defense seminar. Announcements of the public portion of the proposal defense must be posted a minimum of two weeks in advance of the presentation. The timing of this examination should be in coordination with the student's advisory committee.

Internship – Practicum Track

Students on the M.S. Practicum Track must complete their internship no later than the fourth semester in residence. Internships must be approved by the Graduate Program Committee and internship supervisors must complete the required paperwork no later than the semester prior to the internship. Students will complete an internship report to be defended

to their internship supervisor and M.S. committee. Internship reports, once approved, must be submitted to the Program Office no later than the fourth semester upon completion of the internship. The Internship examination will follow the defense of the report. Possible outcomes of the examination are (i) pass, (ii) fail with option to retake (one time only) the examination, or (iii) fail. Students who fail initially or after the second attempt will be removed from the program. It should be noted that there is a Program requirement that ten calendar weeks must pass before a retake of this examination may be scheduled. This examination must be taken prior to the end of the fourth semester in residence. The final internship approval will be based on the supervisor's report, approval of the report by the M.S. committee, and passing the internship examination.

Continuous Enrollment

The Graduate Program in Environmental Sciences has a continuing enrollment policy. Students must enroll for a minimum of 1 hour of dissertation credit each semester after passing qualifying examinations to remain in the program (Fall or Spring) and must only register for these hours during the summer sessions if graduating during a summer session.

Thesis Defense – Thesis Track

After the research is completed, the student will submit a draft of the thesis to his or her advisory committee. Upon the recommendation of the committee, the candidate will arrange with the chair of his or her advisory committee to schedule and conduct a presentation of the results. The candidate will also be required to orally defend the thesis before the Master's Advisory Committee, members of the faculty, students, and interested persons. Arrangements for the thesis defense will be made through the Environmental Sciences Program Office, but announced by the Graduate School. Students are advised to be aware of the deadlines set by the Graduate School for submission of defense results and theses. The defense must occur at least four weeks before the date of graduation. A successful defense receives no more than one negative vote by the members of the Master's Advisory Committee. Failure of the defense requires a one semester probation before a second defense can be scheduled. A second failure of the defense constitutes elimination from the program.

Internship Report and Defense – Practicum Track

Students will complete a written internship report to be defended to their internship supervisor and M.S. Committee. Internship reports, once approved, must be submitted to the Program Office no later than the fourth semester or upon completion of the internship. The Internship examination will follow the defense of the report. Possible outcomes of the examination are (i) pass, (ii) fail with option to retake (one time only) the examination, or (iii) fail. Students who fail initially or after the second attempt will be removed from the program. It should be noted that there is a Program requirement that ten calendar weeks must pass before a retake of this examination may be scheduled. This examination must be taken prior to the end of the fourth semester in residence. The final internship approval will be based on the supervisor's report, approval of the report by the M.S. Committee, and passing the internship examination.

Submitting Thesis

The completed thesis must follow the style and format requirements of the Graduate School as contained in the Guide Theses and Dissertations: Preparation and Electronic Submission. Before submission to the graduate dean, the completed thesis must be approved by the advisory committee. Candidates will also be responsible for the preparation of an abstract of the thesis, not to exceed 300 words, which will be submitted with the completed thesis. Four copies of the completed thesis will be submitted by candidates for approval by the graduate dean and for binding. The bound copies will be on file with the ASU Library, the Graduate School, the Environmental Sciences program office, and the chair of the advisory committee.

Internship Completion and Approval – Practicum Track

The final internship approval and award of degree will be based on the supervisor's report, approval of the report by the M.S. committee, and passing the internship examination.

Checklist for the Last Semester Before Graduation

In the last semester before graduation, candidates must:

1. In the last semester before graduation, candidates must: Register for the graduation fee.
2. File an Intent to Graduate Form with the graduate dean by the relevant deadline.
3. Complete the oral defense of the dissertation.
4. Submit the dissertation by the relevant deadline.

MASTER OF SCIENCE DEGREE WITH A MAJOR IN BIOLOGY

Admission Requirements

Students seeking admission into the Master of Science degree program in Biology must meet the admission requirements of the Graduate School and the specific program requirements.

In addition, applicants for the M.S. program in Biology will be evaluated by the department for academic qualification based upon their undergraduate academic record, score on the Graduate Record Examination, and letters of reference. Specific requirements include:

1. A minimum of 18 undergraduate hours in the biological sciences and an undergraduate grade point of 2.75 or greater (on a 4.0 scale). Students judged to be deficient in some areas of undergraduate preparation may be assigned certain undergraduate prerequisite courses.
2. A recommended GRE combined verbal and quantitative score of 295.
3. Three letters of reference.
4. A statement of educational objectives and career goals.

Applicants not meeting all of the above departmental criteria may be admitted on a conditional basis if they meet the Graduate School admission requirements. A candidate for the Master of Science degree in Biology must fulfill a research tool requirement in addition to completing the 30 hours required for the degree.

Courses required of all candidates

- BIOL 6003 in addition to courses from any three of the prefixes of BIOL, BOT, ENT, ENVR, and ZOOL, and two 6000 level courses (a single course may meet both prefix and number criteria), exclusive of Independent study, Seminar, and Thesis.
- Thesis, six hours;
- Electives in Biology or an approved related area as needed to complete 30 hours.
- Tool 3-4 hours, as approved by graduate thesis committee.

Minimum hours required for this program: 33-34

PROFESSIONAL MASTER OF SCIENCE IN BIOTECHNOLOGY

The Professional Master of Science in Biotechnology program prepares students to compete successfully for existing and future careers in biotechnology. The program offers classroom instruction on concepts and theory, integrated with intensive laboratory experience focusing on techniques and communication skills required for professional biotechnologists. It is an interdisciplinary program composed consists of 36 academic credits. This includes two intensive laboratory methods courses and a directed professional internship with a minimum of 300 laboratory hours in an industry or government laboratory research agency that each student must complete. The internships focus on intensive training and students are required

to compose a PowerPoint presentation and a professional portfolio illustrating accomplishments achieved during their internship experiences.

Admission Requirements

Students seeking admission into the Professional Master of Science in Biotechnology program must meet admission requirements of the Graduate School. In addition, full admission status requires satisfaction of the following criteria:

- A baccalaureate degree with a minimum science GPA of 2.75 (undergraduate science courses). Preference is given to students with a degree in the biological and chemical sciences.
- Verbal, Analytical, and Quantitative GRE Scores
 - GRE Exam before Fall 2011 - Minimum combined Verbal and Quantitative Score of 1000
 - GRE Exam after Fall 2011 - Minimum combined Verbal and Quantitative Score of 300
- Three (3) Letters of Recommendation
- Personal Statement of Career Goals

All applications are due by May 1st.

International applicants are also required to submit TOEFL scores with a minimum IBR score of 79

*Exceptions to these requirements are made on an individual basis.

Core Courses-32 hours

BIO 6143 Introduction to Biotechnology & Research Design

BIO 6033 Biosafety & Ethics in Research

MBS 6213 Advanced Cell Biology

BIO 6233 Specialized Biochemistry

BIO 6023 Genetic Engineering

BIO 6144 Biotechniques I Laboratory

BIO 6154 Biotechniques II Laboratory

BIO 6196 Internship in Biotechnology

MGMT 6433 Entrepreneurship

Students choose 4 hours of elective courses tailored to their individual needs and career goals. We offer courses focusing on molecular biology, bioinformatics, to be selected with the approval of the student's adviser.

Minimum hours required for this program: 36

MASTER OF SCIENCE DEGREE WITH A MAJOR IN CHEMISTRY

Admission Requirements

Along with the admission requirements of the Graduate School, students entering the graduate program in Chemistry must take the general GRE and have a minimum score of 300. In addition, students that do not have an undergraduate degree in Chemistry must take the GRE chemistry subject exam. All students must submit a transcript and give two choices of focus area interests (to be designated by the department faculty). Examples of focus areas: Inorganic synthesis, spectroscopy, biochemistry, etc.

Applications will be reviewed by the department Graduate Program Committee, which will

make recommendations on acceptance, acceptance with deficiencies or non-acceptance. A letter of acceptance/ denial will be sent to students. If the student has deficiencies, these will be noted along with the expected increase in length of time necessary to complete the degree.

Upon arrival, all students will be given qualifying exams to determine proficiency in the areas of Analytical, Inorganic, Organic and Physical Chemistry. Students scoring below a minimum score will be expected to take remediation in the area by repeating undergraduate courses in that area with a grade of C or better. These courses will not count as graduate credit. Students scoring above the minimum but less than the optimum score on the exam will be required to take the respective core course. Those scoring above the optimum score may test out of the respective core course (see below).

MS Degree (Thesis option)

Required (12 hours)*:

Advanced Analytical Chemistry

Advanced Inorganic Chemistry

Advanced Organic Chemistry

Advanced Physical Chemistry

*students must take a minimum of 12 hours of class work.

Electives (18 hours) as determined by the student's thesis committee:

**Thesis (6 hours)

**Graduate Research in Chemistry (6 hours)

**Independent Study (3 hours)

**Special Topics: Research in (specialty area) Chemistry (3 hours)

Biochemistry

Pharmacology

Instrumentation

Inorganic Chemistry

Environmental Chemistry

Geochemistry

Special Topics

EVS or MBS courses

**courses may only be taken once a research advisor has been chosen

No more than six hours of graduate courses with a prefix other than CHEM may be applied toward the MS degree.

MS Degree (non-thesis option)

Students will be required to take 30 hours approved upon by the Graduate Program Committee:

Required (12 hours):

Advanced Analytical Chemistry

Advanced Inorganic Chemistry

Advanced Organic Chemistry

Advanced Physical Chemistry

Electives (18 hours)

Biochemistry

Pharmacology

Instrumentation

Inorganic Chemistry

Environmental Chemistry

Geochemistry
Seminar
Special Topics
EVS or MBS courses

Summer Research Internship: A student may apply to a research lab for 6 hours of summer research credit which may count as six of the elective hours. (This course can only be taken once)

No more than six hours of graduate courses with a prefix other than CHEM may be applied toward the 30 hours.

Students completing the MS non-thesis option must pass a comprehensive exam in the last semester of study.

Minimum hours required for this program: 30

MASTER OF SCIENCE DEGREE WITH A MAJOR IN COMPUTER SCIENCE

Admission Requirements

Students seeking admission into the Master of Science degree program in Computer Science must meet the admission requirements of the Graduate School. In addition, applicants will be evaluated by the department for academic qualification based upon the following requirements:

1. A minimum of 18 undergraduate hours in Computer Science and an undergraduate grade point of 3.00 or greater on a 4.0 scale.
2. A minimum Graduate Record Exam (GRE) combined verbal and quantitative score of 290.
3. Three letters of reference.
4. A statement of educational objectives and career goals.

Applicants not meeting all of the above departmental criteria may be admitted on a conditional basis if they meet the Graduate School admission requirements. Upon arrival, all students will be given an assessment exam to determine proficiency in basic topics in Computer Science. Students judged to be deficient in some areas of undergraduate preparation shall be required to complete certain undergraduate prerequisite courses as determined by department faculty. Students may not take 6000-level courses for credit until all undergraduate course deficiencies have been completed.

Accelerated Masters Program

Undergraduate students seeking admission into the Accelerated Masters Program in Computer Science must meet the admission requirements of the Graduate School. In addition, applicants will be evaluated by the department for academic qualification based upon the following requirements:

1. minimum overall GPA of 3.00
2. minimum GPA of 3.25 in CS courses (exclusive of CS 1013 and 1114)
3. completion of CS 3113

Applicants not meeting all of the above departmental criteria may be admitted on a conditional basis if they meet the Graduate School admission requirements. After admission

into the accelerated masters program, undergraduate students may take up to 12 hours of 5000-level coursework as part of the Accelerated Masters Program.

Curriculum

At least one course from each of the following three groups:

1. Theory
CS 5723, Automata Theory
CS 5133, Compilers
2. Systems
CS 5313, Computer Networks
CS 6213, Parallel Processing
CS 6233, Distributed Systems
CS 6223, High Performance Computing
3. Algorithms
CS 5713, Analysis of Algorithms

Eighteen hours of electives in Computer Science

Nine hours of electives selected from Computer Science, Mathematics, and/or Statistics, subject to the prior approval of the Computer Science Curriculum Committee.

Minimum of eighteen hours of 6000 level Computer Science and approved Mathematics and/or Statistics coursework inclusive of thesis.

Satisfactory Progress

Students are required to maintain a “B” average in all graduate coursework in Computer Science and approved Mathematics/Statistics courses. If a student is placed on academic probation, they must increase the GPA to at least 3.0 within one semester or they will be removed from the program. A student who receives two “C”s in one semester or receives a “C” while on probation will be terminated from the program. A student who receives one “D” or one “F” will be removed from the program.

Minimum hours required for this program: 36

MASTER OF SCIENCE DEGREE WITH A MAJOR IN MATHEMATICS

Admission Requirements

Students seeking admission into the Master of Science degree program in Mathematics, must meet the admission requirements of the Graduate School and the specific program requirements. Students may not take 6000-level courses for credit until all undergraduate deficiencies have been removed.

Courses required of all candidates

Candidates must take at least three of the following two semester sequences:
Functions of a Real Variable I and II (MATH 6823 and 6833)
Functions of a Complex Variable I and II (MATH 6853 and 6863)
Abstract Algebra I and II (MATH 6603 and 6613)
Point Set Topology and Differential Geometry (MATH 6753 and 6623)
Numerical Analysis I and II (MATH 6873 and 6883)

Data Analysis I and II (STAT 6653 and 6663)
Statistical Analysis I and II (STAT 6703 and 6713)

Candidates must take an additional 18 hours of which:
Minimum 12 hours in courses with MATH or STAT prefix
Maximum six hours in approved related areas

Minimum 21 hours of 6000 level coursework excluding thesis

Minimum hours required for this program: 36

PH.D. MINOR IN STATISTICS

The Ph. D. Minor in Statistics is designed to give graduate students in doctoral programs a rich foundation and core competency in statistical design and analysis skills, and to provide education and training for interested students whose doctoral research includes a substantial amount of statistical methodology or data analysis. These students will benefit from broad and enriched perspective in the fundamentals and applications of statistics.

Admission Requirements

Students seeking the Ph.D. Minor in Statistics must be admitted to an ASU doctoral program.

Curriculum

The Ph.D. Minor in Statistics requires at least 12 hours of 6000-level courses with a STAT prefix. A grade of B or better must be earned in each course counted toward the minor. STAT courses which satisfy requirements of the student's graduate program may also count toward the Minor in Statistics. In addition to course work, students must demonstrate the ability to apply statistical methodology to problems in research. Sections or chapters of a dissertation must provide such a demonstration. Administration of the Ph. D. Minor in Statistics is through the Department of Mathematics and Statistics. A member of the statistics faculty must be on the student's graduate committee.

The following provides one example of a set of courses that satisfies the course work portion of the Ph.D. Minor in Statistics.

STAT 6623 Statistical Methods with SAS Programming (Fall odd)
STAT 6673 Design of Experiments (Spring even)
STAT 6653 Data Analysis I: Regression Analysis (Fall even)
STAT 6663 Data Analysis II: Analysis of Variance (Spring odd)

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN BIOLOGY

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Biology must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants for the M.S.E. program in Biology will be evaluated by the department for academic qualification based upon their undergraduate academic record, score on the Graduate Record Examination, and letters of reference. Specific requirements include:

1. A minimum of 18 undergraduate hours in the biological sciences and an undergraduate grade point of 2.75 or greater (on a 4.0 scale). Students judged to be deficient

in some areas of undergraduate preparation may be assigned certain undergraduate prerequisite courses.

2. A recommended GRE combined verbal and quantitative score of 290.
3. Three letters of reference.
4. A statement of educational objectives and career goals.
5. A valid teaching certificate based on a four-year teacher education program.

Applicants not meeting all of the above departmental criteria may be admitted on a conditional basis.

Courses required of all candidates

Core of Professional Education Courses

Nine hours of Professional Education for Secondary Teaching Fields

ELFN 6773, Introduction to Statistics and Research (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology

OR ELCI 5523, Middle School Curriculum,

OR ELCI 6523, Secondary School Curriculum,

OR ELCI 6063, Curriculum Management

Courses in the Major Field

A minimum of one course each at the 6000 level from any three of the prefixes of BIOL, BOT, ENT, ENVR, and ZOO, exclusive of Independent Study, Seminar, and Thesis.

Electives as needed to complete 21 hours.

Minimum hours required for this program: 30

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN CHEMISTRY

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Chemistry must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 semester hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program. Applicants who do not meet the requirements for a valid teaching certificate based on a four-year teacher education program will be required to complete the undergraduate courses required for such a certificate. These courses may be completed concurrently with graduate work, but must be completed before the student is admitted to candidacy for the degree.

For unconditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

- A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) or a minimum score of 300 on the combined verbal and quantitative sections of the Graduate Record Examination (GRE).

Courses required of all candidates**Core of Professional Education Courses**

Nine hours of Professional Education for Secondary Teaching Fields

ELFN 6773, Introduction to Statistics and Research (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology

OR ELCI 5523, Middle School Curriculum,

OR ELCI 6523, Secondary School Curriculum,

OR ELCI 6063, Curriculum Management

Courses in the Major Field

CHEM 5224, Instrumentation

CHEM 6353, Advanced Analytical Chemistry

CHEM 6393, Advanced Organic Chemistry

CHEM 6403, Advanced Inorganic Chemistry

Eight hours of electives in Chemistry or an approved related area.

Minimum hours required for this program: 30

MASTER OF SCIENCE IN EDUCATION DEGREE WITH A MAJOR IN MATHEMATICS

Admission Requirements

Students seeking admission into the Master of Science in Education degree program in Mathematics Education must meet the admission requirements of the Graduate School and the specific program requirements. In addition, applicants must have completed a minimum of 18 hours of professional education courses including the requirements for a valid teaching certificate based on a four-year teacher education program. Applicants who do not meet the requirements for a valid teaching certificate based on a four-year teacher education program will be required to complete the undergraduate courses required for such a certificate. These courses may be completed concurrently with the graduate work, but must be completed before the student is admitted to candidacy for the degree.

For unconditional admission, academic proficiency must be established through satisfaction of either of the following admission selection criteria:

A minimum cumulative undergraduate grade point average of 3.00 (or 3.25 on the last 60 hours) or a minimum score of 300 on the combined verbal and quantitative sections of the Graduate Record Examination (GRE).

Courses required of all candidates:

Core of Professional Education Courses

Nine hours of Professional Education for Secondary Teaching Fields

ELFN 6773, Introduction to Statistics and Research (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology (3 hours)

ELFN 6763, Philosophies of Education, OR

PSY 6513, Advanced Educational Psychology

OR ELCI 5523, Middle School Curriculum,

OR ELCI 6523, Secondary School Curriculum,
OR ELCI 6063, Curriculum Management

Courses in the Major Field

Twenty-one (21) hours of graduate level MATH or STAT courses, approved by the Department of Mathematics and Statistics.

Minimum hours required for this program: 30

SPECIALIST IN COMMUNITY COLLEGE TEACHING

The 60 graduate hours, including the Master's degree, which are required for the Specialist in Community College Teaching degree include the following:

Teaching Field	39 Semester Hours
Community College Core	12 Semester Hours
Teaching Core	9 Semester Hours

A detailed description of this program, along with specific requirements, is presented in the Specialists in Education Degree program under the College of Education.

Minimum hours required for this program: 30 plus a master's degree

COLLEGE OF SCIENCES AND MATHEMATICS GRADUATE COURSE DESCRIPTIONS

DEPARTMENT OF BIOLOGICAL SCIENCES

For each laboratory course taken, both the lecture and laboratory portions must be passed before credit for graduation is assigned.

Biology

BIO 5001 Laboratory Techniques in Electron Microscopy An introduction to the preparation of biological materials for viewing with the transmission-and-scanning electron microscope. Emphasis will be placed on preparative techniques that are commonly used in the laboratory. Lecture one hour per week. Prerequisites: eight hours upper-level biology coursework and permission of professor.

BIO 5003 Laboratory for Laboratory Techniques in Electron Microscopy Six hours per week. To be taken concurrently with BIO 5001. (Course fee, \$20)

BIO 5104 Microbiology Morphology, physiology, taxonomy, and cultivation of bacteria and other microorganisms with an emphasis on medically relevant bacteria. Two hours of lecture and four hours of lab per week.

BIO 5201 Laboratory for Issues in Human Ecology Two hours per week. To be taken concurrently with BIO 5202. (Course fee, \$20)

BIO 5202 Issues in Human Ecology A broad ecological approach demonstrat-

ing problems of modern society such as environmental deterioration, hunger, and resources depletion. Lecture two hours per week.

BIO 5211 Human Genetics Laboratory Three hours per week. To be taken concurrently with BIO 5213. Special course fees may apply.

BIO 5213 Human Genetics Current advances in the understanding of the human genome. Lecture three hours per week. Prerequisite: BIO 3013.

BIO 5131 Laboratory for Cell Biology Two hours per week. To be taken concurrently with BIO 5133. (Course fee, \$20)

BIO 5133 Cell Biology A study of the organization and activities of cells, with emphasis on the ultrastructure and function of cellular organelles. Lecture three hours per week. Prerequisites: BIO 2013, BIO 2011; CHEM 1023, CHEM 1021.

BIO 5013 Population Genetics This course will investigate the theories describing the genetic structure of populations. There will be an emphasis on problem solving applying statistical tools. Intended for graduate students entering the disciplines of preprofessional, conservation, agriculture, and wildlife and fisheries sciences. Prerequisites: BIO 3013, BIO 3011.

BIO 5103 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 BIO 3013 or BIO 4104 or BIO 4133.

BIO 5111 Laboratory for Immunology Study of classical and current immunology techniques such as ELISA, immuno-electrophoresis and Western Blot analysis. Laboratory 3 hours per week.

BIO 5113 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.

BIO 5322 Biology of Marine Mammals Laboratory Hands on experience on the classification, anatomy, and behavior of marine mammals. Concurrent enrollment in BIO 5323. Special Course fees may apply. Permission of instructor required.

BIO 5323 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 two of the following courses: BIO 3322, BIO 3013, BIO 3033, and permission of the instructor.

BIO 5333 Marine Biology Overview of the diverse discipline of marine biology. Emphasis on life history but will incorporate aspects of chemistry, microbiology, and ecology of marine systems. Also included: marine fisheries, conservation biology, aquaculture, pharmacology, resource management, and public policy.

BIO 5123 Cell Signaling This course will provide an understanding of key concepts about cellular signaling mechanisms, and major signaling pathways identified to date about the methods used to study these pathways. Three hours per week during spring semester. Prerequisite: Cell biology course(s) or permission of the instructor.

BIO 5143 Pharmacology The study of drugs and their mechanisms of action at the system, cellular, and molecular levels. Prerequisites: BIO 2223 OR BIO 3233, BIOL

4104, and CHEM 4243.

BIO 5353 Field Techniques for Marine Mammals Field experience in describing and analyzing marine behavior of dolphins and other marine mammals. Prerequisite: Permission of instructor.

BIO 5601 Laboratory for Limnology Two hours per week. To be taken concurrently with BIO 5603. (Course fee, \$20)

BIO 5603 Limnology Physicochemical conditions of fresh water, and their effects on aquatic life; plankton analysis and bottom fauna studies. Lecture three hours per week. Prerequisites: BIO 1301 , 1303; CHEM 1023, CHEM 1021.

BIO 5023 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 historical background of current research but also on how science proceeds. Prerequisites will be at least two of the following courses: BIO 3023, BIO 3013, BIO 3033, or permission of the instructor.

BIO 544V 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.

BIO 5683 Biological Data Analysis Use of statistical tests and models (regression, ANOVA, generalized linear models, and mixed-effect models, PCA) to analyze ecological/biological data applications using the R statistical program. Pre-requisites: Applied Statistics I or equivalent.

BIO 6001 Biological Seminar Required of all graduate students.

BIO 6003 Scientific Methods and Research Design A focus on the understanding and development of the scientific method as it pertains to research. Required of the graduate life sciences major, including students studying within the Biology, Botany, Wildlife Management and Zoology emphasis.

BIO 6033 Biosafety and Ethics in Research Biosafety in the workplace, including chemical and radiation safety. Examination of moral and ethical issues in the laboratory and in research, including the concepts of transgenics, intellectual property and writing in research.

BIO 6103 Genetic Engineering An introduction to genetic engineering through an overview of the types of experiments that recombinant DNA makes possible, and an explanation of the information that such experiments have revealed. Lecture three hours per week.

BIO 6113 Advanced Cell Biology Study of recent advances in cell biology through critical analysis of current literature. Focusing on eukaryotic cell structure and function, topics may include, but not be restricted to, cellular structures and organelles; cell cycling; signal transduction; gene regulation; and intracellular trafficking. Prerequisites: A course in cell biology or permission of the professor

BIO 6013 Evolutionary Biology A summary of current theories concerned with evolution of biological organisms. An elective course particularly directed to the needs of biological science majors including students of Biology, Botany, Zoology, and Wildlife Management. (Fall of even years)

BIO 6123 Specialized Biochemistry An advanced study of biochemical pathways leading to specialized biologically active metabolites. Emphasis will be on specialized pathways in plants and their counterparts in animals, and microorganisms.

BIO 6143 Introduction to Biotechnology & Research Design Study of molecular biological techniques and experimental designs through oral and written review of scientific literature. Career preparation by construction of curriculum vitae and work portfolios. Prerequisites: Students must be graduate students in a biological field of science.

BIO 6144 Laboratory in BioTechniques I Laboratory techniques in protein chemistry and analysis, cell culture, and DNA/RNA isolation techniques. Techniques also include a variety of chromatographic methods, electrophoresis, UV-vis spectroscopy and radiochemistry.

BIO 6154 Laboratory in BioTechniques II Laboratory techniques in DNA/RNA analysis and applications, including PCR, real-time PCR, recombinant DNA and the production of gene expression products.

BIO 6196 Internship in Biotechnology Participation in an internship with a private business, research center or public agency in the field of biotechnology. Included is a minimum of 300 work hours. Internship may be a volunteer or paid position. Included is the completion and approval of a synthesis paper covering methods and applications of molecular tools used during this internship. Prerequisite: BIO 6144, BIO 6154

BIO 6301 Aquatic Biology The collection, identification, and study of aquatic invertebrate and vertebrate animals with emphasis on life history, ecology, and importance to man. Lecture one hour per week. Prerequisites: BIO 1503, 1501, 1303, 1301.

BIO 6302 Laboratory for Aquatic Biology Four hours per week. To be taken concurrently with BIO 6301. (Course fee, \$20)

BIO 6371 Practicum I Practicum in biology requires the completion of a minor project in the biological sciences as approved by the student's advisory committee. To be completed by MA students as part of their core curriculum.

BIO 6372 Practicum II Practicum in biology requires the completion of a major project in the biological sciences as approved by the student's advisory committee. To be completed by MA students as part of their core curriculum.

BIO 638V Thesis

BIO 680V Independent Study

BIO 7161 Responsible Conduct in Research A one credit hour course providing training on ethical behavior in sciences.

Botany

BIO 5511 Laboratory for Plant Physiology Three hours per week. To be taken concurrently with BIO 5513. (Course fee, \$20)

BIO 5513 Plant Physiology General principles of conduction, cellular reactions, respiration, growth, photosynthesis, movement, hormones, and metabolism in plants. Lecture three hours per week. Prerequisites: BIO 1501, 1503; CHEM 3103, CHEM 3101.

BIO 5521 Laboratory for Wetlands Plant Ecology Two hours per week. To be taken concurrently with BIO 5522. (Course fee, \$20)

BIO 5522 Wetlands Plant Ecology A study of plant responses to environmental factors during germination, growth, reproduction, and dormancy. Lecture two hours per week. Prerequisites: BIO 3123 or permission of professor or chair.

BIO 5531 Aquatic Plants A systematic study of the structure, classification, and ecology of freshwater algae and freshwater aquatic vascular plants. Lecture one hour per week. Prerequisites: BIO 1501, 1503.

BIO 5532 Laboratory for Aquatic Plants Four hours per week. To be taken concurrently with BIO 5531. (Course fee, \$20)

BIO 5541 Laboratory for Mycology Two hours per week. To be taken concurrently with BIO 5542. (Course fee, \$20)

BIO 5542 Mycology Morphology, cytology, genetics, and physiology of fungi. Lecture two hours per week. Prerequisites: BIO ; CHEM 3103, CHEM 3101.

BIO 5551 Laboratory for Medical Mycology Two hours per week. To be taken concurrently with BIO 5552. (Course fee, \$20)

BIO 5552 Medical Mycology A study of cutaneous, systemic, and opportunistic fungus diseases (mucoses) of man and other animals. Lecture two hours per week. Prerequisites: BOT 1501, 1503.

BIO 5704 Plant Systematics A study of the systematics, nomenclature, morphology, and identification terminology for vascular plants with an emphasis on dichotomous key-based identification of flowering plants of Arkansas.

BIO 5714 Dendrology A study of the systematics, nomenclature, morphology, phenology, geographic range, and natural history of woody plants with an emphasis on field recognition throughout the year.

BIO 6503 Mechanisms of Speciation A study of genetic, environmental and historical factors which modify all species with emphasis on the effects of mutation, selection, and ploidy upon plant genetic systems. Lecture three hours per week. Prerequisite: BIO 3013.

BIO 6513 Global Change Biology Ecological and evolutionary impacts of anthropogenic global changes. Investigation of pollution, climate change, land use change, and species invasions as important factors involved in losses of and changes in distributions of biodiversity. Prerequisite: This course will serve graduate students in biological sciences and environmental sciences. Previous coursework in Ecology is strongly recommended.

Entomology

BIO 5301 Aquatic Entomology Identification, life histories, 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: BIO 3301, 3303; BIO 3023 OR BIO 4371 AND 4373.

BIO 5302 Laboratory for Aquatic Entomology Four hours per week. To be taken concurrently with BIO 5301. (Course fee, \$5)

BIO 5303 Forensic Entomology The life history, ecology, and behavior of insects and related arthropods and how they affect the interpretation of potential crime scenes.

BIO 6311 Laboratory for Medical and Veterinary Entomology Two hours per week. To be taken concurrently with BIO 6313. (Course fee, \$20)

BIO 6313 Medical and Veterinary Entomology A study of the taxonomy, biology and control of arthropods associated with human and animal diseases. Lecture three hours per week. Corequisite: BIO 6311

BIO 6321 Laboratory for Insect Taxonomy Two hours per week. To be taken concurrently with BIO 6322. (Course fee, \$20)

BIO 6322 Insect Taxonomy A survey of the orders and families of insects designed to familiarize the student with the use of taxonomic literature and keys. Lecture two hours per week. Prerequisites: BIO 3301 and 3303 or permission of professor.

Environmental Biology

BIO 5613 Conservation Biology A 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: BIO 3023 or permission of professor.

BIO 5623 Environmental Microbiology A 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 BIO 2103, or 4014, or 4133.

BIO 5611 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 professor.

BIO 5612 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. Lecture two hours per week.

BIO 5633 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: BIO 4131, BIO 4133 and CHEM 4232 or permission of professor. Lecture three hours per week.

BIO 6653 Aquatic Ecotoxicology A study of the effects of contaminants in water, their accumulation in the biota, and the functional response of populations to specific contaminants. Lecture three hours per week. Prerequisites: BIO 5603, or BIO 6301, or permission of professor.

BIO 6601 Laboratory for Environmental Systems Analysis Laboratory three hours per week. To be taken concurrently with ENVR 6103 and BIO 6603. (Course fee, \$5)

BIO 6603 Environmental Systems Analysis Environmental problem-solving utilizing systems modeling and applied statistical analysis. Use of the microcomputer as an analytical tool will be emphasized. Prerequisites: one semester of calculus, one semester of

statistics, BIO 4633,5633, or permission of professor. Lecture three hours per week.

BIO 6613 Remote Sensing and Geographic Information Systems A study of the principles of computer based Geographic Information Systems (GIS) and the theory and practice of remote sensing for ecosystem analysis. A combination of lecture, reading, and computer work will emphasize the collection and analysis of biological phenomena. Lecture three hours per week. Prerequisites: BIO 5522 or permission of professor.

BIO 6621 Laboratory for Case Studies in Ecosystem Management Field and laboratory experiences in evaluation of ecological, economic and sociological aspects of management of water, soil, and air resources. Course will emphasize data collection, analysis and reporting. Prerequisites: BIOL 3023 or 4373,5633 and 6603 or permission of professor. Laboratory three hours per week. (Course fee, \$5)

BIO 6633 Population Community Ecology An overview of principles, applications, and modeling of population and community ecology.

BIO 6623 Case Studies in Ecosystem Management Evaluation of 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. Prerequisites: BIO 3023 or 4373 , 5633 and 6603 or permission of professor. Lecture three hours per week.

Zoology

BIO 5311 Fishery Biology A study of identification, ecology, food habits, management, and behavior of fishes. Lecture one hour per week. Prerequisites: BIO 1301,1303.

BIO 5312 Laboratory for Fishery Biology Four hours per week. To be taken concurrently with BIO 5311. (Course fee, \$20)

BIO 5332 Animal Histology Microscopic survey of cells and tissues of vertebrate organ systems. This is a pre-existing undergraduate course (BIO 4332). The graduate version will require grad students to investigate selected methods/topics beyond what is expected of undergrads. No prerequisites.

BIO 5342 Laboratory for Animal Histology Four hours per week. To be taken concurrently with BIO 5332.

BIO 5351 Laboratory for Mammalogy Three hours per week. To be taken concurrently with BIO 5342. (Course fee, \$20)

BIO 5352 Mammalogy Classification, distribution, structure, ecology, adaptations, and economic importance of mammals. Lecture two hours per week. Prerequisites: BIO 1301,1303.

BIO 5362 Applied Aquaculture Field course in which principles are applied within several aquaculture business settings. Intended for the student interested in wildlife and fisheries biology. Prerequisites: BIO 4311 AND 4312.

BIO 5372 Applied Fisheries Field course in which principles are applied within several fisheries management settings. Intended for the Wildlife Ecology and Management major. Special course fees may apply. Prerequisite: BIO 4311.

BIO 5343 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.

BIO 5341 Laboratory for Animal Embryology Two hours per week. To be taken concurrently with BIO 5343.

BIO 5361 Laboratory for Mammalian Neurobiology Two hours per week. To be taken concurrently with BIO 5363. (Course fee, \$20)

BIO 5363 Mammalian Neurobiology A detailed study of the mammalian nervous system with particular emphasis on morphological aspects. Lecture three hours per week. Prerequisites: BIO 1301, 1303, 2201, 2203 or permission of professor.

BIO 5371 Laboratory for Animal Ecology Two hours per week. To be taken concurrently with BIO 5373. (Course fee, \$20)

BIO 5373 Animal Ecology A study of the distribution, abundance, population dynamics, behavior, and interactions of animals. Lecture three hours per week. Prerequisites: BIO 3023.

BIO 5382 Parasitology The parasites of vertebrates and plants with emphasis on protozoan and helminth parasites of man and domestic animals. Lecture two hours per week. Prerequisites: BIO 1301, 1303.

BIO 5392 Laboratory for Parasitology Four hours per week. To be taken concurrently with BIO 5382. (Course fee, \$20)

BIO 5401 Laboratory for Ichthyology Two hours per week. To be taken concurrently with BIO 5402. (Course fee, \$20)

BIO 5402 Ichthyology The taxonomy, distribution, natural history, and economic importance of fishes, with emphasis on Arkansas species. Lecture two hours per week. Prerequisites: BIO 1301, 1303.

BIO 5411 Laboratory for Herpetology Two hours per week. To be taken concurrently with BIO 5412. (Course fee, \$20)

BIO 5412 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: BIO 1301, 1303.

BIO 5421 Laboratory for Ornithology Three hours per week. To be taken concurrently with BIO 5423. (Course fee, \$20)

BIO 5423 Ornithology A study of the evolution, taxonomy, behavior, ecology, population biology, physiology, and conservation of birds. Lecture three hours per week. Prerequisites: BIO 1301, 1303.

BIO 5403 Comparative Vertebrate Reproduction This combined lecture/lab course surveys major events in the vertebrate reproductive cycles and patterns. Prerequisites BIO 3231 and 3233 or 3323, or permission of the instructor.

BIO 5433 Field Experience in Marine Environments Hands-on experience with living and non-living components of marine environments. Emphasis on marine organisms and habitats but will incorporate human interactions associated with marine environments. Course is comprised of an intensive 10 day (10 hrs per day) field trip to an appropriate marine environment.

BIO 6133 Bioinformatics and Applications Provides a basic understanding of computational methods used in bioinformatics, including hands on training to access and use biological data sources to analyze nucleotide/amino acid sequences and three-dimensional atomic structures of proteins, nucleic acids, allowing interpretation of biological processes. Prerequisites: Knowledge of cell biology OR Permission of Instructor.

BIO 6331 Laboratory for Comparative Ethology Two hours per week. To be taken concurrently with ZOO 6312. (Course fee, \$5)

BIO 6332 Comparative Ethology Description of the known behavioral adaptations of animals to their environments with emphasis on adaptive significance, including an introduction to objective analysis of behavior patterns. Lecture two hours per week. Prerequisites: BIO 1301,1303.

BIO 6342 Natural History of the Vertebrates The study of the classification and natural history of vertebrates. Lecture two hours per week. Prerequisites: BIO 1301,1303.

BIO 6352 Laboratory for Natural History of the Vertebrates Four hours per week. To be taken concurrently with BIO 6342. (Course fee, \$20)

BIO 6343 Cell & Molecular Neurobiology This course provides an understanding of how the nervous system functions on a molecular and cellular level through lectures and discussions of original scientific papers related to lecture topics. Three hours per week. Prerequisite: Course(s) in basic neurobiology or permission of instructor.

BIO 6351 Laboratory for Comparative Physiology Three hours per week. To be taken concurrently with BIO 6353. (Course fee, \$5)

BIO 6353 Comparative Physiology Comparison of nutrition, water balance, excretion, transport mechanisms, temperature regulation, metabolism, reproduction and nervous coordination set in a phylogenetic format. Emphasis would be on the evolution of animal processes in relation to the environment. Lecture three hours per week. Prerequisites: BIO 1301,1303.

Environmental Sciences

ESCI 613V (1-6 hours) Independent Research in Environmental Sciences: (Subtitle varies) Independent investigations by a student or students directed by faculty and researchers that culminate in the development of or training in new techniques for the production of published findings. As with other independent study courses, the supervising faculty member, number of credit hours and project description will vary. Prerequisites: Admission to the M.S. program or consent of instructor.

ESCI 614V (1-6 hours) Environmental Sciences Internship Off-campus directed experience with environmental management and research with agencies, industries, consultants, municipalities, nonprofit groups or applicable institutions and operations. Independent work experiences by students directed by faculty and mentored by sponsors that culminate in elaboration of their focus area through professional exposure and training. As with similar independent study courses, the supervising faculty member, number of credit hours and project description will vary. Prerequisites: Admission to the M.S. program or consent of

instructor and sponsor.

ESCI 6303 Global Water Issues Overview of current and historical water quality and quantity issues shaping human civilization. Emphasizes water issues facing regions of dense population and intensive agriculture. Importance of ground and surface water, ecosystems, sustainability, economic and policy issues of water are investigated.

ESCI 6323 Population Community Ecology An overview of principles, applications, and modeling of population and community ecology.

ESC 689V (1-6 hours) Thesis

ESCI 7111 Seminar in Environmental Sciences Reports on and discussions of current topics in the environmental sciences. Presentations and discussion by faculty and students. May be repeated as topic varies. Prerequisites: Admission to the Ph.D. program or permission of professor. Master and specialist level students may enroll in this course with permission of professor.

ESCI 7121 Topical Seminar in Environmental Sciences: (Subtitle varies) Reports on and discussions of a single topic or small set of related topics in the environmental sciences. Presentations and discussion by faculty, invited speakers and students. May be repeated as topic varies. Prerequisites: Admission to the Ph.D. program or permission of professor. Master and specialist level students may enroll in this course with permission of professor.

ESCI 713V (1-6 hours) Independent Research in Environmental Sciences: (subtitle varies) Independent investigations by a student or students directed by faculty and researchers that culminate in the development of or training in new techniques for the production of published findings. As with other independent study courses, the supervising faculty member, number of credit hours and project description will vary. Prerequisites: Admission to the Ph.D. program or consent of instructor.

ESCI 714V (1-6 hours) Environmental Sciences Internship: (Subtitle varies) Off-campus directed experience with environmental management and research with agencies, industries, consultants, municipalities, nonprofit groups or applicable institutions and operations. Independent work experiences by students directed by faculty and mentored by sponsors that culminate in elaboration of their focus area through professional exposure and training. As with similar independent study courses, the supervising faculty member, number of credit hours and project description will vary. Prerequisites: Admission to the Ph.D. program or consent of instructor and sponsor.

ESCI 7151 Responsible Conduct in Research Responsible Conduct in Research is a 1 credit hour course offered during the fall semester. This seminar is designed to introduce graduate students and research professionals to the issues associated with responsible conduct in research. It is designed for graduate and postdoctoral trainees, and for faculty. This seminar course is required for all graduate students in the Environmental Sciences program. This seminar is designed to introduce graduate students and research professionals to the issues associated with responsible conduct in research. Frank discussion of these issues and awareness of consequences of irresponsible conduct is critical to the development of a science workforce that has the ethical training and integrity needed to work in today's increasingly complex science and technology fields.

ESCI 7251 Mentored Teaching Structured instruction and practice of concepts and strategies of college teaching for doctoral students in the Environmental Sciences. With this preparation and sufficient topical background, students will be prepared to teach ASU 1000 level general education lectures sections in the natural, social, or life sciences. Restricted to Environmental Sciences Ph.D. students.

ESCI 889V (1-12 hours) Dissertation

Molecular Biosciences

MBS 6001 Fundamentals of Entrepreneurship for Scientists Entrepreneurship from discovery through protected intellectual property. Information about the fundamental processes required to protect new inventions. Including definitions of intellectual property, necessary record keeping, disclosure options for protecting IP and patent application process.

MBS 6213 Advanced Cell Biology Study of recent advances in cell biology through critical analysis of current literature. Focusing on eukaryotic cell structure and function, topics may include, but not be restricted to, cellular structures and organelles; cell cycling; signal transduction; gene regulation; and intracellular trafficking Prerequisites: A course in cell biology or permission of professor

MBS 6233 Specialized Biochemistry An advanced study of biochemical pathways leading to specialized biologically active metabolites. Emphasis will be on the specialized pathways in plants and their counterparts in animals, and microorganisms. Prerequisites: CHEM 4243 or permission of instructor.

MBS 6243 Molecular Genetics and Genomics An advanced treatment of genetics in microbial, animal, and plant systems, focused on the biochemical and molecular aspects of genetics structure and function. Information derived from current and recent genomic analyses and genomic comparisons will be included. Prerequisite: CHEM 4243 or permission of instructor.

MBS 6251 Techniques in Molecular Biosciences: (with specific subtitles) Training in major technical and analytical skills required for contemporary molecular biosciences research. Topics, identified by subtitles, will vary by semester. May be repeated up to 12 credit hours with unduplicated subtitles.

MBS 7111 Seminar in Molecular Biosciences Reports on and discussions of current topics in Molecular Biosciences, and other science topics. Presentations and discussion by faculty and students. May be repeated. Prerequisites: Admission to the MBS Ph.D. program or permission of professor.

MBS 712V (1-3 hours) Topics in Molecular Biosciences In-Depth study of specific areas related to Molecular Biosciences. Multidisciplinary involving extensive discussion and critical analysis of current literature. May be repeated as topic varies. Prerequisite: two MBS core classes or permission of instructor.

MBS 7151 Responsible Conduct in Research A one credit hour course providing training on ethical behavior in sciences.

MBS 713V (1-9 hours) Independent Study in Molecular Biosciences Independent investigation of a particular topic or technique, directed by faculty that culminates in the development of or training in new techniques or publishable discoveries. May be repeated as topic varies. Prerequisites: Open to all graduate students with consent of instructor.

MBS 7251 Mentored Teaching Structured instruction and practice of concepts and strategies of college teaching for doctoral students in Molecular Biosciences. With this preparation, and sufficient topical background, Students will be prepared to teach ASU 1000 level general education lecture sections in the natural and life sciences.

MBS 889V (1-12 hours) Dissertation

DEPARTMENT OF CHEMISTRY AND PHYSICS

Chemistry

CHEM 5043 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.

CHEM 5053 Geochemistry An overview of the chemistry of terrestrial materials. Emphasis will be on the chemical processes which formed and have changed the Earth. Prerequisites: CHEM 3131, 3133.

CHEM 5204 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, 3123.

CHEM 5224 Instrumentation Applications and operation theories of modern instruments. Laboratory includes use of gas chromatography; infrared, ultraviolet-visible, atomic absorption spectroscopy; and electrochemical techniques. Lecture two hours, laboratory six hours per week. Prerequisites: CHEM 3054, 3121, 3123.

CHEM 5241 Biochemistry Laboratory Experiments aimed to acquaint the student with problems and more important methods of biochemical research. Laboratory three hours per week. Corequisite: CHEM 5243.

CHEM 5243 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 3111 and 3113.

CHEM 5254 Fundamentals of Mass Spectrometry Atomic and molecular spectrometry, surface analytical methods, and their application forensic, environmental, atmospheric, geochemical, and bio-analytical problems. Integrated lecture and laboratory format. Prerequisite enforced: CHEM 3054, CHEM 4224.

CHEM 5443 Advanced Biochemistry The second semester continuation of biochemistry. Topics will focus on anabolic metabolism and bioinformation processes vital in biological systems. Current research in biochemistry and medical correlates will also be discussed. Prerequisite: CHEM 4243

CHEM 6144 Environmental Instrumentation Principles of operation and applications of modern instrumental techniques used in environmental science. Particular emphasis will be placed on GC, GC/MS, HPLC, AA, UV/VIS, and FTIR. Lecture two hours, laboratory six hours per week. Prerequisite: CHEM 5043.

CHEM 6233 Specialized Biochemistry An advanced study of biochemical pathways leading to biologically active metabolites. Emphasis will be on specialized pathways in plants and their counterparts in animals, and microorganisms. Aspects of metabolic engineering, chemical ecology and applications of specialized metabolites in medicine and agriculture will be discussed. Prerequisite: CHEM 5243 or equivalent; course in plant physiology and molecular biology are advantageous.

CHEM 6273 Research in Chemistry Directed laboratory study in a specialized aspect of chemistry designed to provide experience in independent investigations. May be taken up to three times (i.e. 9 hours) as the focus of the laboratory research evolves. Prerequisites: Permission of research advisor and Chair of the Department of Chemistry & Physics. The course is restricted to students earning a Master's degree in Chemistry

CHEM 6343 Special Topics The special topic that comprises the course is selected on the basis of the needs of the graduate class. Typical topics that might be offered are: Molecular Structure, Electrochemistry, Chemicals of Pollution, Quantum Chemistry, Chemical Applications of Computer Programming, Nuclear Chemistry, and Organometallic Chemistry.

CHEM 6353 Advanced Analytical Chemistry A discussion of principles and methods of application of analytical chemistry to problems of analysis and the significance of data. Prerequisite: CHEM 3054.

CHEM 6393 Advanced Organic Chemistry Reactions, mechanisms, and structure in organic chemistry. Prerequisites: CHEM 3111 and 3113.

CHEM 6403 Advanced Inorganic Chemistry A study of the quantum theory of bonding, molecular structure, compound formation, and coordination chemistry. Prerequisites: CHEM 4204 and 3123.

CHEM 6433 Advanced Physical Chemistry A systematic, rigorous investigation of the principles of chemistry via thermodynamics, quantum theory, and chemical dynamics. Molecular and macroscopic models are developed in parallel. Prerequisite: CHEM 3133.

CHEM 652V (1-6 hours) Professional Internship The requirements and credits for this course may vary widely from one student to another, involving activities ranging from practice teaching to on-the-job training in industry. Consequently, before admission to the course, a written agreement must be worked out between the student, the student's graduate committee, and any other agency involved.

CHEM 6581 Graduate Seminar Reports on current topics in chemistry. Presentations and discussion by faculty and students.

CHEM 680V (1-3 hours) Independent Study

CHEM 689V (1-6 hours) Thesis

Geology

GEOL 5333 Hydrogeology A discussion of the hydrologic cycle with strong 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 5403 Nuclear and Particle Physics Radioactivity and nuclear structure including nuclear disintegration and fission. Lecture three hours per week. Prerequisite: PHYS 3303.

PHYS 5463 Advanced Mechanics The Lagrangian and Hamiltonian formulations, rigid body mechanics and special relativity. Prerequisite: PHYS 3153.

PHYS 5513. Advanced Electromagnetic Theory The study of Maxwell's equations as applied to waveguides, radiation, and wave propagation in various media. Lecture three hours per week. Prerequisite: PHYS 3203.

PHYS 5533 Solid State Physics An 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.

PHYS 5553 Principles of Quantum Mechanics Solutions of the Schrodinger wave equation, including the harmonic oscillator, the hydrogen atom, and perturbation theory. Lecture three hours per week. Prerequisite: 20 hours of physics.

PHYS 680V (1-3 hours) Independent Study Prerequisite: Consent of Physics Faculty.

DEPARTMENT OF COMPUTER SCIENCE

Computer Science

CS 5012 Accelerated Structured Programming First course in programming, emphasis on programming methodology, procedural abstraction, and top down design. Introduction to string processing, file input and output, recursion, and simple data structures. Cannot be used for CS degree credit. Prerequisites: Permission of the Computer Science faculty.

CS 5022 Accelerated OOP and Fundamental Data Structures Emphasis on object-oriented programming techniques. Introduction to abstract data types. Linked lists, stacks, queues and binary trees. Searching and sorting techniques. Cannot be used for CS degree credit. Prerequisites: Permission of the Computer Science faculty.

CS 5032 Algorithms and Advanced Data Structures Analysis of data structures and associated algorithms. Examination of advanced tree structures, heaps, hashing techniques, and graph algorithms. Cannot be used for CS degree credit. Prerequisites: Permission of the Computer Science faculty.

CS 5543 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 3113.

CS 5723 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. Turing Machines. Prerequisite: CS 3113.

CS 5313 Computer Networks Issues and principles involved in the design of computer networks using the OSI reference model as a framework. Prerequisite: CS 3233.

CS 5213 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 3113 Data Structures.

CS 5223 UNIX Systems Programming System-level programming in UNIX

systems. Prerequisite: CS 3113.

CS 5433 Artificial Intelligence Representation of knowledge and introduction to a functional programming language; search methods and control. Typical applications of artificial intelligence. Prerequisite: CS 3113.

CS 5413 Computer Graphics I The creation, storage, and manipulation of models of objects and their pictures via computer. Implementation of graphics routines beginning at the device driver level and continuing with two- and three-dimensional techniques. Prerequisite: CS 3113.

CS 5423 Computer Graphics II Continuation of Computer Graphics I. Techniques for generation of realistic solid models are examined. Topics include hidden surface removal, shading, shadowing, reflection, refraction, and color theory. Prerequisite: CS 5413.

CS 5113 Software Engineering I Techniques of design, implementation, and automated tools, quality assurance, metrics, and maintenance for large scale software systems. Projects will provide team programming experience. Prerequisite: CS 3113.

CS 5123 Software Engineering II Continuation of Software Engineering I; the survey techniques for dealing with large scale software systems begun there continues here. Projects will provide team programming experience. Prerequisite: CS 5113.

CS 583V 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, CS 3363, and either CS 3113.

CS 5713 Analysis of Algorithms The analysis of space and time requirements of algorithms. Worst-case and average case studies. Greedy algorithms and divide-and-conquer algorithms examined. Tractable and intractable algorithms surveyed. Prerequisites: CS 3113 and MATH 2214.

CS 5133 Compilers Techniques for the construction of compilers. BNF and EBNF representations. Lexical, syntactic and semantic analysis. Top-down and bottom-up parsing. Construction of run-time systems and symbol table routines. Code generation and optimization. Automation tools. Prerequisite: CS 3113.

CS 5823 Scripting Languages Examination of scripting languages compared to conventional programming languages and construction of domain-specific solutions for common problems in GUI, networking, and web programming. Prerequisite: CS 3113 Data Structures.

CS 6423 Robotic Software Control Study of robot manipulators from mathematical and programmed control perspectives. Topics include kinematic representation, manipulator positioning, velocity control, and trajectory calculation. Prerequisite: permission of professor.

CS 6413 Solid Modeling Examination of advanced modeling techniques with emphasis on radiosity. Techniques for rapid interactive display of a complex three-dimensional environment will be developed. Prerequisite: CS 5423 or permission of professor.

CS 6513 Data Compression and Indexing Compressing, indexing and querying large collections of text and image data. Prerequisite: CS 5123 or CS 5713 or permission of instructor.

CS 6313 Data Security Methods for protection, security, and privacy of data; access controls, authentication, cryptographic controls, information flow controls, security kernels. Security of data in networks. Prerequisite: CS 3233.

CS 6433 Natural Language Processing Data representations used in programming computers to interpret and to generate natural language text. Background from linguistics, theoretical computer science and lexical analysis; structures and algorithms for syntactical analysis, semantic analysis, and knowledge representation.

CS 6813 Seminar in Computer Science: (subtitle varies) Current topics in Computer Science.

CS 6713 Advanced Analysis of Algorithms Theoretical space and time requirements for algorithms. Prerequisites: CS 5703.

CS 6723 Computability Theory Turing machines and equivalent models of computation. The universal Turing machine and unsolvability results. Study of computable functions. Problem classification and hierarchy. Prerequisite: CS 5723 or permission of professor.

CS 6213 Parallel Processing Parallel processing and supercomputer architecture with emphasis on efficient utilization of resources. Prerequisite: CS 3223.

CS 6823 Special Topics: (subtitle varies) Current topics of interest to graduate computer science students. (May be repeated for credit with different subtitle. ONLY six hours with the same course number will count toward the degree.)

CS 688V Independent Study

CS 689V Thesis

DEPARTMENT OF MATHEMATICS AND STATISTICS

Mathematics

MATH 5123 Special Topics in Math and Science Education (Variable Title) Content-specific topics as they are related to mathematics and Science education. Does NOT apply to credit toward coursework required for the MS or MSE in Mathematics.

MATH 5423 Modern Algebra II A continuation of MATH 3303. Prerequisite: MATH 3303.

MATH 5513 Applied Mathematics A study of topics from ordinary and partial differential equations, vector analysis, and functions of a complex variable, with physical applications. Prerequisite: MATH 3254.

MATH 5533 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 a high level programming language.

MATH 5553 Advanced Calculus I The calculus of one and of several variables. Limits, continuity, sequences, differentiation, partial differentiation, integration, and infinite series. Prerequisite: MATH 3254.

MATH 5563 Advanced Calculus II A continuation of MATH 5553. Prerequisite: MATH 4553.

MATH 5913 Advanced Geometry Provides instruction to current teachers to increase mathematics content knowledge through the use of technology and cutting-edge pedagogical methods in geometry instruction. This course may not be used to satisfy a mathematics requirement for the MS or the MSE degree.

MATH 6603 Abstract Algebra I A study of finite groups, cyclic groups, groups with operators, right and left modules, lattices and other related topics. Prerequisite: MATH 3303.

MATH 6613 Abstract Algebra II A continuation of MATH 6603.

MATH 6623 Differential Geometry An introduction to manifolds, connections, differentiable structures and related topics. Prerequisite: MATH 6753.

MATH 6643 Advanced Linear Algebra Topics to be selected from the broad range of subjects usually called linear algebra or linear mathematics, including representation theory, infinite-dimensional vector spaces, normed linear spaces, complex vector spaces, tensor products and algebras, and forms. Prerequisites: MATH 3243, 3303.

MATH 6653 Theory of Numbers Divisibility of integers, distribution of primes, congruences, quadratic residues, and continued fractions. Prerequisite: MATH 3303.

MATH 669V (1-3 hours) Seminar Topics of interest to graduate mathematics students.

MATH 6753 Point Set Topology Theory of point set and abstract spaces. The real line, metric spaces, and general topological spaces. Prerequisite: MATH 4553.

MATH 6793 Calculus of Variations Necessary and sufficient conditions for extrema of single integral problems in the plane and three-space. Some generalizations to higher dimensions with applications. Prerequisite: MATH 4553.

MATH 6813 Advanced Ordinary Differential Equations Stresses the study of existence of solutions, autonomous systems and their phase space and the Lyapunov stability of solutions of differential equations. Prerequisite: MATH 4553.

MATH 6823 Functions of a Real Variable I Properties of sets, sequences of functions, measure theory and other related topics. Prerequisite: MATH 4553.

MATH 6833 Functions of a Real Variable II A continuation of MATH 6823.

MATH 6853 Functions of a Complex Variable I Elementary properties of a complex variable. Limits, continuity, differentiation, integration, and transformations. Prerequisite: MATH 4553.

MATH 6863 Functions of a Complex Variable II A continuation of MATH 6853.

MATH 6873 Numerical Analysis I Included are such topics as approximation, interpolation, numerical differentiation and integration, and smoothing of data. Prerequisite: MATH 4403 and a programming language such as C++ or FORTRAN, or permission of professor.

MATH 6883 Numerical Analysis II Included are such topics as Gaussian

Elimination, least squares methods, eigenvalues and eigenvectors, the QR algorithm, and interactive methods. Prerequisite: MATH 6873 or permission of professor.

MATH 680V (1-3 hours) Independent Study

MATH 689V (1-6 hours) Thesis

Statistics

STAT 5463 Probability and Statistics II Point and interval estimation, testing hypotheses, standard statistical tests, correlation and regression, and non-parametric methods. Prerequisite: STAT 5453.

STAT 6613 Nonparametric Statistics Topics include hypothesis testing using data from unknown distributions, tests of independence, tests of goodness-of-fit, rank correlation, and simple linear regression. Prerequisite: STAT 3233 or equivalent.

STAT 6623 Statistical Methods with SAS Programming Point estimation, interval estimation, and tests of significance for comparing two population means and proportions. Power analysis and choosing sample size. Nonparametric methods and Chi-square tests. Linear regression, analysis of variance and multiple comparison procedures. Other topics as time permits. Prerequisite: Stat 3233 or equivalent.

STAT 6643 Multivariate Analysis Topics include the bivariate normal distribution, multiple and partial correlation, canonical correlation, discriminate analysis, multivariate analysis of variance (MANOVA), and factor analysis. Prerequisite: STAT 3233, MATH 3243, or equivalent.

STAT 6653 Data Analysis I: Regression Analysis Simple and multiple linear regression, related estimation and hypothesis testing, model selection, examination of residuals, multicollinearity diagnostics, outliers and influence, qualitative predictor variables, logistic regression. Prerequisite: STAT 3233 or equivalent.

STAT 6663 Data Analysis II: Analysis of Variance (ANOVA) Single-factor, two-factor, and multifactor analysis of variance (ANOVA), related estimation and hypothesis testing, multiple comparison procedures, random effects models, analysis of covariance, ANOVA in some standard experimental designs. Prerequisite: STAT 6653 or permission of instructor.

STAT 6673 Design of Experiments Replication, randomization, and blocking, analysis of variance, full and factorial experiments at two and three levels, effect aliasing, design resolution and minimum aberration criteria, nonregular designs and complex aliasing, introduction to response surface methodology. Prerequisite: STAT 3233 or equivalent.

STAT 6703 Statistical Analysis I Applications of elementary statistics. Advanced principles including statistical study, data gathering, variance and covariance. Prerequisite : STAT 4453 or equivalent.

STAT 6713 Statistical Analysis II A continuation of STAT 6703.

STAT 6723 Probability Abstract probability spaces, random variables, conditional probability, independence, types of convergence, sums of independent random variable, stochastic processes. Prerequisite: MATH 4553.

STAT 6833 Biostatistics Applications of advanced statistical techniques to

the Life and Health Sciences. Topics include estimation and hypothesis testing, single and multiway analysis of variance (ANOVA), linear regression, correlation and frequency analysis. Prerequisite: an introductory level statistics course.

OFFICE OF INTERNATIONAL PROGRAMS

The mission of The International Center for English, through its varied programs and course offerings, is to prepare international students with limited English proficiency for academic studies at Arkansas State University (ASU) and other higher education institutions in the United States by providing quality instruction in English as a second language. Our faculty and staff are committed to fostering students' linguistic and cultural competency, and to developing their critical thinking skills that will enable them to succeed in their academic endeavors and assisting them in having a positive intercultural experience during their matriculation at ASU and their stay in the United States.

Course Descriptions

IEP 5001 International Bridge Program The Graduate International Bridge Program is a course that helps students develop effective academic study skills at the graduate level, such as critical analysis of journal articles, conducting research, citing sources in papers, etc. as well as other skills such as listening and note taking and life skills necessary for adjusting to the academic community. Additionally, this course will provide English language tutoring assistance to students for any of the other classes in which they are enrolled.

STATE LICENSURES AND AUTHORIZATIONS

Alabama

Licensure: The Alabama Commission on Higher Education, and the State of Alabama Department of Post-secondary Education have licensed Arkansas State University pursuant to the Alabama Private School License Law, Code of Alabama, Title 16-46-1 through 10 to offer instruction in the following programs:

Master of Science in Education - Curriculum and Instruction
Master of Science in Education - Educational Theory and Practice
Master of Science in Education - Instructional Specialist in Special Education P-4
Master of Science in Education - Instructional Specialist in Special Education 4-2

Alabama Students: Contact the Teacher Education and Certification Division of the Alabama State Department of Education at 334-242-0035 or www.alsde.edu to verify whether these programs qualify for teacher certification, endorsement, or salary benefits.

Kansas

Licensure: The Kansas Board of Regents has granted a Certificate of Approval for Arkansas State University to offer the following programs:

Master of Science in Education - Curriculum and Instruction
Master of Science in Education - Educational Leadership
Master of Science in Education - Educational Theory and Practice
Master of Science in Education - Instructional Specialist in Special Education P-4
Master of Science in Education - Instructional Specialist in Special Education 4-2

Kansas Students: Contact the Kansas State Department of Education at 785-291-3678 or www3.ksde.org/cert/cert.html to verify whether these programs qualify for teacher certification, endorsement, or salary benefits.

Missouri

Licensure: The Missouri Department of Higher Education has authorized Arkansas State University to offer the following programs:

Master of Science in Education - Curriculum and Instruction
Master of Science in Education - Educational Leadership
Master of Science in Education - Educational Theory and Practice
Master of Science in Education - Instructional Specialist in Special Education P-4
Master of Science in Education - Instructional Specialist in Special Education 4-12

Missouri Students: Contact the Missouri Department of Elementary and Secondary Education at 573-751-4212 to verify whether these programs qualify for teacher certification, endorsement, or salary benefits.

Tennessee

Licensure: Arkansas State University is authorized by the Tennessee Higher Education Commission. This authorization must be renewed each year and is based on an evaluation by minimum standards concerning quality of education, ethical business practices, health and safety, and fiscal responsibility.

Master of Science in Education - Curriculum and Instruction
Master of Science in Education - Educational Leadership (Students must complete degree by July 1, 2012)
Master of Science in Education - Educational Theory and Practice
Master of Science in Education - Instructional Specialist in Special Education P-4
Master of Science in Education - Instructional Specialist in Special Education 4-12
Master of Public Administration

Tennessee Students: Contact the Tennessee Department of Education at (615) 532-4885 or <http://www.state.tn.us/education/> to verify whether these programs qualify for teacher certification, endorsement, or salary benefits.

Disclosure on Transferability of Credits per Tennessee Higher Education Commission SECTION 1. Tennessee Code Annotated, Title 49, Chapter 7, Part 1, is amended by adding the following language as new, appropriately designated section: § 49-7-1_.

Credits earned at Arkansas State University may not transfer to another educational institution. Credits earned at another educational institution may not be accepted by Arkansas State University. You should obtain confirmation that Arkansas State University will accept any credits you have earned at another educational institution before you execute an enrollment contract or agreement. You should also contact any educational institutions that you may want to transfer credits earned at Arkansas State University to determine if such institutions will accept credits earned at Arkansas State University prior to executing an enrollment contract or agreement. The ability to transfer credits from Arkansas State University to another educational institution may be very limited. Your credits may not transfer and you may have to repeat courses previously taken at Arkansas State University if you enroll in another educational institution.

You should never assume that credits will transfer to or from any educational institution. It is highly recommended and you are advised to make certain that you know the transfer of credit policy of Arkansas State University and of any other educational institutions you may in the future want to transfer the credits earned at Arkansas State University before you execute an enrollment contract or agreement.

The Tennessee Higher Education Commission's website maintains useful information for students and the public: <http://www.state.tn.us/thec/index.html>

Texas

Certificate of Authorization: Arkansas State University is authorized by the Texas Higher Education Coordinating Board to grant Master's Degrees. Arkansas State University meets the standards set forth in the rules of the Texas Higher Education Coordinating Board and qualifies for an exemption pursuant to Subchapter G, Chapter 61, Texas Education Code and, Defined in Chapter 7.3 of Board rules. Arkansas State University is authorized to conduct courses, grant degrees, grant credit toward degrees, and to use certain protected academic terms in the State of Texas. Authority of for this exemption will continue as long as the institution maintains its accreditation status with the North Central Association of Colleges and Schools, The Higher Learning Commission (NCA-HLC) and standards acceptable to the Coordinating Board.

Accreditation: Arkansas State University is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools; 312/263-0456, www.ncahlc.org/.

ADMINISTRATIVE SUPPORT STAFF 2012

ACADEMIC AFFAIRS AND RESEARCH

Gina Hogue, Interim Associate Vice Chancellor for Academic Services
Administrative Services, Robin Hicks, Executive Assistant
Advisement Services, Melissa Jackson, Director
Delta Center for Economic Development, Alan McVey, Executive Director
Delta Heritage Initiatives, Ruth Hawkins, Director
Fowler Center, Jeff Brown, Director
Institutional Research, Planning & Assessment, Kathryn Jones, Director
International Programs & Services, Tugrul Polat, Director
Museum, Marti Lu Allen, Director
Regional Programs, Beverly Gilbert, Dean
Admissions, Records and Registration Office, Tracy Finch, Registrar

FINANCE AND ADMINISTRATION

Russ Hannah, Associate Vice Chancellor for Finance
Administrative Services, Jo LunBeck, Director
Budget Planning and Development, Donna McMillin, Director
Controller's Office, Myra Goodwin, Controller
Convocation Center, Tim Dean, Director
Facilities Management, Al Stoverink, Assistant Vice Chancellor
Human Resources, J. W. Mason, Associate Vice President
Information & Technology Services, Mark Hoeting, Director
Procurement Services, Carol Barnhill, Director
Sponsored Programs Accounting, Nikki Turner, Director
Treasurer's Office, Judy Reed, Treasurer

CHANCELLOR'S OFFICE

Dr. Jason Penry, Chief of Staff
Interim Director of Athletics, Doug Abel

STUDENT AFFAIRS

Student Services, Lonnie Williams, Associate Vice Chancellor
Student Services, Craig Johnson, Assistant Vice Chancellor
Student Services, Beth Silverthorn, Executive Assistant
Recruitment, Tammy Fowler, Director
Career Services, Sharon Becker, Associate Director
Counseling Center, Phillip Hestand, Director
Dining Services, David Miller, General Manager
Disability Services, Jenifer Rice-Mason, Director
Financial Aid, Terry Finney, Director
Parking Services, David McKinney, Director
Residence Life, Patrick Dixon, Director
Student Union, Randall Tate, Dean of Student Development
Student Health Center, Renata Vaughn, Director
Testing, Rosemary Freer, Director
University Police, Jim Chapman, Director

UNIVERSITY ADVANCEMENT

University Development, Jim Prock, Executive Director

Advancement Services, Holly Van Wagener, Executive Director

Alumni Relations, Beth Smith, Director

Publications and Creative Services, Mark Reeves, Director

University Communications, Christy Valentine, Director

THE GRADUATE FACULTY 2011

<p>ADAMS, THOMAS MYERS, II, 1981 B.S., East Carolina University M.A., East Carolina University Ed.D., West Virginia University</p>	<p>Professor of Exercise Science</p>
<p>ADDAE, REJOICE, 2012 BSW, University of Arkansas at Pine Bluff MSW, University of Arkansas at Little Rock Ph.D., Jackson State University</p>	<p>Assistant Professor of Social Work</p>
<p>AGNEW, DAVID, 1990 B.S.A.E., University of Tennessee—Martin M.Ed., Mississippi State University Ed.D., Mississippi State University</p>	<p>Professor of Agricultural Education</p>
<p>AHN, JEONGHO, 2009 B.S., Kyung Hee University, Korea M.S., Kyung Hee University, Korea Ph.D., University of Iowa</p>	<p>Assistant Professor of Mathematics</p>
<p>AHN, SOOHYOUN, 2006 B.S., Yonsei University, South Korea B.S., Yonsei University, South Korea Ph.D., Cornell University</p>	<p>Associate Professor of Food Science</p>
<p>ALDRIDGE, ROY LEE, JR., 2000 B.S.P.T., University of Tennessee M.S.P.T., University of Tennessee Ed.S., Arkansas State University Ed.D., Arkansas State University</p>	<p>Professor of Physical Therapy</p>
<p>ALI, HASHIM, 2009 B.S., United Arab Emirates University Ph.D., University of Iowa</p>	<p>Assistant Professor of Chemistry</p>
<p>ALLEN, KAREN, 2012 B.A., Oakland University MSW, Wayne State University Ph.D., Wayne State University</p>	<p>Chair, Department of Social Work Professor of Social Work</p>
<p>ALLEN, MARTI LU, 2007 B.A., University of Missouri-Columbia M.A., University of Michigan Ph.D., University of Michigan</p>	<p>Director, ASU Museum</p>
<p>ALLEN, SUSAN DAVIS, 2003 B.S., Colorado College Ph.D., University of Southern California</p>	<p>Distinguished Professor of Chemistry, Physics and Engineering</p>
<p>ALLEN, WILLIAM J., 1979 B.A., University of Alabama M.A., The Johns Hopkins University Ph.D., The Johns Hopkins University</p>	<p>Professor of Art History</p>
<p>AMIENYI, OSABUOHEN P., 1989 B.S., Tennessee State University M.A., Northern Illinois University Ph.D., Bowling Green State University</p>	<p>Professor of Radio-TV Chair, Radio-TV</p>
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