The Record

Graduate Catalog Issue

Western Carolina University
Western Carolina University is committed to equality of educational opportunity and does not discriminate against applicants, students, or employees based on race, color, national origin, religion, sex, age, sexual orientation, or disability. Moreover, Western Carolina University is open to people of all races and actively seeks to promote racial integration by recruiting and enrolling a larger number of African-American and other minority students.

For information concerning affirmative action policies and procedures, contact the Affirmative Action Officer, 530 H.F. Robinson Administration Building, Western Carolina University, Cullowhee, North Carolina 28723, telephone (704) 227-7116.

The Graduate Catalog Issue is one of two issues of The Record published by Western Carolina University giving full details of academic programs and regulations. The other is the General Catalog Issue.

Copies of the appropriate issues are made available to all students registered at the university, high school principals and guidance counselors, college and university libraries, and all public and private high schools and institutions of higher learning in North Carolina. Additional copies are available from the Office of Research and Graduate Studies, Western Carolina University, Cullowhee, North Carolina 28723, telephone (704) 227-7398. Nine thousand copies of this public document were printed at a cost of $5,294 or $.59 per copy.
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GRADUATE SCHOOL CALENDAR

Fall Semester 1996

August 15, Thursday, 3-6 p.m. Registration in Asheville; A $10 late fee applies after this date
August 16, Friday, 9 a.m.-12 noon Graduate Student orientation
August 18, Sunday, 8 a.m. Residence halls open
August 18, Sunday, 1 p.m.-6 p.m. Registration in Graduate School office in Cullowhee
August 19, Monday All classes begin¹
August 19-23, Monday-Friday Late registration and schedule changes in the Graduate School office in Cullowhee¹
August 30-September 2, Friday, 5 p.m.-Monday Labor Day holiday
September 3, Tuesday, 8 a.m.
October 7-8, Monday-Tuesday Classes resume
October 9, Wednesday, 8 a.m. Fall holiday
October 11, Friday Classes resume
October 21, Monday Last day to drop a course with a W
October 21-November 8, Monday-Friday Last day for students completing programs in May to file degree application in the Graduate School
November 26, Tuesday Academic advising for spring semester and early registration in Cullowhee
November 27-December 1, Wednesday, 2 p.m.-Sunday Last day for completed theses and comprehensive examination results to be submitted to the Graduate School for students completing degree requirements in December
December 2, Monday, 8 a.m. Thanksgiving holiday
December 4, Wednesday Classes resume
December 5, Thursday Last day of classes
December 6-12, Friday-Thursday Reading day
December 13, Friday Final examinations
To Be Announced Christmas holiday begins
December 13, Friday Commencement

Spring Semester 1997

January 9, Thursday, 3-6 p.m. Registration in Asheville; A $10 late fee applies after this date
January 12, Sunday Residence halls open
January 13, Monday Classes in Asheville begin¹
January 13, Monday, 9 a.m.-4 p.m. Registration in Graduate School office in Cullowhee
January 13, Monday, 6 p.m. Evening classes in Cullowhee begin
January 14, Tuesday Day classes in Cullowhee begin
January 14-17, Tuesday-Friday Late registration and schedule changes in the Graduate School office in Cullowhee¹
January 20, Monday Martin Luther King Jr. birthday holiday
March 7, Friday Last day to drop a course with a W
March 10-16, Spring holiday Classes resume
March 10-16, Monday-Sunday Deadline for students completing programs in summer or fall to file degree applications in the Graduate School¹
March 10-16, Monday-Sunday
March 17, Monday, 8 a.m.
March 17, Monday

¹ A late registration fee of $10 will be charged
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>March 24-April 11, Monday-Friday</td>
<td>Academic advising for summer and fall semester and early registration in Cullowhee</td>
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<tr>
<td>March 28-30, Friday, 8 a.m.-Sunday</td>
<td>Easter holiday</td>
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<tr>
<td>March 31, Monday, 8 a.m.</td>
<td>Classes resume</td>
</tr>
<tr>
<td>April 25, Friday</td>
<td>Last day for completed theses to be submitted to the Graduate School for students completing degree requirements in May</td>
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<tr>
<td>April 28, Monday</td>
<td>Last day for written results of comprehensive examination to be submitted to the Graduate School for students completing degree requirements in May</td>
</tr>
<tr>
<td>May 2, Friday</td>
<td>Last day of classes</td>
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<tr>
<td>May 3-9, Saturday-Friday</td>
<td>Final examinations</td>
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<td>May 10, Saturday</td>
<td>Commencement</td>
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<td><strong>Summer Term 1997 (Subject to Change)</strong></td>
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<tr>
<td>May 22, Thursday, 3-6</td>
<td>Registration in Asheville</td>
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<tr>
<td>May 26, Monday, 9-12</td>
<td>Registration in Cullowhee in Graduate School office for new and continuing graduate students</td>
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<tr>
<td>May 26, Monday-August 1, Friday</td>
<td>Summer session (ten-week session)</td>
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<td>May 28, Wednesday-July 1, Tuesday</td>
<td>First summer session</td>
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<tr>
<td>July 2, 8 a.m.-5 p.m., Wednesday</td>
<td>Registration in Cullowhee in Graduate School office for new and continuing graduate students</td>
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<td>July 2, Wednesday-August 1, Friday</td>
<td>Second summer session</td>
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<td>July 18, Friday</td>
<td>Last day for completed theses to be submitted to the Graduate School for students completing degree requirements in August</td>
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<tr>
<td>July 21, Monday</td>
<td>Last day for written results of comprehensive examination to be submitted to the Graduate School for students completing degree requirements in August</td>
</tr>
<tr>
<td>August 1, Friday</td>
<td>Commencement</td>
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<tr>
<td><strong>Fall Semester 1997 (Subject to Change)</strong></td>
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<tr>
<td>August 14, Thursday, 3-6 p.m.</td>
<td>Registration in Asheville; a $10 late fee applies after this date</td>
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<tr>
<td>August 15, Friday, 9 a.m.-12 noon</td>
<td>Graduate Student orientation</td>
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<tr>
<td>August 17, Sunday, 8 a.m.</td>
<td>Residence halls open</td>
</tr>
<tr>
<td>August 17, Sunday, 1 p.m.-6 p.m.</td>
<td>Registration in Graduate School office in Cullowhee</td>
</tr>
<tr>
<td>August 18, Monday</td>
<td>All classes begin¹</td>
</tr>
<tr>
<td>August 18-22, Monday-Friday</td>
<td>Late registration and schedule changes in the Graduate School office in Cullowhee¹</td>
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<tr>
<td>August 29-September 1, Friday, 5 p.m.-Monday</td>
<td>Labor Day holiday</td>
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<tr>
<td>September 2, Tuesday, 8 a.m.</td>
<td>Classes resume</td>
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<tr>
<td>October 10, Friday</td>
<td>Last day to drop a course with a W</td>
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<tr>
<td>October 13-14, Monday-Tuesday</td>
<td>Fall holiday</td>
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<tr>
<td>October 15, Wednesday, 8 a.m.</td>
<td>Classes resume</td>
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<tr>
<td>October 20, Monday</td>
<td>Last day for students completing programs in May to file degree application in the Graduate School</td>
</tr>
<tr>
<td>October 20-November 7, Monday-Friday</td>
<td>Academic advising for spring semester and early registration in Cullowhee</td>
</tr>
<tr>
<td>November 25, Tuesday</td>
<td>Last day for completed theses and comprehensive examination results to be submitted to the Graduate School for students completing degree requirements in December</td>
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</tbody>
</table>

¹ A late registration fee of $10 will be charged
November 26-30,  
   Wednesday, 2 p.m.-Sunday  
December 1, Monday, 8 a.m.  
December 4, Thursday  
December 5, Friday  
December 6-12, Saturday-Friday  
December 13, Saturday  
To Be Announced  

Thanksgiving holiday

Classes resume
Last day of classes
Reading day
Final examinations
Christmas holiday begins
Commencement

Spring Semester 1998 (Subject to change)

January 8, Thursday, 3-6 p.m.  
January 11, Sunday  
January 12, Monday  
January 12, Monday, 9 a.m.-4 p.m.  

January 12, Monday, 6 p.m.  
January 13, Tuesday  
January 13-16, Tuesday-Friday  
January 19, Monday  
March 6, Friday  
March 9-15, Monday-Sunday  
March 16, Monday, 8 a.m.  
March 16, Monday  
March 23-April 10,  
   Monday-Friday  
April 3-5, Friday, 8 a.m.-Sunday  
April 13, Monday, 8 a.m.  
April 24, Friday

April 27, Monday

May 1, Friday  
May 2-8, Saturday-Friday  
May 9, Saturday 

Registration in Asheville; a $10 late fee applies after this date  
Residence halls open  
Classes in Asheville begin  
Registration in Graduate School office in Cullowhee  
Evening classes in Cullowhee begin  
Day classes in Cullowhee begin  
Late registration and schedule changes in Graduate School office in Cullowhee  
Martin Luther King Jr. birthday holiday  
Last day to drop a course with a W  
Spring holiday  
Classes resume  
Deadline for students completing programs in summer or fall to file degree applications in Graduate School office  
Academic advising for summer and fall semester and early registration in Cullowhee  
Easter holiday  
Classes resume  
Last day for completed theses to be submitted to the Graduate School for students completing degree requirements in May  
Last day for written results of comprehensive examination to be submitted to the Graduate School for students completing degree requirements in May  
Last day of classes  
Final examinations  
Commencement

1 A late registration fee of $10 will be charged
TELEPHONE NUMBERS

Area Code 704

Graduate School ................................................................. 227-7398
Academic Affairs ................................................................. 227-7495
Bookstore ........................................................................ 227-7346

Colleges
  College of Applied Sciences .............................................. 227-7272
  College of Arts and Sciences ............................................. 227-7646
  College of Business ........................................................... 227-7401
  College of Education and Allied Professions ....................... 227-7311

Employment, Student ............................................................. 227-7134

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<td>GRE Gen.</td>
<td>Art</td>
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<tr>
<td>Biology/M.S.</td>
<td>GRE Gen. Subj.</td>
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<td>GRE Gen.</td>
<td>Biology; Administration, Curriculum, and Instruction</td>
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<td>GRE Gen.</td>
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<tr>
<td>Two-Year College/ M.A.Ed.</td>
<td>GRE Gen.</td>
<td>College of Business</td>
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<tr>
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<td>GMAT</td>
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<td>Chemistry and Physics</td>
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<td>Community Counseling/ M.S.</td>
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<td>Elementary Education (K-6)/ M.A.Ed.*</td>
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<td>Middle Grades (6-9)/ M.A.Ed.*</td>
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<tr>
<td>Subject Specialties/ M.A.Ed.*</td>
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<tr>
<td>Curriculum-Instruction/ M.A.Ed.*</td>
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<td>Administration, Curriculum, and Instruction</td>
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<td>Instructional Technology</td>
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<td>Elementary and Middle Grades Education; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Specialist-Computers/ M.A.Ed.*</td>
<td>GRE Gen. or MAT</td>
<td>Elementary and Middle Grades Education; Administration, Curriculum, and Instruction</td>
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<td>Elementary and Middle Grades Education</td>
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<td>English/M.A.</td>
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<td>GRE Gen.</td>
<td>Administration, Curriculum, and Instruction</td>
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*Programs leading to recommendation for North Carolina teacher licensure.  
**On inactive status.
<table>
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<tr>
<th>Programs/Degrees</th>
<th>Admission Tests</th>
<th>Supervising Department</th>
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</thead>
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<tr>
<td>Human Resource Development/M.S.</td>
<td>GRE Gen.</td>
<td>Human Services</td>
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<td>Individually Approved Multidisciplinary Studies Two-Year College Teaching (M.A.Ed.)</td>
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<td>Administration, Curriculum, and Instruction; Subject Specialist department</td>
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<td>Industrial Arts Education Secondary Education/ M.I.E.**</td>
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<td>Industrial and Engineering Technology; Administration, Curriculum, and Instruction</td>
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<td>GRE Gen., or NTE Core &amp; Area</td>
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<tr>
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<tr>
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<td>Project Management/M.P.M.</td>
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<td>Public Affairs/M.P.A.</td>
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<td>GRE Gen.</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
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<td>Human Services</td>
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<td>Learning Disabilities/ M.A.Ed.*</td>
<td>GRE Gen.</td>
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<td>Mental Retardation/ M.A.Ed.*</td>
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<tr>
<td>Technology/M.S.</td>
<td>GRE Gen.</td>
<td>Industrial and Engineering Technology</td>
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*Programs leading to recommendation for North Carolina teacher licensure. **On inactive status. ^Program being restructured.
Western Carolina University is one of the sixteen public senior institutions of the University of North Carolina. It is a comprehensive university, authorized to offer programs of study at the baccalaureate, master's, and intermediate levels. The university is comprised of four undergraduate colleges—Applied Sciences, Arts and Sciences, Business, and Education and Allied Professions—and a Graduate School. Statewide in scope, the university has a special sense of responsibility to the western region of North Carolina.

Role and Mission

The fundamental role of Western Carolina University is to foster a community of scholarship in which students, faculty members, administrators, and staff members learn and apply the products of learning. Teaching, service, and research missions are built upon this foundation of scholarship.

The most important activity at Western Carolina University is student-teacher involvement in learning. To this end, the university is committed to the preservation of small classes taught by fully qualified faculty and to maintaining a climate in which teaching is valued and excellence in teaching is the norm. Excellence in teaching is also sustained through a series of on-going university and state-wide programs which promote faculty knowledge and interaction concerning post-secondary teaching. Students are expected to take active responsibility for their learning. Students with a wide range of academic abilities and aptitudes may enter the university, but those who are graduated are expected to be knowledgeable in the perspectives included in general education; competent in critical thinking, logical reasoning, and communication and research skills; aware of ethical and aesthetic values; and productive in employment and general life settings.

Scholarly service and research are essential to the goals of the university. The university encourages and supports service that extends the benefits of scholarship and the principle of life-long learning to the people in the western region of North Carolina as well as to regional, state, national, and international constituencies. The university encourages and supports research and creative activity that provide opportunities for faculty members and students to engage in the exploration and development of knowledge and that support student-teacher interaction.

Principal Functions

The principal function of the university is to provide an academic curriculum appropriate to its role and mission, essentially for the benefit of the people of North Carolina. This curriculum is offered primarily in Cullowhee where creative teaching by a caring faculty in a residential setting creates an environment conducive to learning. In addition, graduate and undergraduate programs are extended to students through centers in Asheville and in Cherokee. Credit and noncredit courses also are sponsored in a variety of locations by the Division of Continuing Education.

The university's commitment to excellence in education at all levels is evident in its rich history of university-wide cooperation in the preparation of effective elementary and secondary school personnel, its establishment of partnerships with surrounding public school systems, its research and service activities within the educational community, and its selection as the host site for the North Carolina Center for the Advancement of Teaching.

Functions of specialized university centers and services include technical and research assistance in the development of human, economic, and natural resources in the southern Appalachian region of the United States; archival and museum activities that record and interpret the history of western North Carolina, the Cherokee people, and the southern Appalachian region and help preserve their cultural artifacts; overseas educational exchanges and technical assistance projects, especially in less developed nations; summer programs for gifted, talented, and transitional pre-college students; childhood developmen-
tal evaluation, as well as diagnostic and treatment programs in reading, speech, and hearing, primarily for residents of western North Carolina; cultural enrichment of the university and regional communities through the fine and performing arts; and an array of activities dedicated to improving the quality of elementary and secondary school instruction and management and to increasing the quality of health care in the region.

Location

Western Carolina University is located in the scenic Appalachian mountain ranges at Cullowhee, North Carolina. The university consists of the main campus in Cullowhee and resident credit centers in Asheville and Cherokee. A faculty of about 335 serves a student body of almost 6,700 in resident-credit and extension classes.

The Cullowhee campus is in a rural valley between the Blue Ridge and Great Smoky mountains, fifty-two miles west of Asheville and seven miles south of Sylva on North Carolina Highway 107. The location at the southern end of Cullowhee valley in the heart of the Tuckasegee River basin gives it an unusually attractive setting. The university provides a bus service between Sylva and Cullowhee for students. Private taxi service also is available. The closest airport to the university is located in Asheville.

The central campus consists of about 265 acres, including beautifully wooded areas and modern academic, student residence, recreation, and athletic facilities. The Blue Ridge Parkway, Great Smoky Mountains National Park, Cherokee Indian Reservation, Fontana Lake, and numerous resort areas offer golf, skiing, fishing, hunting, hiking, water sports, and other recreational opportunities nearby.

Governance

Western Carolina University, a constituent institution of the University of North Carolina, functions under the jurisdiction of the Board of Governors of the University of North Carolina and the Board of Trustees of Western Carolina University. Policies of the Board of Governors are administered by the president and the General Administration of the University of North Carolina. The Board of Trustees receives its authority by delegation from the Board of Governors.

The chancellor is the chief administrative officer of the university. The Faculty Senate, the principal policy-recommending body of the faculty, operates under the provisions of a faculty constitution and bylaws.

Accreditation

Western Carolina University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award degrees at the baccalaureate, master’s, and specialist levels. In addition to this institutional accreditation, other special accreditation by appropriate agencies includes:

- American Assembly of Collegiate Schools of Business
- American Association of Family and Consumer Sciences
- American Chemical Society
- American Dietetic Association (Approved Plan V Program)
- American Speech-Language-Hearing Association
- Commission on Accreditation of Allied Health Education Programs in cooperation with the American Health Information Management Association, and the Joint Review Committee on Educational Programs for the EMT-Paramedic
- Council for Accreditation of Counseling and Related Educational Programs
- Council on Social Work Education
- Environmental Health Science and Protection Accreditation Council
- National Accreditation Council for Environmental Health Science and Protection
- National Accrediting Agency for Clinical Laboratory Sciences
- National Association of Schools of Music
- National Council for Accreditation of Teacher Education
National League for Nursing
North Carolina Board of Nursing
North Carolina Department of Public Instruction
Project Management Institute
Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (Manufacturing Engineering Technology and Electronics Engineering Technology)

The university is a member of appropriate state and national associations and organizations to which its professional programs are related. These include but are not limited to:

Academy of Criminal Justice Sciences
American Association of Colleges for Teacher Education
American Association of Colleges of Nursing
American Association of Higher Education
American Association of State Colleges and Universities
American Council on Education
American Society of Allied Health Professions
Association for Theatre in Higher Education
Association for Continuing Higher Education
Association of Governing Boards of Universities and Colleges
College Entrance Examination Board
Conference of Southern Graduate Schools
Cooperative Education Association
Council of Graduate Schools in the United States
Institute for International Education, Inc.
International Council for Small Business
National Association of Student Financial Aid Administrators
National Business Education Association
National University Continuing Education Association
North American Association of Summer Sessions
North Carolina Academy of Science
North Carolina Association of Colleges and Universities
North Carolina Bar Association
North Carolina Criminal Justice Education and Training Standards Commission
Southeastern Theatre Conference
Southern Atlantic States Association for Asian and African Studies
Southern Regional Education Board
Southern States Communication Association
Speech Communication Association
United States Distance Learning Association
United States Institute for Theatre Technology
GRADUATE STUDENT LIFE

Housing

Residence hall accommodations are available for graduate students. Students who desire residence hall accommodations during the academic year should make reservations early.

The university has ten residence halls, each staffed with professionally trained personnel who are charged with the general responsibility for the building and for the welfare of its residents. Residence hall rooms are designed to be occupied by two students. There are no single rooms, but a student may be assigned a private room for an additional fee when space is available.

Each room is furnished with single beds, study desks, chairs, dressers, and closets. Students must furnish their own pillows, bed linens, blankets, towels, wastepaper baskets, telephones, and study lamps. Students may bring computers, radios, stereo equipment, television sets, carpets, and curtains.

For health and safety reasons, and because of legal statutes, the following are not allowed in residence hall rooms: body-building equipment, cooking and cooking appliances, fireworks, outside aerials or antenna, radio transmitters, air conditioners, firearms, ammunition, explosives, water beds, and darts and archery equipment.

Small kitchenettes are located in some of the residence halls. These kitchens are provided for the residents of the halls. They are not equipped for the preparation of a complete meal.

Residence hall rooms are assigned by the Department of University Housing. All requests for residence hall applications or questions pertaining to residence halls should be addressed to the Department of University Housing, Western Carolina University.

Married/Graduate Students. Western Carolina University opened Robertson Hall in August 1980 for married and graduate students. (Children are not allowed.) The complex is located in the hill area and consists of 37 efficiency apartments and five one-bedroom apartments. All apartments are furnished.

Madison Hall opened in 1993 and offers air conditioned private rooms with private baths. Applicants should apply early.

Off-Campus Housing. The university recommends that all students planning to live off-campus visit the community and inspect the facilities as to heat, other utilities, and safety features before entering into a written contract or agreement with the householder.

Meals

The University Food Service provides two cafeterias—Brown and Dodson—and a Food Court. Students may eat breakfast, lunch, and dinner in either cafeteria. Residence hall students are required to pay for board on a semester basis; other students may purchase meal tickets or pay for their meals on an individual basis.

Motor Vehicles

Any student owning, operating, or having custody of a motor vehicle on the campus must register the vehicle and display a registration sticker. Contact the Public Safety Office for vehicle registration on registration day and obtain a copy of campus traffic regulations.

Health Services

Graham Infirmary. The University Health Service supervises physical health care provided on the university campus. Physician, nurse, laboratory personnel, and outpatient facilities are housed in Graham Infirmary. Consultation hours are posted at the infirmary.

A complete medical record is required of all students entering the university. Additional information for updating during the period of actual attendance may be requested. New students are required by North Carolina General Statute 130A-155.1 to have the following current immunizations: Diphtheria-Pertussis-Tetanus or Tetanus-Diphtheria, measles (rubeola), rubella, and polio. Evidence of the immunizations should be in the student's
records at the time of registration. If this evidence is not present, the student will have 30 days to correct the deficiency. If the deficiency is not corrected in this time period, the student will not be allowed to continue to attend the university.

Counseling and Psychological Services. The Counseling and Psychological Services Center provides individual and group counseling, crisis counseling, assessment and referral services, outreach presentations and programs, and consultation and training services to the campus community.

Testing Services. The Testing Center is located in the Counseling and Psychological Services Center. Testing services include individual administration of academic tests (CLEP, MAT, Correspondence Exams) and group administration of national university entrance exams such as GRE, PRAXIS Series, GMAT, SAT, LSAT, MCAT, and ISAT.

Mental Health Service. The Smoky Mountain Mental Health Center is an outpatient diagnostic and treatment facility serving the university community. The services are available by appointment or on an emergency basis.

Insurance. Group medical insurance is available to students on a voluntary basis and may be obtained any time during the term. The university strongly recommends that students avail themselves of these coverages where appropriate or have coverage from some other source. Health insurance coverage is mandatory for international students.

Information concerning the voluntary programs is available from the Office of Student Development, 460 H. F. Robinson Administration Building, 227-7234.

Career Planning and Job Placement

CAP Center. The Career and Academic Planning Center offers career counseling and testing, academic advising, cooperative education, student support services, and job placement assistance.

Education Placement Service. Employment placement services for all students and alumni who seek employment in education are available through the CAP Center in McKee Building (227-7133).

Educator Licensure Assistance. All students and alumni seeking initial or subsequent education licensure will find assistance in the Office of Field Experience and Teacher Education in Killian Building (227-7315).

Other Facilities and Services

Post Office. All mail is received in Cullowhee through the United States Postal Service. A residence hall mailbox should be rented through the Department of University Housing by students living in residence halls. Other students may rent a box in the Cullowhee post office. The campus post office in McKee Building provides on-campus service from 11 a.m. to 1 p.m., Monday through Friday. Postal regulations do not permit long-term receipt of mail through General Delivery.

Books and Supplies. The WCU Bookstore offers students a wide variety of merchandise, including textbooks, course materials, WCU clothing and gift items, art supplies, cosmetics, stationery, and other supplies. An extensive selection of books is offered for class use and pleasure reading and books may be special ordered if not in stock. All books for 500-, 600-700- and 800-level courses are sold by the store. Books for graduate students taking courses numbered below 500 are sold by the Book Rental Department located in the store. Graduation caps, gowns, invitations, class rings, and computer hardware and software also may be purchased at the bookstore.

Bank Services. A branch office of Wachovia Bank and Trust Company is located in Cullowhee and offices of this bank, First Citizens Bank and Trust, First Union National Bank, Community Bank & Trust Company, Haywood Savings Bank, North Carolina National Bank, and Jackson Savings Bank are located in Sylva, seven miles from the university.

Schools for Elementary and High School Students. Cullowhee Valley School, located near the campus in Cullowhee, is a regular Jackson County school, grades K-8. Smoky
Mountain High School and Fairview Elementary School, also Jackson County schools, are located on the Sylva highway about five miles from the university.

Recreation and Fitness. The facilities of Reid Health and Physical Education Building, including the fitness center, Breese Gymnasium, and A. K. Hinds University Center make possible a rich recreational program. Indoor and outdoor recreation includes tennis, volleyball, basketball, swimming, handball, softball, badminton, shuffleboard, racquetball, table tennis, and archery.

Cullowhee’s location offers excellent opportunities for mountain climbing, whitewater rafting, fishing, skiing, hunting, golfing, boating, and camping. Students may easily visit the Great Smoky Mountains National Park, Blue Ridge Parkway, and other nearby places of interest.

Wellness Program
The goal of the Wellness Program is to provide students, faculty, and staff a positive and healthy environment in which to live and grow. The program provides services on health and wellness issues, including health presentations; resources to help individuals with projects and personal issues; a Wellness Resource Library; a walking program for students, faculty, and staff; and events centered on national awareness topics such as fitness, nutrition, AIDS, and alcohol. For further information, call 704-227-7018.

Ramsey Regional Activity Center. The Liston B. Ramsey Regional Activity Center, located adjacent to E. J. Whitmire Stadium, is the largest, most versatile facility of its kind in western North Carolina. It has a total seating capacity of over 8,000 people. Through a versatile network of movable curtains, it may be used as a large auditorium or as small areas with a more intimate atmosphere. Its multi-purpose design provides excellent facilities for a wide variety of activities, ranging from basketball and other sports to concerts, dramatic and television productions, workshops, conferences, and conventions. A ticket office, racquetball courts, weight room, and rifle range are also located in the Ramsey Regional Activity Center.
GRADUATE STUDY AT WESTERN CAROLINA UNIVERSITY

Graduate study is a personal experience and the selection of a Graduate School is one of the most important decisions a student is called upon to make. At Western Carolina University, graduate study is characterized by small classes, personal interaction with faculty members, and a pleasant atmosphere conducive to the pursuit of individual educational goals.

Western Carolina University is a state-supported co-educational institution with a student body of almost 6,700, of which some 1,000 are graduate students. Including its credit and noncredit instructional courses, continuing education offerings, and workshop, conference, and service programs, the university serves more than 12,000 persons each year. The Graduate School offers programs leading to ten master’s degrees in over 50 professional and academic areas, an education specialist degree and an Ed.D. in educational leadership which are useful for school teachers, supervisors, superintendents, principals, and other central office personnel, teachers, and leadership personnel in higher education.

The Graduate School provides programs to prepare members of the teaching profession for licensure at the master’s and sixth-year levels, to prepare persons to teach in higher education and to meet the needs of persons working in or preparing to work in other occupations and professions. A student interested in any of these programs or in the programs available in art, biology, business, chemistry, counseling, educational leadership, English, health sciences, American history, home economics, human resource development, mathematics, music, physical therapy, project management, psychology, public affairs, school administration, special education, or technology should request additional information from the Graduate School or the head of the appropriate department.

The university operates on a semester system, with two semesters making up the regular academic year. In addition, a summer term offers a wide variety of courses for both graduates and undergraduates.

Further information may be obtained by writing the Graduate School, Western Carolina University, 250 H. F. Robinson Administration Building, Cullowhee, North Carolina 28723-9022 or by telephoning (704) 227-7398.

Among the research and service facilities available to graduate students at the university are:

Western Carolina University Programs in Asheville. The university offers, in Asheville, a broad range of instruction at the advanced undergraduate and graduate levels, particularly in the areas of education, business administration, human resource development, nursing and health sciences, public affairs, manufacturing and electronics engineering technology, and criminal justice. This program of instruction utilizes the educational facilities and resources of the University of North Carolina at Asheville. The programs provided, intended principally for the residents of Buncombe and surrounding counties, are attended by students who commute from considerable distances throughout the region.

All of the course requirements for master’s degrees in business administration, elementary education, English education, middle grades education, health sciences, counseling, human resource development, mathematics education, general special education (with concentrations in behavioral disorders, learning disabilities, and mental retardation), public affairs, school administration, and school supervision are offered by the university. The Education Specialist degree is offered in educational leadership which leads to recommendation for advanced licensure for principals, superintendents, and general supervisors. Two-year college programs are available at the master’s and Ed.S. levels.

Some of the courses for master’s degrees in business education, English, history, home economics, technology, mathematics, physical education, project management, and psychology are also available. WCU programs in Asheville are affiliated with the Asheville Graduate Center.

Western Carolina University administers its programs in Asheville through a staff whose offices are located in Room 120 Karpen Hall, on the campus of the University of North
Carolina at Asheville. Additional information is available from Western Carolina University Programs in Asheville, 120 Karpen Hall/UNCA, Asheville, North Carolina 28804-3299, or by telephoning (704) 251-6642, (704) 251-6643, or (704) 227-7423.

Division of Continuing Education and Summer School. As the educational outreach unit of Western Carolina University, the Division of Continuing Education and Summer School extends the resources of the institution to the campus, community, region, state, nation, and world in educational programs appropriate to the mission of the university. This involves offering educational opportunities and services to a diverse clientele in many locations through a variety of delivery systems and formats. It is accomplished through the sub-units of the division including conferences, workshops, seminars, non-credit activities, extension credit courses, summer school, and distance learning, in cooperation with the academic colleges and departments. Continuing Education Units (CEUs) may be available for some programs but may not be earned in regular graduate credit course offerings.

For information or to be placed on a mailing list for programs in your area of interest, call (704) 227-7397 or 800-WCU-4YOU (928-4968).

Highlands Biological Station. The Highlands Biological Station is a facility for biological research and education in the southern Appalachian mountains. The station is an interinstitutional program of the University of North Carolina. It is administered by Western Carolina University. Twenty-six other southern colleges and universities participate in the station’s programs as member institutions.

The station is located on the crest of the Blue Ridge Mountains about thirty miles south of Cullowhee. It lies within an area of high biotic and environmental diversity and is ideally situated for a variety of field studies. Its facilities are open to graduate students and senior investigators who are engaged in research on the plants, animals, and environments of the southern Appalachian region. The station maintains a well-equipped laboratory, housing for investigators, and a dining hall. A grant-in-aid program provides financial aid to graduate students conducting thesis research on the biota of the region.

Further information is available from the Executive Director, Highlands Biological Station, Highlands, North Carolina 28741.

Hunter Library. Hunter Library contains more than 520,000 books and bound periodical volumes and one million units of microform. Approximately 2,200 serial subscriptions are received, including regional, national, and international newspapers. The annual addition rate of new materials is more than 15,000 items.

As a selective federal depository, the library holds over 166,000 government documents and adds important items monthly. Of special interest is the North Carolina Documents Collection which houses publications generated by the state government.

Hunter Library is also a depository for maps published by the United States Geological Survey, the Defense Mapping Agency, and other federal agencies. The Map Room Collection contains over 106,000 sheet maps, over 500 atlases, and a small reference collection.

The Special Collections unit of Hunter Library maintains manuscripts collections, books, photographs, and other resources documenting the history of western North Carolina and Southern Appalachia, the history of the Cherokee Indians, literary works and papers of authors residing in or native to western North Carolina, the behavior of spiders, and the history of Western Carolina University.

As a service for professional education programs, a curriculum materials center is maintained that contains the state-adopted textbooks for North Carolina, curriculum guides, children’s literature, media, and manipulatives suitable for classroom use.

Hunter Library shares an on-line system with the libraries at Appalachian State University and the University of North Carolina at Asheville. Faculty, students, and staff may borrow materials from those libraries and generally receive them within 72 hours.

The library also provides online access to Infotrac, First Search, Uncover Chemical Abstracts, and Mathematical Reviews. In addition, the library offers the following CD-ROM bibliographic services: Compact Disclosure, MLA, Psyclit, Sport Discus, ERIC, Biography and Genealogy Master Index, and GPO.
Hunter Library provides library materials in UNCA's Ramsey Library for Western Carolina University courses and programs offered on the Asheville campus.

**Myron L. Coulter Faculty Center for Excellence in Teaching and Learning.** This center provides services designed to assist all faculty on campus in achieving and maintaining excellence in their teaching. Through faculty workshops, seminars, luncheons, and similar activities, the center seeks to foster a campus climate where teaching is highly valued and excellence in teaching is the norm. Services also include a teaching analysis program, a faculty exchange program, and a lending library of professional literature on college teaching.

**University Writing Center.** A trained staff of faculty, graduate assistants, and peer tutors is available to assist both student and faculty writers with their individual needs. The staff’s approach is to guide the writer through the stages of composing by making positive suggestions for improvement.

Beginning with the writer’s initial ideas, tutors can help with brainstorming, prewriting, drafting, revising, editing, and proofreading. By offering the writer workable strategies, the tutors can move the student toward self-sufficiency.

**University Media Center.** The University Media Center provides instructional media services to the university with emphasis on academic support needs. Services include non-print media and audiovisual equipment circulation, instructional materials, production, and equipment maintenance and repair. The center also supports a microcomputing and printing area for students.

**Mountain Resource Center.** The Mountain Resource Center (MRC) is a major technical assistance and service unit of Western Carolina University that extends the resources of the university to the region it serves. It is a recognized source of knowledge about western North Carolina, with special emphasis on rural economic and social development. Through counseling and technical assistance, planning and research support, data collection and analysis, specialized training, conferences, and workshops, MRC serves as a catalyst for economic and social development in western North Carolina and the state. The center provides assistance for town, county, and state government, business and industry, educational and social agencies, chambers of commerce, citizens groups, civic clubs, voluntary and non-profit organizations, other special purpose groups. It serves as the home for Western North Carolina Tomorrow (WNCT), a regional citizen leadership organization; the regional Small Business and Technology Development Center and an Economic Development Administration University Center. The center encourages faculty and student collaboration in its programs and is comprised of three divisions: Regional Development, Administrative Services, and WNCT.

**Mountain Aquaculture Research Center.** The Center was established within the College of Arts and Sciences at WCU in 1988. Its mandate is to foster biotechnologically based research to support the economic sustainability of the aquaculture industry in western North Carolina. Facilities include an office, an analytical laboratory, and indoor fish-rearing laboratories utilizing bio-filtered recirculated water. Research activities of the center are of both a basic and an applied nature. They are conducted by the center personnel in collaboration with faculty and students (graduate and undergraduate) in the Departments of Biology and of Chemistry and Physics. Collaborative research activities with the NC Wildlife Resources Commission, the NC Cooperative Extension Service, and the commercial trout industry are also planned. Areas of research interest include: culture characteristics of all-female and/or triploid rainbow and brook trout; identification of DNA markers associated with sex and other genetic traits of interest in commercial trout production as well as in fisheries management; study of the physiological responses of fish to stressors (thermal, pH, etc.) and identification of biochemical measures and genetic markers associated with levels in these responses; and monitoring impact and control of fish farm effluents.

**Mountain Heritage Center.** The center collects, interprets, and disseminates knowledge about the southern Appalachian region and its people. It conducts research and collects and displays artifacts. It interprets the region’s natural and cultural heritage through publications, exhibitions, and demonstrations. The center works with public schools in preparing programs for educational enrichment and provides an educational experience for university students.
through internships. Its essential objective is to promote public awareness of the rich traditions of the mountains.

Developmental Evaluation Center. The Developmental Evaluation Center is a service agency for the seven counties of Cherokee, Clay, Graham, Haywood, Jackson, Macon, and Swain and the Qualla Indian Boundary. It is cooperatively sponsored by the Division of Maternal and Child Health, North Carolina Department of Environment, Health, and Natural Resources; other local agencies; and Western Carolina University. The center provides developmental evaluation, recommendations for services, treatment, and guidance for families of newborns, infants, toddlers, and preschool children. Special services are provided or located if necessary, and progress is followed until the child enters a school program. The center's program affords opportunities for training and research relevant to the university's academic programs in child development, communication disorders, counseling, elementary education, health information management, nursing, nutrition and dietetics, physical therapy, psychology, recreational therapy, social work, and special education.

Speech and Hearing Center. The Speech and Hearing Center provides outpatient diagnostic, treatment, and consultative services for individuals with known or suspected communication disorders. The services are available on campus or through outreach clinics held in Cherokee, Haywood, and Swain counties. These sites also provide clinical practicum experiences for students pursuing graduate and undergraduate degrees in communication disorders. All professional members of the program are certified by the American Speech-Language Hearing Association and licensed by the State of North Carolina in their respective fields of audiology and speech-language pathology.

Office of School Services. The Office of School Services in the College of Education and Allied Professions maintains an inventory of campus resources that can be of service to the public schools through technical assistance or research initiatives. The office disseminates information on campus resources, receives requests for assistance from school districts, and directs requests to the appropriate campus resource.

Summer Program for Gifted Students. The College of Education and Allied Professions conducts a comprehensive summer program for students in grades 4-10 emphasizing experiences designed to challenge the academically gifted.

Reading Center. In conjunction with university programs for the preparation and licensure of reading teachers and specialists, the Reading Center provides diagnostic and remedial services and reading improvement courses for children, college students, and adults. A resource room in the center provides literature, mathematics, social studies, and science materials, as well as teacher resources of all kinds. The staff provides consulting services, conducts workshops and conferences, and provides a variety of reading services for public schools in the area. The center is located in Killian Building on the campus in Cullowhee.

Computing Resources. Computing resources are available in each of the university's colleges. Three major computing resource centers are located in Forsyth Building. Microcomputers are available for instructional purposes in Forsyth 334; microcomputers in a laboratory environment in Forsyth 320-21; and terminals in an area adjacent to the Computer Center in Forsyth. Providing convenient and immediate access to data through local and world-wide networks, these computing resource centers are equipped to enhance scholarship and research for persons pursuing advanced degrees.

Located in Stillwell Annex are two additional computing laboratories, including a microcomputer laboratory and a VAX terminal laboratory. Access is gained through the basement of Stillwell Building.

The university sponsors the WCU MicroNet Project whereby teachers and students in more than 60 North Carolina high schools access a computer on campus for electronic mail, student competitions, graduate courses, and research participation with faculty. The departments involved are biology, chemistry and physics, and geosciences and anthropology.

The Math and Science Resource Center provides tutoring not only in math and science but also in the use of computers and computer science.

Computer Center. The Computer Center is responsible for providing, within the context of the WCU mission statement, the highest quality of computer information services to the
campus community that allocated resources will allow. These services provide computing resources where students, faculty members, administrators, and staff members can develop a community of scholarship in which to learn and apply the products of learning.

The Computer Center, located in the Forsyth building, provides planning and technical guidance in the integration of varied new and existing campus information technologies, and provides leadership in the efficient, effective, and timely use of a vital university resource - information.

Computing facilities at WCU consist of two Digital Equipment Corporation (DEC) VAX 4000/700A computers. The computers operate as a cluster under the VAX/VMS operating system, supporting batch and interactive computing. Altogether, there are 384 terminal ports available. The VAX systems are interconnected with Ethernet, which allows users to select the resources they need between the systems.

The Computer Center supports a wide selection of software on the VAXs for academic computing. Software programming languages include Basic, C, Fortran, Pascal, COBOL, and MACRO, with DATATRIEVE as a common report-retrieval language. The Student Information System (SIS), Financial Record System (FRS), Loans Management System (LMS), and Alumni Development System (ADS) are administrative software products from Systems & Computer Technology Corporation. The remaining administrative software applications have been developed by the Computer Center staff.

A variety of generalized programs for the solution of problems in statistics, numerical analysis, and other areas is available through the center's program library facilities. For large research problems and special applications, the computer resources of the North Carolina Supercomputer Center are available through the University of North Carolina Educational Computing Services (UNCECS). We are connected to the North Carolina Information Highway for data access to other locations. WCU is an Internet node and an active member of CAUSE and EDUCOM.

The Computer Center also supports the campus-wide network. The backbone between buildings is a FDDI dual-optic fiber ring. Within each building is a central wiring closet with a router connecting departmental Ethernet segments. Most departmental LANs use Novell servers. The campus-wide network is also connected to the statewide NC-REN network which provides our Internet access. There are over 1,600 microcomputers in offices and lab facilities on campus. The Computer Center supports both DOS and Apple operating systems and various application programs. Site licenses have been established with Microsoft, WordPerfect, and Apple companies.

N.C. Center for the Advancement of Teaching. The North Carolina Center for the Advancement of Teaching was established by the General Assembly of North Carolina in 1985 as a statewide center to recognize and support outstanding North Carolina pre-kindergarten through 12th-grade school teachers, and to enhance teaching as an art and profession. The center is located west of the WCU campus. A unit of the University of North Carolina, it is governed by a board of trustees, and its programs and activities are conducted by a professional staff of administrators and faculty.

Institute for College and University Teaching. The Institute for College and University Teaching (ICUT) promotes excellence in teaching among faculty members and higher education institutions in North Carolina and across the Southeast. The Institute designs and organizes programs for college and university faculty members on issues of teaching, learning, and student development. It promotes development of collaboration and partnerships among educators and education institutions of all types and at all levels. Dedicated to elevating the role and professional practice of teaching within higher education, the Institute provides a climate for post-secondary faculty to deepen their understandings of the art and science of teaching.

Faculty and Student Research. The Office of Research and Graduate Studies serves as the official source of information about contract and grant possibilities and is the office through which all members of the faculty and staff channel their proposals for university approval and
subsequent submission to the Office of Research and Public Service Programs of the General Administration of the University of North Carolina and to the appropriate sponsoring agency. The research administration staff assists faculty, staff, and students in the preparation of proposals, including budget development.

Administration

The Graduate School consists of a graduate faculty represented by the dean, who is the administrative officer, and the Graduate Council. The dean reports to the vice-chancellor for academic affairs and is responsible for research and graduate studies.

The Graduate Council formulates and recommends policies and standards for the Graduate School, reviews and recommends all teaching personnel for graduate courses, and appraises and recommends new graduate degree programs and changes in existing programs.
FEES, EXPENSES, AND FINANCIAL AID

Expenses are held to a minimum. The following schedule of fees, payable at the beginning of each semester will be effective beginning with fall semester of the 1996-97 academic year. The university reserves the right to alter any charges without prior notice upon direction from appropriate governing authorities.

Fees Per Semester

<table>
<thead>
<tr>
<th>Fees Per Semester</th>
<th>Full-time Graduate Student</th>
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</thead>
<tbody>
<tr>
<td>Tuition and Academic Fees</td>
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<td>Room</td>
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<td>5,478.85</td>
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<tr>
<td>21 Meals per week</td>
<td>5,521.85</td>
</tr>
<tr>
<td>18 Flex Meal plus $50 plan</td>
<td>5,693.85</td>
</tr>
<tr>
<td>12 Flex Meal plus $100 plan</td>
<td>5,605.85</td>
</tr>
</tbody>
</table>

Part-time Graduate Student

(8 hours or fewer)

<table>
<thead>
<tr>
<th>Semester Hours Enrolled</th>
<th>North Carolina Student</th>
<th>Out-of-State Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>129.15</td>
<td>984.15</td>
</tr>
<tr>
<td>2</td>
<td>153.30</td>
<td>1,008.30</td>
</tr>
<tr>
<td>3</td>
<td>282.45</td>
<td>1,993.45</td>
</tr>
<tr>
<td>4</td>
<td>306.60</td>
<td>2,017.60</td>
</tr>
<tr>
<td>5</td>
<td>330.75</td>
<td>2,041.75</td>
</tr>
<tr>
<td>6</td>
<td>459.90</td>
<td>3,025.90</td>
</tr>
<tr>
<td>7</td>
<td>484.05</td>
<td>3,050.05</td>
</tr>
<tr>
<td>8</td>
<td>508.20</td>
<td>3,074.20</td>
</tr>
</tbody>
</table>

*Required fees include: Health Services, $77; Recreation and Cultural, $66; Athletics, $110; Athletic Facilities, $16; University Center, $88.50; Education and Technology fee, $17.35; Documents fee, $3.
For each credit course scheduled for audit, a charge will be made equal to the credit-hour value of the audited course.

**Additional Fees**

- Application fee: $25
- Cap, gown, and hood obtained through WCU Bookstore
- Late registration fee: $10

Certain courses in some fields require laboratory or materials fees in addition to the costs listed in this section. Textbooks are available to graduate students by purchase only.

**Payment of Fees.** All charges are due and payable on or before the date of registration for each term. Payment by check in the exact amount of the bill is recommended. A fee of $10 is assessed if a bank declines payment of a student’s personal check and the student is at fault.

Any fees or fines not paid will cause the university to withhold the issuing of transcripts and other records, including registration materials, until all debts are cleared. Failure to make proper payments on accounts will result in cancellation of registration.

**Application Fee.** Prospective students will make application and pay the application fee under the following circumstances:

1. Any person who desires to take one or more courses for graduate credit for the first time. This applies to full-time and part-time students whether or not the prospective student desires to have work credited toward a degree program.
2. Any person who has completed a master’s degree or Ed.S. program (either at WCU or elsewhere) and who desires to do further graduate work.
3. Any student inactive for one full year (example: fall semester, spring semester, and summer school).

Active students will make application but not pay the application fee when they desire to change from one degree program to another.

**Late Registration.** With approved reason for delay, a student may register for classes after the regular registration date with the payment of a late registration fee. Students entering late must show satisfactory reason and obtain approval of the dean of research and graduate studies, who reserves the right to reduce the number of hours for which a late entrant may register.

**Textbooks**

Graduate students purchase all textbooks regardless of the level of the course. Textbooks for courses numbered 500 and above are available by purchase only at the WCU Bookstore. Graduate students may purchase textbooks for courses numbered below 500 at the Book Rental Department located in the WCU Bookstore.

**Withdrawal**

Students who withdraw from one or more courses during a term, but who remain enrolled in the university, must follow the procedures published in the master class schedule booklet in order to be officially removed from the class rolls. Grading policies applicable in the event of withdrawal are stated in the Academic Regulations section of this catalog.

Students withdrawing from the university during a term must secure a withdrawal form from the office of the assistant to the vice-chancellor for student development, obtain the necessary signatures, and return the form to the assistant to the vice-chancellor for student development. If an emergency prevents a student from completing the withdrawal process before leaving the campus, the student should call, write, or arrange for a friend or relative to contact the Office for Student Development.

Students who interrupt or terminate their education at the university during or at the end of a term for any reason are responsible for clearing any indebtedness in the following areas:
housing office, bookstore, financial aid office, controller’s office, library, public safety office, academic departments, and infirmary.

Refund Policies

**Academic Year Tuition and Fees.** During a fall or spring semester, a full-time or part-time student who withdraws from the university on or before the first day of classes will be refunded 100 percent of tuition and fees. Students who withdraw from the university following the first day of classes are entitled to refunds of tuition and fees in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Days Following First Day of Classes</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-11 calendar days</td>
<td>90%</td>
</tr>
<tr>
<td>12-28 calendar days</td>
<td>50%</td>
</tr>
<tr>
<td>29-57 calendar days</td>
<td>25%</td>
</tr>
<tr>
<td>58 calendar days</td>
<td>0%</td>
</tr>
</tbody>
</table>

**EXCEPTION:** Students who withdraw from the University in their initial term of enrollment are entitled to refunds of tuition and fees in accordance with the following schedule:

<table>
<thead>
<tr>
<th>Days Following Last Day of Regular Registration</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On or before the last day of regular registration</td>
<td>100 percent</td>
</tr>
<tr>
<td>1-7 calendar days</td>
<td>93 percent</td>
</tr>
<tr>
<td>8-14 calendar days</td>
<td>86 percent</td>
</tr>
<tr>
<td>15-21 calendar days</td>
<td>79 percent</td>
</tr>
<tr>
<td>22-28 calendar days</td>
<td>72 percent</td>
</tr>
<tr>
<td>29-35 calendar days</td>
<td>65 percent</td>
</tr>
<tr>
<td>36-42 calendar days</td>
<td>58 percent</td>
</tr>
<tr>
<td>43-49 calendar days</td>
<td>51 percent</td>
</tr>
<tr>
<td>50-56 calendar days</td>
<td>44 percent</td>
</tr>
<tr>
<td>57-63 calendar days</td>
<td>37 percent</td>
</tr>
<tr>
<td>64-70 calendar days</td>
<td>30 percent</td>
</tr>
<tr>
<td>71 calendar days</td>
<td>0 percent</td>
</tr>
</tbody>
</table>

Students who withdraw from the university as a result of involuntary recall to military service, pursuant to a presidential order authorizing the call-up of reservists, and who are thereby prevented from receiving credit for the courses in which he/she is enrolled, will be entitled to a full refund of tuition and fees. Refunds of room and board charges will be prorated based on the number of days the dormitory room was occupied and the meal ticket was used. Students having the declining balance meal plan will be refunded the actual account balance at the time of withdrawal.

Students who reduce their course loads during the registration period for the semester as defined in this catalog, but who continue to be enrolled in the university, will have their tuition and fees adjusted fully to reflect only the number of semester hours in which they remain enrolled. Part-time students are eligible for a refund based on the semester hour tuition rate. Full-time students are eligible for a refund only when course loads are reduced below the minimum hours required to qualify as full-time. No adjustment will be made for reduced loads after the close of the registration period. However, students who drop all courses must withdraw from the university. They are, therefore, eligible only for the partial refunds that apply to university withdrawals.

**Summer School Tuition and Fees.** A student who withdraws from summer school on or before the first day of classes will be refunded 100 percent of tuition and fees. Students who withdraw after the first day of classes are eligible for refunds through the first 50 percent of the summer terms. The refund prorations for summer school are available from the controller’s office.

Summer school students who reduce their course loads by one or more semester hours within three days following regular registration or on or before the date of the second class meeting, whichever is later, will have tuition and fees adjusted to reflect the number of semester hours in which they remain enrolled.

**Room and Board.** Refunds of room rent for any semester or summer term will be calculated at the same rate as tuition and fees. The residence hall deposit is not refundable if withdrawal occurs before completion of the current housing contract period.
Meal ticket refunds for Standard Meal Plans will be calculated at the same rate as tuition and fees. Meal ticket refunds for Declining Balance Plans will be based on the actual balance remaining on the student account at the time of withdrawal. Flex Meal Plans have a standard and a declining balance component. Refunds for Flex plans will be based on the policy applicable to each component. Refunds will not be made for the last two weeks of a semester or for the last week of a summer session.

All refunds, except those for withdrawals prior to the first day of classes, are subject to an administrative fee not to exceed the lesser of $100 or 5 percent of institutional charges.

Exceptions. Exceptions to these policies may be made if a student withdraws from the university for reasons of hardship. Prorated refunds of tuition and fees, room rent, and meal charges may be made to the student or the student’s family in case of hardship, which is defined as (1) death of the student, (2) death in the student’s immediate family, or (3) withdrawal upon recommendation of the director of student health services. The prorations and regulations governing refunds in hardship cases are available from the Office for Business Affairs. The vice-chancellor for student development must approve, and notify the controller’s office, of any refunds or account adjustments for hardship situations. The controller’s office will take appropriate action to make final settlement of the student’s account. Any other exceptions require approval by the chancellor.

Graduate Assistantships
Teaching, research, and service assistantships are available for a limited number of well-qualified graduate students. Graduate assistantship application forms are available from the Graduate School. Applicants for graduate study who wish to be considered for such assistantships should complete an application form and submit it to the Graduate School. In addition, the applicant may want to address a letter of application to the head of the intended major department or attach a letter to the application form. Consideration for possible appointment to an assistantship can then be given after a decision has been made concerning admission to graduate study. Stipends vary from approximately $1,500 to $6,000, depending upon the assignments involved. In addition, the out-of-state portion of tuition may be waived for some, but not all, of these assistantships.

Students receiving assistantships will be expected to be registered as full-time students. Continuation of the appointment depends upon satisfactory performance of duties and upon satisfactory academic achievement (3.0 GPA on all graduate coursework attempted). In order to have a graduate assistantship, students must be admitted into graduate programs and must provide their Social Security card.

A limited number of Chancellor’s Fellowships are available to well-qualified graduate students. The awards, based on merit, are intended to encourage and assist superior students in pursuing graduate studies in the minimum time possible. The value of the fellowships is $5,000 per academic year and carries no work requirement. Students are required to be registered for a minimum of nine semester hours each semester. Forms are available from the Graduate School.

Each semester the Graduate School awards a number of Graduate School Study Grants. These grants are designed to support well-qualified graduate students by helping pay their tuition and fees. Students must register for a minimum of three semester hours. There is no work requirement and the awards are made on the basis of merit as reflected by the student’s application file. Forms are available from the Graduate School.

Financial Aid
The university maintains an Office of Student Financial Aid, and the staff of this office can furnish more detailed information concerning loans, work-study, and other work opportunities. The various types of aid are described in the general catalog and a financial aid brochure is available upon request.

Minority Presence Grant Program. Part I - provides funds for grants to white students at predominately African-American institutions and to African-American students at predomin-
nately white institutions who are residents of North Carolina, are enrolled for at least three hours of degree credit coursework, and demonstrate financial need; Part II - provides funds for grants to Native Americans and other minority students at the constituent institutions of the University of North Carolina who are residents of North Carolina, are enrolled for at least three hours of degree credit coursework, and demonstrated financial need.

Veterans Assistance

The university is approved for the training of VA benefit recipients.

This institution is approved under the provisions of Title 38 United States Code, Chapter 36. Persons eligible and entitled under provisions of Chapters 30, 31, 32, 34, 35 and Section 901 and 903 and Title 10 United States Code, Chapters 106 and 107 may enroll in programs approved by the North Carolina States Approving Agency. All inquiries concerning VA educational benefits should be addressed to the Director of Student Services, Western Carolina University, Cullowhee, North Carolina 28723.

Disability Services. Assistance for students with disabilities is available through the Office for Student Development, 460 Robinson Administration Building, 704-227-7234.

Explanation of Out-of-State Tuition Rate

North Carolina G.S. 116-143, 1-2-3 governs tuition status. Each student will be subject to the following:

To qualify for in-state tuition, a legal resident must have maintained his or her permanent domicile in North Carolina for at least 12 months immediately prior to his or her classification as a resident for tuition purposes. In order to be eligible for such classification, the individual must establish that his or her presence in the state during such 12-month period was for purposes of maintaining a bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education.

Student residential classification, for purposes of applicable tuition rates, is required to be changed if, since original establishment of a student’s current classification, the state of legal residence has changed.

Certain members of the armed services and their dependent relatives may be eligible to be charged less than the out-of-state tuition rate. Included among the requirements are that the member of the armed services and a relative claiming the benefit through a member be living together in North Carolina incident to the supporting member’s active duty and that the applicant for the benefit qualify for academic admission at the pertinent institution.

A student currently classified as a nonresident for tuition purposes has the right to petition for a change in classification to that of resident if he or she claims that he or she is now and, for at least the 12-month period immediately preceding the date of such petition, has been a legal resident of the state of North Carolina. If it is determined that in fact a legal residency has existed for the required 12-month period, the effective date of change in applicable tuition rates shall be the next semester, quarter, or term following the date of change in facts which required the change in classification.

A student currently classified as a resident for tuition purposes has the obligation to petition for a change in classification to that of a nonresident if there is reasonable basis for believing that change in fact requires such a change in classification. Failure to fulfill this obligation may result in appropriate disciplinary action including, but not necessarily limited to, cancellation of enrollment. If it is determined that in fact a student has become a nonresident, the effective date of change in applicable tuition rates shall be the next semester, quarter, or term following the date of change in facts which required the change in classification.

Copies of the applicable North Carolina law and regulations which govern such classification determinations are available in the Office of Admissions, Academic Services, Graduate School, and student development for inspection upon request. The student is responsible for being familiar with these regulations.
Waiver of Tuition for North Carolina Residents Aged 65

Legal residents of North Carolina who have attained the age of 65 and who meet applicable admission standards may enroll on a tuition-free basis if space is available but must pay required fees. Further information is available from the registrar.
ACADEMIC REGULATIONS

Course and Grade Policies

Courses listed in this catalog are open to graduate students only. At least half of the credit hours applied toward a master's degree must be in those courses numbered 600 and above. It is expected that courses applicable toward the Education Specialist degree and the Certificate of Advanced Study will be numbered 600 or above.

Course Loads

The maximum full-time course load for graduate students is 15 hours per semester. The minimum full-time load per semester is nine hours. Reductions may be approved for students receiving a graduate assistantship, and the normal maximum load for graduate assistants is 12 hours per semester. Load limitations during summer school are listed in the summer school catalog.

Students employed fulltime are limited to six hours per semester and 12 semester hours for the academic year.

Any exceptions to these rules must be approved by the department and the dean of research and graduate studies.

Class Attendance. Graduate students are expected to attend all class meetings. Specific attendance regulations are announced by the instructor.

Grading System

The grades which may be assigned to graduate credit courses are as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
<th>Quality Points Per Hour</th>
<th>Grade</th>
<th>Interpretation</th>
<th>Quality Points Per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Superior</td>
<td>4</td>
<td>W</td>
<td>Withdrawal</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
<td>AU</td>
<td>Audit</td>
<td>-</td>
</tr>
<tr>
<td>C</td>
<td>Passing</td>
<td>2</td>
<td>IP</td>
<td>Grade Pending</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
<td>S</td>
<td>Satisfactory</td>
<td>3</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>-</td>
<td>U</td>
<td>Unsatisfactory</td>
<td>0</td>
</tr>
</tbody>
</table>

Incomplete Grades. Instructors may give an incomplete grade when students are unable to complete a course for non-academic reasons. An incomplete is not a satisfactory grade and may lead to an academic warning. All incomplete grades must be removed and a grade of A, B, C, F, S, or U must be submitted to the registrar by the last day of classes in the next semester, excluding the summer, an F being automatic if the student has not completed the coursework. A student may not register for the course again until the incomplete has been removed. All incomplete grades in courses taken as part of the degree program must be removed before graduation.

A grade of incomplete will be awarded only when there is a reasonable prospect that the student can pass the course by making up the work missed. The instructor is required to send to their department head a list of the conditions for removing the grade of incomplete. If the instructor is no longer in the employ of the university, the department head will remove the grade of incomplete upon completion of the stated requirements.

Grade Pending. An IP is assigned only for thesis research or similar courses to indicate that a grade is pending until the sequence of courses is completed. A grade of A, B, C, or F is then assigned to each course by the instructor.

Satisfactory-Unsatisfactory Grading. The use of S/U (pass/fail) grading is limited to selected courses in which standard or traditional grading is rendered difficult by the nature and purpose of the courses. The courses are identified in the master class schedule and in the course descriptions in this catalog. S (satisfactory) and U (unsatisfactory) are the only grades assigned in courses approved for pass-fail grading.
Withdrawal Grade Policy. A student, after consultation with the academic adviser, may withdraw from any course prior to the expiration of one-third of the total class time and receive a W grade to designate that the course was dropped.

If a student drops a course or withdraws from the university for other than health, medical, or legal reasons after one-third of the total class time has elapsed, an F, W, or I will be assigned by the instructor. A W grade will be assigned if the student is passing or if the student's progress has not been evaluated. An I grade will be assigned if the instructor agrees that there is a reasonable prospect that the work can be made up and agrees to allow the student to do so. A grade of F will be assigned if the student is failing at the time of withdrawal. Instructors are encouraged to give examinations or have some form of evaluation in their courses during the first one-third of the term.

Any time a student is forced to withdraw from the university during a term for health, medical, or legal reasons which are verified in writing, a grade of W will be assigned in all courses for which the student is registered. Students who withdraw during a term should secure a withdrawal form from the office of the assistant vice-chancellor for student development. Policies pertaining to indebtedness and refunds in the event of withdrawal from the university are stated in the fees section of this catalog.

Audit. A graduate student may audit a course if space is available and if prior permission of the instructor, the adviser, the head of the department offering the course, and the dean of research and graduate studies has been obtained. A completed course audit form must be submitted. No credit is earned for auditing, but the audited course must not add hours in excess of the student’s maximum load. An auditor's participation in class activities is optional with the instructor. Change from audit to credit or from credit to audit is permissible only during the regular schedule change period. An audited course will be noted on the student's transcript.

Final Grade Changes. When a grade other than incomplete has been reported officially by an instructor at the end of a term, the grade will be recorded by the registrar and can be changed only if an error has been made in estimating or reporting the grade. The instructor will, with the approval of the department head, report the error in writing to his/her dean with a recommendation about the action to be taken. Only the instructor has the right to change the grade in a course except as provided in the incomplete grade policy.

Any request by a student for a change in a final grade must be submitted within 30 days of the mailing of the final grade report.

Grade Average for Graduation. An average of B (3.0 GPA) is required for all graduate degrees. Grades received in all graduate courses will be included in the graduate cumulative average. For purposes of applying these requirements, S is considered the equivalent of a B grade and U is the equivalent of an F.

Course Repeat Policy. A graduate student may repeat any course one time with the approval of the adviser, department head, and the dean of research and graduate studies. The original grade earned in the repeated course remains on the student’s transcript and is calculated in the student’s cumulative average.

Transcripts. Transcripts are furnished, either to the student or by mail, only after accounts are cleared and only upon the student’s written request, which must include the student’s signature and student identification number. Requests for transcripts should be addressed to the registrar. The university’s recommendation for teacher certification will be accompanied by a transcript. There is no charge for transcripts issued.

Academic Honesty Policy. Western Carolina University, as a community of scholarship, is also a community of honor. Faculty, staff, administrators, and students work together to achieve the highest standards of honesty and integrity. Academic dishonesty is a serious offense at WCU because it threatens the quality of scholarship and defrauds those who depend on knowledge and integrity. Academic dishonesty includes:
For specific information on procedures for cases involving allegations of academic dishonesty, see relevant sections in the Student Handbook.

**Academic Dismissal.** A student who accumulates more than two grades below B or any grade of F will automatically be dismissed from the Graduate School. A student who has been admitted provisionally and fails to meet the terms of admission will also be dismissed from the Graduate School. Once dismissed a student cannot register for graduate courses, but may reapply for admission to the Graduate School.

**Academic Appeal Procedure.** A student who feels he or she has been treated unjustly by an instructor in any matter pertaining to academic work shall appeal first to the instructor. If necessary, an appeal may then be addressed to the instructor's department head. The student may consult any administrator in beginning the process, but only the instructor can change a grade. If, after appealing to the instructor and department head, the student is still dissatisfied or suitable action has not been taken, the student may appeal to the Graduate Council and graduate dean. A student has 30 days from the day grades are posted to make an appeal. The letter of appeal should be addressed to the dean of research and graduate studies. The appeal will be considered by the Graduate Council who will make a recommendation to the dean of research and graduate studies. The student will be notified of the outcome of the appeal by the dean. If necessary, subsequent appeals may then be made to the vice-chancellor for academic affairs, and finally to the chancellor.

A student who has been dismissed from the Graduate School for failure to meet the terms of provisional admission or for accumulation of excessive unsatisfactory grades will be notified by the dean of research and graduate studies. The student has two weeks from the date of the letter of notification of dismissal to appeal. The letter of appeal should be addressed to the dean of research and graduate studies. The appeal will be considered by the Graduate Council who will make a recommendation to the dean of research and graduate studies. The student will be notified of the outcome of the appeal by the dean. If, after appealing to the graduate dean, the student is still dissatisfied or suitable action has not been taken, the student may appeal to the vice-chancellor for academic affairs, and finally to the chancellor.

**Credit Policies**

**Residence Requirement.** At least 24 semester hours of a student's work toward a degree must be earned in resident-credit courses. All graduate programs in teacher education require a period of full-time resident study of at least one academic semester or one complete summer session. In lieu of resident study, the requirements may be met through an off-campus period of study that is equivalent to one semester or one complete summer session of work. The off-campus study must involve an organized group of graduate students pursuing a specific graduate program under the supervision and instruction of regular Western Carolina University graduate faculty.

**Transfer Credit.** Up to six semester hours of graduate credit with grades of B or better may be transferred from other regionally accredited Graduate Schools. No graduate degree credit may be obtained through correspondence courses. Students must transfer credit from both special and non-degree status if they intend to count such credit toward their degree.
may transfer up to 12 semester hours of graduate credit earned at WCU with grades of B or better from special or non-degree status. Courses used toward a prior degree may not be transferred into a degree program.

Requests for transfer of credit already earned are made as soon as is feasible when the student is accepted into degree status. Forms for the transfer of credit are available from the Graduate School. Courses accepted for transfer credit must: (1) be appropriate to the student’s program and be approved by the student’s adviser, (2) be completed within the six-year limit for coursework applicable toward the degree, and (3) have been offered by a regionally accredited institution for graduate credit.

Graduate students who have been admitted to Graduate School may enroll at other regionally accredited graduate-level institutions for coursework which is applicable to their programs provided they have obtained advance permission from their adviser(s) and the dean of research and graduate studies. Forms are available from the Graduate School. Such coursework cannot exceed the six-hour maximum for transfer credit. Students should note that while courses may be allowed to be transferred into a degree program, grades earned at other institutions are not transferred and therefore are not counted toward a student’s GPA.

**Experiential Credit.** The university does not grant graduate academic credit for the life experiences of students. A policy has been established to award credit, up to a maximum of 20 percent of a graduate degree, for experiential courses. Experiential courses have been defined by the university as structured, preplanned experiential learning opportunities for which credit toward a degree may be earned through regular enrollment in established university courses. Experiential courses are required by some but not all graduate programs.

**External Instruction Courses.** Western Carolina University has the following guidelines for enrolling students in external instruction courses/programs. External instruction programs are defined as instruction received at a site(s) to which the student is sent by the enrolling institution to participate in instructional activities. Encompassed in the scope of external instruction are programs referred to as cooperative program, practical training, independent study and open-circuit televised instruction.

1. All courses are bona fide: approved by all required college, university, state, regional and national regulatory agencies.
2. All courses are an integral part of the student’s program; credit will apply toward graduation and/or will be required for a particular degree program.
3. All courses are appropriately rigorous with credit assigned proportionate to the amount of instructor involvement and control (course credit assigned determined by university and state requirements).
4. The university/college has an agreement on file with specific work sites assuring that the experiences will provide opportunities for application of the knowledge, skills and competencies gained from on-campus academic programs.
5. All courses have regularly-employed faculty members responsible for all students participating in external instruction courses.

**Continuing Education Units (CEU) Credit.** Courses in which CEUs are earned are not accepted for undergraduate or graduate credit, and regular credit courses offered by the university are not available for CEU credit. Students interested in CEUs should contact the Division of Continuing Education and Summer School for information about special programs and courses suited to their needs.

**Time Limitation.** Work to be applied toward any master’s or education specialist degree or Certificate of Advanced Study must have been completed within the six years immediately preceding the completion of requirements for the degree. Graduate credits to be accepted in transfer must have been earned within the six-year period. Students in the Ed.D. program must complete all degree requirements within five years of admission to candidacy. Any extension of time beyond these limits must have the approval of the student’s adviser, the head of the department of the student’s major, and the dean of research and graduate studies.
In-Service Education Program
The university provides graduate courses in a number of locations throughout the state so that students may continue their studies while at the same time continuing to carry out job-related responsibilities. Within specified limits, credit earned in these courses may be included in programs of study leading to many of the degrees offered by the Graduate School. Students planning to register for in-service courses should consult with their advisers, the department, or the Graduate School to ascertain if the courses in question are approved for inclusion in a program of study for a graduate degree. No student will be allowed to count more than six semester hours of extension credit toward a degree.

Student Academic Record Policy
The university is in compliance with the appropriate portions of the Family Educational Rights and Privacy Act of 1974 and recognizes the rights of students to inspect their educational records, ask for interpretation of entries, and request correction of errors. The full statement about records maintained and policies concerning them is available from the registrar and in the WCU Programs in Asheville office.

Standards of Conduct
The university is committed to developing and maintaining the highest standards of scholarship and conduct. Therefore, all students are subject to the rules and regulations of the university. In accepting admission to Graduate School, students indicate their willingness to abide by university rules and regulations and acknowledge the right of the university to take appropriate disciplinary action, including suspension and/or expulsion, as may be deemed appropriate, for failure to abide by university rules and regulations.

Students registered in the Graduate School at Western Carolina University may not be enrolled simultaneously at another institution except in the case of transfer of credit or guest matriculation, which must be approved in advance by the dean of research and graduate studies. Failure to comply with this policy may result in dismissal from the Graduate School.

Code of Ethics
Graduate students are expected to be familiar with and to adhere to the professional and ethical guidelines appropriate to their area of study. Failure at any time to adhere to the guidelines may result in immediate dismissal from the Graduate School.

Policy on Illegal Drugs
I. Purpose
Western Carolina University is an academic community dedicated to the transmission and advancement of knowledge and understanding. The Board of Trustees is committed to the maintenance and protection of an environment in which students and faculty members may responsibly pursue these goals through teaching, learning, research, discussion, and publication, free from internal or external restraints that would unreasonably restrict their academic endeavors. Moreover, it is the obligation of all members of the university community—faculty, students, administrators, and other employees—to help maintain an environment where academic freedom flourishes and in which the rights of each member of the academic community are respected. The illegal use of and trafficking in drugs can jeopardize the welfare of members of this academic community. Accordingly, in an effort to responsibly address such threats to the integrity of the academic environment, the Board of Trustees adopts this policy.

II. Applicable Policies, Practices, and Programs
A. Education, Prevention, Counseling, and Rehabilitation
1. Just as the primary purpose of Western Carolina University is education, so also the university's major effort to address drug abuse should be educational in nature. The university shall maintain a comprehensive drug-education program available to all members of the academic community (students, faculty, administration, and staff). The activities of the program shall be the responsibility of the Drug and Alcohol Education Task Force co-chaired by the vice-chancellor for student development and composed of faculty, staff, and students. The Task Force shall develop and coordinate an ongoing program available to all members of the academic community that:

   a. informs members of the academic community about the health hazards associated with drug abuse.
   b. emphasizes the incompatibility of drug abuse and maximum achievement of personal and educational goals.
   c. encourages members of the campus community to make use of available campus and community counseling, medical, and rehabilitation resources in dealing with drug abuse problems.
   d. informs members of the academic community that they also may be subject to criminal prosecution for violating state laws relating to the illegal use, possession, delivery, sale, manufacture, or creation of controlled substances.

2. WCU shall provide information about drug counseling and rehabilitation services to members of the university community, through campus-based programs for students and through community-based organizations for faculty, staff, and students. Persons who voluntarily avail themselves of university services shall be assured that applicable professional standards of confidentiality will be observed.

B. Enforcement and Penalties

1. Western Carolina University shall take all actions necessary, consistent with state and federal law and applicable university policy, to eliminate illegal drugs from the university community. The institutional policy on illegal drugs shall be publicized in catalogs and other relevant materials prepared for all enrolled and prospective students and in relevant materials distributed to faculty members, administrators, and other employees.

2. Students, faculty members, administrators, and other employees are responsible, as citizens, for knowing about and complying with the provisions of North Carolina law that make it a crime to possess, sell, deliver, or manufacture those drugs designated collectively as “controlled substances” in Article 5 of Chapter 90 of the North Carolina General Statutes. Any member of the university community who violates that law is subject both to prosecution and punishment by the civil authorities and to disciplinary proceedings by the university. It is not “double jeopardy” for both the civil authorities and the university to proceed against and punish a person for the same specified conduct. The university shall initiate its own disciplinary proceeding against a student, faculty member, administrator, or other employee when the alleged conduct is deemed to affect the interests of the university.

3. Penalties shall be imposed by the university in accordance with procedural safeguards applicable to disciplinary actions against students, faculty members, administrators, and other employees, and by regulations of the State Personnel Commission.*

4. The penalties to be imposed by the university shall range from written warnings with probationary status to expulsions from enrollment and discharges from employment. However, the following minimum penalties shall be imposed for the particular offenses described.

III. Trafficking in Illegal Drugs

A. For the illegal manufacture, sale or delivery, or possession with intent to manufacture, sell, or deliver, of any controlled substance identified in Schedule I, N.C. General Statutes 90-89, or Schedule II, General Statutes 90-90, (including, but not limited to, heroin, mescaline, lysergic acid diethylamide, opium, cocaine, amphetamine, methaqualine), any

* Rules of the State Personnel Commission govern disciplinary actions that may be taken against SPA employees. Under current Commission policies, discharge rather than suspension is the applicable penalty for SPA employees in instances where this policy otherwise requires suspension.
student shall be expelled and any faculty member, administrator, or other employee shall be discharged.

B. For a first offense involving the illegal manufacture, sale or delivery, or possession with intent to manufacture, sell or deliver, of any controlled substance identified in Schedules III through VI, N.C. General Statutes 90-91 through 90-94, (including but not limited to marijuana, pentobarbital, codeine) the minimum penalty shall be suspension from enrollment or from employment for a period of at least one semester or its equivalent. For a second offense, any student shall be expelled and any faculty member, administrator, or other employee shall be discharged.

IV. Illegal Possession of Drugs

A. For a first offense involving the illegal possession of any controlled substance identified in Schedule I, N.C. General Statutes 90-89, or Schedule II, N.C. General Statutes 90-90, the minimum penalty shall be suspension from enrollment or from employment* for a period of at least one semester or its equivalent.

B. For a first offense involving the illegal possession of any controlled substance identified in Schedules III through VI, N.C. General Statutes 90-91 through 90-94, the minimum penalty shall be probation, for a period to be determined on a case-by-case basis. A person on probation must agree to participate in a drug-education and counseling program, consent to regular drug testing, and accept such other conditions and restrictions, including a program of community service, as the Chancellor or the Chancellor’s designee deems appropriate. Refusal or failure to abide by the terms of probation shall result in suspension from enrollment or from employment* for any unexpired balance of the prescribed period of probation.

C. For second or other subsequent offenses involving the illegal possession of controlled substances, progressively more severe penalties shall be imposed, including expulsion of the students and discharge of faculty members, administrators, or other employees.

V. Suspension Pending Final Disposition

When a student, faculty member, administrator, or other employee has been charged by the university with a violation of policies concerning illegal drugs, he or she may be suspended from enrollment or employment before initiation or completion of regular disciplinary proceedings if, assuming the truth of the charges, the Chancellor or, in the Chancellor’s absence, the Chancellor’s designee concludes that the person’s continued presence within the university community would constitute a clear and immediate danger to the health or welfare of other members of the university community; provided, that if such a suspension is imposed, an appropriate hearing of the charges against the suspended person shall be held as promptly as possible thereafter.

VI. Compliance with Federal Drug-free Workplace Act of 1988 Pertaining to Employees

A. As a condition of employment an employee must abide by the terms of this policy and must notify his immediate supervisor at Western Carolina University of any criminal drug conviction occurring in the workplace no later than five days after that conviction.

B. Western Carolina University will notify federal granting or contracting agencies within ten days after receiving notice that an employee directly engaged in a grant or contract has been convicted of a drug offense in the workplace.

C. Western Carolina University will impose sanctions and/or require satisfactory participation in drug abuse or rehabilitation programs by an employee convicted of a drug-related violation in the workplace no later than 30 days after notice of said conviction.
Policy on Computer Abuse

The university provides computer access through the computer center and college and department computer systems. It is essential that computer systems be protected from misuse and unauthorized access, subject to university policy and applicable state and federal laws. Computer abuse defined as, but not limited to, privacy issues, theft, vandalism, copyright issues, and harassment will be referred to the Director of the Computer Center and/or college or department computer network and laboratory managers. Abuse involving theft or vandalism will also be reported to the Director of Public Safety. Penalties include, but are not necessarily limited to, suspension or revocation of computing privileges, reimbursement to the university for resources consumed, other legal action including action to recover damages, referral to law enforcement authorities, and referral to the Office of the Vice Chancellor for Student Development for disciplinary action. In connection with inquiries into possible abuses, the university reserves the right to examine files, programs, passwords, accounting information, printouts, or other computing material without notice authorized only by the Director of the Computer Center.
ADMISSIONS AND DEGREE REQUIREMENTS

Admissions
The dean of research and graduate studies is responsible for the admission of all graduate students. All students taking graduate courses, whether for credit, noncredit, or audit, must make formal application to the Graduate School prior to enrolling in any graduate coursework.

All applications and inquiries should be addressed to:

Dean of Research and Graduate Studies
Western Carolina University
Cullowhee, N.C. 28723-9022
Telephone: (704) 227-7398

The Graduate School welcomes the applications of students without regard to race, color, national origin, religion, sex, age, sexual orientation, or disability. Applicants must possess the interest and maturity necessary for graduate study. In addition to the stated objective criteria described in the application procedure, e.g., letters of recommendation, official test scores, official transcripts, etc., the dean of research and graduate studies reserves the right to determine, from other appropriate information, whether an applicant will be a suitable candidate for a graduate degree.

The specific requirements for the various degree programs offered are outlined in subsequent sections of this catalog. All prospective applicants are urged to study these requirements carefully prior to initiating an application for acceptance to the Graduate School.

Application Procedure. All applicants for admission to the Graduate School must (1) submit a completed application with the $25 nonrefundable application processing fee and (2) arrange to have letters of recommendation; official test scores, as required for the program selected; and official transcripts of all previous academic work sent to the Graduate School.

To be official, test scores must be sent to the Graduate School directly from the testing agency or be recorded on an official transcript. To be official, transcripts must be sent directly from the university or college to the Graduate School or come in a sealed envelope with an unbroken school seal.

The completed application and all credentials should be received by the Graduate School not later than six weeks prior to the opening of the term for which admission is desired. Application may be made as early as one year preceding the semester of entrance. All materials submitted, including transcripts, become the property of the university and cannot be forwarded or returned. The following programs have application deadlines:

- Communication Disorders: March 21
- Counseling (School and Community): February 1
- Educational Leadership: March 1
- Physical Therapy: January 31
- Psychology (Clinical, School): February 1

All elements of the admissions process must be completed by the application deadline. Some programs require an interview. Applicants should contact the department of their intended major to determine if an interview is required.

Any student inactive for more than one full year (example: fall semester, spring semester, and summer school) must file a new application for admission, pay the nonrefundable application fee, and be reevaluated for admission prior to resuming study.

Program Changes. Admission to one degree program does not guarantee admission to another degree program. A student may not be admitted to more than one program at the same time.

Students requesting to change programs, licensures, or degree objectives, after having been accepted into a program of study, must file a new application for admission to the new program, licensure, or degree. For students wishing to change programs within a department,
student request forms, available from the Graduate School, may be used rather than a new application. The student is subject to the standards, rules, and requirements in force in the new course of study at the time of admission to the new program.

Categories of Admission

Persons applying for admission to the Graduate School, if accepted, may be admitted in one of several categories as described below:

Regular Admission. Degree-seeking students who meet the established requirements for admission to their chosen degree programs are granted regular graduate status. Conditions, such as the completion of one or more additional undergraduate or graduate course(s), may be specified.

Provisional Admission. Promising applicants who hold a baccalaureate degree but do not meet the formal requirements for regular admission may be granted provisional admission into a degree program. Full graduate standing is granted when these students satisfactorily complete prescribed courses or otherwise remove deficiencies which have been attached to their admission by either the Graduate School or their major department. Also, to move from provisional status to regular degree status, part-time students must earn at least a 3.0 GPA in their first 12 semesters of completed graduate credit; full-time students must earn at least a 3.0 GPA in their first term of full-time graduate study (nine hours or more of completed graduate level coursework). Some programs may have higher requirements. If provisionally admitted students fail to meet the requirements as stated in their letter of acceptance, the offer of admission to the Graduate School will be withdrawn.

Special Admission. Some graduate programs allow students to be admitted to the Graduate School to take courses for one semester only while they are completing their application file. The student must provide evidence of holding a bachelor’s degree by submitting with his or her application an unofficial transcript from a regionally accredited institution. By the end of the one semester, the student who wishes to continue taking graduate courses must request a change to admission status using the appropriate Graduate School form.

Nondegree Admission. Some programs allow students who wish to take one or more graduate courses for self-improvement, teacher certification, or exploration of graduate degree program offerings to be admitted as non-degree-seeking students. Such students must show evidence that they hold a bachelor’s degree by submitting an unofficial transcript from a regionally accredited institution and normally must have earned at least a 2.75 GPA on the last 60 hours of undergraduate study. Persons granted non-degree status who later decide to work toward a degree must petition for regular admission. Non-degree students may request to become degree students by submitting the appropriate Graduate School form and all documents required by the program they wish to enter. Students should be aware that work completed in a special or non-degree status does not necessarily apply toward a degree, nor does being allowed to take courses imply acceptance into a degree program. If a student has taken courses in a special or non-degree status and later is formally admitted as a degree candidate, a maximum of 12 hours of the earlier coursework with grades of B or better may be transferred into a degree program. The student’s adviser, department head, and the graduate dean must approve such a transfer.

Guest Matriculant. Students enrolled at other regionally accredited Graduate Schools may be admitted temporarily to take a limited number of graduate courses provided the deans of their Graduate Schools make the request for them in writing.

Undergraduates. Undergraduate students may not enroll in graduate-level courses for either undergraduate or graduate credit. Selected seniors may petition in writing to take courses at the 500 or 600 level only if they meet the eligibility requirements of the Graduate School. Enrollment must be approved in advance of registration and an approved application must be on file in the Graduate School where application forms and information about eligibility are available. If the application is approved, the senior will be expected to meet the same requirements for credit that apply to graduate students regardless of other conditions that may be specified.
International Students. International students are granted regular, provisional, special, nondegree, or guest matriculant admission to the Graduate School as appropriate in each case.

In addition to the application form, application processing fee, test scores, letters of recommendation, and transcripts as specified for the program, international students must also submit a chronological listing of all formal education, naming certificates, diplomas, degrees, and other documentary forms of educational attainment. International applicants also must submit a minimum score of 550 on the Test of English as a Foreign Language (TOEFL) and provide a statement of financial responsibility. It is expected that international students will not begin graduate study until the admission process is completed and the student has met all admission conditions except prerequisite coursework requirements, if any.

Since several months may be required to receive and process applications from abroad, international students are urged to submit complete information as early as possible.

Admission Requirements

All applicants for admission to the Graduate School must hold a bachelor’s degree from a regionally accredited college or university and must have an undergraduate background appropriate for graduate study in the proposed field. An applicant may be required to take additional coursework to strengthen the undergraduate background. Applicants for the Ed.S. and Ed.D. degrees must hold a master’s degree in the approved field from a regionally accredited college or university.

Each student’s application must be approved by the department(s) in which the student proposes to major.

The specific requirements for the various degree programs are outlined below. The major department also may require and consider other information such as recommendations, experience, and personal interviews.

Master of Arts and Master of Science Degrees

Applicants for degrees in American history, applied mathematics, art, biology, chemistry, English, and music must have an average grade of B or higher as defined by the major department in upper-level undergraduate courses in the major. For communication disorders, community counseling, home economics, human resource development, and psychology, a B average calculated for the last two years overall is required. A personal interview may be requested by some departments.

The General Test of the Graduate Record Examination is required for American history, chemistry, communication disorders, community counseling, English, home economics, human resource development, psychology, studio art, and technology. The General and appropriate Subject Test of the GRE are required for applied mathematics, biology, and music.

Applicants for the M.A. in Music must have an undergraduate degree in music, perform an audition in the principal area of applied music, and demonstrate or document piano proficiency.

Applicants for the M.S. in Technology must hold a bachelor’s degree in an engineering, engineering technology, or industrial technology program with an average grade of B or higher as defined by the department in upper-level undergraduate courses in the major. Prerequisites for admission to the program for graduates of other curricula include a minimum of 16 hours of undergraduate work in four different technical areas. Students must demonstrate computer competency prior to completion of six semester hours of the program. Students who lack this experience must complete an adviser-approved computer class.

Three recommendations (forms are available from the Graduate School) from former instructors who are in a position to judge the applicant’s aptitude for graduate study are
required for all programs except studio art. For studio art, two recommendations, a letter of application to the Department of Art, and a portfolio of the applicant's work are required.

Master of Arts in Education Degrees
Applicants must hold or be eligible to hold a North Carolina Class A teaching license, or a comparable license from another state in the chosen field unless admission is sought to certain programs in which licensure is not a factor.

Applicants must meet the requirements for admission based on the admissions test and an undergraduate grade-point average for the last 60 hours of the baccalaureate program.

Programs which require the GRE or MAT test scores for admission are educational supervision (all areas) and two-year college administration.

Programs for which the GRE is the required admissions test include: elementary education; middle grades education; physical education; home economics; school counseling; special education, general; secondary education, and two-year college teaching.

Applicants for all M.A.Ed. programs must submit three recommendations from former instructors or employers who are in a position to judge the applicant's aptitude for graduate study. (Forms are available from the Graduate School.)

Master of Business Administration Degree
To be eligible for consideration, applicants must present a satisfactory score on the Graduate Management Admission Test (GMAT) and an undergraduate GPA sufficient to meet formula minimums. Letters of recommendation and/or personal interviews may be requested.

In addition to meeting the formula requirements, the following course prerequisites must be satisfactorily completed for admission to the M.B.A. program: 6 semester hours of accounting principles, 6 semester hours of economics (microeconomics and macroeconomics), 3 semester hours of statistics which include business applications, 3 semester hours of management principles, 3 semester hours of business law and ethics, and 3 semester hours of financial management. Prerequisites are normally met by coursework but satisfactory examination results may also be considered.

Graduate students must be fully and unconditionally admitted to a degree program prior to enrolling in 600-level courses in the College of Business.

Master of Health Sciences Degree
Applicants must have a cumulative grade-point average of B or higher in all upper-level undergraduate coursework.

Applicants must present satisfactory scores on the verbal, quantitative, and analytical portions of the General Test of the Graduate Record Examinations.

Three recommendations from former instructors or employers who are in a position to judge the applicant's aptitude for graduate study are required. (Forms are available from the Graduate School.)

Master of Industrial Education Degree (on inactive status)
This program is on inactive status and no new students are being enrolled.

Master of Music Education Degree
This program is being reviewed and will be restructured. Students should contact the Department of Music if they have any questions (704) 227-7242.
Applicants must have earned an average grade of B or higher as defined by the department in upper-level undergraduate courses in music. Applicants must demonstrate or document piano proficiency.

Applicants who do not hold, or who are not eligible to hold, the North Carolina Class A license in music or a comparable license from another state may be accepted on the condition that deficiencies in this area will be added to the program of studies.

The Graduate Record Examination, both the General and Subject Test in Music, or the National Teacher Examination, both the Core and Specialty Area, are required. Three letters of recommendation from former instructors or employers who are in a position to judge the applicant's aptitude for graduate study are required. (Forms are available from the Graduate School.)

Master of Physical Therapy Degree
Applicants must have earned an average grade of B or higher on the last 60 semester hours of undergraduate coursework. Satisfactory scores on the verbal, quantitative, and analytical portions of the General Test of the Graduate Record Examinations are required. An essay written on a topic specified by faculty of the Department of Physical Therapy and evidence of understanding of the scope of physical therapy practice are required. In addition, applicants must have completed the following courses prior to admission: 12 semester hours of biology, including 8 semester hours of human anatomy and physiology and 4 semester hours of biology, not including botany; 8 semester hours of general chemistry; 8 semester hours of general physics; 3 semester hours of statistics; 3 semester hours of human growth and development; and 6 semester hours of social sciences. All science courses must include laboratory components.

Three letters of recommendation from former employers or instructors who are in a position to judge the applicant's aptitude for graduate study are required. One of these recommendations must be from an academic instructor and one from a practicing physical therapist.

Applicants must be unconditionally admitted to the MPT program prior to enrolling in physical therapy courses. The department accepts only full-time students.

Western Carolina University is seeking accreditation by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. The program has submitted a Declaration of Intent to Apply for Accreditation, which is the formal application required in the pre-accreditation stage. Submission of this document does not assure that the program will be granted initial accreditation. The initial accreditation process for physical therapy education programs is lengthy and cannot be completed until students are enrolled in their final year of the curriculum. Completion of accreditation documents by program faculty does not imply that the program will be granted accreditation by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. Graduation from an accredited program is prerequisite for licensure as a physical therapist in North Carolina and most other states in the United States.

Master of Project Management Degree
To be eligible for consideration, applicants must present a satisfactory score on the Graduate Management Admission Test (GMAT) and an undergraduate GPA sufficient to meet formula minimums. Letters of recommendation and/or personal interviews may be requested.

In addition to meeting the formula requirements, the following course prerequisites must be satisfactorily completed for admission to the M.P.M. program: 6 semester hours of accounting principles, 6 semester hours of economics (microeconomics and macroeconomics), 3 semester hours of statistics which include business applications, 3 semester hours of management principles, 3 semester hours of financial management, and 3 semester hours of business law and ethics. Prerequisites are normally met by coursework but satisfactory examination results may also be considered.
Graduate students must be fully and unconditionally admitted to a degree program prior to enrolling in 600-level courses in the College of Business.

Master of Public Affairs Degree
Applicants must have an average grade of B or higher the last two years of undergraduate study in the major. The Graduate Record Examination General Test is required and a personal interview may be requested. Prerequisite work may be required of applicants having an inadequate background for the M.P.A.

Master of School Administration Degree
Applicants must hold or be eligible to hold a North Carolina Class A teaching license or a comparable license from another state. They must have an average grade of B or higher during the last 60 semester hours of undergraduate study and submit satisfactory scores on the General Test of the Graduate Record Examinations. Applicants must have three years of successful teaching or equivalent experience and must present a portfolio that includes professional achievements, a leadership philosophy, and a self-assessment of readiness for a career in school administration. Applicants will be interviewed by program faculty and local school administrators. An impromptu writing activity will also be required.

Three letters of recommendation from employers or former instructors who are in a position to judge the applicant's aptitude for graduate study and potential as a school administrator are required. One recommendation must be from the current immediate supervisor. (Forms are available from the Graduate School.)

Education Specialist Degrees
Applicants must hold the master's degree from an accredited institution and hold graduate licensure at the fifth-year level in the same field in which the Ed.S. is sought. (Two-year college programs do not require a teaching license. Exceptions may be made if requirements for the master's degree have not yet been completed, provided that work at the fifth-year and sixth-year level is planned concurrently. Applicants requesting such exceptions will be considered in accordance with the standards of the sixth-year program.

Persons applying for admission to Ed.S. in Educational Administration must submit scores on the GRE General Test.

The Ed.S. program requires three recommendations from former instructors and/or administrative superiors who are in a position to judge the applicant's aptitude for graduate study. (Forms are available from the Graduate School.)

Certificate of Advanced Study   (on inactive status)
This program is on inactive status and no new students are being enrolled.

Doctor of Education Degree
It is expected that applicants will possess the master's degree in school administration, supervision, or curriculum. Admission without the appropriate master's degree will be conditional, with the individual expected to complete either a master's degree program or prescribed coursework prior to being admitted as a candidate for the Ed.D. Applicants possessing the Ed.S. degree or credits toward the Ed.S. degree may have coursework that can reduce the number of hours required for the doctoral program. These applicants will be reviewed on a case-by-case basis and individual programs will be developed. In no case, however, will the requirement of one year of full-time residence be waived.

Applicants must have a grade-point average of 3.5 on all previous graduate work (3.0 undergraduate grade point average for those without a master's degree), satisfactory combined scores on the verbal and quantitative sections of the General Test of the Graduate
Record Examinations, a minimum of three years of teaching experience, and three references from persons in leadership roles in educational organizations or who are knowledgeable about the applicant's prior academic performance in higher education. Applicants must have successful teaching experience, the capability to pursue graduate-level studies, and the potential to assume a leadership role in schools. Applicants who meet the described criteria will be interviewed by an admission committee of program faculty. The committee will assess such things as writing and communication skills, commitment to pursuing a career as an educational leader, the capacity for further graduate study, and the potential for a leadership role in schools. Additional information and materials may be requested.

Foreign Language Requirement
A reading knowledge of a foreign language is required of candidates for the Master of Arts degrees in American history and English. Other degree programs do not require proficiency in a foreign language.

Thesis
A thesis is required in the Master of Arts and Master of Science degree programs for American history (excluding public history and American studies options), biology, chemistry, English, clinical psychology, general psychology, and school psychology. A thesis-exhibition is required for the Master of Arts in studio art. A thesis or an approved research topic is required for the Master of Arts in art education. A thesis or lecture/recital is required for the Master of Arts in music. A thesis may be accepted for degree programs leading to the Master of Arts in Education, the Master of Health Sciences, the Master of Industrial Education, the Master of Music Education, the Master of Science in applied mathematics, the Master of Science in communication disorders, the Master of Science in home economics, and the Certificate of Advanced Study in school counseling.

A thesis proposal approved by the student's thesis committee, major department or program coordinator, and the dean of research and graduate studies must be on file in the Graduate School. If the student's research involves either human or animal subjects, the protocol must be approved by either the Institutional Review Board (for human subjects) or the Institutional Animal Care and Use Committee (for other live vertebrates) before the thesis proposal can be approved.

An unbound copy free from all errors must be submitted to the dean of research and graduate studies at least two weeks before the commencement at which the degree is to be conferred. The student's major department will guide the preparation of the thesis and inform the student as to when final copies of the thesis are due to be filed with the Graduate School. A thesis guide to help students prepare their theses is available from the Graduate School. After the thesis has been read for format by Graduate School personnel, it will be returned to the student for changes, for signatures from committee members, and to make at least three original copies on required thesis paper. All copies must be returned to the Graduate School at least two days before commencement for the graduate dean's signature. Upon approval, three copies must be presented to the library for binding at the student's expense. The student may also have a personal copy bound by the library at cost.

The thesis in its final form must be approved by the major department and the dean of research and graduate studies before a candidate can receive the graduate degree.

Dissertation
A dissertation is required for the Ed.D. in Educational Leadership. A dissertation proposal approved by the student's doctoral committee and the dean of research and graduate studies must be on file before the student can register for EDL 899. If the student's research involves human subjects, the protocol must be approved by the Institutional Review Board before the dissertation proposal can be approved.

Thesis Defense. Students who write theses are expected to defend their work during oral examinations. The oral examination will not be administered until after the final draft of the thesis has been completed.
Comprehensive Examinations

A comprehensive examination is required for most degree programs. The examination may be written or oral or both. The specific requirement for each program is stated in the degree outline.

The comprehensive examination shall be administered by the appropriate department at least two weeks before the end of the semester in which the student expects to receive a degree. Written notice of the results of the examination shall be given to the Graduate School at least ten days prior to commencement.

Failure of a student to pass the oral or written comprehensive examination terminates the student's graduate work at WCU unless otherwise recommended by the departmental committee. Only one re-examination will be permitted. All committee actions may be appealed by written application to the dean of research and graduate studies.

Graduation and Licensure

Application for Graduation. Students who expect to be awarded a degree at the spring commencement must file an application for graduation in the Graduate School not later than the close of the previous fall semester. Persons expecting to be awarded a degree at the summer commencement must file an application for graduation not later than one month prior to the close of spring semester. Persons expecting to be awarded a degree at the fall commencement must file an application for graduation not later than the close of summer school. Forms for this purpose may be obtained in the Graduate School.

Graduation Attendance. Candidates for degrees are required to be present at the commencement exercises in the prescribed academic dress. Requests for exceptions to this policy should be addressed to the registrar.

Licensure. It is the responsibility of the student to apply for an initial North Carolina teacher license or to upgrade an existing North Carolina license by contacting the licensure secretary in Killian 228 at the beginning of the final semester.

The fee for raising an existing North Carolina license to a higher level or for adding an area of licensure to an existing license is $45.

Changes in Requirements and Regulations

Every effort has been made to assure the accuracy of statements in this catalog to the extent they could be known at press time. However, changes in, or elimination of, provisions contained herein on any and all matters, including courses, course descriptions, designations of faculty, fees and other charges, admissions and degree requirements, and academic policies and procedures, may be made and applied before the next catalog publication occurs. All rules and regulations pertaining to graduate students are maintained in the Graduate School and may be reviewed there.

The policies, rules, regulations, and requirements of the Graduate School are intended to promote quality and excellence in the graduate program and to assist students to progress in a steady and orderly way toward the achievement of their academic and professional goals. It is recognized that graduate students may enter their graduate studies with various academic experiences; thus, exceptions to these policies, rules, regulations, and requirements may be considered when, in the opinion of the appropriate faculty and the Graduate School, a change will enhance the student's program of study, and where the objectives and quality of the individual student's program of study and the standards of the Graduate School will not be compromised.
GRADUATE PROGRAMS AND DEGREE OUTLINES

Degree candidates are subject to those degree requirements in force at the time of their initial registration following admission. Degree candidates who have been readmitted following withdrawal for one full year (example: fall semester, spring semester, and a summer school), are subject to those degree requirements in force at the time of their initial registration following readmission. All degree candidates have the option of graduating under the degree requirements in force at the time the degree is to be awarded.

Program requirements are listed showing the absolute minimum required for each degree. Credentials of each applicant are reviewed and a program of study is devised for each individual. Therefore, students may be required to take coursework above the minimum.

The appropriate graduate degree will be conferred upon a student after completion of one of the programs outlined below to the satisfaction of the major department(s) and the dean of research and graduate studies. Each program requires successful completion of the minimum number of semester hours of graduate study, as required by each program, with at least half of the credits having been earned in courses open to graduate students only and numbered 600 or above.

Master of Arts Degree Programs (M.A.)

American History

The program for the M.A. degree in American history requires a minimum of 30 semester hours of graduate study, including 3 to 6 hours of thesis and satisfactory performance on an examination in a foreign language approved by the history department. Degree candidates must take comprehensive examinations.

This program has a public history, non-thesis option designed to prepare students for entry-level positions related to public history. This option requires satisfactory performance on a foreign language examination as approved by the history department and the completion of 30 semester hours of graduate study, including: Required courses, 9 hours: HIST 631, 688, 695; 9 hours selected from: HIST 572, 573, 575, 578; 12 hours of guided electives exclusive of public history courses. Successful performance on a written comprehensive examination is required.

The M.A. degree in American History-American Studies Option requires the completion of 30 semester hours of graduate study, a reading knowledge of a foreign language, and a comprehensive written examination. Program requirements are as follows: American History courses, 15 hours. (Students may take any course except HIST 572, 573, 575, 578); HIST 695; American literature courses, 9 hours; and a 3-hour course on American culture from a third discipline.

Studio Art

The program for the M.A. degree in studio art requires 30 semester hours of graduate study, including 18 semester hours in studio art courses, 6 semester hours in art history, a 3-hour approved elective outside the department, and 3 semester hours in a thesis and exhibition. Candidates must pass an oral examination in defense of the thesis-exhibition.

Art Education (on inactive status)

This program is on inactive status and no new students are being enrolled.

The program for the M.A. in art education requires a total of 33 semester hours of graduate study, including 12 semester hours of studio art courses, 6 semester hours in art history, a 3-hour seminar in art education, 9 semester hours of professional education courses (EDCI 602, 604, and PSY 621), and 3 semester hours of thesis or an approved research topic.
Degree candidates must pass both a written and an oral comprehensive examination to be administered by the student’s graduate committee.

**English**

The M.A. degree in English is awarded upon the successful completion of the following requirements: 30 semester hours of graduate credit, 24 hours of which are coursework, including ENGL 518 (Literary Research and Bibliography), and six hours of thesis credit; a written comprehensive examination; an examination in a foreign language, normally French, German, or Spanish; a thesis; and a final oral examination. The final oral examination will be scheduled upon the completion of the written comprehensive examination and the thesis. English majors may not offer for a graduate degree more than two English courses from any one of the nine areas of specialization without written permission of the student’s adviser and the chair of the English Department Graduate Committee. The areas of specialization, reading lists, and details on the comprehensive examinations over those areas are described in the current *Guide to Graduate Study*, available upon request from the Department of English.

**Music**

The program for the M.A. in Music requires a total of 34 semester hours of graduate study, including: a music core of 10 hours-MUS 620, 630, and performance (applied music and ensemble with no less than 2 hours in applied music); 12 additional hours of coursework in music selected with the adviser’s approval; 9 hours of approved coursework outside music; and a thesis (including oral defense) or lecture-recital, 3 hours.

Successful performance on a combined written and oral comprehensive examination is required.

**Psychology**

Graduate students seeking the M.A. degree in psychology may choose among the areas of clinical psychology, general psychology, and school psychology.

The clinical psychology program requires the completion of 61 semester hours including: PSY 650, 651, 652, 661, 662, 671, 672, 675, 676, 679, 683, 684, 686, 698, 699 (6 hours), and 6 hours of electives approved by the program director.

The general psychology program requires the completion of 35 semester hours including: PSY 544, 555, 610, 624, 651, 652, 699 (3-6 hours), and 12-15 hours of electives approved by the program director.

The school psychology program requires the completion of 61 semester hours including: PSY 574, 621, 624, 651, 652, 661, 673, 675, 678, 683, 684, 686, 697, 699 (6 hours); SPED 513 or 681; COUN 645; and one course selected from the following: COUN 620, 630, 635, EDRD 641, PSY 610, 650, 680, SPED 631. Successful completion of the program and requirements related to licensure will lead to recommendation for Level II licensure.

Degree candidates must complete a comprehensive requirement which consists of an approved thesis prospectus and successful performance on an oral examination given by a committee of at least three faculty members.

**Master of Science Degree Programs (M.S.)**

**Applied Mathematics**

The program for the M.S. degree in applied mathematics requires a minimum of 30 semester hours including:

Required courses, 15 hours: MATH 622, 632, 640, 661, 670.

Two courses, 6 hours, selected from MATH 624, 630, 634, 646, 672, 693.

Electives, 9 hours, to include no more than 6 hours of master’s thesis; any 600-level course
except MATH 601, 602, 603, 610, 694; no more than 6 hours from MATH 523, 541, 561, 570; and no more than 6 hours from the sciences, approved by the Department of Mathematics.

Students who elect to write a thesis must pass an oral examination in defense of the thesis.

**Biology**

The program for the M.S. degree in biology requires a minimum of 30 semester hours of graduate study, including a 3- to 6-hour thesis. Both written and oral comprehensive examinations are required. The written comprehensive must be passed before the oral is taken.

**Biochemistry Program**

The Department of Biology and the Department of Chemistry and Physics jointly offer a special program in biochemistry designed to prepare graduate students for study toward Ph.D. degrees at other universities.

**Cooperative Ph.D. Program with Bowman Gray School of Medicine**

A cooperative graduate program between the Department of Biochemistry at Bowman Gray School of Medicine and WCU offers students a five-year plan leading to the Master of Science and Ph.D. degrees. Two years are spent at Western and three years are spent at Bowman Gray.

**Chemistry**

The program for the M.S. degree in chemistry requires a minimum of 30 semester hours of graduate study, including a thesis as specified by the Department of Chemistry and Physics. An oral defense of the thesis is required. Students are required to fulfill a part-time teaching assignment during at least one semester.

Required core courses, 14 semester hours: CHEM 532, 541, 621, 652, and 2 hours of CHEM 696.

Required research courses, 9 semester hours: 6 hours of CHEM 698 and 3 hours of CHEM 699.

Elective courses, 7 semester hours, excluding CHEM 698 and 699.

Part-time students may petition to do a critical research literature review in place of the thesis. To be eligible, the student must be currently employed and have at least one year's experience as a full-time chemical professional, have demonstrated laboratory facility, have completed all other course requirements, and have received majority consent of the chemistry faculty. A maximum of 6 semester hours of credit for CHEM 698 may be earned for the literature review and competence demonstrated in a general oral examination. An extra 3 hours of chemistry elective course at the 600 level must replace CHEM 699. The 2 hours of CHEM 696 may be replaced with 2 hours of general elective credit at the 600 level approved by the Thesis Research Advisory Committee. The required professional experience may be substituted for the part-time teaching requirement.

**Communication Disorders**

The program leading to the M.S. degree in Communication Disorders requires a minimum of 51 hours of graduate study, including completion of a series of supervised clinical internships totaling no less than 350 hours. Experiences will be obtained at on-campus and off-campus locations. The program is designed to meet the needs of students who wish to work in schools and other professional settings. The program adheres to the academic and clinical education requirements set by the American Speech-Language-Hearing Association, the North Carolina Board of Examiners for Speech and Language Pathologists and Audiologists, and the North Carolina State Department of Public Instruction.

Course requirements include: EDCD 572, 574 or 578, 672, 673, 674, 675, 676, 677, 678, 679, 683, EDCI 602, a 3-hour guided elective, and a 3-hour related elective. The guided elective must be in an EDCD 594-Topics in Communication Disorders or an EDCD 600-level course.
The related elective must be a 500- or 600-level course taken from psychology, counseling, education, curricular theory, or other related area. Enrollment in Internship in Communication Disorders (EDCD 683) is required each semester and must total no less than 12 credit hours.

The following courses or their equivalent are required (if not completed previously at the bachelor's level): EDCD 301, 320, 370, 371, 372, 450, 471, 476, 478. Additionally, EDCD 595 is required for State Licensure.

All students must complete either (a) a comprehensive examination or (b) a 3-hour thesis project (EDCD 699) in communication disorders or an allied area. The thesis project may be substituted for the guided elective.

Community Counseling

The program leading to the M.S. degree in community counseling requires a minimum of 48 semester hours of graduate study. Additional work (up to 9 semester hours) may be added to supplement the undergraduate background.

Professional core 27 hours: COUN 605, 615, 625, 630, 631, 635, 640, 645, 650, and EDCI 602.

Specialty requirements 21 hours: COUN 601, 623, 686, 687, and 12 hours in guided electives.

Home Economics

Requirements for the M.S. program in home economics include the completion of 30 semester hours of graduate study, including 6 hours of thesis, or 36 semester hours in the non-thesis option. Students may concentrate in child development and family relations, or general home economics. The comprehensive examinations may be written, oral, or both as determined by the department.

Core requirement, 6 hours: EDCI 606 or 602 and HE 601.

Guided electives, 24-30 hours: may be taken within the Department of Human Environmental Sciences or in approved areas outside the department.

Human Resource Development

The program leading to the M.S. degree in human resource development requires 33-36 semester hours including:

Core courses, 15-18 hours: HRD 610, EDHE 531, COUN 645, EDCI 602, HRD 698, HRD 589 or 683. Students with substantial professional experience in human resource development may request their advisor waive the field experience requirement (HRD 589 or 683); thereby making 33 the minimum number of semester hours required.

Guided electives 12 hours, selected from one of the following three areas: Training and Development (HRD 612; EDEL 566, 666; HRD 620, 670, 675, 693; MGT 605); Organization Change (COUN 600; EDCI 606; HRD 670, 675; MGT 605, 608; OA 605); Career Development (COUN 600, 650; HRD 620, 660, 670, 693; MGT 608). Other appropriate guided electives approved by the student's advisor may be substituted.

Elective courses, 6 hours, selected from ACCT 651; CIS 662; COUN 640; EDCI 609; PSY 610, 621; MHS 663; HRD 693; IET 630, 680; MGT 609, 672; MKT 602; PA 571, 572, 673. Courses not taken as guided electives and other appropriate electives approved by the student's advisor may be substituted.

Successful performance on a comprehensive examination, either written or oral as determined by the department, is required upon the completion of all coursework or during the semester in which all coursework will be completed.

Technology

Requirements for the M.S. in technology include a minimum of 30 semester hours distributed over report writing, industrial and manufacturing technology, management, and elective courses. Course requirements include:
Language, 3 hours: ENGL 501.

Industrial technology core, 18 hours: IET 560, 640, 641, 642, and up to 6 hours in IET 680 or IET 699 or a coherent grouping of elective courses in a related academic area approved by the student's advisory committee.

Management, 9 hours: MGT 605, 608, 611.

Successful performance on a comprehensive examination, either written or oral as determined by the department, also is required.

Master of Business Administration Degree Program (M.B.A.)
The program leading to the Master of Business Administration degree requires the completion of 36 semester hours at the 600 level, including:

Core courses, 24 hours: ACCT 651, ECON 607, FIN 601, CIS 651, MGT 605, MGT 606, MGT 607, MKT 601.

Electives, 12 hours: Elective courses from at least three disciplines must be selected to assure breadth of business understanding and must be approved by the director of graduate programs in business from the following: accounting, economics, finance, information systems, law, management, marketing, and office administration.

Master of Health Sciences Degree Program (M.H.S.)
The Master of Health Sciences degree program requires a minimum of 36 semester hours of approved graduate coursework. The curriculum is composed of three parts: (1) the core block; (2) the emphasis block, with options in either management, education, or nutrition; and (3) the research block, which includes a thesis and non-thesis option. A comprehensive examination (written and/or oral) is required.

Core block, 6 semester hours: MHS 510 (must be completed within the first 12 hours of attempted graduate credit) and MHS 696.

Emphasis block, 18 semester hours:
- Management option: MHS 560, 562, and 564; and 9 hours of electives selected from: MHS 663, 664, 665, 666, 667, 668, 693, or approved electives.
- Education option: MHS 530, 532, and 534; and 9 hours of electives selected from: EDAD 620, EDCI 506, EDCI 601, MHS 693, ENVH 570, or approved electives.
- Nutrition option: 18 hours from ND or MHS 500-600 level approved courses.

Research block, 12 semester hours: EDCI 606; MHS 675 or ND 533; MHS 698 and approved elective, or MHS 699 (6 hours).

Option for Preprofessional Practice in Dietetics: This option consists of 12 hours of graduate coursework including ND 539, 681, 682, and 683. Completion of the option enables the student to take the American Dietetic Association registration examination and thus become a Registered Dietitian. The coursework includes 1,125 hours of on-site clinical experience. Students in this option will incur some costs (i.e., liability insurance, travel to clinical sites, uniforms) in addition to the regular graduate fees. Students wishing to complete this option must apply for admission to the option and submit a verification statement of completion of an ADA-approved Plan IV or V program.

Master of Industrial Education Degree Program (M.I.E.) (on inactive status)
This program is on inactive status and no new students are being enrolled.
The programs for the Master of Industrial Education degree in industrial education for either secondary education or two-year college teaching each require a minimum of 30 semester hours of graduate study. Successful performance on a comprehensive examination, either written or oral as determined by the department, also is required.

**Secondary Education (on inactive status)**

This program is on inactive status and no new students are being enrolled.

Successful completion of the program and requirements related to licensure lead to recommendation for a North Carolina teaching license.

Education and Psychology, 12 hours: EDCI 602, 604, 605, and PSY 621 or 625.

Subject area courses, 18 hours: IET 602, 610, 630, or 632, and 9 hours of guided electives in industrial education.

**Two-Year College Teaching (on inactive status)**

This program is on inactive status and no new students are being enrolled.

Education and Psychology, 11 hours: EDCI 602 and 604; EDHE 605 and 695 or 686.

Subject area, 19 hours: IET 602, 610, 630 or 632, and 10 hours of guided electives in industrial education.

**Master of Music Education Degree Program (M.M.E.)**

This program is being reviewed and will be restructured. Students should contact the Department of Music if they have any questions (704) 227-7242.

The Master of Music Education degree requires a minimum of 32 semester hours, including: Professional education, 9 hours: EDCI 602; PSY 621, 624, or 625; and one course elected from supervision, curriculum and materials, foundations and research, or educational psychology.

An area of concentration, 10 hours, selected from (a) General Music, MUS 695; 698 or 592; 680 or 693 or 694; (b) Instrumental Music, MUS 695, 697, 680; (c) Choral Music, MUS 695, 696, 680. (MUS 682 or 699 may be substituted for MUS 680.)

Other music courses, 9 hours: MUS 620, 630, and three hours elected from music theory or music history and literature courses.

Electives from any of the above areas, 4 hours.

Successful performance on a combination written and oral comprehensive examination is required.

Successful completion of the program and requirements related to licensure leads to recommendation for a North Carolina teaching license.

**Master of Physical Therapy Degree Program (M.P.T.)**

The Master of Physical Therapy degree program requires a total of 75 semester hours of approved coursework, including full-time clinical internships. The curriculum consists of basic sciences, physical therapy sciences, professional issues, scientific inquiry, clinical logic, and clinical internship sequences. Completion of the following coursework and successful performance on a comprehensive examination are required for graduation.

**Year One:**

**Fall Semester:** PT 601, 611, 621, 623, and 631.

**Spring Semester:** PT 602, 612, 622, 624, 632, and 641.

**Summer School:** PT 603, 642, 651, 660, and 683.
Year Two:

Fall Semester:  PT 604, 613, 643, and 652.
Spring Semester:  PT 605, 614, 644, 653, and 684.
Summer School:  PT 693, 783, and 784.

Master of Project Management Degree Program (M.P.M.)
The program leading to the Master of Project Management degree requires 33 semester hours, including:
Core courses, 15 hours:  ACCT 651, ECON 607, FIN 601, MGT 605, MKT 601.
Advanced competency courses, 18 hours:  MGT 670, 672, 674, 676, 677, 678.

Master of Public Affairs Degree Program (M.P.A.)
The Master of Public Affairs is designed for in-service students who possess professional experience and seek additional education to prepare for career advancement. The program requires a minimum of 36-39 semester hours, including:
Public Affairs core, 21-24 hours:  PA 670, 671, 672, 673, 674, 675, and 685. Students who lack professional experience will be required to take six semester hours of internship (PA 685).
Program electives, 6 hours, selected from PA 571, 572, 676; PSC 521, 593, 595; MGT 608.
Professional electives, 9 hours, selected with adviser's approval from graduate courses pertinent to the individual's career field.
Successful performance on an oral examination following completion of 18 semester hours is required and a written comprehensive is required upon completion of the internship and all coursework.

Master of School Administration Degree Program (M.S.A.)
The program leading to the Master of School Administration degree requires the completion of 42 semester hours. The curriculum is divided into four areas as follows:
Professional Knowledge and Skills Core, 15 hours:  EDAD 611, 612; EDCI 612, 615; and PSY 621.
School-Site Management Core, 9-12 hours:  EDAD 620, 630, 660, 720, 731, and COUN 600.
Instructional Leadership Core, 9-12 hours:  EDCI 604 and EDSU 605, and 3-6 hours selected from:  EDAD 650, EDSU 630, HRD 670, SPED 502.
Internship, 6 hours:  EDAD 686 and 687.
Students will maintain a portfolio throughout their experience to be evaluated three times each semester by the program faculty. At the culmination of the program, portfolios will be evaluated for achievement of the stated goals.
Successful completion of the program and requirements related to licensure will qualify students to apply for Administrator I license. Condition of licensure will be determined by the North Carolina Standards Board for School Administrators.

Master of Arts in Education Degree Programs (M.A.Ed.)
All programs leading to the Master of Arts in Education degree require a minimum of 30 to 48 semester hours of graduate study, inclusive of coursework and individual problems or a thesis. Comprehensive examinations, either written or oral or both, must be passed in both
the major and minor fields with the exception of some programs in special education which require a portfolio. Successful completion of a program and requirements related to licensure will lead to recommendation for a North Carolina teaching license except for the two-year college and non-school programs.

**Elementary Education (K-6)**
The program leading to the M.A.Ed. in Elementary Education requires a minimum of 36 semester hours, including:

Professional component, 12 hours: EDCI 602; EDCI 604 or EDEL 601; EDCI 605 or 506 or 603; and PSY 624 or 621.

Elementary core, 9 to 12 hours: EDEL 695, 696 and 3-6 hours selected from approved courses in elementary education.

Subject-matter area(s), 12 hours, selected with adviser's approval from one or more of the following: art, physical education, language arts, mathematics, music, reading, science, social studies.

Electives, 0-3 hours.

**Middle Grades Education (6-9)**
The program leading to the M.A.Ed. degree in middle grades education requires a minimum of 36 semester hours, including:

Professional component, 12 hours: EDCI 602; EDCI 604 or EDEL 618; EDCI 605 or 506 or 603; PSY 625 or 624.

Middle Grades core, 6-9 hours: EDEL 697, 698, and 0-3 hours in approved middle grades education courses.

Subject-Area courses, 15 hours approved by the adviser in one of the following areas: language arts (including reading), mathematics, science, social studies.

Electives (with adviser's approval), 0-3 hours.

**Secondary Education**
Programs leading to the M.A.Ed. degree in the area of secondary education are available in:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Chemistry*</th>
<th>Mathematics</th>
<th>Social Sciences*</th>
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<tbody>
<tr>
<td>Business</td>
<td>English</td>
<td>Physical Education (K-12)</td>
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</table>

The programs require a minimum of 30-36 semester hours of graduate study. The requirements are as follows:

Professional component, 12 hours: EDCI 603, 605, or 700; EDCI 602; EDCI 604; and PSY 621 or 625.

Academic major approved by academic adviser, 18 hours.

Business education majors will take 12 hours in office administration courses at the 600 level, including OA 601, OA 603, and 6 hours of guided electives. English majors may not offer for a graduate degree more than two English courses from any one of the nine areas of specialization without written permission of the student's adviser and the chair of the English Department Graduate Committee. The areas of specialization, reading lists, and details on the comprehensive examinations over those areas are described in the current *Guide to Graduate Study*, available upon request from the Department of English.

Mathematics majors must take: MATH 507, 508, and 509 and 9 hours of electives chosen from any 500- or 600-level mathematics courses except MATH 601, 602, or 603. (At least one of these elective courses (three hours) must be taken at the 600 level.)

*These programs are on inactive status and no new students are being enrolled.*
Physical education majors must take a minimum of 36 semester hours including PE 621 and 696. They must select 9 semester hours from one of the following areas: (1) PE 625, 635, 650, 665 or (2) PE 600, 615, 630, 640, 675. The student must select nine hours from an area of interest not previously taken and/or PE 676, 694, 699, PSY 541. Physical education majors may select PSY 624 in lieu of PSY 621 or PSY 625.

Home Economics Education

The program requires the completion of either a minimum of 33 semester hours of graduate study, including 6 hours of thesis, or 36 hours in the non-thesis option.

Professional component, 12 hours: EDCI 606 or 602; EDCI 605 or 603 or 700; EDCI 604; and PSY 621 or 625.

Core requirement, 3 hours: HE 601.

Guided electives, 18-21 hours: Any combination within the Department of Human Environmental Sciences or in approved areas outside the department.

Two-Year College Teaching

Programs leading to the M.A.Ed. degree in the area of two-year college teaching are available in:

<table>
<thead>
<tr>
<th>Biology</th>
<th>Chemistry*</th>
<th>English</th>
<th>Mathematics</th>
<th>Physical Education</th>
<th>Social Sciences*</th>
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<td>Individually Approved</td>
<td>Multi-Disciplinary Studies</td>
</tr>
</tbody>
</table>

Each program requires a minimum of 35 semester hours of graduate study. The programs do not lead to licensure. The course requirements are as follows:

Academic major approved by academic adviser, 24 hours.

Professional core, 11 hours: EDCI 602, PSY 621, EDHE 605 and 686. (A person with one or more years of teaching experience or a person who holds a teaching license may, upon recommendation of the adviser and department head, substitute EDHE 695 for EDHE 686.)

English majors may not offer for a graduate degree more than two English courses from any one of the nine areas of specialization without written permission of the student’s adviser and the chair of the English Department Graduate Committee. The areas of specialization, reading lists, and details on the comprehensive examinations over those areas are described in the current Guide to Graduate Study, available upon request from the Department of English.

Reading Education (on inactive status)

This program is on inactive status and no new students are being enrolled.

The program leading to the M.A.Ed. degree in reading education requires a minimum of 36 semester hours of graduate study.

Public School (on inactive status)

Professional component, 12 hours: EDCI 602; EDEL 601 or EDCI 604; EDCI 506, 605, or 603; PSY 621, 624, or 625.

Reading core, 21 hours: EDRD 641, 651, 661, 672, 750, EDEL 606, 653.

Electives, 3 hours.

Two-Year College (on inactive status)

This program is on inactive status and no new students will be admitted.

*These programs are on inactive status and no new students are being enrolled.
Counseling
The program leading to the M.A.Ed. degree in school counseling requires a minimum of 48 semester hours of graduate study. Additional work (up to 9 semester hours) may be added to supplement the undergraduate background.

Professional core, 27 hours: COUN 605, 615, 625, 630, 631, 635, 640, 645, 650, and EDCI 602.

Specialty requirements, 21 hours: COUN 601, 660, 686, 687, and 12 hours of guided electives.

Special Education, General
The M.A.Ed. degree program in general special education requires a minimum of 36 semester hours of graduate study. The program consists of a professional component, a special education core, and a concentration in either behavioral disorders, learning disabilities, or mental retardation.

Professional component, 12 hours: EDCI 605, 603, or 700; EDCI 602; EDCI 604 or EDEL 601; and PSY 621, 624, or 625.

Special Education core, 12 hours: SPED 502, 631, 682, and 687.

Concentration requirements, 12 hours, as follows:
- Behavioral Disorders concentration: SPED 504; SPED 684; PSY 574; and 3 hours of guided electives.
- Learning Disabilities concentration: SPED 513; SPED 681; EDCD 576 or EDRD 651; and 3 hours of guided electives.
- Mental Retardation concentration: SPED 529, 630 and 6 hours of guided electives.

Educational Administration, Public School  (on inactive status)
This program is on inactive status and no new students are being admitted. The program was replaced by the Master of School Administration (M.S.A.). Questions regarding the new M.S.A. program should be directed to the Department of Administration, Curriculum, and Instruction, (704) 227-7415.

Educational Administration, Two-Year College
The program leading to the M.A.Ed. degree in two-year college administration requires a minimum of 33 semester hours of graduate study, including:

Professional component, 12 hours: EDCI 602; EDCI 604 or EDHE 636; PSY 621; and EDCI 603, 605, 700 or EDHE 531.

Administration, Organization, and Supervision, 10 hours: EDAD 600, 710, EDHE 683, and EDSU 605.

Higher Education and cognate, 11 hours: EDHE 605, 695, and 6 hours of guided electives.

Educational Supervision
Each of the programs leading to the M.A.Ed. degree in supervision for elementary education, middle grades education, secondary or special subject areas, curriculum-instruction, and instructional technology specialist-computers requires a minimum of 38 semester hours of graduate study. Requirements include courses to qualify the student for the appropriate graduate teaching license or as a curriculum-instruction specialist.

All students complete a common core of courses consisting of the professional education component and required courses in supervision as well as the specialty requirements of the program they select.

Professional component, 12 hours: EDCI 603, 605, or 700; EDCI 604; EDCI 602; and PSY 621.
In addition, a 3-hour cognate course must be selected from anthropology, history, economics, political science, social psychology, or sociology.

Supervision, Curriculum, and Instruction, 5 hours: EDSU 605 and 685. Any student whose professional background does not include central office experience in either administration or supervision must also complete EDAD 600 (Theory and Foundations of Educational Administration, 3 hours) in addition to the stated minimum hours for the degree.

The specialty requirements for each program are as follows:

**Elementary Education.** Concentration in area of teaching license: 18 hours in methods, materials, and techniques of teaching elementary education, and study in one or more of the following teaching areas: art, physical education, language arts, mathematics, music, reading, sciences, social sciences.

**Middle Grades Education.** Concentration in area of teaching license: 18 hours in methods, materials, and techniques of teaching in middle grades education, and study in one or more of the following areas: language arts, mathematics, sciences, social sciences.

**Secondary or Special Subject Areas.** Concentration in area of teaching license, 18 hours to be selected from the academic or special-subject area.

**Curriculum-Instruction.** Nine hours of advanced-level preparation in a teaching field(s). EDSU 615, 620, and 3 hours from the following areas with adviser’s approval: supervision, curriculum, and administration.

**Instructional Technology Specialist - Computers.** Concentration in the areas of instructional technology and computers, 18 hours minimum to be selected from CIS, CS, and EDEL courses with adviser’s approval. Students who do not hold a North Carolina class A teaching license or a comparable license from another state may be admitted into the program if they meet all other admission requirements. Successful completion of the program by students not holding a teaching license will not lead to a recommendation for teacher licensure.

**Education Specialist Degree Programs (Ed.S.)**

**Educational Administration**

The program leading to the Ed.S. degree in educational administration includes student options for public school or two-year college administration. Either option must include the required courses listed in the respective master’s programs, if not previously taken, in addition to 33 hours of coursework as follows:

**Public School Administration**

This program is being reviewed and will be restructured. Students should call the Department of Administration, Curriculum, and Instruction (704) 227-7415 if they have any questions.

Professional component, 12 hours: EDCI 606; EDCI 702; EDCI 603, 605, or 700; and PSY 621, 624, or 625.

Cognate course, 3 hours selected from anthropology, economics, history, political science, social psychology, sociology, Educational Sociology (EDCI 601), or Politics of Educational Decision Making (EDAD 720).

Administration, Organization, and Supervision, 18 hours: EDAD 620, 630, 700, 783, 795, and 5 hours of guided electives.

**Two-Year College Administration**

Professional component, 12 hours: EDCI 606; EDHE 636 or EDCI 702; EDCI 603, 605, or 700; and PSY 621 or an approved graduate psychology course.

Administration, Organization, and Supervision, 15 hours: EDAD 620, EDAD 630, EDHE 783, and 7 hours of guided electives.
EDHE 610 and a 3-hour cognate course from anthropology, economics, history, political science, social psychology, sociology.

Educational Supervision
This program is being reviewed and will be restructured. Students should call the Department of Administration, Curriculum, and Instruction (704) 227-7415 if they have any questions.

The program leading to the Ed.S. degree in supervision requires a minimum of 34 semester hours above the master's degree. In addition, any required courses listed in the master's program, if not previously taken, must be completed. Requirements include:

Professional component, 12 hours: EDCI 603, 605, or 700; EDCI 702; EDCI 606; and PSY 624 or 625.

In addition, a 3-hour cognate course must be selected from anthropology, history, economics, political science, social psychology, or sociology.

Supervision, Curriculum, and Instruction, 13 hours: EDSU 705, 785, 795, EDAD 630, and EDCI 609.

Concentration in area of teaching, curriculum-instruction, or approved courses related to educational leadership: 6 hours.

Curriculum and Instruction (on inactive status)
This program is on inactive status and no new students are being enrolled.

The Ed.S. degree program in curriculum and instruction requires a minimum of 30 semester hours of graduate study above the master’s. Master’s-level training must be in the same academic area as the major chosen for the Ed.S. or additional coursework will be required. The program provides student options for public school and two-year college personnel. Students entering the program who have not had courses in curriculum, foundations, research, and psychology will take work beyond the minimum 30-hour requirement for the degree.

Public School or Two-Year College Teaching (on inactive status)
This program is on inactive status and no new students are being enrolled.

Curriculum and Foundations, 12 hours: EDCI 603, 605, or 700; EDCI 604; EDCI 609; and EDCI 702. (Students in the Two-Year College program will take EDHE 610 instead of EDCI 604.)

Areas of specialization, 18 hours, available in biology, chemistry, English, home economics, industrial education, reading, and social sciences.

English majors may not offer for a graduate degree more than two English courses from any one of the nine areas of specialization without written permission of the student’s adviser, chair of the English Department Graduate Committee, and head of the Department of English. The areas of specialization, reading lists, and details on the comprehensive examinations over those areas are described in the current Guide to Graduate Study, available upon request from the Department of English.

Two-Year College/Curriculum Specialty (on inactive status)
This program is on inactive status and no new students are being enrolled.

Administration and Supervision, 6 hours: EDAD 600 and EDSU 605 or 615.

Curriculum, 12 hours: EDCI 609; EDCI 702; and EDHE 610; electives to be selected from EDCI 601, 604, 606, 700; EDSE 680, 681.

PSY 610 or 612, 3 hours.

Guided electives, 9 hours.
Elementary Education (K-6) (on inactive status)

This program is on inactive status and no new students are being enrolled.

The program leading to the Ed.S. degree in elementary education requires a minimum of 36 semester hours above the master’s, including:

Professional component, 12 hours: EDCI 606; EDEL 701, EDCI 604 or 702; EDCI 601, 605, or 700; PSY 621 or EDCI 609.

Organization, Supervision, and Methods, 9 to 12 hours: EDEL 795, 796 and 3 to 6 hours selected from approved courses in elementary education.

Subject-Matter areas, 9 to 12 hours: Approved concentration in one or more areas of the curriculum.

Electives, 0 to 6 hours.

Middle Grades Education (6-9) (on inactive status)

This program is on inactive status and no new students are being enrolled.

The program leading to the Ed.S. in middle grades education requires a minimum of 36 semester hours above the master’s, including:

Professional component, 12 hours: EDCI 606; EDEL 718, EDCI 604 or 702; EDCI 601, 605, or 700; PSY 621 or EDCI 609.

Middle Grades Core, 9-12 hours: EDEL 797, 798; and 3 to 6 hours selected from approved courses in middle grades education.

Subject-Matter areas, 12 hours: Approved concentration in mathematics, science, language arts, or social studies.

Electives, 0-3 hours.

Certificate of Advanced Study (C.A.S.) (on inactive status)

Counseling

This program is on inactive status and no new students are being enrolled.

The Certificate of Advanced Study in counseling is designed for individuals who hold the master’s degree and “G” licensure in school counseling. The CAS typically requires 30 semester hours beyond the master’s; however, for individuals whose master’s degrees in school counseling exceed 30 semester hours, the CAS requirements may be reduced by 3 to 12 semester hours. The minimum requirement for the CAS is 18 semester hours. A thesis is optional and an oral examination is required. The course requirements are COUN 670, 730, 786, and 9 to 21 hours in counseling and related electives approved by the adviser.

Doctor of Education Degree Program (Ed.D.)

The program leading to the Ed.D. degree in educational leadership prepares senior-level school administrators as school leaders in rural communities and leads to a recommendation for advanced licensure for school administrators.

The program requires 60-63 semester hours beyond the master’s degree; a full year of residence; a core of coursework in leadership, research, and supporting areas; an extensive year-long internship in both school and non-school settings; and a dissertation. Rather than a minor, the program of studies has a supporting areas component of interdisciplinary courses that focus on rural studies. The areas in which courses must be completed are as follows:
Leadership Core, 24 hours: EDL 800, 810, 896, 898, EDAD 630, EDSU 895, and 6 hours selected from EDAD 640, 650, 660, 720, 731, EDL 732, or EDSU 615.

Applied Research, 12 hours: EDCI 606, 895, and 6 hours selected from EDCI 611, 705, 801, or 802.

Supporting Areas, 12 hours: EDCI 800, SOC 801, and 6 hours selected from ANTH 517 or HIST 546, COUN 600, HIST 543, PSC 595, SOC 532, or SOC 554.

Internship, 6-9 hours: EDL 883, 884, and 885. (Nine hours required for students not previously serving internships at both school and school district settings in Master's or Education Specialist's programs.)

Dissertation, 6 hours: EDL 899.

A minimum of 24 hours of full-time study in residence is required, during which time at least 18 hours will be scheduled in a cohort format. The residency may be completed in two consecutive semesters and a summer session.

Formal admission to candidacy must be attained prior to the beginning of the period of full-time residency. To be admitted to candidacy, the student must have removed any conditions for admission, received approval of a program of study, and requested the appointment of a specific doctoral committee. Students must complete all requirements of the program within five years of the date of admission to candidacy for the Ed.D. degree.

Both written and oral comprehensive examinations and an oral defense of the dissertation are required.
COURSE DESCRIPTIONS

Credits and Class Meetings. Unless specifically indicated at the end of the course description, the number of hours a class meets each week is the same as the credit-hour value of the course. The credit-hour value of each course is indicated in parentheses immediately following the title of the course. For example, if three hours of credit may be earned the credit is indicated as follows: (3). In variable credit courses, the minimum and maximum hours are shown as follows: (1-3). Unless repeat credit is specified in the course description, a course may be applied only once toward the hours required for graduation. The availability of a course for repeat credit and the maximum hours that may be earned are indicated within the parentheses and immediately following the credit-hour value of the course, as follows: (3, R6). In this example, the course carries three hours of credit and may be repeated once for a maximum of six hours applicable toward a degree.

Prerequisites and Corequisites. A prerequisite (PREQ) is any special requirement, usually one or more background courses or requirements, in addition to class rank, which a student must meet before enrolling in a course specifying the prerequisite. A corequisite (COREQ) is any course in which a student must enroll simultaneously with the course specifying the corequisite.

Departmental and Course Prefixes. The prefixes used to designate departments and courses, except in the case of very short names such as Art, are abbreviations of the names of departments or of fields of study within the departments.

Guide to Course Prefixes

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<tr>
<th>Prefix</th>
<th>Field of Study</th>
<th>Department</th>
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<td>ACCT</td>
<td>Accounting</td>
<td>Accounting and Information Systems</td>
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<td>ANTH</td>
<td>Anthropology</td>
<td>Geosciences and Anthropology</td>
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<tr>
<td>ART</td>
<td>Art</td>
<td>Art</td>
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<tr>
<td>ASI</td>
<td>Arts and Sciences Interdisciplinary</td>
<td>College of Arts and Sciences</td>
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<tr>
<td>AST</td>
<td>Astronomy</td>
<td>Chemistry and Physics</td>
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<td>BA</td>
<td>Business Administration</td>
<td>College of Business</td>
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<td>BIOL</td>
<td>Biology</td>
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<td>CDFR</td>
<td>Child Development and Family Relations</td>
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<td>Chemistry</td>
<td>Chemistry and Physics</td>
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<td>CIS</td>
<td>Computer Information Systems</td>
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<td>Criminal Justice</td>
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<td>Electronic Media</td>
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<td>Computer Science</td>
<td>Mathematics and Computer Science</td>
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<td>CTM</td>
<td>Clothing, Textiles, and Merchandising</td>
<td>Human Environmental Sciences</td>
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<td>ECON</td>
<td>Economics</td>
<td>Economics, Finance, and International Business</td>
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<td>Educational Administration</td>
<td>Administration, Curriculum, and Instruction</td>
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<td>Communication Disorders</td>
<td>Human Services</td>
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<td>EDCI</td>
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<td>Administration, Curriculum, and Instruction</td>
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<td>Elementary Education</td>
<td>Elementary and Middle Grades Education</td>
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<td>Higher Education</td>
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<td>Reading</td>
<td>Elementary and Middle Grades Education</td>
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<td>Health Sciences</td>
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<td>Office Administration</td>
<td>Business Administration, Law, and Marketing</td>
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<td>Public Affairs</td>
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<td>Physical Education</td>
<td>Health, Physical Education, and Recreation</td>
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**Accounting (ACCT)**

601 **Financial Analysis** (3)
Concepts of financial and industry analysis with emphasis on evaluation of corporate performance and financial strength.

651 **Managerial Accounting** (3)
Concepts underlying financial reports, management applications of cost and accounting measurement.

661 **Advanced Theory** (3)
Pronouncements of the American Institute of CPAs, the Financial Accounting Standards Board, and Cost Accounting Standards Board; current accounting literature.
662 Taxation and Business (3)
Tax laws affecting business decisions involving capital expenditures; timing of income and expenditures; alternative financing.

682 Research Project in Accounting (3, R6)
PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

693 Topics in Accounting (1-3, R6)
PREQ: Permission of department head and director, graduate programs in business.

Anthropology (ANTH)

514 (SOC 514) Minority Groups (3)

517 Southern Appalachian Culture (3)
Stability and change in the sociocultural institutions of the region. PREQ: 260 or SOC 231.

519 Comparative Family (3)
The family as a social institution in various cultures. PREQ: 260 or SOC 231.

531 North American Prehistory (3)
Cultural history of the peoples of prehistoric North America, including Mexico. PREQ: 250 or permission of instructor.

540 Archeological Field Techniques (3)
Basics of field work; surveying, photography, excavation, recording, and preservation techniques. PREQ: Permission of instructor.

541 Archeological Problems and Analyses (3)
Experience in collecting and analyzing relevant archeological data. PREQ: Permission of instructor.

561 Indians of North America (3)
Traditional and changing lifestyles of native North Americans; environmental adaptations, social organizations, religions, and arts. PREQ: 260 or permission of instructor.

565 Cultures of South Asia (3)
The cultures of India, Pakistan, Ceylon, Nepal, Afghanistan, and other South Asian countries. PREQ: 260.

566 Folklore (3)
Major forms, theories, and functions of lore among the world's cultures; collection, classification, and analysis of folklore. PREQ: Permission of instructor.

573 Contemporary Cherokee Culture and Society (3)
Present-day Cherokee culture and society; the effects of tourism and the reservation system on lifestyles. PREQ: 260 or permission of instructor.

577 Cultures of Sub-Saharan Africa (3)
Cultural diversity and development in Sub-Saharan Africa from earliest times to the present.

581 Independent Study in Anthropology (1-2, R6)
PREQ: Written application; approval of instructor and adviser.

593 Topics in Anthropology (3, R6)
PREQ: Permission of instructor.

Art (ART)

531 Drawing Problems (3, R6)
PREQ: Permission of instructor. 6 Studio.
532 Design Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

533 Painting Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

534 Printmaking Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

544 Sculpture Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

551 Ceramics Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

553 Weaving Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

564 Art Education Problems (3, R6)  
PREQ: Permission of instructor.

582 Independent Study in Art History (1-6)  
PREQ: Written proposal; permission of instructor.

586 Exhibition Practicum (3)  
Designed to familiarize the student with organizational, administrative, and operational structures of an art gallery and museum including the introduction of planning, curating, and installing professional art exhibitions. PREQ: Permission of department head.

593 Topics in Art (1-4, R7)  
Projects, summer programs, or workshops. PREQ: Permission of instructor.

596 Art History Seminar (3)  
PREQ: Permission of instructor.

597 Seminar in Contemporary Art (3)  
Developments in art since 1945. PREQ: Permission of instructor.

631 Graduate Drawing (3, R9)  
6 Studio.

632 Graduate Design (3, R9)  
Problems in two- and three-dimensional design. 6 Studio.

633 Graduate Painting (3, R9)  
6 Studio.

634 Graduate Printmaking (3, R9)  
6 Studio.

644 Graduate Sculpture (3, R9)  
6 Studio.

651 Graduate Ceramics (3, R9)  
6 Studio.

652 Graduate Jewelry (3, R9)  
6 Studio.

653 Graduate Weaving (3, R9)  
6 Studio.

666 Photography Problems (3, R6)  
PREQ: Permission of instructor. 6 Studio.

667 Graduate Photography (3, R9)  
PREQ: Permission of instructor. 6 Studio.

680 Independent Study in Art Education (3, R6)  
PREQ: Written proposal; permission of instructor.
681 Graduate Problems in Art (3)
  6 Studio.

682 Independent Study in Art History (1-6)
  PREQ: Written proposal; permission of instructor.

696 Graduate Seminar in Art History (3, R6)

697 Seminar in Art Education (3, R6)
  Philosophical, aesthetic, psychological, and curricular ramification of issues in art education.

699 Thesis (3)

Arts and Sciences Interdisciplinary Courses (ASI)

593 Topics in American Studies (3, R6)
  Seminar on particular facets of American culture such as literature and art, philosophy and politics, and folklore and society.

594 Topics in Cherokee Studies (3, R6)
  Various topics in Cherokee Studies such as anthropology, history, sociology, and literature. PREQ: Permission of instructor.

Astronomy (AST)

601 Astronomy for Teachers (3)
  Solar and stellar astronomy; methods and materials for elementary and secondary teaching.

Biology (BIOL)

513 Principles of General Microbiology (2)
  Morphology, physiology, immunology, land ecology of microorganisms; microorganisms and disease.

514 Methods of General Microbiology (2)
  Microscopy; morphological, cultural, physiological, and serological characteristics of microorganisms; microbiology of food, water, and soil. COREQ: 513. 6 Lab.

515 Plant Physiology (4)
  Aspects of plant metabolism, water relationships, transport, development, and defense mechanisms. PREQ: 130, Chem 136. 3 Lecture, 3 Lab.

517 Biochemistry (3)
  The metabolism of carbohydrates, lipids, nucleic acids, and proteins in plant and animal systems. PREQ: 232, 242, 311 and CHEM 242, 271, or permission of instructor.

519 Cell Biology (4)
  Structure and function; techniques for the study of cells. PREQ: 311. 3 Lecture, 3 Lab.

525 Flora of the Southern Appalachians (4)
  Taxonomy of flowering plants of the region; family relationships; use of keys for identification; recognition, collection, documentation, and preservation of specimens. One weekend field collecting trip. PREQ: 130. 2 Lecture, 6 Lab.

534 Terrestrial Ecology (4)
  Population, ecosystem, community structure, and dynamics; major North American biomes; field and descriptive methods; required weekend field trips. PREQ: 232, 242, 311. 2 Lecture, 6 Lab/field.
535 Aquatic Ecology (4)
Biological, physical, and chemical components and processes in lakes and streams; field studies of local lakes and their biota. PREQ: 232. 2 Lecture, 6 Lab.

543 Evolutionary Processes (3)
Mechanisms of evolution; emphasis on current research and hypotheses such as group selection, kin selection, r and K selection, and sympatric speciation. PREQ: 232, 242, 311.

551 Biology of Fungi (4)
Slime molds and true fungi; life histories, morphology, host-parasite relationship, fine structure, and phylogeny. PREQ: 130. 3 Lecture, 3 Lab.

553 Principles of Systematics (4)
Principles and methods used in describing animal and/or plant taxa and in testing hypotheses of evolutionary relationship; individual research projects on the systematics of selected taxa. PREQ: 242. 3 Lecture, 3 Lab.

555 Vascular Plants (4)
Biology of the higher plants; club and small club mosses, quill worts, scouring rushes, ferns, gymnosperms, and angiosperms in living and fossil form. PREQ: 232, 242, 311. 3 Lecture, 3 Lab.

557 Biology of Algae (4)
Life history, structure, reproduction, phylogeny of the algae. PREQ: 130. 3 Lecture, 3 Lab.

566 Aquaculture (1)
Introduction to commercial practices for the production of fish; review of the generic elements involved in aquaculture systems with examples of aquatic farming; examination of problems related to industry. PREQ: 131, 232, or permission of instructor.

567 Biostatistics (3)
Statistical concepts and methods for biologists, design of experiments for computer analysis by ANOVA, single or multiple regression, principal components. PREQ: An elementary statistics course or permission of instructor. 2 Lecture, 2 Lab.

570 Biology of Arthropods (4)
Functional morphology, physiology, natural history, and systematics of the arthropods; field/lab emphasis on spiders. PREQ: 131. 2 Lecture, 6 Lab.

571 Animal Behavior (4)
Mechanisms, development, functional significance, and evolution of behavior; individual research projects, films, and discussions in lab. PREQ: 131 or permission of instructor. 3 Lecture, 3 Lab.

576 Contemporary Fisheries (3)
Biological concepts and alternative management practices involved in the protection, conservation, restoration, augmentation, and cultivation of fisheries resources. PREQ: 131, 232 or permission of instructor. 2 Lecture, 2 Lab.

578 Histology (4)
Vertebrate microscopic anatomy; emphasis on mammals, study and preparation of permanent microscopic slides. PREQ: 131. 2 Lecture, 6 Lab.

589 Cooperative Education in Biology. (3, R6)
PREQ: Minimum of 9 hours of graduate courses with at least a B average and approval of department head, advisor, and cooperative education coordinator. Only 3 hours apply toward degree. S/U grading.

593 Advanced Studies in Biology (1-6, R12)
PREQ: Permission of department head.

612 Principles of Chemical Ecology (3)
Biochemistry, physiology, and function of secondary compounds stressing alkaloids, phenolics, and terpenoids. PREQ: 361, 417, 517 or Chem 242.
613 Molecular Biology (3)

614 Principles of Chemical Ecology Laboratory (2)
Techniques for isolating, identifying, and studying biological functions of alkaloids, phenolics, and terpenoids. COREQ: 612. 6 Lab.

632 Biogeography (3)
Plant and animal distribution; ecological and historical factors contributing to distribution of the earth's biota. PREQ: 242 or permission of instructor.

672 Ichthyology (4)
Systematics, life history, ecology, and identification of groups of fishes; collection of local fishes. PREQ: 131 or permission of instructor. 2 Lecture, 6 Lab/field.

693 Topics in Biology (1-6, R12)
PREQ: Permission of department head.

697 Introduction to Graduate Studies in Biology (2)
An introduction to teaching methods, experimental design, and methods of computer literature searching and internet access.

699 Thesis (3, R12)
Only six semester hours may be applied toward degree.

Business Administration (BA)

500 Accounting for Management Analysis (3)
Accounting theory and statements and analytical skills in managerial decision making; readings, problems, cases. PREQ: Permission of director, graduate programs in business.

505 Economics and Public Policy (2-3, R5)
Economic, social, and public policies affecting managerial decisions; readings, problems, cases. PREQ: Permission of director, graduate programs in business.

510 Information Systems and Statistical Methods (2, R4)
Information processing and statistical tools for managerial decisions; use of computer software packages; readings, case method. PREQ: Permission of director, graduate programs in business.

515 Management, Marketing, and Legal Issues (2, R6)
Management theory and organizational behavior; elements and strategies in marketing; level environment of business; ethics, international implications. PREQ: Permission of director, graduate programs in business.

589 Cooperative Education Experience (3)
An elective in addition to existing program requirements. PREQ: Minimum of 9 hours at the 600 level with at least a B average. S/U grading.

693 Topics in Business Administration (3, R6)
PREFQ: Permission of department head and director, graduate programs in business.

Business Law (LAW)

630 International Law (3)
Its practice, sources, sphere of operation, questions determined by it, applicable courts, and extent to which it is observed and enforced.

693 Topics in Business Law (1-3, R6)
PREFQ: Permission of department head and director, graduate programs in business.
Seminar in Business Law (3)
PREQ: Permission of instructor.

Chemistry (CHEM)

Instrumental Analysis (3)
Theory and practice of modern chemical instrumentation; electrochemistry, spectroscopic methods, and nuclear techniques. 2 Lecture, 3 Lab.

Advanced Organic Chemistry (3)
Synthetic methods and mechanistic study to include selected topics emphasizing relationships between structure and reactivity. PREQ: 242 and 370.

Introduction to Organic Polymers (3)
Linear and cross-linked polymers; selected topics emphasizing relationships between structure and properties. PREQ: 370.

Biophysical Chemistry (4)
Applications of the principles and techniques of physical chemistry to the study of biochemical systems; for graduate students in biology. PREQ: 271 and MATH 140.

Physical Chemistry II (3)
Quantum mechanics; introduction to molecular spectroscopy; applications of thermodynamics. PREQ: 352, MATH 255, and PHYS 230.

Computer Interfacing (3)
Digital logic, computer design; interfacing computers to laboratory instruments. PREQ: Permission of instructor. 2 Lecture, 3 Lab.

Cooperative Education in Chemistry (3, R6)
PREQ: Minimum of 9 hours of graduate courses, minimum B average in graduate work, and approval of department head, adviser, and cooperative-education coordinator. Only 3 semester hours may be applied toward a degree. S/U grading.

Topics in Chemistry (1-3, R6)
PREQ: Permission of department head.

Graduate Inorganic Chemistry (3)
Structure and bonding in inorganic compounds; acid-base theory; coordination complexes of transition metals; introduction to crystal-field and ligand field theory.

Graduate Physical Chemistry (3)
Overview of chemical thermodynamics, kinetics, and quantum mechanics.

Topics in Chemical Education (1-3, R9)
PREQ: High school chemistry teaching experience; permission of department head.

Topics in Inorganic Chemistry (3, R6)

Topics in Analytical Chemistry (3, R6)

Topics in Organic Chemistry (3, R6)

Topics in Physical Chemistry (3, R6)

Seminar in Chemistry (1, R3)

Research in Chemistry (3, R9)
PREQ: Permission of Thesis Research Advisory Committee. Only 6 semester hours may be counted toward a degree.

Thesis (3, R9)
PREQ: CHEM 698 and permission of Thesis Research Advisory Committee. Only 3 semester hours may be counted toward a degree.
Child Development/Family Relations (CDFR)

565 Day Care Management (3)
Organization and administration of programs in child development and daycare centers.

567 Parent Education (3)
Effective child-rearing skills; review of current theories, research, and model parenting programs.

568 Families: Organization and Function (3)
Family organization and function; the family life cycle and areas of adjustment. PREQ: 261 or consent of instructor.

569 Family Gerontology (3)
Study of older family members; their relationships, development, life adjustments, and sources of assistance. PREQ: 364 or permission of instructor.

660 Theories of Child Development (3)
Evaluation of major theories of child development selected from the literature.

661 Contemporary Family Systems (3)
Current trends, changing needs, and roles.

693 Topics in Child and Family Studies (1-3, R6)

Clothing, Textiles, and Merchandising (CTM)

545 Apparel and Home Furnishings Product Analysis (3)
Value analysis of the compositions and construction of fashion and home furnishing products. PREQ: 242 and 246 or permission of instructor.

546 Principles and Techniques of Fashion Retailing (3)
Case study approach to the operation and management of fashion business enterprises. PREQ: MKT 302, 304, CTM 346, 347, or permission of instructor.

Communication - Electronic Media (CMEM)

593 Selected Topics (3)

Communication - Human Communication (CMHC)

593 Selected Topics (3)

Communication - Print Media (CMPM)

593 Selected Topics (3)

Communication - Public Relations (CMPR)

593 Selected Topics (3)

Communication - Theatre Arts (CMTA)

586 Theatre Production (3)
PREQ: Permission of instructor.

593 Selected Topics in Theatre Arts (3)
Communication Disorders (EDCD)

551 Sign Language I (3)
Basic beginning sign language skills, receptive and expressive; cultural issues.

552 Sign Language II (3)
Advanced sign language skills, receptive and expressive; cultural issues. PREQ: 551 or equivalent.

572 Aural Rehabilitation (3)
Acoustic and visual components of speech; amplification and training procedures. PREQ: 450 or permission of instructor.

574 Voice Disorders (3)
The etiology, evaluation, and treatment of voice disorders. PREQ: 372, 471 or equivalent.

576 Language Disorders in Children (3)
Analysis of childhood language disorders; evaluation and implementation of treatment approaches. PREQ: 301, 370, 471 or equivalent.

578 Fluency Disorders (3)

594 Topics in Communication Disorders (1-3, R6)
PREQ: Permission of instructor.

595 Seminar in School Practice (3)
Policy and procedures related to school-based practice. PREQ: 683. COREQ: Repeated enrollment in 683 and permission of instructor.

650 Clinical Audiology (3)
Advanced impedance techniques, site of lesion and central auditory testing; review of literature on special procedures. PREQ: 450, 572, or permission of instructor.

660 Psychology of the Hearing Impaired (3)
Effects of congenital and acquired auditory-sensory deprivation on the development and maturation of the hearing impaired; habilitation, counseling, and management stressed. PREQ: 470, 572, or permission of instructor.

661 Private Practice: Design and Operation (3)
Study of the legal, financial, and administrative decisions critical to the design and operation of private practice. PREQ: Permission of instructor.

672 Language Disorders in Adults (3)
Theory, diagnosis, and treatment of adult language disorders. PREQ: 476 or equivalent.

673 Neurogenic Speech Disorders (3)
Theory, diagnosis, and treatment of neurogenic speech disorders including apraxia, dysarthria, cerebral palsy, and dysphagia. PREQ: 476 or equivalent or permission of instructor.

674 Diagnostics (3)
Clinical procedures used in evaluating communication disorders. PREQ: 476 or equivalent.

675 Management of Communication Disorders (3)
Analysis of clinical methods proven useful in the treatment of communicatively handicapped individuals across the life-span. PREQ: 476 or equivalent.

676 Management of Orofacial Anomalies (3)
Etiology, diagnosis, and treatment of communication disorders associated with orofacial anomalies. PREQ: 476 or equivalent.

677 Dysphagia (3)
Diagnosis and treatment of persons with feeding and/or swallowing disorders. PREQ: 672, 673 or equivalent.
678 Augmentative Communication Systems (3)
Study of augmentative/alternative systems for nonspeaking populations; focus on needs of handicapped individuals. PREQ: 476 or equivalent.

679 Language Assessment and Intervention (3)
Advanced study of current language assessment/intervention techniques. PREQ: 476 or equivalent.

680 Communication Problems of Aging (3)
Survey of communication problems and their remediation in geriatric populations. PREQ: 672 or permission of instructor.

682 Research in Communication Disorders (3)
Study and application of research designs and statistics in communication disorders. PREQ: Permission of instructor.

683 Internship in Communication Disorders (1-3, R15)
Supervised clinical experiences in varied settings. PREQ: 371, 476 or equivalent, and permission of clinic director.

695 Seminar in Articulation and Phonology (3)
Current issues in articulation and phonology; application of research to assessment and intervention. PREQ: 371, 476 or equivalent, or permission of instructor.

696 Seminar in Language (3)
Current issues in language acquisition; application of research to assessment and intervention. PREQ: 476, 679 or equivalent, or permission of instructor.

697 Seminar in Fluency (3)
Issues related to diagnosis and treatment of fluency disorders. PREQ: 476, 478 or equivalent, or permission of instructor.

698 Seminar in Voice (3)
Issues related to the diagnosis and treatment of functional-organic voice disorders. PREQ: 474, 476 or equivalent, or permission of instructor.

699 Thesis (3, R6)
PREQ: EDCI 602 or EDCD 682 and permission of instructor.

Computer Information Systems (CIS)

651 Decision Support Systems (3)
Analysis, development, design, implementation, and evaluation of computer-based, decision-support systems for management; computer applications in spreadsheets, word processing, and databases.

661 Systems Design (3)
Types of information systems commonly used in commercial data processing; purpose, structure, tasks, and implementation of a system.

662 Database Management (3)
Structure and design of static and dynamic databases; the use of database management software as an integral component of an information system.

682 Research Project in Computer Information Systems (3, R6)
PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

693 Topics in Information Systems (1-3, R6)
PREQ: Permission of department head and director, graduate programs in business.

Computer Science (CS)

552 Advanced Computer Architecture (3)
Advanced topics in computer architecture including pipelining, multiple and parallel
processing systems, issues in performance enhancement, data flow computers, and VLSI computations. PREQ: 350.

555 Computer System Performance Analysis (3)
Performance evaluation of computer systems and computer networks; measurement and benchmarks, simulation, and analytical models (stochastic processes and queueing theory). PREQ: 370 and MATH 270.

560 Compiler Construction II (3)
Continuation of course 460; symbol tables, principles, scope rules, type rules; structures from specific languages; run time models; code generation and optimization; error recovery; term project. PREQ: 460.

564 Microcomputer Development (3)
Software and hardware development and interfacing for dedicated microcomputer applications. PREQ: 251 or PHYS 302 or IET 371. 2 Lecture, 2 Lab.

565 Computer Networks (3)
Protocol layers, ATM, media access, routing, flow control, TCP/IP, socket programming, client-server, remote procedure call, global states, fault-tolerant group communication, consensus, name services, and real-time communication. PREQ: 351 and 370.

580 Artificial Intelligence (3)
Machine intelligence; problem reduction, state space search, game trees, expert systems, resolution principle; introduction to LISP. PREQ: 351.

593 Selected Topics in Computer Science (1-6, R6)
PREQ: Permission of department head.

600 Computer Literacy (3)
History, word processing, database management, robotics, computer security, simulations, spreadsheets, graphics editors, telecommunications packages, integrated systems, software review.

601 Logo (3)
Problem solving and programming, top-down design and modularity, procedures, recursion and list processing.

602 Structured Basic (3)
Program development and problem solving, top-down design and modularity, functions, strings, arrays, matrices, subroutines, sequential files, random files, graphics.

606 Applications to the K-8 Curriculum (3)
Computer literacy, scope and sequence models, in-depth examination of a computer literacy curriculum, applications. PREQ: 600; 601 or 602 or permission of department head.

610 Computing Concepts in Programming (3)
Topics will be treated using the Pascal language including programming methodology, data structures, algorithms. 3 Lecture, 2 Lab.

611 Data Structures (3)
Data types; recursion; algorithms; lists, stacks, queues; sorting trees; sorting methods; hash tables; AVL trees. PREQ: 610 or permission of department head.

612 Introduction to Computer Systems (3)
Assembly language, addressing modes, integer instruction set, looping, branching, stacks, subroutines, procedures, macros, conditional assembly, character, and string functions. PREQ: 610.

613 Organization of Programming Languages (3)
Syntax, semantics, names, locations, values, control structures, data types, procedures, nesting and scope, new data types, applicative languages, dynamically varying structures, exception handling, complexity. PREQ: 610, 612.

614 Introduction to Computer Organization and Architecture (3)
Logic gates and Boolean algebra; combinational logic, design of MSI and LSI devices;
flip-flops and synchronous sequential circuits; registers, counters, ROM, RAM, memory devices, ALU, buses, control unit, interrupts, I/O devices and programming; interrupt-driven I/O. PREQ: 610, 612.

616 Applications to the Math Curriculum - Grades 9-12 (3)
Computer science curriculum—ACM; using the computer as a tool to support teaching geometry, algebra, trigonometry, and calculus.

617 Computers in Secondary Education (3)
Problems faced by schools; software evaluation, hardware evaluation; administrative applications—packages and programs; programming and software packages in use; planning for computer educational use. PREQ: 600.

618 Computer-Assisted Learning (3)
Modes of CAL; CAI, CMI, simulation, games, testing; design principles; authoring languages; examining software critically. PREQ: 600, 601 or 602, 610, 611.

Counseling (COUN)

600 Individual and Group Helping Skills (3)
Exploration of helping roles; individual interviewing skills, group process skills demonstration, role playing, and recordings; for noncounseling majors.

601 Professional Orientation (1)
Introduction to counseling profession: roles; history; professional issues; ethical and legal concerns. PREQ or COREQ: 605. COREQ: 623 or 660.

605 The Helping Relationship (3)
Analysis of the helping relationship; development of helping skills; demonstrations, role playing, and recordings; professional orientation; ethical issues; on-campus laboratory experience required. PREQ: Admission to graduate program in counseling.

610 Family Counseling (3)
Survey of basic family counseling theories: structural, strategic, systemic, experiential, and intergenerational.

615 Multicultural Counseling (3)
Social and cultural considerations in counseling; study of ethnic groups, subcultures, changing roles of women, use of leisure time, differing life patterns and their implications for counseling.

617 Substance Abuse Counseling (3)
A systems-based study of substance abuse and its effects upon the individual, family, and community; implications for counseling the substance abuser.

620 Counseling Children (3)
Individual and group counseling approaches for use with children ages 6-12; developmental and remedial methods. PREQ: Permission of instructor.

623 Introduction to Community Counseling (2)
Concepts and current practices in counseling in community-agency settings; consideration of a model community counseling program, introduction to DSM. PREQ or COREQ: 605. COREQ: 601.

625 Counseling: Developmental Perspectives (3)
Counseling issues related to social, cognitive, physical, and personality factors in human life span development. PREQ or COREQ: 605.

630 Theories of Counseling (2)
Selected theories of counseling; development of personal model of counseling. PREQ or COREQ: 605. COREQ: 631.
631 Techniques of Individual Counseling (1)
Applications of counseling theories: demonstrations, supervised practice, role playing.
PREQ or COREQ: 605. COREQ: 630.

633 Crisis Intervention Counseling (3)
Theory and strategy in crisis intervention counseling, role playing and modeling; participation and skill development stressed. PREQ: 605. PREQ or COREQ: 630 or permission of instructor.

635 Group Methods in Counseling (3)
Theories, techniques, materials, and procedures used in group interaction; participation in group processes required. PREQ or COREQ: 605, 630, 631.

640 Measurement and Appraisal in Counseling (3)
Statistical concepts in testing and measurement; selection, administration, and interpretation of tests and other appraisal methods.

645 Consultation (3)
Role of the counselor as consultant; models and skills; evaluation of techniques; issues. PREQ: 630 or permission of instructor.

650 Career Development (3)
Philosophy, theory, and research in career development and vocational choice processes; career information resources; applicability to special groups.

655 Career Counseling (3)
Approaches to career counseling; occupational analysis; synthesis of personal counseling, information, and assessment in career counseling. PREQ: 650. PREQ or COREQ: 630 and 640.

660 School Counseling Program Development (2)
Organization, maintenance, evaluation, and improvement of developmental K-12 school counseling programs; relationship to total school program. PREQ or COREQ: 605. COREQ: 601.

670 Research in Counseling (3)
Applications of research methodologies in counseling. PREQ: EDCI 602 or equivalent and permission of instructor.

680 Independent Study in Counseling (3)
PREQ: Advanced standing; permission of adviser.

686 Practicum in Counseling (3)
Application of skills in settings that approximate employment; audiotapes and transcripts required; 150 contact hours required. S/U grading. PREQ: 605, 615, and approval by counselor education faculty. PREQ or COREQ: 625, 630, 635, 640, 650.

687 Internship in Counseling (3, R6)
Supervised, on-site experience in various counselor employment settings. Six hundred contact hours required. S/U grading. PREQ: 686 and approval by counselor education faculty. PREQ or COREQ: 645. (Only three hours may be applied toward degree).

695 Seminar in Counseling (3)
PREQ: Advanced standing; permission of instructor.

699 Thesis (3, R6)

730 Advanced Theory and Techniques in Counseling (3)
Selected theories and related techniques; supervised practice. PREQ: Admission to counseling specialty at the sixth-year level.

784 Internship in Counseling (3)
Supervised, in-depth experience in counseling settings for sixth-year-level students; applications related to advanced-level courses and practicum are stressed. PREQ: Admission to C.A.S. program in counseling; 730; recommendation of adviser. PREQ or COREQ: 786. S/U grading. Nine hours per week.
786 Advanced Practicum in Counseling (3)
Application of skills in settings that approximate employment; supervision of master's-level practicum students; involvement in program development/evaluation; 150 contact hours required. S/U grading. PREQ: Admission to C.A.S. program in counseling; 670, 730.

Criminal Justice (CJ)
524 Probation and Parole (3)
Development, organization, operation, and results of probation and parole systems as substitutes for incarceration.

593 Topics in Criminal Justice (1-3, R9)
PREQ: Approval of department head.

620 Law Enforcement Administration (3)
Problems, policies, and practices related to executive action, administration, ethics and the law, jurisdiction, and societal expectations. PREQ: 250 or permission of instructor.

640 Correctional Administration (3)
Issues in correctional policy; legal and structural constraints inherent in implementing policy. PREQ: 250 or permission of instructor.

680 Independent Study in Criminal Justice (3, R6)
PREQ: Permission of instructor.

Curriculum and Instruction (EDCI)
503 Social Studies in the Secondary School (3)
Curriculum, materials, and methods for in-service teachers.

506 Contemporary Philosophies of Education (3)
Contemporary philosophies; implications for practice; works of Brameld, Hutchins, Dewey, and Whitehead. PREQ: 231; permission of instructor.

601 Educational Sociology (3)
Application of sociological theory and research to educational problems.

602 Methods of Research (3)
Concepts, methodologies, and procedures in educational research; problem identification, research design, basic data analysis, and applications to educational problems.

603 Comparative Education (3)
Comparison of educational systems in selected cultures.

604 Curriculum Development (3)
Fundamentals of curriculum planning with special emphasis on relating research, theory, and practice.

605 Foundations of Modern Education (3)
Problems of education today; social, economic, political, and philosophical influences.

606 Statistical Analysis in Research (3)
Descriptive and inferential statistical procedures used in data description and hypothesis testing.

609 Educational Tests and Measurements (3)
Concepts and techniques; construction of tests; item analysis and interpretation of results of classroom and standardized tests; applications.

611 Qualitative Research (3)
Explores issues and methods surrounding research that utilizes interpretive, open-ended formats, and focuses on understanding complex social, political, and educational issues.
612 **Principles and Application of Educational Research Methods and Analysis** (3)
Study of research skills useful in administrative decision making; location and synthesis of existing research, research techniques, testing/measurement issues.

615 **Philosophy, History, and Sociology of Education** (3)
The exploration of philosophical, historical, and social influence on American Education. Special emphasis on how these issues confront school leaders.

693 **Topics in Education** (1, R3)
PREQ: Permission of instructor.

699 **Thesis** (4)

700 **Philosophy of Education** (3)
Major educational philosophies; analysis of problems.

702 **Research Seminar in Curriculum** (3)
PREQ: Permission of department head.

705 **Advanced Research Methods** (3)
Logic, techniques, limitations, and applications of case studies, survey methods, causal comparative methods, and causal modeling; emphasis upon use in decision making. PREQ: 606.

800 **Issues in Rural Education** (3)
Issues in providing education to rural communities; unique problems and opportunities of rural schools; instructional adaptations in rural settings.

801 **Meta Theory: Research Review and Applications** (3)
The study of techniques and resources which are employed in the evaluation and synthesis of research and evidence. PREQ: 606.

802 **Program Planning and Evaluation** (3)
Design and techniques for the development and improvement of educational programs. Issues and approaches involved in conducting evaluations and using the results in decision making. PREQ: 606.

895 **Doctoral Research Seminar** (3)
Exploration of an area of research interest, problem development, and the creation of an appropriate research strategy for addressing the problem. S/U grading. PREQ: 606.

**Economics (ECON)**

607 **Managerial Economics** (3)
Application of the analytical tools of economic theory to decision making by management.

608 **Business and Managerial Forecasting** (3)
Analysis of current and prospective levels of national economic activity; emphasis on the art and science of forecasting future business conditions using available business indicators.

609 **International Economics** (3)
International trade and capital movements, balance of payments, barriers to trade, international economic policies.

682 **Research Project in Economics** (3, R6)
PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

693 **Topics in Economics** (3, R6)
PREQ: Permission of department head and director, graduate programs in business.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>600</td>
<td>Theory and Foundations of School Administration</td>
<td>Administrative structure and processes; theories, frameworks, and models of administrative behavior, governance, and organization.</td>
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<tr>
<td>610</td>
<td>The Principalship</td>
<td>Administrative and supervisory duties, problems, skills, and competencies required of a school principal.</td>
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<tr>
<td>611</td>
<td>Educational Organizations</td>
<td>Organizational theory applied to educational organizations; structures/models; behavioral theory; administrative processes. Students conduct field-based study to analyze and compare organizational arrangements. PREQ: Admission to MSA program.</td>
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<tr>
<td>612</td>
<td>Leadership Theory</td>
<td>This course explores school applications of leadership theory. Students will study leadership theories, participate in leadership simulations, and take on leadership responsibilities in schools.</td>
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<tr>
<td>620</td>
<td>School Law</td>
<td>Principles of school law; authority, responsibility, and liability of school boards, administrators, and teachers; significant court decisions.</td>
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<tr>
<td>630</td>
<td>School Finance and Business Management</td>
<td>Principles and practices of financing public education; revenue and allocation plans; budgeting; management of school funds.</td>
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<tr>
<td>640</td>
<td>School Plant Planning and Management</td>
<td>Determination of needs; planning construction and remodeling; efficient use of school plants.</td>
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<tr>
<td>650</td>
<td>School Personnel Administration</td>
<td>Theory, principles, and practices; recruitment, selection, assignment, evaluation, promotion, and tenure; staff development and welfare; collective negotiations.</td>
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<tr>
<td>660</td>
<td>School-Community Relations</td>
<td>Developing and maintaining appropriate relationships; communication with the public; techniques, instruments, and tools for improving relationships.</td>
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<tr>
<td>680</td>
<td>Problems in School Administration</td>
<td>Discovery and implementation of practical solutions to problems encountered by school administrators. PREQ: Permission of adviser.</td>
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<tr>
<td>681</td>
<td>Independent Study</td>
<td>PREQ: Permission of adviser.</td>
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<tr>
<td>684</td>
<td>Elementary Principal Internship</td>
<td>PREQ: 600, 610, EDSU 605, and permission of adviser. S/U grading.</td>
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<tr>
<td>685</td>
<td>Secondary Principal Internship</td>
<td>PREQ: 600, 610, EDSU 605, and permission of adviser. S/U grading.</td>
</tr>
<tr>
<td>686</td>
<td>School-Site Internship I</td>
<td>An administrative internship under supervision of a practicing principal and university faculty. First part of a series of two internships. Seminar sessions held concurrently. PREQ: Permission of adviser.</td>
</tr>
<tr>
<td>687</td>
<td>School-Site Internship II</td>
<td>Administrative internship under supervision of practicing principal and university faculty. Second of two required internships. Seminar sessions held concurrently. PREQ: 686.</td>
</tr>
<tr>
<td>693</td>
<td>Topics in School Administration</td>
<td>Scheduling; negotiations; budgeting; management information systems; surveys; changes in school law. PREQ: Permission of instructor.</td>
</tr>
</tbody>
</table>
695 Seminar in the Principalship (2)
Trends and issues in school administration. PREQ: Permission of adviser.

700 The Superintendency (3)
The superintendent's role and relations with school boards, staff, and community; problems of administering a complex educational organization.

710 (EDHE 710) Administration of Two-Year Colleges (2)
Organization, functions, and practices in higher education; emphasis on community colleges and technical institutes.

720 The Politics of Educational Decision Making (3)
Examination of factors and groups that may influence educational decisions.

731 Policy Development and Analysis (3)
Visioning, strategic planning, organizational goals and objectives, and policy development are major topics. An analysis of policy and its effect on organizational performance is included.

783 Internship in School Administration (2)

795 Seminar in School Administration (2)
PREQ: Permission of adviser.

Educational Leadership (EDL)

732 Computer Applications in Educational Administration (3)
Techniques of data management for administrative problem solving and effective management of schools. Students work with administrative software developed for microcomputers.

800 Advanced Leadership Theory (3)
Advanced study of leadership theory. Leadership roles and expectations in educational organizations. Comparisons and analysis of effective and ineffective leadership. PREQ: EDAD 600 or 611.

810 Behavior and Management of Educational Organizations (3)
Organizational structures and functions, focusing on rural educational organizations and the behavior of groups and individuals within them. PREQ: EDAD 600 or 611.

883 Internship in Rural School Leadership I (3)
First part of three internship experiences. Seminar sessions held concurrently. PREQ: Approval of student's doctoral committee. S/U grading.

884 Internship in Rural School Leadership II (3)
Second part of three internship experiences. Seminar sessions held concurrently. PREQ: 883 and approval of student's doctoral committee. S/U grading.

885 Internship in Rural School Leadership III (3)
Third part of three internship experiences. Seminar sessions held concurrently. PREQ: 883, 884, and approval of student's doctoral committee. S/U grading.

896 Seminar in School Law (3)
An in-depth investigation and analysis in a seminar setting of current issues and trends in the law affecting school operations. PREQ: EDAD 620.

898 Doctoral Seminar in Educational Leadership (3)
The seminar explores strategies used to provide leadership for rural educators. Case studies, models, research, and interviews are used to understand leadership theory and practice.

899 Dissertation in School Leadership. (3, R12)
The culminating activity of the doctoral program in educational leadership. PREQ: Approval of student's doctoral committee. S/U grading.
Education and Psychology (EDPY)

591 Topics in Education and Psychology (1, R3)
PREQ: Permission of department head.

592 Topics in Education and Psychology (2, R6)
PREQ: Permission of department head.

593 Topics in Education and Psychology (3, R6)
PREQ: Permission of department head.

691 Topics in Education and Psychology (1, R3)
PREQ: Permission of department head.

692 Topics in Education and Psychology (2, R6)
PREQ: Permission of department head.

693 Topics in Education and Psychology (3, R6)
PREQ: Permission of department head.

793 Selected Topics in Education and Psychology (3, R12)
PREQ: Ed.S. degree and permission of department head. S/U grading.

Educational Supervision (EDSU)

605 Principles of Supervision (3)
Purposes and philosophies of supervision; basic laws of human relationships, concepts of leadership and change; the change-agent role in instructional improvement.

615 Techniques of Supervision (3)
Practical applications of supervisory principles for improving instructional staff and programs. PREQ: 605.

620 School-Based Instructional Leadership (3)
Function, organization, and techniques of school-based supervisory support for teachers, including roles of principal, mentor teacher, curriculum coordinator, and support teams. PREQ: 605 or permission of department head.

630 School Improvement (3)
Exploration of the developmental process of school improvement focusing on school leadership. Site-based management, total quality management, and outcomes-based models are explored. PREQ: 605.

635 Supervision of the Novice Teacher (3)
Techniques of supervising student teachers and beginning teachers during the initial certification period.

680 Problems in Supervision (1, R3)
PREQ: 605.

685 Internship in Supervision (2)
Supervised work at the school level or at the departmental level in higher education. PREQ: 605. S/U grading.

693 Topics in Supervision (1, R3)
PREQ: Permission of instructor.

705 Leadership for Educational Programs (3)
Function, organization, and leadership responsibilities of the central office supervisory staff, with an emphasis on systemwide program coordination. PREQ: 605.

785 Internship in Supervision (2)
Supervised work at the district level or at the institutional level in higher education. S/U grading. PREQ: 615.
795 Seminar in Supervision (2)
PREQ: 605.

895 Advanced Seminar in Instructional Leadership (3)
An investigation of an instructional problem: studying and solving it. PREQ: 605 and EDCI 800.

Elementary Education (EDEL)

566 Computers in Education (3)
Introduction to the use of computers in school settings; emphasis on instructional applications, issues, and trends.

567 Adolescent Literature (3)
The reading development and reading interests of adolescents; evaluation criteria; instructional strategies; requires comprehensive reading of a wide genre of books.

575 Discipline and Classroom Management (3)
Strategies and techniques for developing positive attitudes and behavior in the classroom; principles of classroom management.

580 Independent Study (3)
PREQ: Permission of department head.

593 Topics in Elementary Education (3)

601 Elementary School Curriculum (3)
Content and methods; evaluation of practices and recent developments.

602 Individualizing Instruction (3)
Philosophy, principles, and techniques of meeting individual needs; identification, evaluation, and use of resources for individualization.

603 Elementary Science Curriculum (3)
Curricular development and research in teaching science; current issues and trends.

604 Elementary Social Studies Curriculum (3)
Curricular development and research in teaching social studies; current issues and trends.

605 Elementary Math Curriculum (3)
Curricular development and research in teaching math; current issues and trends.

606 Elementary Language Arts Curriculum (3)
Curricular development and research in teaching language arts; current issues and trends.

607 Mathematical Problem Solving in the Elementary/Middle School (3)
Teaching methods, issues, and curriculum development of mathematical problem-solving strategies appropriate for elementary and middle school students. PREQ: 308 or 311 or permission of instructor.

608 Diagnosis and Remediation in Elementary/Middle School Mathematics (3)
Diagnostic/prescriptive strategies for elementary and middle-school mathematics teachers. PREQ: 308 or 311 or permission of instructor.

614 Issues and Trends in Elementary Education (3)

618 Curriculum for Middle Grades Education (3)
Explores principles and relationships and assesses current issues and trends in middle-grades education.

620 Philosophy and Mission of Middle Grades Education (3)
Presents the philosophy, history, purpose, and role of middle grades education.
622 **Teaching-Learning Strategies for the Middle Grades** (3)
Present theories, methods, grouping for middle grades; includes individualizing, units, instructional technique, and methods.

653 **Advanced Children's Literature** (3)
Literary experience in the total language arts curriculum, selection of materials, guiding children's study of literature.

666 **Projects in Educational Computing** (3)
Research and advanced projects related to the use of computers in educational settings. 
**PREQ:** 566 or approval of instructor.

670 **Practicum in Middle Grades Education** (1-3, R3)
Relates theory to practice; expands skills in areas of research, curriculum, and application. Direct experience for professional practitioners. **PREQ:** Permission of adviser.

675 **Workshop in Elementary Education** (3)
Content, methods, and materials to meet specific in-service needs of an individual school or system.

680 **Independent Study** (1-3, R6)
**PREQ:** Permission of department head.

695 **Research Seminar in Elementary Education I** (3)
Development and presentation of a research proposal. **PREQ:** EDCI 602, EDEL 601, and permission of department head.

696 **Research Seminar in Elementary Education II** (3)
Presentation of research project carried out in an appropriate elementary classroom. **PREQ:** 695.

697 **Research Seminar in Middle Grades Education I** (3)
Development and presentation of a research proposal. **PREQ:** 618, EDCI 602, and permission of department head.

698 **Research Seminar in Middle Grades Education II** (3)
Presentation of a research project carried out in an appropriate middle grades classroom. **PREQ:** 697.

701 **Seminar in Elementary School Curriculum** (3)
Forces affecting curriculum development, strategies for implementing changes, formulation of curriculum development models. **PREQ:** 601 or EDCI 604.

714 **Programs in Elementary Education** (3)
Comparative studies of programs in historical and philosophical perspective. **PREQ:** 614.

718 **Philosophy and Curriculum for Middle Schools** (3)
Analysis of programs in historical and philosophical perspective. **PREQ:** 601 or 618.

770 **Advanced Practicum** (3, R6)
Supervised practicum experience in educational settings with emphasis on planning, implementing, and evaluating innovative or experimental instructional strategies and/or resources. **PREQ:** Admission to the Ed.S. program. S/U grading.

782 **Research in Elementary Education** (3)
**PREQ:** EDCI 602.

795 **Advanced Research Seminar in Elementary Education I** (3)
Development of a research project to be carried out in an elementary classroom. **PREQ:** 701 and permission of department head.

796 **Advanced Research Seminar in Elementary Education II** (3)
Presentation of a student-conducted research. **PREQ:** 795.
797 Advanced Research Seminar in Middle Grades Education I (3)
Development of a research proposal to be carried out in a middle-grades classroom.
PREQ: 718 and permission of department head.

798 Advanced Research Seminar in Middle Grades Education II (3)
Presentation of student-conducted research. PREQ: 797.

English (ENGL)

501 Writing for Careers (3)
Writing and editing strategies for the marketplace; writing memos, letters, resumes, reports, and other documents used in the professions; basic computer applications.

505 Advanced Creative Writing (3)
Intensive study and practice of creative writing; emphasis on required individual projects. PREQ: Satisfactory writing sample and permission of instructor.

512 Modern English Structure (3)
Application of linguistics to the study of English; comparison of approaches to the study of grammar.

514 Fundamentals of Teaching Composition (3)
Contrasting analysis of teaching approaches; the process, rhetorical, and linguistic/stylistic approaches.

515 Linguistics (3)
The world's languages, their sound systems, word systems, sentence patterns, and relationships to culture and the mind. PREQ: Permission of instructor.

516 Teaching English as a Second Language (3)
Current trends and strategies; measuring proficiency and progress; adapting instructional materials in content areas; aspects of American culture and language that affect language learning. PREQ: 515 or permission of instructor.

518 Literary Research and Bibliography (3)
Methods of literary research and the history, production, and description of printed books.

520 Chaucer and His Age (3)
Chaucer's major poetry with emphasis on *Troilus and Criseyde* and *The Canterbury Tales*; selected readings from the works of contemporaries.

521 Fairy Tale Literature (3)
The genre of the fairy tale; its structure and theme; its influence on children's literature as well as mainstream literature. PREQ: Graduate standing.

530 English Literature of the Renaissance (3)
Representative Tudor and Jacobean prose and nondramatic poetry.

531 Shakespeare and His Age (3)
Selected plays.

540 Milton and His Age (3)
Milton's major poems; selections from his prose; readings from works of contemporaries.

541 The Age of Pope, Swift, and Johnson (3)
Selections from the works of Pope, Swift, Johnson, and their contemporaries.

550 Major British Writers (3, R9)
Selected works of one or more important British authors from a single historical period.

551 Nineteenth-Century British Writers (3)
Study of the major Romantic and Victorian authors, including Wordsworth, Coleridge, Keats, Shelley, Tennyson, Browning, Arnold, and Dickens.
555 The English Novel (3)
Selected 18th- and 19th-century novels of such writers as Defoe, Richardson, Fielding, Smollett, Austen, Scott, Dickens, Thackeray, and Hardy.

563 American Literature Since 1945 (3)
Post-World War II American literature and its influences from other nationalities, especially those of Latin America and Canada. Such writers as Barth, Barthelme, Garcia Marquez, Sexton, and Walcott, among others, will be considered.

564 Native American Literature (3)
A survey of writings by Native Americans.

570 Twentieth-Century Commonwealth Literature (3)
Poetry, fiction, and drama from the most prominent writers in those countries in which English is a common medium for literature.

571 Modern Poetry (3)

572 Modern Fiction (3)

573 Modern Drama (3)

575 The American Novel (3)
Selected novels of major American writers.

577 Literature and Gender (3)
Study of literature by or about women, the relationship of men and women in literature; feminist issues from a literary perspective.

580 Studies in English (1-3, R6)
Independent study/directed research in English. PREQ: Permission of instructor and department head.

589 Cooperative Education: Writing and Editing (3, R6)
A cooperative education experience in writing and editing at the graduate level involving a full-time work experience. PREQ: Enrollment for at least one term in the M.A. in English program; B average in graduate work; approval of adviser, department head, and cooperative education coordinator. S/U grading.

593 Topics in Creative Writing (1-3, R6)
Study and practice of writing in a special area, e.g., the novel, drama, science fiction, juvenile literature. PREQ: 303 or permission of instructor.

594 Special Topics in Advanced American English For Non-Native Speakers (1, R6)
Advanced writing skills class for graduate students whose native language is not English. Focus will be on rhetorical style and mechanics. Credit earned not applicable toward a graduate degree. PREQ: Approval of adviser.

611 Writing Seminar for Teachers (3 or 6, R6)
Study and practice of successful approaches to the teaching of writing, following the National Writing Project model. PREQ: Permission of instructor.

621 English Literature to 1500 Exclusive of Chaucer (3)

631 Shakespeare (3)

640 English Literature of the Enlightenment (3)

651 The Major Romantics (3)

661 American Literature of the Romantic Period (3)

662 American Literature Since 1855 (3)

691 Topics in English Linguistics (3, R6)

692 Studies in Renaissance Literature (3)
693 Topics in Literary Criticism (3, R6)
694 Topics in 17th- and 18th-Century Literature (3, R6)
695 Studies in 19th-Century British Literature (3, R6)
696 Topics in American Literature (3, R6)
697 Topics in Modern British/American Literature (3, R6)
698 Studies in Rhetoric (1-3, R6)
   PREQ: 514 or 611 or permission of instructor.
699 Thesis (3, R6)

Environmental Health (ENVH)

570 Principles of Epidemiology (3)
   Principles and applications to investigation, control, and prevention of disease. PREQ: Permission of instructor.

575 Environmental Program Administration (3)
   Intensive study of regulatory program administration; focus on development, implementation, and evaluation of environmental health programs in the government sector.

655 Hazardous Materials and Waste Management (3)
   An application of technical and administrative procedures needed to understand the problems of hazardous materials and waste management, especially as they relate to current generators, transporters, processors, and disposers.

675 Loss Control through Industrial Hygiene (3)
   Reduction of employer health-care cost through utilization of principles of industrial hygiene and occupational health; cost-effectiveness of preventive medicine in industry.

Finance (FIN)

601 Financial Management (3)
   Capital budgeting, capital structure, dividend policy, mergers, and other aspects of financial planning.

602 Investment Analysis and Portfolio Management (3)
   Evaluation of investment strategies; foreign exchange markets; technical analysis and portfolio theories.

603 Advanced Financial Analysis (3)
   Financial models, investment decisions under uncertainty, cost of capital, valuation models, and dividend policies: case approach. PREQ: 601.

682 Research Project in Finance (3, R6)
   PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

693 Topics in Finance (3, R6)
   PREQ: Permission of department head and director, graduate programs in business.

Food Service Management (FSM)

532 Food Systems Management II (3)
   Functions of management applied to food-service systems; emphasis on planning, marketing, personnel, cost control, and computer applications. PREQ: 430.
Geography (GEOG)

502 Conservation of Natural Resources (3)
Quantity, quality, and distribution of resources in the United States; dilemma of increasing demand on a dwindling resource base.

540 Topics in Regional Geography (3, R12)
Physical, economic, and social aspects of the geography of a selected region (Asia, Europe, USSR, North America, Middle East, Latin America, Africa).

544 Political Geography (3)
Territorial and cultural elements in the formation of national and international boundaries: case studies.

560 Urban and Regional Land Use Planning (3)
Principles and practices of urban-regional planning; types of planning reports; applications to North Carolina. PREQ: Permission of instructor.

562 Introduction to Urban Geography (3)
Study of the spatial structure and functions of urban places; theories of city origin and growth.

564 Industrial Location and Community Development (3)
Measures of manufacturing; location theory; decision-making factors in the location of industry; community-development planning practices. PREQ: 350 or permission of instructor.

591 Topics in Geography (1-3, R6)
PREQ: Permission of instructor.

593 Special Problems (1-3, R6)
PREQ: Permission of instructor.

693 Special Problems in Geography (3, R6)
PREQ: Permission of department head.

Geology (GEOL)

541 Economic Mineral Resources (3)
Formation of and exploration for economic mineral deposits; technologic, economic, and political aspects of exploitation; distribution of production and reserves. PREQ: 251 or permission of instructor.

551 Analytical Methods in Geology (3)
Techniques used for the preparation of mineral and rock specimens for chemical analyses and/or instrumentation for field collection of data. PREQ: Permission of instructor. 1 Lecture, 4 Lab.

591 Topics in Geology (1-3, R6)
PREQ: Permission of instructor.

593 Special Problems in Geology (2, R4)

601 Earth Sciences (3, 3)
602 Survey of the elements of physical and historical geology, weather, climate, and their effect on geomorphic process.

693 Topics in Geology (1-3, R6)
PREQ: Permission of instructor.

Health Sciences (MHS) (previously HSCC and HSMS)

510 Systems and Policy in Health Care (3)
Medical and health services delivery organizations, providers, recipients, financing, and national policy perspectives. (formerly HSMS 610)
530 **Continuing Education for Health Professionals (3)**
Theory and principles of adult education as they apply to health professionals and the clinical setting.

532 **Principles of Clinical Education (3)**
Principles and methods of teaching health-care occupational skills in clinical settings focusing on defining educational needs, developing curricula, pedagogy, and outcomes assessment. (formerly HSCC 610)

534 **Training and Development in Clinical Settings (3)**
Techniques used in designing programs and activities to improve effectiveness of hospitals and other health-service delivery organizations as delineated by organizational needs, culture, and strategic plan.

560 **Management of Health Resources (3)**
Concepts of resources management in health-care delivery; the supervision process and related skills as applied in various health-related facilities.

562 **Human Resource Management in Health Care Organizations (3)**
Human resource management in hospitals and other health service delivery organizations; includes determining need, designing jobs, determining compensation, hiring, and managing employees. PREQ: 510.

564 **Cost Containment/Productivity Management in Health Care Organizations (3)**
Principles of productivity management and budgeting of clinical departments in hospitals and other health service delivery organizations. (formerly HSMS 550)

663 **Workforce Distribution Dynamics in Health Care (3)**
Labor force issues in hospitals and other health service delivery organizations as a function of internal and external forces and their effects on the ability to provide services. PREQ: 560 or permission of instructor. (formerly HSMS 630)

664 **The Legal Environment of Health Care (3)**
Controls and constraints over the provision of medical and health services and the practices of personnel; includes standards and regulations; applicable legislation and case law. PREQ: 510 and 560 or permission of instructor. (formerly HSMS 620)

665 **Quality Improvement in Delivery of Patient Services (3)**
Quality improvement in patient care delivery; includes program design and new and emerging concepts and practices in quality management. PREQ: 510 or permission of instructor. (formerly HSMS 650)

666 **Health Care Organization-Problem Solving and Decision Making (3)**
Overview of macro-level directional decisions and micro-level operational decisions.

667 **Organizational Dynamics in Health Services Delivery (3)**
Overview of theories and practices concerning the interaction of organizations, groups, and professionals in health-care service delivery organizations. PREQ: 560 or permission of instructor.

668 **Management Information Systems in Health Care Organizations (3)**
Overview of automated information systems, flow charting and mainframe health-care systems, technology considerations, artificial intelligence, programming and application in health-care settings. (formerly HSMS 640)

675 **Research Methodology in the Health Sciences (3)**
Overview of history and philosophies of research, topic selection, data gathering and presentation, report writing, and proposal development. PREQ: EDCI 606 and completion of 24 semester hours applicable toward the MHS degree.
680 Directed Independent Study in Health Sciences (1-3, R6)
A limited course for independent study; goals, methods, and expected outcomes approved in advance by program faculty; process monitored and outcome evaluated by program faculty. PREQ: Permission of instructor.

693 Special Topics in Health Sciences (3, R6)
Indepth study of a selected subject related to health sciences. PREQ: Permission of instructor. (formerly HSMS 693)

694 Seminar in Health Care Management Issues (3)
Analysis of management problems and issues emphasizing service unit needs. PREQ: Acceptance in the MHS program or permission of instructor.

696 Trends and Issues Seminar in Health Sciences (3)
Overview of the latest development in the delivery of health and medical services and their implications for the future. PREQ: Completion of 27 hours of graduate course work applicable toward the MHS degree.

698 Project in Health Sciences (3, R6)
Students work independently under the direction of one faculty member on an analysis of a topic, or synthesis, or creative application of existing scholarship to a specific problem, the result of which is a scholarly paper. PREQ: 675.

699 Thesis (3, R12)
PREQ: 675 and approved thesis topic. Only six semester hours may be applied toward degree. (formerly HSMS 699)

Higher Education (EDHE)

531 Foundations of Adult Education (3)
Historical, sociological, psychological, and philosophical foundations of adult education; the nature and characteristics of adult learners; review of research.

605 The Two-Year College (3)
The two-year institution's function in higher education.

610 Two-Year College Instruction (3)
Theories of instruction: emphasis on strategies appropriate to different abilities, interests, and learning levels.

636 Two-Year College Curriculum Development (3)
Principles and processes of program planning and curriculum development.

683 Internship: Two-Year College Administration I (2)
Fieldwork at the department or division level in a two-year school. PREQ: Consent of adviser. S/U grading.

686 Practicum in Two-Year College Teaching (2)

693 Topics in Higher Education (1, R3)
Short-term, high-interest topics related to administration and curriculum in higher education. PREQ: A course in higher education or permission of instructor.

695 Seminar on the Two-Year College (2)

710 (EDAD 710) Administration of Two-Year Colleges (2)

783 Internship: Two-Year College Administration II (2)
Field work at the dean or director level or higher in a two-year school. PREQ: Permission of adviser. S/U grading.
History (HIST)

511 Western Imperialism, 1800 to the Present (3)
Western Imperialism in Africa and Asia; World War I and its aftermath; the roots of Third-World independence movements.

512 Early Modern Europe (3)
The Reformation; development of the modern state; scientific revolution; rise of capitalism; social change.

513 Europe in the Eighteenth Century (3)
The Old Regime; wars of expansion, the Enlightenment; the French Revolution and Napoleon.

514 Europe in the Nineteenth Century (3)
Post-Napoleonic settlement; internal, colonial, and imperial developments; unification movements; the background of World War I.

516 Europe in the Twentieth Century (3)
World War I: Paris Peace Conference, domestic developments, the rise of "isms" in Russia, Italy, and German. World War II: postwar reconstruction and reorganization, and the Cold War.

531 Colonial America, 1492-1763 (3)
Political, social, economic, and cultural characteristics.

532 The Revolutionary Era, 1763-1800 (3)
Causes and effects of the Revolution, the War for Independence, the Constitution, the Federalist Era.

533 The Young Republic, 1800-1848 (3)
Jeffersonian democracy; War of 1812; Era of Good Feeling; Jacksonian democracy; western expansion; the Mexican War.

534 Civil War and Reconstruction, 1848-1877 (3)
Sectional differences; the secession movement; military operations; Reconstruction.

535 Emergence of Industrial America, 1877-1920 (3)
Growth and conflict of organized industry and labor; agrarian decline and revolt; American imperialism; progressive reform; World War I; postwar crises.

536 The United States since 1920 (3)
Roaring Twenties, Depression and New Deal; World War II; role as Cold-War superpower; domestic developments.

542 History of Black America (3)
Role of African-American in American history; African background; religious, cultural, economic, and political institutions; trends toward assimilation; black nationalism.

543 The American South (3)
Social structure and economic interests of the Antebellum South; impact of Civil War and Reconstruction; the New South; the 20th-century South; emphasis on regional differences and social transition.

545 Cherokee History (3)
Pre-contact Cherokee society; acculturation; removal; post-removal development of the Cherokee Nation West and the Eastern Band of the Cherokees.

546 Southern Appalachian Culture (3)
History and folkways in the period of geographic isolation; changes in regional culture in an age of improved transportation and communications.

551 Women in American History (3)
Historic role of women; attitudes in various periods; women in American culture; the women's rights and feminist movements.
563 History of the Mexican Nation (3)
Mexico since 1810; 19th-century conflicts; revolution, 1910-1917; progress to the present.

572 Local History and Genealogy (3)
Role of the family and the community in shaping state, regional, and national developments; emphasis on research techniques and local resources. Lecture and fieldwork.

573 Archives and Museum Management (3)
Preservation, management, and display of archival materials and museum artifacts with emphasis on museum management. Lecture and fieldwork.

575 Historical Editing (3)
Analysis of manuscripts, government documents, and transcripts of oral testimony; emphasis on evaluation, selection, transcription, and annotation of materials and completion of an editorial project. Lecture and fieldwork.

578 Historic Sites and Historic Preservation (3)
Aspects of historic preservation; emphasis on aesthetic, legal, financial, and public relations considerations. Lecture and fieldwork.

589 Cooperative Education in History (3)
PREQ: Enrollment for at least one term in the M.A. in American History-Public History option; B average in graduate work; approval of department head, adviser, and cooperative education coordinator. S/U grading.

593 Topics in History (3, R12)

631 American Historiography (3)
Survey of the principal historians: their aims, methods, materials, and philosophy.

680 Readings in History I, II, III, IV (3, R6 each course)
681 Major interpretative monographs and articles within a selected area. May not be taken more than twice for credit without departmental approval.
683

688 Internship in History (1-3, R-3)
Supervised internship in a public history institution or setting. PREQ: Permission of department head. S/U grading.

693 Problems in American History (3, R9)
PREQ: Preparation in topic or permission of instructor.

695 Seminar in American History and American Studies (3)
Intensive investigation of selected topics in American history and American studies.

699 Thesis (3, R12)

Home Economics (HE)

514 (IET 514) Career Exploration (3)
Prevocational component of career education; emphasis on applying theories of career development through hands-on activities. PREQ: EDSE 310 or 317 or 320.

593 Topics in Home Economics (1-3, R6)

601 Professional Issues (3)

602 (IET/OA 602) Vocational Education History and Philosophy (3)

610 (IET 610) Vocational/Technical Evaluation (3)
Philosophy, methods, and techniques of evaluating vocational/technical students, instructors, and programs.
611 Program Development in Home Economics (3)
Curricular theory, philosophy, materials, and media for consumer homemaking and occupational home economics programs.

620 Contemporary Consumer Issues (3)
Perspectives on the development, appraisal, and use of consumer programs and resources.

652 Computer Applications in Home Economics (3)
Study of microprocessing technology specifically for home economics professionals; hardware and software capabilities and limitations. 2 Lecture, 2 Lab.

654 Creative Ergonomics (3)
Human factors in interior design systems; human information handling; variability of measurements in human support and environmental systems.

680 Independent Study in Home Economics (1-3, R6)
PREQ: Permission of department head.

681 Research Project (3)
PREQ: Permission of adviser, completion of two-thirds of degree requirements.

693 Topics in Home Economics (1-3, R6)

699 Thesis (3, R6)
PREQ: Permission of adviser.

Human Resource Development (HRD)

589 Cooperative Education in Human Resource Development (3)
Paid work experience in Human Resource Development. PREQ: Enrollment for at least one term in the HRD program, a B average in graduate work, approval of adviser, department head, and cooperative education coordinator. S/U grading.

610 Human Resource Development (3)
Background and role of the human-resource-development function in business and industry; emphasis on designing and implementing training programs.

612 Instructional Design (3)
Developing instructional training programs for education, industry, and government. PREQ: Permission of instructor.

620 The Design and Use of Instructional Gaming-Simulations (3)
Exploration into instructional games and simulations. Selection of gaming-simulations to achieve particular learning objectives and facilitation of simulation exercises. Emphasis is placed on designing and field-testing student-made gaming-simulations. PREQ: Permission of instructor.

660 Career Development/Management Systems (3)
Case histories of successful career-pathing; mentoring, and other career-helping relationships; Concepts borrowed from career-planning counselors, professional trainers, and organization development specialists. PREQ: Permission of instructor.

670 Program Evaluation (3)
The role, design, and implementation of program evaluation procedures.

675 Managing the Human Resource Development Function (3)
Introduction to effective management of a human resource development department. Emphasis placed on organization, staffing, and supervising an ongoing training operation; developing a training-department budget and conducting cost-benefit studies. PREQ: Permission of instructor.

683 Field Experience in Human Resource Development (3)
Supervised experience in a human resource development department of an industry to familiarize students without prior experience with the setting in which they will be

693 Selected Topics in Human Resource Development (3, R6)
PREQ: Permission of instructor.

698 Seminar in Human Resource Development (3)
Trends and issues in human resource development; implementation of programs. PREQ: 610 and/or permission of instructor.

Industrial and Engineering Technology (IET)

510 Topics in CAD (3, R6)
Advanced applications using state of the art CAD programs, operating systems, hardware configurations and operational procedures. PREQ: Permission of instructor.

514 (HE 514) Career Exploration (3)

521 Ergonomics (3)
Theories and applications of ergonomic principles for the industrial setting. PREQ: Permission of instructor.

522 Advanced Polymer Technology (3)
Theory and application of molding processes; emphasis on thermoplastic and thermostet injection; topics in polymer science and microprocessing. PREQ: 420 or permission of instructor.

524 Facilities Management and Maintenance (3)
Management and maintenance of residential, commercial, and industrial building systems. Functions and evaluation of systems for heating, cooling, electrical, communications, water, waste, protective coatings and roofing, lawns and roadways. PREQ: Permission of instructor.

534 Plant Layout (3)
Problem analyses and design of plant facilities; plant layout, material flow and handling; physical storage systems. PREQ: Permission of instructor.

560 Industrial Materials and Processes (3)
An overview of industrial materials as related to contemporary manufacturing processes. PREQ: Permission of instructor. 2 Lecture, 2 Lab.

570 Advanced Electronics (3)
Application of electrical/electronic circuits in manufacturing and automatic control. PREQ: 371 or equivalent. 2 Lecture, 2 Lab.

589 Cooperative Education in Industrial Technology (3, R6)
PREQ: Enrollment for at least one term in the M.S. in Technology or M.I.E.; B average in graduate work; approval of department head, adviser, and cooperative education coordinator. S/U grading.

593 Topics in Industrial and Engineering Technology (1-3, R6)

602 (OA/HE 602) Vocational Education History and Philosophy (3)
History of vocational education; development of current programs; federal and state legislation; guidelines for program development and implementation; changing needs in employment.

610 (HE 610) Vocational/Technical Evaluation (3)

630 Trends in Industrial Education (3)
Trends and innovations in industrial education to assist teachers and administrators in developing new concepts based on technological changes.

632 Administration of Industrial Education (3)
Purposes and philosophy of supervision; application of principles as related to organization, personnel, and materials.
636 Cooperative Vocational Education (3)
Principles and methods of cooperative vocational education. PREQ: EDSE 320 or permission of instructor.

640 Value Analysis (3)
Engineering techniques used to increase the value of products or services by maintaining quality while reducing costs. PREQ: A course or demonstrated competency in computer programming.

641 Quality Assurance (3)
Concepts for managing the quality function of industry to maximize consumer satisfaction at minimal product cost. PREQ: A course or demonstrated competency in computer programming.

642 Computerized Production Techniques (3)
Applications related to manufacturing processes, process designs, production and inventory control, scheduling, cost control, and quality assurance. PREQ: A course or demonstrated competency in computer programming.

650 Program Planning in Vocational/Technical Education (3)
Determining educational needs through surveys, labor statistics, and community input; developing comprehensive goals and strategies for implementing or modifying vocational/technical programs.

670 Research Methods in Vocational/Technical Education (3)
Research terminology, methodologies, and statistical analysis techniques in vocational/technical education. PREQ: EDCI 602 or equivalent.

680 Independent Study (3, R6)

695 Seminar in Industrial and Engineering Technology (1-3, R3)

699 Thesis (3, R6)

Management (MGT)

605 Organizational Behavior and Analysis (3)
Structural and behavioral aspects of organizations; factors determining form and effectiveness; applications of behavioral research in organizational planning and development.

606 Quantitative Analysis for Business I (3)
Classical and Bayesian statistical analysis; decision theory; linear programming; transportation and assignment; network analysis, PERT, CPM, inventory analysis, queuing theory, and simulation.

607 Strategic Management (3)
Company objectives and the plans and controls to accomplish them; policy formulation and decision making; integrating all functional areas; case method. PREQ: M.B.A. core courses must be completed prior to or during the term of enrollment.

608 Personnel Administration (3)
Behavioral approach to acquisition, use, and development of an organization's human resources; criteria for effective programs; scientific principles and current research in policy formulation.

609 The Collective Bargaining Process (3)
Labor movement; role of governments; contract negotiation and administration; grievance and resolution.

611 Production and Operation Management (3)
Problems related to physical production, inventory and maintenance systems, investment decision, quality control, network and cost location analysis. PREQ: 606 or permission of instructor.
613 **Management of International Operations** (3)  
Cultural, social, political, economic, and other environmental variables affecting international and multinational management systems and decision making.

614 **Managerial Career Development** (3)  
Practical considerations of developing professional careers in large organizations from the viewpoint of the individual manager without regard to the individual's profession.

670 **Project Management Systems** (3)  
Introduction to project management theory dealing with issues and implications of the life cycle, project environments, logistics and support structure, and specialized project management tools and techniques.

672 **Human Resource Management in Projects** (3)  
Human resource issues associated with project management from project manager, project team member, and support personnel viewpoints. PREQ: 605, 670.

674 **Project Contract and Logistics Management** (3)  
Contracting process, solicitation cycle, contract award and monitoring, and external factors. PREQ: 670.

676 **Specialized Project Management Techniques I** (3)  
Optimal production planning, scheduling, and control techniques for the project manager.

677 **Specialized Project Management Techniques II** (3)  
Advanced, computerized project planning, scheduling, and control programs. PREQ: 676.

678 **Project Management Organization and Policy** (3)  
Strategic planning and the contribution of projects in achieving organizational purposes. PREQ: 670, 672, 674, 676, 677.

682 **Research Project in Management** (3, R6)  
PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

693 **Topics in Management** (3, R6)  
PREQ: Permission of department head and director, graduate programs in business.

**Manufacturing Engineering Technology (MET)**

536 **Engineering Economic Analysis** (3)  
The economics of decision making, including break-even, least cost, and alternatives related to the time value of money. PREQ: Permission of instructor.

**Marketing (MKT)**

601 **Marketing Management** (3)  
Techniques of planning, market analysis, and strategic design; emphasis on integration of product, price, promotion, and distribution.

602 **Marketing Research** (3)  
The role of marketing research; methodology and technique; emphasis on generating information for solving marketing problems. PREQ: 601; MGT 606.

603 **Consumer Behavior** (3)  
Buyer behavior and marketing strategies; emphasis on research studies from the behavioral sciences. PREQ: 601.

604 **Marketing Communications** (3)  
Relationship of demand stimulation to business management; analysis of cases emphasizing the management of advertising and promotional efforts in the total marketing concept. PREQ: 601.
682 Research Project in Marketing (3, R6)
PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

693 Topics in Marketing (3, R6)
PREQ: Permission of department head and director, graduate programs in business.

Mathematics (MATH)

507 Survey of Algebra (3)
Topics from theory of equations, linear algebra, and modern algebra.

508 Survey of Analysis (3)
Review of differential and integral calculus; selected topics from advanced calculus to include the Riemann integral and the fundamental theorem.

509 Mathematics for Secondary Teachers (3)
Techniques for improving problem-solving skills and for assisting remedial students in computation; selected topics from geometry; topics and problems for the gifted student.

512 Modern Geometry (3)
Geometries, to include finite geometries; transformational geometry and convexity in Euclidean space.

523 Advanced Calculus II (3)
Differentiation, including L'Hospital's rule and Taylor's theorem; integration theory, other classical topics. PREQ: 323.

541 Introduction to Numerical Analysis (3)
Finite differences, interpolation, numerical integration and solutions to ordinary differential equations, linear systems, eigenvalues, eigenvectors, errors.

561 Abstract Algebra (3)
Group theory through the homomorphism theorems; rings and fields through their homomorphism theorems.

562 Linear Algebra (3)
Linear transformations; polynomials and determinant theories; canonical forms; inner product spaces.

570 Statistical Theory II (3)
Point and interval estimation, hypothesis testing, decision theory, likelihood ratio and sequential testing, correlation, and regression. PREQ: 370 or permission of department head.

589 Cooperative Education in Mathematics (3, R6)
An elective in addition to existing program requirements. PREQ: Minimum of 9 hours of mathematics at the 600 level with at least a B average, approval of department head, adviser, and cooperative education coordinator. S/U grading.

593 Topics in Mathematics (1-6, R6)
PREQ: Permission of department head.

610 Computers in Education (3)
Computer literacy, BASIC, and the use of microcomputers in public school education; term paper required. PREQ: Permission of department head.
620 **Algebra** (3)  
Theory of groups, rings, and fields. PREQ: 561.

622 **Analysis I** (3)  
Set theory, numerical sequences and series, continuity and differentiation, the Riemann-Stieltjes integral, sequences and series of functions. PREQ: 523.

623 **Analysis II** (3)  
A continuation of topics from Math 622. PREQ: 622.

624 **Complex Analysis** (3)  
Holomorphic and elementary functions; power series, integration, and representation theorems; the calculus of residues. PREQ: 523.

630 **Mathematical Modeling** (3)  
Models of physical phenomena; emphasis on derivation of the model and methods of solution. PREQ: 523, 562.

632 **Methods of Applied Mathematics** (3)  
Special functions; calculus of variations; integral equations. PREQ: 523, 562.

634 **Partial Differential Equations and Boundary Value Problems** (3)  
Classification, characteristics, eigen functions, Green's function, maximum principle. PREQ: 523, 562.

640 **Numerical Analysis** (3)  
Selected topics in numerical analysis. PREQ: 541.

646 **Numerical Linear Algebra** (3)  
Direct and iterative solution of linear systems; norms and condition numbers; stability and rounding error; algebraic eigenvalue problem; linear least squares and generalized inverses; singular value decomposition and the QR algorithm; linear inequalities. PREQ: 541 or equivalent.

661 **Applied Algebra** (3)  
Applications of Boolean algebras, finite fields, and semigroups. PREQ: 561 or equivalent.

670 **Advanced Statistical Theory** (3)  
Stochastic processes and Markov chains; decision theory and utility, loss functions; Bayesian analysis of information with prior and posterior estimation functions and linear statistical models. PREQ: 570.

672 **Advanced Statistical Methods** (3)  
Analysis of large data sets using multiple regression, discriminant analysis, factor analysis, cluster analysis, multivariate analysis of variance, and log-linear models.

693 **Topics in Mathematics** (1-6, R6)  
PREQ: Permission of instructor.

694 **Topics in Mathematics Education** (1-6, R6)  
PREQ: Permission of instructor.

699 **Thesis** (3, R6)

**Music (MUS)**

503 **Marching Band Techniques** (2)

521 **Wind Literature** (3)  
Literature of wind instruments; emphasis on authentic performance practices.

522 **Vocal Literature** (3)  
Solo vocal literature since the 16th century.
523 Choral Literature (3)
Literature from the Renaissance to the present; emphasis on style and authentic performance practices.

524 Keyboard Literature (3)
Keyboard literature from the Baroque to the present.

525 Studies in Contemporary Music (3)
Styles and issues of 20th-century music.

528 Choral Conducting (3)
Study and application of gesture communication and analysis related to choral conducting.

529 Instrumental Conducting (3)
Application of techniques and analysis to instrumental conducting.

577 Contrapuntal Techniques (3)
Survey of contrapuntal practice from 1500 to the present, focusing on the 16th-, 18th-, and 20th-century techniques.

592 Orff-Schulwerk Level I (3)
A study of basic Orff-Schulwerk techniques.

593 Topics in Music (1-3, R12)
Only six credit hours may be counted toward any graduate degree course requirement.

594 Topics in Music (1-3, R9)
S/U grading. PREQ: Permission of department head.

611 Applied Music (1, R4)
One half-hour lesson per week.

612 Applied Music (2, R8)
Two half-hour lessons per week.

613 Applied Music (3, R9)
Three half-hour lessons per week.

620 Music History Seminar (3)
Major styles from the Middle Ages through the 19th century.

625 Studies in Music Literature (3, R6)
The study of various forms of music literature from preclassic to the present.

630 Music Theory Seminar (3)
Harmonic, contrapuntal, and formal characteristics of the tonal period, 1600-1900.

640 Studies in Pedagogy (3, R9)
Techniques and materials of teaching for voice and instruments.

675 Ensemble (1, R6)
Participation in any departmental ensemble to expand knowledge of literature, conducting, and performance. Meetings as arranged.

678 Applied Composition (2, R8)
Two one-half hour lessons per week. PREQ: 578.

679 Lecture/Recital (3, R6)
Three hours toward degree.

680 Independent Study (1, R6)

681 Readings in Music History (3, R9)

682 Research Project in Music Education (3)

693 Orff-Schulwerk Level II (3)
A study of intermediate level Orff-Schulwerk techniques. PREQ: 592.
694 Orff-Schulwerk Level III (3)
A study of advanced level Orff-Schulwerk techniques. PREQ: 693.

695 Music Education Seminar (3)
Music curriculum within the general education framework; current philosophies and trends.

696 Seminar in Choral Techniques and Materials (3)

697 Seminar in Instrumental Techniques and Materials (3)

698 Seminar for the General Music Class (3)
Techniques and materials for the general music class.

699 Thesis (3, R6)
Three hours toward degree.

Nutrition and Dietetics (ND)

531 Food Preservation (3)
Principles and procedures for food preservation with special reference to home methods; basic principles of home food sanitation and spoilage; food storage techniques. PREQ: 231 or permission of instructor. 2 Lecture, 2 Lab.

533 Research Methods in Nutrition (3)
Standard procedures for nutrient analysis, including proximate analysis of foods; introductory experimental design and methodology. PREQ: 231 and EDCI 606. COREQ: 436 or 536. 2 Lecture, 4 Lab.

534 Experimental Methods of Foods (3)
Advanced food science principles and techniques of sensory and objective evaluation of foods. PREQ: 231, CHEM 133. 2 Lecture, 4 Lab.

536 Advanced Human Nutrition (4)
Normal nutrition in relation to biochemical and psychological functioning; interrelationships of nutrients and their effect on body needs. PREQ: 334, BIOL 292, CHEM 133.

537 Diet Therapy (4)
Mechanisms by which food contributes to maintenance of health, prevention of disease, and correction of nutritional disorders. PREQ: 436 or 536.

538 Clinical Experiences in Dietetics (1)
Supervised experiences in nutritional assessment and in dietary management of individuals. PREQ: 536 and permission of instructor. COREQ: 537.

539 Introduction to Professional Practice (3)
Introduction to professional ethics, conduct in patient care, utilization of laboratory values, nutritional assessment, and dietary management. PREQ: 437 or 537. 2 Lecture, 45 hours on-site experience.

630 Nutrition Throughout the Life Cycle (3)
Relationship of good nutrition to well-being and needs at all ages; methods of appraising nutritional status.

635 Nutrition Education (3)
Contemporary educational strategies of communicating nutrition concepts for public health nutritionists, dietary consultants, secondary teachers, extension specialists, journalists, medical personnel, and other professionals.

636 Protein, Carbohydrates, and Lipids (3)
Ingestion, digestion, absorption, and metabolism of protein, carbohydrates, and lipids. PREQ: 436/536 or permission of instructor.
637 Advanced Diet Therapy (3)
Physiological and metabolic basis for dietary modification in the treatment of disease.
PREQ: 436/537 or permission of instructor.

638 Community Nutrition (3)
Public health nutrition; assessment of the nutritional status of residents.

639 Vitamins and Minerals (3)
Digestion, absorption, and metabolism of vitamins and minerals. PREQ: 330 or permission of instructor.

681 Practicum in Clinical Dietetics (3, R6)
Supervised on-site experience in clinical dietetics. PREQ: 539, completion of ADA Plan IV or V Program.

682 Practicum in Administrative Dietetics (3, R6)
Supervised on-site experience in administrative dietetics. PREQ: 539, completion of ADA Plan IV or V Program.

683 Practicum in Community Dietetics (3)
Supervised experiences in community dietetics. PREQ: 539, completion of ADA Plan IV or V Program.

693 Topics in Nutrition and Food Science (1-3, R9)
PREQ: 231 and 330 or permission of instructor.

Office Administration (OA)

601 Trends and Issues in Business Education (3)

602 (HE/IET 602) Vocational Education History and Philosophy (3)

603 Research in Business Education (3)
Analysis of research in business education with emphasis on implications for changes in teaching methodology and curricula. PREQ: EDCI 602.

605 Managerial Communication (3)
Processes, analyses, and skills necessary to communicate in management.

683 Internship in Vocational Business Education (3)
S/U grading. PREQ: Permission of department head.

684 Internship in a Business Firm (1-3)

693 Topics in Business and Office Education (1-3, R9)
PREQ: Permission of instructor.

695 Seminar in Business and Office Education (3)
PREQ: Permission of department head.

Parks and Recreation Management (PRM)

580 Independent Study (1-3, R6)

583 Internship in Parks and Recreation Management (1-3, R6)

593 Topics in Parks and Recreation Management (1-3, R6)
PREQ: Permission of program coordinator.

Philosophy (PHIL)

593 Topics in Philosophy (1-3, R6)
PREQ: Permission of department head.
**Physical Education (PE)**

600 **The Elementary Physical Education Curriculum** (3)
Basic beliefs; guidelines for learning, nature of the learner, developing and implementing an effective program.

615 **Legal Issues for the Physical Educator, Coach, and Sports Administrator** (3)
Development of a risk-management approach to prevent lawsuits in sport settings; comprehensive study of written and case laws and their effect on physical education and sport; introduction to contract law.

621 **Research in Health, Physical Education, Recreation, and Dance** (3)
Research competencies relating to health, physical education, recreation, and dance. PREQ: EDCI 602.

625 **Motor Learning** (3)
Theories and research concerning perceptual modalities in motor skill acquisition; physiological-psychological interaction in perceptual motor learning; relation of feedback, practice, and transfer to motor performance.

630 **Principles of Physical Education** (3)
History, philosophies, aims, and objectives of physical education.

635 **Life Span Motor Development** (3)
Theories, principles, and review of research on the biological, psychological, cognitive, and social changes across the life span that influence motor development.

640 **Administration of Physical Education** (3)
Organization and administration of the physical education programs in the school.

650 **Applied Physiology** (3)
Physiological adaptations resulting from different levels of performance.

665 **Exercise Testing and Prescription** (3)
Testing and training in fitness-based programs.

675 **Issues in Intramurals and Athletics** (3)
Examination of issues in intramurals and athletics.

676 **Research Techniques in Exercise Physiology** (3)
Techniques used for acute and chronic physical activity in humans and animal models. Procedures, ethical considerations, and institutional requirements will be covered. PREQ: Introductory courses in Physiology and Biochemistry. 2 Lecture, 2 Lab.

694 **Special Problems** (1-3)
Topics in physical education, athletics, recreation, dance, and related areas.

696 **Seminar/Practicum in Physical Education** (3)
2 Lecture, 2 Lab.

699 **Thesis** (3, R6)
PREQ: EDCI 606 and PE 621 or permission of instructor.

**Physical Therapy (PT)**

601 **Professional Issues I** (2)
Issues which define and influence the physical therapy profession; personal effectiveness skills. PREQ: Admission to the Physical Therapy program.

602 **Professional Issues II** (2)
Issues which define and influence the physical therapy profession; personal effectiveness skills. PREQ: Admission to the Physical Therapy program.

603 **Professional Issues III** (1)
Issues which define and influence the physical therapy profession; personal effectiveness skills. PREQ: Admission to the Physical Therapy program.
604 Professional Issues IV (2)
Issues which define and influence the physical therapy profession; personal effectiveness skills. PREQ: Admission to the Physical Therapy program.

605 Professional Issues V (2)
Issues which define and influence the physical therapy profession; personal effectiveness skills. PREQ: Admission to the Physical Therapy program.

611 Physical Therapy Science I (3)
Patient care skills: documentation, measurement of joint motion, body mechanics, positioning, transfers, assisted gait, wheelchairs, exercise, infection control. PREQ: Admission to the Physical Therapy program. 2 Lecture, 2 Lab.

612 Physical Therapy Science II (2)
Patient care skills: measurement of joint motion, manual muscle testing, thermoscience, hydrotherapy, biofeedback, and therapeutic exercise. PREQ: Admission to the Physical Therapy program. 1 Lecture, 3 Lab.

613 Physical Therapy Science III (4)
Patient care skills: electrotherapy, mechanical traction, massage, soft tissue and joint mobilization, functional capacity evaluations, orthotics, prosthetics, and dynamometers. PREQ: Admission to the Physical Therapy program. 2 Lecture, 4 Lab.

614 Physical Therapy Science IV (3)
Patient care skills: electrodiagnostic testing, developmental and functional assessments across the life span, aquatic therapy. PREQ: Admission to the Physical Therapy program. 2 Lecture, 2 Lab.

621 Human Anatomy I (3)
Advanced study, upper quarter. Musculoskeletal, cardiopulmonary, integumentary, nervous, circulatory systems. Anatomical bases for human motion; normal structural changes throughout the life span. PREQ: Admission to the Physical Therapy program. 1 Lecture, 4 Lab.

622 Human Anatomy II (3)
Advanced study, lower quarter. Musculoskeletal, integumentary, nervous, circulatory, reproductive, and gastrointestinal systems. Anatomical bases for human motion, normal structural changes throughout the life span. PREQ: Admission to the Physical Therapy program. 1 Lecture, 4 Lab.

623 Functional Human Anatomy I (4)
Biomechanical analysis of upper limb structure, function. Clinical applications. PREQ: Admission to the Physical Therapy program. 2 Lecture, 4 Lab.

624 Functional Human Anatomy II (4)
Analysis of lower extremity movement; emphasis on soft tissue relationships, biomechanics. Clinical applications. PREQ: Admission to the Physical Therapy program. 2 Lecture, 4 Lab.

631 Human Physiology I (3)
Advanced study of normal physiology of major human body systems; changes across the life span. Effects on human motion. PREQ: Admission to the Physical Therapy program. 2 Lecture, 2 Lab.

632 Human Physiology II (3)
Advanced study of normal physiology of gastrointestinal, metabolic, urinary, reproductive, immune, and lymphatic systems. Changes throughout the life span; emphasis on human motion. PREQ: Admission to the Physical Therapy program. 2 Lecture, 2 Lab.

641 Scientific Inquiry I (1)
Introduction to disciplined inquiry in physical therapy, emphasis on qualitative research methodology, history and philosophy of science. PREQ: Admission to the Physical Therapy program.

642 Scientific Inquiry II (1)
Introduction to quantitative research in physical therapy, emphasis on social and clinical relevance. PREQ: Admission to the Physical Therapy program.
Scientific Inquiry III (2)
Epidemiological studies in physical therapy; directed study: conduct research project structured in Scientific Inquiry II. PREQ: Admission to the Physical Therapy program.

Scientific Inquiry IV (2)
Directed study: complete research and first draft of major paper. PREQ: Admission to the Physical Therapy program.

Clinical Logic I (3)
Integration of knowledge from the physical therapy sciences to perform physical therapy assessment and intervention for clients with neurological dysfunction. PREQ: Admission to the Physical Therapy program. 1 Lecture, 4 Lab.

Clinical Logic II (3)
Integration of knowledge from the physical therapy sciences to perform physical therapy assessment and intervention for clients with musculoskeletal dysfunction. PREQ: Admission to the Physical Therapy program. 1 Lecture, 4 Lab.

Clinical Logic III (3)
Integration of physical therapy sciences to perform physical therapy assessment and intervention for clients with multiple systems dysfunction. PREQ: Admission to the Physical Therapy program. 1 Lecture, 4 Lab.

Neuroscience (4)
Anatomy and physiology of the human nervous system, including clinical neurological assessment and examination. PREQ: Admission to the Physical Therapy program or permission of department head. 2 Lecture, 4 Lab.

Experiential Professional Activities I and II (2, 2)
Assignment to a clinical setting with a designated supervisor to gain practical experience with health-care delivery systems and physical therapy practice. PREQ: Admission to the Physical Therapy program.

Topics in Physical Therapy (1)

Experiential Professional Activities III and IV (5, 5)
Assignment to a clinical setting with a designated supervisor to gain practical experience with health-care delivery systems and physical therapy practice. PREQ: Admission to the Physical Therapy program.

Physics (PHYS)

601 Topics in Physics Education I, II (3, 3)
Topics for the secondary teacher, including mechanics, electricity and magnetism, and modern physics; curricular projects. PREQ: High school physics teaching experience or permission of department head.

Political Science (PSC)

507 American Political Parties (3)
American political parties and their role in the government and politics of contemporary society; current national issues.

521 Political and Organizational Leadership (3)
Concepts and processes of leadership as related to political and public organizations. PREQ: 6 hours of political science or permission of instructor.
536 **Dynamics of World Order (3)**  
Alternative approaches to meeting social and political needs in a changing global environment; conditions and practices of interdependence.

580 **Readings in Political Science (3)**  
PREQ: Department approval.

593 **Contemporary Political Systems (3, R6)**  
Problems in the structure and functions of selected political systems reflected against their political cultures.

595 **Seminar: American Political System (3)**  
Current issues in American government and politics.

693 **Topics in Political Science (1-6, R9)**  
PREQ: Permission of department head.

### Psychology (PSY)

510 **Individual Psychology (3)**  
Theory and practice related to self-understanding, problem solving, and interpersonal relationships. PREQ: 250 and 6 hours of psychology or permission of instructor.

526 **Death and Dying (3)**  
Psychological foundations and correlates of death anxiety and grief; cross-cultural perspectives; death education and stages in children's awareness; methods of coping with grief and fears. PREQ: 250 or permission of instructor.

530 **Personality (3)**  
Assumptions, constructs, and theories of personality; related empirical findings. PREQ: 250 or permission of instructor.

540 **Physiological Psychology (3)**  
Physiological and biochemical bases of behavior; sensation; neurophysiological correlates of learning, memory, sleep; other topics. PREQ: 250 or permission of instructor.

541 **Health Psychology (3)**  
Psychological foundations of health and illness; exploration of the impact of thoughts, emotions, and behavior on the development, treatment, and prevention of illness and the maintenance of health. PREQ: 250 or permission of instructor.

544 **Language, Memory, and Cognition (3)**  
Theories and principles of human information processing: language production and comprehension, basic processes in memory and cognition. PREQ: 250 or permission of instructor.

548 **Human Neuropsychology (3)**  
Survey of the basic theories of neuropsychology, emphasizing both cognitive and clinical research. The course will focus on the influence of the human brain on normal and abnormal behavior. PREQ: 250 or permission of instructor.

555 **Systems and Theories in Psychology (3)**  
Psychology as a scientific endeavor, from early approaches to contemporary schools and trends. PREQ: 250 or permission of instructor.

570 **Abnormal Psychology (3)**  
Theories of psychopathology; etiology, dynamics, symptomatology, diagnosis, and treatment. PREQ: 250 or permission of instructor.

574 **The Emotionally Disturbed Child and Adolescent (3)**  
Etiology, characteristics, assessment, and treatment of deviation; learning difficulties, behavioral and psychotic disorders; problems of the handicapped. PREQ: 250 or permission of instructor.
610 Advanced Social Psychology (3)
Theories and research concerning aggression, prosocial behavior, group behavior, conformity, attitudes, person perception, and attraction. PREQ: 250 or permission of instructor.

621 Advanced Educational Psychology (3)
Application of theories and principles of development, learning, and measurement to classroom practice. PREQ: 250 or permission of instructor.

624 Child Development (3)
Development and behavior of children, prenatal to adolescence; influences of heredity, maturation, and learning on development. PREQ: 250 or permission of instructor.

625 Adolescent Development (3)
Physical, mental, and emotional development in adolescents; interests, attitudes, ideals, and social adaptations. PREQ: 250 or permission of instructor.

626 Adulthood and Aging (3)
Theories, principles, and review of research on the normal development of adults; emphasis on the biological, psychological, cognitive, and social changes from early adulthood through old age. PREQ: 250 or permission of instructor.

650 Advanced General Psychology (3)
An overview of the discipline of psychology for the advanced student.

651 Advanced Research Methods (3)
Inferential statistics emphasizing experimental design; univariate and multivariate techniques, non-parametric procedures, and computer usage. PREQ: 251 or equivalent.

652 Advanced Research: Proposal Writing (2)
Experimental designs, literature review, scientific writing styles, planning, writing, research proposal, statistical analysis of data, and computer applications. PREQ: 651.
1 Lecture, 1 Lab.

661 Psychological Assessment I (4)
Nature and theory of assessment; administering, scoring, and interpreting Stanford-Binet and Wechsler scales. PREQ: 360 or equivalent; permission of instructor.

662 Personality Assessment (3)
Major techniques of objective personality assessment; emphasis on administration, scoring, and interpretation. PREQ: Permission of instructor.

663 Assessment and Intervention with Infants (3)
Administration, scoring, and interpretation of infant assessment scales; planning and implementation of intervention programs. PREQ: 624 or equivalent.

671 Advanced Psychopathology (3)
Clinical and experimental approaches; classification, etiology, and modification of deviant behavior. PREQ: 250 or permission of instructor.

672 Psychotherapy I: Theories (3)
The major theoretical perspectives in psychotherapy and their application. PREQ: Admission to the graduate program in clinical psychology.

673 Professional Issues (3)
Models of practice in school psychology; social, ethical, and legal issues; interdisciplinary focus of training and professional roles; problems of the professional practice of psychology in school and community settings. PREQ: Permission of instructor.

675 Behavioral Interventions (3)
Behavior modification techniques and their application in school and clinical settings. PREQ: Admission to graduate program.

676 Psychotherapy II: Techniques (3)
Issues and techniques of psychotherapy and their application. PREQ: Admission to clinical psychology graduate program.
677 **Group Psychotherapy** (3)  
Theory and practice of group psychotherapy; supervised problems. **PREQ:** Admission to psychology graduate program.

678 **Family Systems** (3)  
Theory and research in dynamics of family systems; ecological models. **PREQ:** Permission of instructor.

679 **Survey of Clinical Psychology** (3)  
Survey of the major topics and issues in clinical psychology. **PREQ:** Admission to the graduate program in clinical psychology.

680 **Directed Study in Psychology** (3, R6)

683 **Internship in Psychology** (6, 6)  
Six-month, full-time or nine-month, part-time internship in a clinical or school setting. **PREQ:** 686. **S/U grading.**

686 **Practicum** (4)  
Application of psychological theory in the educational setting; observation of practices of school psychologists; participation in school psychological services under field and university supervision. **PREQ:** 673.

693 **Topics in Psychology** (3, R9)  
**PREQ:** 250 or permission of instructor.

697 **Seminar: Behavioral/Emotional Evaluation of Children and Adolescents** (3)  
Major techniques of objective and projective personality assessment with children and adolescents; focus on theory, administration, scoring, interpretation, and report writing. **PREQ:** Admission to psychology graduate program.

698 **Rorschach Seminar** (3)  
Administration, scoring, and interpretation of the Rorschach Inkblot Test. **PREQ:** Admission to the clinical psychology graduate program.

699 **Thesis** (3, R6)  
**S/U grading.** **PREQ:** 651 and 652.

**Public Affairs** (PA)

571 **Government-Business Relations** (3)  
Interrelationships between government and business in the free enterprise system; regulatory role of government; constitutional framework of anti-trust laws, public utilities, taxation, and labor legislation.

572 **Public Policy Formulation** (3)  
The policy-making process in its political context; models of policy developing applied to selected issues.

670 **Public Affairs Administration** (3)  
The place of public affairs administration and the role of the administrator in the American system of government.

671 **Budgetary Processes** (3)  
Budgetary practices and processes at the federal, state, and local levels; roles of professionals and elected officials; budgetary problems, planning, and reform.

672 **Governmental Organizations** (3)  
Analysis of governmental structures and procedures; recent developments in reorganization.

673 **Public Policy Analysis** (3)  
Bureaucratic decision making and theories of analyzing and explaining public policy.
674 **Statistics and Decision Making (3)**
Statistical decision theories and operational research models; computer programming, frequency distributions, hypothesis testing, correlations, regression, and multivariate tests; uses in the assessment of public policy.

675 **Metropolitan Government (3)**
The nature of urbanization and its consequences for politics and administration in the United States.

676 **Government and Press Relations (3)**
Why and how politicians and public administrators use the press to generate public support for policy decisions and to influence public perceptions: media strategies will be studied.

685 **Internship in Public Affairs (3)**
May be repeated once by pre-service students only.

**Reading (EDRD)**

520 **Phonics and Word Analysis (3)**
Use of basic word analysis skills in reading instruction.

533 **Reading and Communication Skills (3)**
Methods and materials for teaching children to read; integration of communication skills in the total instructional program.

543 **Middle Grades Reading (3)**
Methods and materials for teaching reading and other communication skills in the middle grades; emphasis on organization for instruction, word identification and comparison skills, and reading in content materials.

553 **High School and Adult Reading (4)**
Methods and materials for teaching reading in high school and adult education programs. 3 Lecture, 2 Lab.

573 **Practicum in Teaching Reading (3)**
Assessment and remediation of reading problems and strategies for teaching reading. PREQ: 533 or 543 or 553. 2 Lecture, 2 Lab.

641 **Seminar I: Investigation and Research in Teaching Reading (3)**
Development and presentation of a research proposal in Literacy Education. PREQ: EDEL 601, EDCI 602, and EDRD 661.

651 **Clinical Procedures in Remedial Reading (3)**
Evaluation and diagnosis of severe reading problems; supervised practicum. PREQ: 573.

661 **Issues and Trends of Literacy Education (3)**
Current trends in approaches and theories for teaching and learning to read. PREQ: 9 hours in reading.

672 **Organization and Supervision of Reading Programs (3)**
Designing and implementing comprehensive programs in reading. PREQ: 12 hours in reading.

676 **Reading Workshop (3)**
Topics for in-service teachers of school systems.

700 **History and Psychology of Reading (3)**
Psychological foundations of reading; history of reading instruction. PREQ: G license in reading or permission of instructor.

710 **Field Experience in Reading (3)**
Design, implementation, and evaluation of a field-based teaching-learning project. PREQ: G license in reading and permission of instructor. 3 Lab, 6 or more field.
720 Developing and Evaluating Reading Materials (3)
Construction and evaluation of teaching and testing materials. PREQ: G license in reading or permission of instructor. 2 Lecture, 2 Lab.

740 Reading Research Projects (3)
Initiating, conducting, and analyzing a research project. PREQ: G license in reading and permission of instructor. 2 Lecture, 2 Lab.

750 Reading: Communication and Language Structure (3)
Recent research, including psycholinguistic approaches to reading instruction. PREQ: G license in reading or permission of instructor.

780 Independent Study in Reading Education (3)
PREQ: G license in reading and permission of instructor. 2 Lab, 6 or more directed study.

795 Advanced Seminar in Reading (3)
Current literature, research, and educational practices. PREQ: G license in reading or permission of instructor.

Science Education (SCI)

551 Environmental Science for Teachers (3)
Materials and techniques for interdisciplinary projects.

593 Topics in Science Education (1-3, R6 each course)

594

611 Physical and Earth Science for Teachers (3)
Philosophy and techniques of inquiry teaching; applications using physical and earth science curricular materials.

621 Biology and Environmental Science for Teachers (3)
Philosophy and techniques of inquiry teaching applied to biological and environmental curricular materials.

695 Seminar in Science Education (3, 3)

696 Trends, issues, and research problems in science education. PREQ: 611 or 621 or permission of instructor.

Social Work (SOCW)

593 Topics in Social Work (1-3, R6)

Sociology (SOC)

514 (ANTH 514) Minority Groups (3)
Relations between dominant and subordinate races and ethnic groups; historical and comparative aspects; African-Americans, Chicanos, and Indians.

523 Sociology of Sport (3)
Social issues in sports examined from historical, cross-cultural, and sociological perspectives with attention to impact of race, gender, and social class on participation.

532 Community Organization and Development (3)
Community organization viewed as a process of bringing about desirable changes in community life; community structure, needs assessment, and planning for change.

534 Regional and Societal Development (3)
Social dimensions of economic growth and development with particular emphasis on Third-World countries; alternative definitions of development; problems related to the implementation of change in national, regional, and institutional structures.
554 Sociology of Conflict and Conflict Resolution (3)
Analysis of sociological theories of social conflict, including Marx, Weber, Simmel, Coser, Dahrendorf, and Collins; case studies of conflict and conflict resolution stressing the applications of theory and research.

580 Independent Study in Sociology (1-2, R6)
PREQ: Written application; approval of instructor and adviser.

594 Topics in Sociology (3, R6)
PREQ: Permission of instructor.

801 Rural Society (3)
Historical and contemporary survey of key social institutions within rural areas in the United States with attention to the processes of demographic and structural change. PREQ: Permission of instructor.

Special Education (SPED)

501 Introduction to Learning Disabilities (3)
Historical concepts and theories of learning disabilities; educational characteristics of learning disabled children; overview of remedial programs. PREQ: 240 or permission of instructor.

502 Current Issues in Special Education (3)
Investigation and interpretation of educational issues in special education.

504 Educational Programs for Students with Behavioral Disorders (3)
Study of identification procedures, affective and behavioral techniques, and instructional programs for teaching students with behavioral disorders.

513 Teaching Adolescents with Learning Problems (3)
Survey and evaluation of curricular models; diagnosis; developing instructional strategies; establishing goals and objectives.

529 Educational Programs for Students with Mental Retardation (3)
Study of educational programs and services for students with mental handicaps.

531 The Physically Handicapped Child (3)
Social, psychological, and medical problems related to children with physical disabilities.

593 Topics in Special Education (1-3, R6)
PREQ: Permission of instructor.

600 Creative Thinking and Problem Solving (3)
Exploration of creative thinking; emphasis on current research and present methodologies of problem solving.

603 Administration of Special Education Programs (3)
Administrative practices and problems of organization, staffing, curricular development, and supervision of special education.

630 Teaching Students with Mild to Moderate Mental Retardation (3)
Objectives, methods, and materials for students with mild to moderate mental retardation. PREQ: 529 or permission of instructor.

631 Appraisal of Exceptional Children (3)
Educational assessment of exceptional individuals emphasizing curriculum-based measurement.

681 Seminar in Learning Disabilities (3)
Exploration of emerging theories influencing the learning disability field; current research and practices.
682 Research in Special Education (3)
Theoretical and experimental research into techniques of teaching, investigation of problems, and educational systems. PREQ: EDCI 602 or equivalent.

684 Teaching Students with Behavioral Disorders (3)
In-depth analysis of one program model, development of instructional strategies from this approach, and examination of interdisciplinary approaches to treatment. PREQ: 504, PSY 574 or permission of adviser.

687 Practicum in Special Education (1-3, R3 each course)
688 Supervised experience in a school or clinical setting. PREQ: Written application; approval of instructor and adviser.

University Studies-Interdisciplinary (USI)
693 Topics in Graduate Education (1-3, R6)
History of the University of North Carolina

In North Carolina, all the public educational institutions that grant baccalaureate degrees are part of the University of North Carolina. Western Carolina University is one of the 16 constituent institutions of the multi-campus state university.

The University of North Carolina, chartered by the N.C. General Assembly in 1789, was the first public university in the United States to open its doors and the only one to graduate students in the 18th century. The first class was admitted in Chapel Hill in 1795. For the next 136 years, the only campus of the University of North Carolina was at Chapel Hill.

In 1877, the N.C. General Assembly began sponsoring additional institutions of higher education, diverse in origin and purpose. Five were historically African-American institutions, and another was founded to educate American Indians. Several were created to prepare teachers for the public schools. Others had a technological emphasis. One is a training school for performing artists.

In 1931, the N.C. General Assembly redefined the University of North Carolina to include three state-supported institutions: the campus at Chapel Hill (now the University of North Carolina at Chapel Hill), North Carolina State College (now North Carolina State University at Raleigh), and Woman's College (now the University of North Carolina at Greensboro). The new multi-campus University operated with one board of trustees and one president. By 1969, three additional campuses had joined the University through legislative action: the University of North Carolina at Charlotte, the University of North Carolina at Asheville, and the University of North Carolina at Wilmington.

In 1971, the General Assembly passed legislation bringing into the University of North Carolina the state's ten remaining public senior institutions, each of which had until then been legally separate: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, the North Carolina School of the Arts, Pembroke State University, Western Carolina University, and Winston-Salem State University. This action created the current 16-campus University. (In 1985, the North Carolina School of Science and Mathematics, a residential high school for gifted students, was declared an affiliated school of the University.)

The UNC Board of Governors is the policy-making body legally charged with "the general determination, control, supervision, management, and governance of all affairs of the constituent institutions." It elects the president, who administers the University. The 32 voting members of the Board of Governors are elected by the General Assembly for four-year terms. Former board chairmen and board members who are former governors of North Carolina may continue to serve for limited periods as non-voting members emeriti. The president of the UNC Association of Student Governments, or that student's designee, is also a non-voting member.

Each of the 16 constituent institutions is headed by a chancellor, who is chosen by the Board of Governors on the president's nomination and is responsible to the president. Each institution has a board of trustees, consisting of eight members elected by the Board of Governors, four appointed by the governor, and the president of the student body, who serves ex officio. (The N.C. School of the Arts has two additional ex officio members.) Each board of trustees holds extensive powers over academic and other operations of its institution on delegation from the Board of Governors.

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Western Carolina University is one of the 16 constituent members of The University of North Carolina. There are undergraduate colleges of Applied Sciences, Arts and Sciences, Business, Education and Allied Professions, as well as the Graduate School.

A graduate division was established in the 1950-51 academic year, and graduate study leading to the Master of Arts in Education degree was begun in the summer of 1951. For the first few years, the program consisted largely of summer school courses with an increasing number of course offerings in the evening and Saturday class schedule. Initially, there were majors in elementary education, school administration, and secondary education, with minors in English, biology, geography, and social sciences.

WCU began a sixth-year program leading to licensure of school principals and superintendents in 1965.

The graduate division was replaced in 1967 by the present Graduate School.

WCU began offering an Ed.D. in Educational Leadership in 1996.

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<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
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<td>Judy H. Dowell</td>
<td>Assistant to the Chancellor</td>
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<td>Anthony A. Hickey</td>
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<td>Steven P. Yurkovich</td>
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<td>Kathleen M. Owen</td>
<td>Assistant to the Graduate Dean</td>
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<td>Harry E. Ramsey</td>
<td>Assistant to the Chancellor for WCU Programs in Asheville</td>
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<td>Patricia L. Miller</td>
<td>Coordinator, Evening Programs in Asheville</td>
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<td>Rosemary DePaolo</td>
<td>Dean, College of Arts and Sciences</td>
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<td>J. C. Alexander Jr.</td>
<td>Associate Dean, College of Arts and Sciences</td>
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<td>John Wade</td>
<td>Interim Dean, College of Business</td>
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<td>Marilyn E. Feldmann</td>
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<td>Dean, College of Applied Sciences</td>
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<td>Noelle L. Kehrberg</td>
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Linda S. Bowers, Department of Human Services
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Jackson Webster, Department of Biology
Thomas Wentworth, Department of Biology
Peter White, Department of Biology
Cecil E. Yount, Department of Human Services

Names of temporary members of the graduate faculty are not listed here but are available from the Graduate School.
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