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, or handicap. 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 black students.

For information concerning affirmative action policies and procedures, contact the Compliance Office, 460 H.F. Robinson Administration Building, Western Carolina University, Cullowhee, North Carolina 28723, telephone (704) 227-7147.

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 to 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. Six thousand copies of this public document were printed at a cost of $4,706.00 or $.78 per copy.
TABLE OF CONTENTS

Graduate Degree Programs ................................................................. 6
Graduate Student Life ........................................................................ 9
Graduate Study .................................................................................. 12
Fees, Expenses, and Financial Assistance ..................................... 18
Academic Regulations ...................................................................... 23
Admissions and Degree Requirements .......................................... 29
Graduate Programs and Degree Outlines ..................................... 36
  Master of Arts .................................................................................. 36
  Master of Science ........................................................................... 37
  Master of Business Administration .............................................. 39
  Master of Health Sciences .............................................................. 40
  Master of Industrial Education ....................................................... 40
  Master of Music Education ............................................................ 40
  Master of Project Management ....................................................... 41
  Master of Public Affairs ................................................................. 41
  Master of Arts in Education .......................................................... 41
  Education Specialist ...................................................................... 46
  Certificates of Advanced Study ..................................................... 48
Course Descriptions ......................................................................... 49
Register .............................................................................................. 93
Index .................................................................................................. 108
GRADUATE SCHOOL CALENDAR

Fall Semester 1992

August 18, Tuesday, 5:00-7:00 p.m.
August 20, Thursday, 3:00-6:00 p.m.
August 23, Sunday, 12:00 noon
August 24, Monday, 8:00 a.m.-5:00 p.m.

August 24, Monday, 4:30-6:30 p.m.
August 24, Monday, 6:00 p.m.

August 25-28, Tuesday-Friday
8:00 a.m.-5:00 p.m.
August 25, Tuesday
September 4-7
Friday, 5:00 p.m.-Monday
September 8, Tuesday, 8:00 a.m.
September 30, Wednesday
October 17-20,
Saturday, 5:00 p.m.-Tuesday
October 21, Wednesday, 8:00 a.m.
October 26, Monday

October 26-November 13,
Monday-Friday
November 25-29,
Wednesday, 2:00 p.m.-Sunday
November 30, Monday, 8:00 a.m.
December 2, Wednesday

December 8, Tuesday
December 9, Wednesday
December 10-16, Thursday-Wednesday
December 17, Thursday

Special evening registration in graduate school office
Registration in Asheville
Residence halls open
Registration in graduate school office in Cullowhee for new and continuing graduate students
Registration in Asheville continues
Evening classes in Cullowhee and Asheville begin
Late registration and schedule changes in the graduate school office in Cullowhee
Day classes in Cullowhee begin
Labor Day Holiday

Classes resume
Last day to drop a course with a "W"
Fall holiday

Classes resume
Late day for students completing programs in May to file degree applications in the graduate school
Academic advising for spring semester and early registration in Cullowhee
Thanksgiving holiday

Classes resume
Last day for completed theses and comprehensive examination results to be submitted to the graduate school for students completing degree requirements in December
Last day of classes
Reading day
Final examinations
Christmas holiday begins

Spring Semester 1993

January 5, Tuesday, 5:00-7:00 p.m.
January 7, Thursday, 3:00-6:00 p.m.
January 10, Sunday
January 11, Monday, 8:00 a.m.-5:00 p.m.

January 11, Monday, 4:30-6:30 p.m.
January 11, Monday, 6:00 p.m.

January 12, Tuesday
January 12-15, Tuesday-Friday

Special evening registration in graduate school office
Registration in Asheville
Residence halls open
Registration in graduate school office in Cullowhee for new and continuing graduate students
Registration in Asheville continues
Evening classes in Cullowhee and Asheville begin
Day classes in Cullowhee begin
Late registration and schedule changes in Cullowhee

1 A late registration fee of $10.00 will be charged for all classes in Cullowhee
<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 18, Monday</td>
<td>Martin Luther King’s Birthday holiday</td>
</tr>
<tr>
<td>February 19, Friday</td>
<td>Last day to drop a course with a “W”</td>
</tr>
<tr>
<td>Feb. 27-March 7, Sat., 5:00 p.m.-Sun.</td>
<td>Spring holiday</td>
</tr>
<tr>
<td>March 8, Monday, 8:00 a.m.</td>
<td>Classes resume</td>
</tr>
<tr>
<td>March 22, Monday</td>
<td>Last day for students completing programs in summer or fall to file degree applications in the graduate school</td>
</tr>
<tr>
<td>March 22-April 8, Monday-Thursday</td>
<td>Academic advising for summer and fall semester and early registration in Cullowhee</td>
</tr>
<tr>
<td>April 9-11, Fri., 8:00 a.m.-Sunday</td>
<td>Easter holiday</td>
</tr>
<tr>
<td>April 12, Monday, 8:00 a.m.</td>
<td>Classes resume</td>
</tr>
<tr>
<td>April 23, Friday</td>
<td>Last day for completed theses to be submitted to the graduate school for students completing degree requirements in May</td>
</tr>
<tr>
<td>April 26, 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>April 30, Friday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>May 1-7, Saturday-Friday</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 8, Saturday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

### Summer Term 1993 (Subject to Change) Ten Week Session

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 31, Monday-August 6, Friday</td>
<td>Summer session (ten-week session)</td>
</tr>
<tr>
<td>May 31, Monday-July 2, Friday</td>
<td>First summer session</td>
</tr>
<tr>
<td>July 5, Monday-August 6, Friday</td>
<td>Second summer session</td>
</tr>
<tr>
<td>July 23, Friday</td>
<td>Last day for completed theses to be submitted to the graduate school for students completing degree requirements in August</td>
</tr>
<tr>
<td>July 26, 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 6, Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

### Fall Semester 1993 (Subject to Change)

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 17, Tuesday, 5:00-7:00 p.m.</td>
<td>Special evening registration in graduate school office</td>
</tr>
<tr>
<td>August 19, Thursday, 3:00-6:00 p.m.</td>
<td>Registration in Asheville</td>
</tr>
<tr>
<td>August 22, Sunday, 12:00 noon</td>
<td>Residence halls open</td>
</tr>
<tr>
<td>August 23, Monday, 8:00 a.m.-5:00 p.m.</td>
<td>Registration in graduate school office in Cullowhee for new and continuing graduate students</td>
</tr>
<tr>
<td>August 23, Monday, 4:30-6:30 p.m.</td>
<td>Registration in Asheville continues</td>
</tr>
<tr>
<td>August 24-25, Tuesday-Wednesday</td>
<td>Registration continues in Cullowhee; schedule changes</td>
</tr>
<tr>
<td>9:00 a.m.-4:00 p.m.</td>
<td>Evening classes in Cullowhee and Asheville begin</td>
</tr>
<tr>
<td>August 24, Tuesday, 6:00 p.m.</td>
<td>Classes in Cullowhee begin</td>
</tr>
<tr>
<td>August 25, Wednesday</td>
<td>Late registration and schedule changes in Cullowhee</td>
</tr>
<tr>
<td>August 25-27, Wednesday-Friday</td>
<td>Labor Day holiday</td>
</tr>
<tr>
<td>September 3-6</td>
<td>Classes resume</td>
</tr>
<tr>
<td>Friday, 5:00 p.m.-Monday</td>
<td>Last day to drop a course with a “W”</td>
</tr>
<tr>
<td>September 7, Tuesday, 8:00 a.m.</td>
<td>Fall holiday</td>
</tr>
<tr>
<td>October 13, Wednesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>October 16-19, Saturday, 5:00 p.m.-Tuesday</td>
<td>Last day for students completing programs in May to file degree applications in the graduate school</td>
</tr>
</tbody>
</table>
November 1-12, Monday-Friday
November 24-28
   Wednesday, 2:00 p.m.-Sunday
November 29, Monday, 8:00 a.m.
December 1, Wednesday

December 7, Tuesday
December 8, Wednesday
December 9-15, Thursday-Wednesday
December 16, Thursday

Academic advising for spring semester and early registration in Cullowhee
Thanksgiving holiday

Classes resume
Last day for completed theses and comprehensive examination results to be submitted to the graduate school for students completing degree requirements in December
Last day of classes
Reading day
Final examinations
Christmas holiday begins

Spring Semester 1994 (Subject to Change)

January 4, Tuesday, 5:00-7:00 p.m.
January 6, Thursday, 3:00-6:00 p.m.
January 9, Sunday
January 10, Monday, 4:30-6:30 p.m.
January 10, Monday, 8:00 a.m.-5:00 p.m.
January 10, Monday, 6:00 p.m.
January 11, Tuesday
January 11-14, Tuesday-Friday
January 17, Monday
February 18, Friday
February 26-March 6,
   Saturday, 5:00 p.m.-Sunday
March 7, Monday, 8:00 a.m.
March 21, Monday
March 28-April 7, Monday-Thursday
April 1-3, Friday, 8:00 a.m.-Sunday
April 4, Monday, 8:00 a.m.
April 22, Friday

April 25, Monday

April 29, Friday
April 30-May 6, Saturday-Friday
May 7, Saturday

Special evening registration in graduate school office
Registration in Asheville
Residence halls open
Registration in Asheville continues
Registration in graduate school office in Cullowhee for new and continuing graduate students
Evening classes in Cullowhee and Asheville begin
Day classes in Cullowhee begin
Late registration and schedule changes in Cullowhee
Martin Luther King’s 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 the graduate school
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
### TELEPHONE NUMBERS

**Area Code 704**

<table>
<thead>
<tr>
<th>Department</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate School</td>
<td>227-7398</td>
</tr>
<tr>
<td>Academic Affairs</td>
<td>227-7495</td>
</tr>
<tr>
<td>Book Store</td>
<td>227-7345</td>
</tr>
<tr>
<td>Employment, Student</td>
<td>227-7170</td>
</tr>
<tr>
<td>Fees</td>
<td>227-7334</td>
</tr>
<tr>
<td>Financial Aid, Loans, Scholarships</td>
<td>227-7290</td>
</tr>
<tr>
<td>General Student Information</td>
<td>227-7234</td>
</tr>
<tr>
<td>Housing</td>
<td>227-7303</td>
</tr>
<tr>
<td>International Students</td>
<td>227-7234</td>
</tr>
<tr>
<td>Registrar, Student Records, Transcripts</td>
<td>227-7217</td>
</tr>
<tr>
<td><strong>Schools</strong></td>
<td></td>
</tr>
<tr>
<td>School of Applied Sciences</td>
<td>227-7272</td>
</tr>
<tr>
<td>School of Arts and Sciences</td>
<td>227-7646</td>
</tr>
<tr>
<td>School of Business</td>
<td>227-7401</td>
</tr>
<tr>
<td>School of Education and Psychology</td>
<td>227-7311</td>
</tr>
<tr>
<td>Veterans Affairs</td>
<td>227-7234</td>
</tr>
</tbody>
</table>
# GRADUATE DEGREE PROGRAMS

<table>
<thead>
<tr>
<th>Programs/Degrees</th>
<th>Admission Tests</th>
<th>Supervising Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Education/M.A.*</td>
<td>GRE Gen.</td>
<td>Art; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Art, Studio/M.A.</td>
<td>GRE Gen.</td>
<td>Art</td>
</tr>
<tr>
<td>Biology/M.S.</td>
<td>GRE Gen. &amp; Subj.</td>
<td>Biology</td>
</tr>
<tr>
<td>Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education/</td>
<td>GRE Gen.</td>
<td>Biology; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>M.A.Ed.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Year College/</td>
<td>GRE Gen.</td>
<td>Biology; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>M.A.Ed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Administration/</td>
<td>GMAT</td>
<td>School of Business</td>
</tr>
<tr>
<td>M.B.A.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education/</td>
<td>GRE Gen.</td>
<td>Administrative Services; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>M.A.Ed.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry/M.S.</td>
<td>GRE Gen.</td>
<td>Chemistry and Physics</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education/</td>
<td>GRE Gen.</td>
<td>Chemistry and Physics; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>M.A.Ed.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two-Year College/</td>
<td>GRE Gen.</td>
<td>Chemistry and Physics; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Teaching/M.A.Ed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Counseling/</td>
<td>GRE Gen.</td>
<td>Human Services</td>
</tr>
<tr>
<td>M.A.Ed.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Counseling/</td>
<td>GRE Gen.</td>
<td>Human Services</td>
</tr>
<tr>
<td>M.A.Ed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Including programs for persons in programs such as rehabilitation and general agency counseling)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counseling/C.A.S. School*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum and Instruction/</td>
<td>GRE Gen. or NTE</td>
<td>Human Services</td>
</tr>
<tr>
<td>M.A.Ed.**</td>
<td>Core &amp; Area</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Areas of specialization include: Biology, Chemistry, English, Social Sciences, Individually Approved Multi-Disciplinary Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum and Instruction/</td>
<td>GRE Gen. or MAT</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Ed.S.*</td>
<td>Core &amp; Area</td>
<td></td>
</tr>
<tr>
<td>Areas of specialization include: Biology, Chemistry, Counseling, Curriculum and Instruction, English, Home Economics, Industrial Education, Reading, Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public School Administration/</td>
<td>GRE Gen. or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>M.A.Ed.*</td>
<td></td>
<td>Same as above</td>
</tr>
<tr>
<td>Two-Year College/</td>
<td>GRE Gen. or MAT</td>
<td>Same as above</td>
</tr>
<tr>
<td>M.A.Ed.</td>
<td></td>
<td>Same as above</td>
</tr>
<tr>
<td>Public School Administration/</td>
<td>GRE Gen. or MAT</td>
<td>Same as above</td>
</tr>
<tr>
<td>Ed.S.*</td>
<td></td>
<td>Same as above</td>
</tr>
<tr>
<td>Educational Supervision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary (K-6)/</td>
<td>GRE Gen. or MAT</td>
<td>Elementary Education and Reading; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>M.A.Ed.<em>/ Ed.S.</em></td>
<td></td>
<td>Same as above</td>
</tr>
<tr>
<td>Middle Grades (6-9)/</td>
<td>GRE Gen. or MAT</td>
<td>Same as above</td>
</tr>
<tr>
<td>M.A.Ed.<em>/ Ed.S.</em></td>
<td></td>
<td>Same as above</td>
</tr>
</tbody>
</table>

*Programs leading to recommendation for North Carolina teacher certification.

**On inactive status.
<table>
<thead>
<tr>
<th>Programs/Degrees</th>
<th>Admission Tests</th>
<th>Supervising Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Specialties/ M.A.Ed.*</td>
<td>GRE Gen. or MAT</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Curriculum-Instruction/ M.A.Ed.*</td>
<td>GRE Gen. or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Instructional Technology Specialist-Computers/ M.A.Ed.*</td>
<td>GRE Gen. or MAT</td>
<td>Elementary Education and Reading; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Elementary/Ed.S.*</td>
<td>GRE Gen. or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>General/Ed.S.*</td>
<td>GRE Gen. or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Elementary Education</td>
<td>GRE Gen.</td>
<td>Elementary Education and Reading</td>
</tr>
<tr>
<td>Elementary Education K-6/M.A.Ed./Ed.S.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Middle Grades (6-9)/ M.A.Ed./Ed.S.*</td>
<td>GRE Gen. &amp; Subj.</td>
<td>English</td>
</tr>
<tr>
<td>English/M.A.</td>
<td>GRE Gen.</td>
<td>English; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>English Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>School of Applied Sciences</td>
</tr>
<tr>
<td>Health Sciences/M.H.S.</td>
<td>GRE Gen.</td>
<td>History</td>
</tr>
<tr>
<td>History, American/M.A.</td>
<td>GRE Gen. &amp; Subj.</td>
<td>Human Environmental Sciences</td>
</tr>
<tr>
<td>Home Economics/M.S.</td>
<td>GRE Gen.</td>
<td>Human Environmental Sciences; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Home Economics/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Human Services</td>
</tr>
<tr>
<td>Human Resource Development/M.S.</td>
<td>GRE Gen.</td>
<td>Industrial and Engineering Technology; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Industrial Arts Education Secondary Education/ M.I.E.*</td>
<td>GRE Gen., or NTE Core &amp; Area</td>
<td>Same as above</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.I.E.</td>
<td>GRE Gen.</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Junior and Community College Teaching/M.A.Ed.</td>
<td>GRE Gen. &amp; Subj.</td>
<td>Mathematics and Computer Science</td>
</tr>
<tr>
<td>Mathematics, Applied/M.S. Mathematics Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Mathematics and Computer Science; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Music/M.A.</td>
<td>GRE Gen.</td>
<td>Music</td>
</tr>
<tr>
<td>Music Education/M.M.E.*</td>
<td>NTE Core &amp; Area, or GRE Gen. and Subject</td>
<td>Music; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Physical Education</td>
<td>GRE Gen.</td>
<td>Health, Physical Education, and Recreation</td>
</tr>
<tr>
<td>Public School/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Programs/Degrees</td>
<td>Admission Tests</td>
<td>Supervising Department</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education/M.A.Ed.**</td>
<td>GRE Gen.</td>
<td>Chemistry and Physics; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Project Management/M.P.M.</td>
<td>GMAT</td>
<td>School of Business</td>
</tr>
<tr>
<td>Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General/M.A.</td>
<td>GRE Gen.</td>
<td>Psychology</td>
</tr>
<tr>
<td>Clinical/M.A.</td>
<td>GRE Gen.</td>
<td>Psychology</td>
</tr>
<tr>
<td>School/M.A.*</td>
<td>GRE Gen.</td>
<td>Psychology</td>
</tr>
<tr>
<td>School (Level II)/C.A.S.**</td>
<td>GRE Gen.</td>
<td>Psychology</td>
</tr>
<tr>
<td>Public Affairs/M.P.A.</td>
<td>GRE Gen.</td>
<td>Political Science and Public Affairs</td>
</tr>
<tr>
<td>Reading Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public School/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Elementary Education and Reading</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Secondary Education/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Education/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Social Sciences; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Special Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Disorders/M.S.</td>
<td>GRE Gen.</td>
<td>Human Services</td>
</tr>
<tr>
<td>Gifted and Talented/M.A.Ed.**</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Mental Retardation/M.A.Ed.**</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Disorders/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Learning Disabilities/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Mental Retardation/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
</tr>
<tr>
<td>Technology/M.S.</td>
<td>GRE Gen.</td>
<td>Industrial and Engineering Technology</td>
</tr>
</tbody>
</table>
University Location

Western Carolina University is located at Cullowhee in the scenic Appalachian mountain ranges of western North Carolina, fifty-two miles west of Asheville and seven miles south of Sylva on North Carolina Highway 107. Its location in the Cullowhee valley beside the Tuckaseigee River provides an extraordinarily attractive setting.

The central campus consists of about 400 acres, including beautifully wooded areas and modern academic, recreation, and athletic facilities. The Blue Ridge Parkway, the Great Smoky Mountains National Park, the Cherokee Indian Reservation, Fontana Lake, and numerous resort areas offering golf, skiing, fishing, hunting, hiking, water sports, and other recreational opportunities are located near the university.

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 nine residence halls, each staffed with professionally trained personnel who are charged with the general responsibility for the building and for the welfare of its occupants. 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, ashtrays, and study lamps. Students may bring radios, record players, 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 antennas, radio transmitters, air conditioners, firearms, ammunition, explosives, water beds, and dart 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 Student Housing Office. All requests for residence hall applications or questions pertaining to residence halls should be addressed to the Student Housing Office, Western Carolina University.

Married/Graduate Students. Western Carolina University opened Robertson Hall in August 1980 as a housing alternative 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.

A limited number of one-, two-, and three-bedroom unfurnished apartments ordinarily reserved for faculty and staff also may be available for rental to married graduate students. (Children are allowed.) Information about these apartments is available from Student Housing, Western Carolina University, Cullowhee, North Carolina 28723.

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. 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 the mental and 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 psychological and academic tests and group administration of national university entrance exams such as GRE, NTE, and GMAT.

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 and personal property 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, special support services, and job placement assistance.

Teacher Placement Service. Teacher placement services are available to all teacher education graduates and alumni who seek employment in the field of education. The service is located in Killian Building.

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 Student Housing Office 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 3 p.m., Monday through Friday. Postal regulations do not permit long-term receipt of mail through General Delivery.
WCU Bookstore. 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 other books may be special ordered if not in stock. All books for 500-, 600-, and 700-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, and invitations also may be purchased at the appropriate times. Class rings may be ordered during regular business hours.

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, and Nations Bank are located in Sylva, seven miles from the university.

Schools for Elementary and High School Students. Camp Laboratory School, located on the campus of the university, 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. The facilities of Reid Health and Physical Education Building, Breese Gymnasium, and A.K. Hinds University Center make possible a rich recreational program. Indoor and outdoor recreation includes tennis, volleyball, basketball, swimming, bowling, handball, softball, badminton, shuffleboard, 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.

Ramsey 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 almost 9,000 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.
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 over 6,500, of which some 1,200 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 nine master's degrees in over fifty professional and academic areas, and it offers education specialist degrees in educational administration, supervision, curriculum and instruction, middle grades education, and elementary education, which are useful for school teachers, supervisors, superintendents, principals, and other central office personnel and teachers and leadership personnel in higher education. In addition, the university offers graduate-level courses in other academic areas which offer support courses as electives.

The graduate school provides programs to prepare members of the teaching profession for certification 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, English, health sciences, history, home economics, human resource development, mathematics, music, project management, psychology, public affairs, special education, and 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 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, engineering and industrial technology, and criminal justice. This program of instruction utilizes the educational facilities and resources of the University of North Carolina at Asheville. In so doing, the two universities, working cooperatively with programs of instruction in the evening as well as on Saturday, make maximum use of these facilities while assisting people who are fully employed to secure further academic work. 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, project management, health sciences, elementary education and reading, counseling, human resource development, math education, general special education (with concentrations in behavioral disorders, learning disabilities, and mental retardation) public affairs, social sciences, school administration, and school supervision are offered by the university. The Education Specialist degree is offered in selected areas, including options which lead to recommendation for advanced certificates for elementary educators, middle grades educators, principals, superintendents, general supervisors, and curriculum specialists in a number of fields in secondary education. Two-year college programs are also available at the master's and Ed.S. levels as is the Certificate of Advanced Study in School Counseling.

Some of the courses for master's degrees in biology, communication disorders, curriculum and instruction, English, history, home economics with an option for preprofessional practice
in dietetics, mathematics, music education, physical education, psychology, and science education 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, University Heights, UNCA campus, Asheville, North Carolina 28804-3299, or by telephoning 251-6642, 251-6643, or 227-7423.

Division of Continuing Education and Summer School. The Division of Continuing Education and Summer School exists to make the resources of the university available to the people, businesses, industries, and agencies of the region and the state. The university's commitment involves all schools, divisions, and departments of the institution.

The Division of Continuing Education and Summer School promotes and coordinates all of the university's extension credit and non-credit instructional courses and programs. Many of the non-credit instructional courses and programs on and off the campus, such as workshops, institutes, conferences, and seminars, are available for CEU credit. CEU credit may not be earned in regular graduate course offerings.

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-two 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 399,000 books and bound periodical volumes and one million units of microform. Approximately 2,500 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 75,000 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 map depository for the United States Geological Survey and the Defense Mapping Agency. The Map Room Collection contains over 101,000 sheet maps as well as atlases, satellite imagery, and aerial photography.

Local and regional history is served by the Department of Special Collections which includes the university archives and manuscripts and rare books pertaining to the Eastern Band of the Cherokee Indians, western North Carolina and southern Appalachia and wilderness conservation, and the behavioral characteristics of spiders.

As a service for professional education programs, a curriculum library is maintained that contains state-adopted textbooks for North Carolina and curriculum guides from school systems in North Carolina and other states.

Hunter Library shares a computer catalog 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 computer access to Infotrac, ERIC, PsychLIT, GPO and Compact Disclosure. DIALOG searches are available as well.

Hunter Library provides library materials in UNCA's Ramsey Library for Western Carolina University courses and programs offered on the Asheville campus.
Faculty Center for Teaching Excellence. 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 towards self-sufficiency. In addition to the one-on-one tutorial help, the center periodically offers mini-courses or workshops tailored to specific problems exhibited by student writers.

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 has an area equipped with video and audio cassette players.

Center for Improving Mountain Living. The Center for Improving Mountain Living (CIML) is a major technical assistance and service unit of Western Carolina University that extends the resources of the university to the region it serves. CIML 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, CIML serves as a catalyst for economic and social development in western North Carolina, the state, and the world. The center provides assistance for town, county, and state government, business and industry, educational and social agencies, chambers of commerce, citizens groups and civic clubs, and voluntary organizations and other special purpose groups. CIML serves as the home for Western North Carolina Tomorrow (WNCT), a regional citizen leadership organization; the regional Small Business and Technology Development Center; an Economic Development Administration University Center; and the Center for PVO/University Collaboration in Development, an association of over 30 universities and private voluntary organizations cooperating in development activities throughout the world. CIML encourages faculty and student collaboration in its programs and comprises five divisions: Human Resources, Economic Development, Natural Resources, Administrative Services, and WNCT.

Mountain Aquaculture Research Center. The center was officially established by the Board of Governors of the University of North Carolina in 1988 to foster and conduct research and experimental developments to sustain productivity, growth, and the competitive position of the aquaculture industry clustered in southern Appalachia. Funded initially with an institutional grant from the North Carolina Biotechnology Center, the program at Western Carolina University strives to involve staff from various segments of the university, to develop collaborative and multidisciplinary investigations with primary and secondary industries allied with the intensive farming of freshwater fish, and to cooperate with educational institutions and other agencies interested in the wise husbandry of the aquatic resources of western North Carolina. The center will also play a role in the development and enrichment of curriculum related to aquaculture, and in the sourcing, adaptation, and diffusion of appropriate technologies.

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. It is cooperatively sponsored by the Division of Maternal and Child Health, North Carolina Department of Environment, Health, and Natural Resources, Smoky Mountain Center for Mental Health, Developmental Disability and Substance Services, local school systems, 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, counseling, early childhood education, medical record administration, nursing, psychology, social work, special education, and communication disorders.

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.

Bureau of Educational Research and Development. The Bureau of Educational Research and Development of the School of Education and Psychology coordinates the professional services of the school to the education community and responds to requests from the area for professional services in education. When appropriate, the bureau joins with other university agencies in the sponsorship of educational programs and activities.

Summer Program for Gifted Students. The School of Education and Psychology conducts a special summer program for students in grades 5-10, the major emphasis of which is on programs designed to challenge the academically gifted.

Reading Center. In conjunction with university programs for the preparation and certification of reading teachers and specialists, the Reading Center provides diagnostic and remedial services and reading improvement courses for children, college students, and adults. Reading materials, programs, and equipment are displayed, demonstrated, and evaluated. The staff provides consulting services, conducts workshops and conferences, and provides a variety of reading services for public schools in the area.

Computing Resources. Computing resources are available in each of the university's schools. Two major computing resource centers are located in Forsyth Business Building. More than 40 PC/AT microcomputers and 30 graphics terminals are located in this facility. The terminals are adjacent to the University Computing Center. Providing convenient and immediate access to data, these computing resource centers are equipped to enhance research and scholarship among persons pursuing advanced degrees.

Located in Stillwell Annex are two additional computing laboratories. The microcomputer laboratory has eighteen microcomputers and the VAX terminal laboratory has twenty computer terminals available for student use. Access is gained through the basement of Stillwell Science building.

The university sponsors the WCU MicroNet Project whereby teachers and students in more than sixty 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 serves both the administrative and academic computing needs of the university. The center is given direction and goals by an advisory committee consisting of faculty and administrators. The Computer Center has two Digital Equipment Corporation computers, a VAX 4000/300 and a VAX 8530. These computers operate under the VAX/VMS operating system, supporting batch and interactive computing simultaneously. There is a total of 312 terminal ports available. The two systems are linked together using Ethernet and DECnet.
The VAX 4000/300 system has 1,381 megabytes of disk storage and one 4mm DAT tape drive. The VAX 8530 system has 5,472 megabytes of disk storage and one tape drive. Five printers can be switched between the systems. Software programming language include Basic, C, Fortran, Pascal, COBOL, and MACRO, with DATATRIEVE as a common report retrieval language. Applications software is acquired as needed.

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 are available through the University of North Carolina Educational Computing Services (UNCECS). These services, as well as others (TELENET, TYMENET, USENET, etc.) are available through an intercampus network called LINCNET. WCU is a BITNET and INTERNET node and an active member of CAUSE and EDUCOM.

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 at Western Carolina University in 1985 as a statewide center to recognize and support outstanding North Carolina public school (K-12) teachers, and to enhance teaching as an art and profession. The center is located in a new $7 million facility on NC 107, 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.

Faculty and Student Research. The Office of Research Administration, located in the graduate school, 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.

Accreditation

Western Carolina University is fully accredited by the Southern Association of Colleges and Schools. In addition to this comprehensive accreditation, other special accreditation by appropriate agencies includes:

- Accreditation Board for Engineering and Technology, Inc.
- American Assembly of Collegiate Schools of Business (undergraduate and graduate)
- American Dietetic Association (Approved Preprofessional Practice Program)
- Committee on Allied Health Education and Accreditation of the American Medical Record Association in cooperation with the American Medical Record Association and the National Accreditation Agency for Clinical Laboratory Sciences
- Committee on Allied Health Education of the American Medical Association in cooperation with the National Accreditation Agency for Clinical Laboratory Sciences
- Council for Professional Development of the American Home Economics Association
- Council on Social Work Education
- National Accreditation Council of the National Environmental Health Association
- 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
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
American Theatre Association
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 Carolina Academy of Science
North Carolina Association of Colleges and Universities
North Carolina Bar Association
Southeastern Theatre Conference
Southern Atlantic States Association for Asian and African Studies
Southern Regional Education Board
Southern Speech Communications Association
Speech Communication Association
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 1992-93 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>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Academic Fees</td>
<td></td>
</tr>
<tr>
<td>North Carolina Student</td>
<td>$338.00</td>
</tr>
<tr>
<td>Out-of-State Student</td>
<td>2,865.00</td>
</tr>
<tr>
<td>*Required Fees</td>
<td>334.50</td>
</tr>
<tr>
<td>Room</td>
<td>615.00</td>
</tr>
<tr>
<td>Board (Required of all residence hall students)</td>
<td></td>
</tr>
<tr>
<td>Declining Balance - Standard Option</td>
<td>567.00</td>
</tr>
<tr>
<td>Declining Balance - Low Option</td>
<td>513.00</td>
</tr>
<tr>
<td>15 meals per week</td>
<td>502.00</td>
</tr>
<tr>
<td>21 meals per week</td>
<td>540.00</td>
</tr>
<tr>
<td>Totals:</td>
<td></td>
</tr>
<tr>
<td>Day Student</td>
<td></td>
</tr>
<tr>
<td>North Carolina rate</td>
<td>672.50</td>
</tr>
<tr>
<td>Out-of-State rate</td>
<td>3,199.50</td>
</tr>
<tr>
<td>Residence Hall Boarding Student</td>
<td></td>
</tr>
<tr>
<td>North Carolina rate</td>
<td></td>
</tr>
<tr>
<td>Declining Balance - Standard Option</td>
<td>1,854.50</td>
</tr>
<tr>
<td>Declining Balance - Low Option</td>
<td>1,800.50</td>
</tr>
<tr>
<td>15 meals per week</td>
<td>1,789.50</td>
</tr>
<tr>
<td>21 meals per week</td>
<td>1,827.50</td>
</tr>
<tr>
<td>Out-of-State rate</td>
<td></td>
</tr>
<tr>
<td>Declining Balance - Standard Option</td>
<td>4,381.50</td>
</tr>
<tr>
<td>Declining Balance - Low Option</td>
<td>4,327.50</td>
</tr>
<tr>
<td>15 meals per week</td>
<td>4,316.50</td>
</tr>
<tr>
<td>21 meals per week</td>
<td>4,354.50</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>106.60</td>
<td>737.60</td>
</tr>
<tr>
<td>2</td>
<td>128.20</td>
<td>759.20</td>
</tr>
<tr>
<td>3</td>
<td>233.80</td>
<td>1,497.80</td>
</tr>
<tr>
<td>4</td>
<td>255.40</td>
<td>1,519.40</td>
</tr>
<tr>
<td>5</td>
<td>277.00</td>
<td>1,541.00</td>
</tr>
<tr>
<td>6</td>
<td>383.60</td>
<td>2,278.60</td>
</tr>
<tr>
<td>7</td>
<td>405.20</td>
<td>2,300.20</td>
</tr>
<tr>
<td>8</td>
<td>426.80</td>
<td>2,321.80</td>
</tr>
</tbody>
</table>

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 (explained on next page) .................................................. $20.00
Cap, gown, and hood .................................................. obtained through WCU Bookstore
Late registration fee .................................................. 10.00
Cooperative Education fee (work semesters only) .................................. 30.00

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.

*Required fees include: Health Services, $77.00; Recreation and Cultural, $62.00; Athletics, $94.00; Athletic Facilities, $16.00; University Center, $60.50; Graduate fee, $20.00; Documents fee, $2.00.
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 $10.00 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, Ed.S., or C.A.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 vice-chancellor for student development, obtain the necessary signatures, and return the form to the assistant 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, any full-time or part-time student who withdraws from the university on or before the final day of regular registration will be refunded 100 percent of tuition and fees. A student who withdraws from the university within the next seven calendar days following the last day of regular registration will be refunded 85 percent of tuition and fees. A student who withdraws from the university within the next seven calendar days following the last day to receive 85 percent refund will be refunded 70 percent of tuition and fees. Students who withdraw thereafter will not be entitled to a refund.
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 or 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 to reflect 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 become eligible for a refund of tuition and fees only when course loads are reduced below the minimum hours required to qualify as a full-time student.

No adjustment of tuition and fees will be made for reduced course loads after the close of the registration period.

Summer School Tuition and Fees. A student who withdraws from summer school on or before the close of the regular registration day will be refunded 100 percent of tuition and fees. A student who withdraws from a summer session within three days following regular registration or on or before the date of the second class meeting, whichever is later, will be refunded 85 percent of tuition and fees. Students who withdraw after this period will not be entitled to a refund.

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.

Residence Hall and Food Service Fees (All Terms). Room rent refunds will be calculated at the same rate as tuition and fees, except in those cases where a student is eligible for a 100 percent refund of tuition and fees; then the room rent will be prorated according to the number of days the room was occupied. The residence hall room deposit is not refundable in any case.

Meal ticket refunds will be made on a weekly prorated basis. Refunds will not be made for the last week of a summer session or for the last two weeks of a semester.

Exceptions. Students will be entitled to refunds only in accordance with the above stated policies.

Exceptions to these policies may be made in the event a student withdraws from the university for hardship reasons. Prorated refunds of tuition and fees, room rent, and meal charges may be made to the student or the student’s family in hardship cases, which are defined as (1) death of the student, (2) death in the student’s immediate family, or (3) withdrawal of a student when recommended by 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 or his designee must approve, and notify the controller’s office, of any refunds or accounts adjustments for hardship situations. The controller’s office will take appropriate action to make final settlement of the student’s account. Any other exceptions to these policies require the approval of 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, a student must be admitted into a graduate program and must provide a bona fide social security number.

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.

Student Financial Aid

The university maintains an office of student aid, and the director 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.

Veterans Assistance

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

Veterans in training are required to pay all fees as regular students since they are paid benefits directly by the Veterans Administration. To qualify for full benefits, the graduate student must carry a minimum of nine semester hours each semester. Students are responsible for verifying their hours each term with the Office of Veterans Affairs.

All inquiries concerning veterans affairs should be addressed to the associate dean for student development, Western Carolina University, Cullowhee, North Carolina 28723.

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 twelve-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 twelve-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 twelve-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 Sixty-Five
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 9 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 Issue.

Persons employed in full-time positions who enroll as part-time graduate students are limited to 6 hours per semester and 12 semester hours for the academic year.

Graduate applicants are prohibited from taking any graduate coursework in the School of Business prior to completing all prerequisite requirements and being fully admitted.

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 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 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.** A B average (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.

**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. A student may appeal the dismissal action to the Graduate Council.

**Appeal Procedure.** Those students who have 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. Students have two weeks from the time of their notification of dismissal to appeal the decision by submitting a dismissal appeal form, signed by the student, the student’s adviser, and the student’s department head, to the graduate school for consideration by the subcommittee on student appeals of the Graduate Council. The subcommittee will review each appeal and make a recommendation to the dean of research and graduate studies, who will notify the student of the outcome of the appeal.
Transcripts. Transcripts are provided only upon the student's signed request, including social security number, and after all accounts are cleared. See section on fees, p. 17. Requests for transcripts should be addressed to the registrar. The university's recommendation for teacher certification in North Carolina will be accompanied by a transcript.

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. Students 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.

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 dean of 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. Any extension of time beyond the six-year limit 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 graduate 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.

A student who is dismissed from a graduate program or the graduate school for any reason may continue to be enrolled at the university only if the student applies for readmission and secures the approval of the appropriate department head, dean, and either the Committee on Admission, Retention, and Readmission (if application is made for undergraduate status) or the Graduate Council (if the student seeks readmission into a graduate program) and dean of research and graduate studies. The student, if readmitted, must abide by the specific conditions stated in the letter of readmission. Failure to do so will result in immediate suspension, and a student so suspended is not thereafter eligible for readmission to the university.

**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 the associate vice-chancellor for academic affairs 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 90-90, or Schedule II, General Statutes 90-90, (including, but not limited to, heroin, mescaline, lysergic acid diethylamide, opium, cocaine, amphetamine, methaqualine), any 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.

* 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.
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 thirty days after notice of said conviction.

Handicapped Student Services. Assistance for handicapped students is available through the Office for Student Development, 460 Robinson Administration Building, Dr. Bonita Jacobs, 227-7234.

Academic Appeals Procedure
Students who feel they have been treated unjustly by an instructor in any matter pertaining to their academic work normally shall appeal first to the instructor. If necessary, an appeal may then be addressed to the instructor's department head and, next, to the dean of the school in which the course is offered. The student may consult any administrator in beginning the process, but only the instructor can change a grade.

If, after appealing to the instructor, department head, and dean, the student is still dissatisfied or suitable action has not been taken, the student may appeal to the Graduate Council and graduate dean. Subsequent appeals may then be made to the vice-chancellor for academic affairs, and finally to the chancellor.
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
Telephone: (704) 227-7398

The graduate school welcomes the applications of students without regard to race, religion, age, sex, national origin, or handicap. 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 $20.00 non-refundable application processing fee (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. Transcripts to be official 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.

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 non-refundable 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.

Students requesting to change programs, certifications, or degree objectives, after having been accepted into a program of study, must file a new application for admission, pay the non-refundable 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.

Students requesting to change programs, certifications, or degree objectives, after having been accepted into a program of study, must file a new application for admission to the new program, certification, 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.** Degree-seeking students whose records are temporarily incomplete or who have not met all the prerequisites for admission to their chosen degree programs may be admitted on a provisional basis provided they supply sufficient evidence of their capacity to do satisfactory work. In order to move from provisional status to regular degree status, part-time students must earn at least a 3.0 GPA in their first 12 semester hours of completed graduate credit; full-time students must earn at least a 3.0 GPA in their first term of full-time graduate study (9 hours or more of completed graduate level coursework). If a provisional student earns less than a 3.0 GPA, 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.

**Non-degree Admission.** Students who wish to take one or more graduate courses for self-improvement, teacher certification, or exploration of graduate degree program offerings, may 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 twelve hours of the earlier coursework with grades of B or better may be transferred into a degree program. The student’s adviser 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, non-degree, 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 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 admissions 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 work to strengthen the undergraduate background.

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.

The professional knowledge portion of the National Teacher Examinations Core Battery is the section of the NTE Core used for admission to graduate programs specifying the NTE Core as the admissions test. The Specialty Area may also be required. (See specific requirements listed in each program.)

Master of Arts and Master of Science Degrees
Applicants for degrees in applied mathematics, art, biology, chemistry, English, history, 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 psychology and home economics, 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 Examinations is required for studio art, art education, chemistry, communication disorders, home economics, human resource development, music, and psychology. For American history, applied mathematics, biology, and English, the General and appropriate Subject Test of the GRE are required.

Applicants for the M.A. in Music must have an undergraduate degree in music, have an audition in the principal area of applied music, and demonstrate or document piano proficiency. A diagnostic exam in music theory and music history is required.

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 6 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 art education, studio art, and music. For art education and studio art, two recommendations, a letter of application to the Department of Art, and a portfolio of the applicant's work are required. Applicants for art education must hold or be eligible to hold a North Carolina Class A teaching certificate in art.

Master of Arts in Education Degrees
Applicants must hold or be eligible to hold a North Carolina Class A teaching certificate, or a comparable certificate from another state, in the chosen field unless admission is sought to certain programs in which certification 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 public school administration; 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; reading education; physical education; home economics; school counseling; community 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**

Applicants must present a satisfactory score on the Graduate Management Admissions 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 School 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. Applicants must be fully credentialed (certified, registered, or licensed at the highest occupational level, as defined in the program) in a medical or health-related occupation and be able to submit evidence of the credential held. Nurses are required to have a bachelor's degree in nursing.

Applicants must have completed at least two years of full-time employment as a credentialed medical or health practitioner and be able to submit evidence of that experience.

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**

Applicants must have an average grade of B or higher as defined by the department in upper-level undergraduate industrial education courses. Those who apply for admission into the program for secondary-level teaching must hold or be eligible to hold a North Carolina Class A teaching certificate in industrial education or a comparable certificate from another state. The National Teacher Examinations, both the Core and Specialty Area, or the Graduate Record Examinations General Test are required for the secondary-level teaching program or the two-year college teaching program.

Three recommendations from former instructors who are in a position to judge the student's aptitude for graduate study may be requested.

**Master of Music Education Degree**

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 and complete diagnostic examination in music history and music theory.
Applicants who do not hold, or who are not eligible to hold, the North Carolina Class A certificate in music or a comparable certificate 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 Examinations, both the General and Subject Test in Music, or the National Teacher Examinations, both the Core and Specialty Area, are required.

Master of Project Management Degree
Applicants must present a satisfactory score on the Graduate Management Admissions Test (GMAT) and an undergraduate GPA sufficient to meet formula minimums. Three letters of recommendation are required from individuals who have firsthand knowledge of the applicant's academic or job performance.

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.

M.P.M. applicants are prohibited from taking any coursework applicable toward the M.P.M. prior to completing all prerequisite requirements and being fully admitted.

Master of Public Affairs Degrees
Applicants must have an average grade of B or higher the last two years of undergraduate study in the major. The Graduate Record Examinations 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.

Education Specialist Degrees
Applicants must hold the master's degree from an accredited institution and hold the graduate certificate 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 certificate, but the teaching area for both the master's program and the Ed.S. must be the same.) 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 public school or two-year college teaching programs in school administration, supervision, or curriculum and instruction, must submit scores on the GRE General Test or the Miller Analogies Test. In the elementary or middle grades education programs, a satisfactory score on the GRE General Test is required.

All Ed.S. programs require 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.)

Certificates of Advanced Study
The program leading to the Certificate of Advanced Study in school psychology is on inactive status and no new students are being enrolled.

For the program in school counseling, a master's degree and "G" Certification in school counseling is required. Applicants must submit an official copy of satisfactory GRE scores. Three letters of recommendation from former instructors or employers who are in a position to judge the applicant's aptitude for graduate study are also required. (Forms are available from the graduate school.)
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 and for the Master of Science degree in biology. 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, school psychology, and the Master of Health Sciences. 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 degree 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 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.

The thesis proposal must have the approval of the student’s major department, and a prospectus approved by the research director or department head and the dean of research and graduate studies must be on file in the graduate school. 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.

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 a graduate degree.

The unbound original and two copies of the thesis must be in the hands of the dean of research and graduate studies at least two weeks before the commencement at which the degree is to be conferred. A thesis guide to help students prepare their theses is available from the graduate school. After approval, three copies must be presented to the library for binding. The student may also have a personal copy bound at cost by the library.

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 Certification
Application for Graduation. Students who expect to be awarded a degree at the spring commencement must file application for graduation in the graduate school not later than the close of the previous fall semester. Persons expecting to be awarded degrees at the summer commencement must file application for graduation not later than one month prior to the close of spring semester. Persons expecting to be awarded degrees at the end of fall semester must file 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.

Teacher Certification. The North Carolina Department of Public Instruction requires that a fee be paid for the issuance of teacher certificates. The fee for an initial certificate in North Carolina is $30. The fee for raising an existing North Carolina certificate to a higher level is $30. There is also a fee of $30 for changing a name, issuing a duplicate certificate to an individual, or adding an area of certification to an existing certificate.

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 three-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

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, 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 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 for the M.A. in psychology may choose among majors in general psychology, clinical psychology (with emphasis in adult clinical, child clinical, and community clinical), and school psychology.

The general psychology major requires the completion of a minimum of 34 semester hours including PSY 652 and thesis.

The clinical psychology major requires the completion of 61 semester hours of graduate study, including practicum, internship, and thesis.

The program leading to the Master of Arts degree in school psychology requires the completion of 61 semester hours of graduate study, including practicum, internship, and thesis. Successful completion of the program and requirements related to certification will lead to recommendation for Level II certification.

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 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, 642, 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 3-6 hour thesis and successful performance on an examination in
a foreign language approved by the department. 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 39 hours of graduate study, including completion of a series of supervised clinical practica. The program is designed to meet the needs of students who wish to work in school and non-school 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, 676, EDCI 602, and 6 hours of guided electives or a 6 hour thesis project in communication disorders or an allied area. Enrollment in clinical practicum, EDCD 683, also is required and must total no less than 6 credit hours. EDCD 595 is required for SDPI certification. Additionally, 3 hours each must be selected from psychology or counseling and foundations of education or curricular theory. All course options are selected on the basis of a student's prior educational experience and professional aspirations. Individual decisions are governed by program policy and advisor approval.

A comprehensive examination (written and/or oral) is required. Students who select the thesis option are required to complete only an oral examination of the thesis project.
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 nutrition and dietetics, 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 home economics or in approved areas outside the department. Electives may include no more than 9 hours from ND 681, 682, 683.

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.

Human Resource Development

The program leading to the M.S. in human resource development requires a minimum of 33 semester hours including:

Core courses, 15-18 hours: HRD 610, EDHE 531, EDCI 620, EDCI 602, HRD 698. Students who lack professional experience will be required to take HRD 683, increasing the minimum requirements to 36 semester hours.

Guided electives, 6-9 hours, selected from: HRD 670, HRD 693, MGT 605, MGT 608, OA 605, COUN 645, and COUN 650. Other appropriate electives approved by the student's adviser may be substituted.

Advanced competency courses, 9-12 hours, selected from ACCT 651, IET 630, EDCI 609, PSY 610, 621, COUN 605, 635, 640, 655, and CIS 662. Other appropriate electives approved by the student's adviser may be substituted.

Successful performance on a comprehensive examination, either written or oral as determined by the department, is required upon 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 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 39 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, 15 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 administration or education, and (3) the research block.

Core block, 12 semester hours: HSEH 570 and HSMS 620 and 6 hours of electives selected from HSMS 610, 630, 640, 650, and 693.

Emphasis block, 15 semester hours: Administration option: MGT 605 and HSMS 550; and 9 hours of electives selected from: HSMS 560, 640, 650, and 694; MGT 606, 608, and 609; and MKT 601, 602, and 603.

Education option: EDCI 604 and HSCC 610; and 9 hours of electives selected from: EDCI 506, 601, 605, and 609; and HRD 610.

Research block, 9 semester hours: EDCI 602; EDCI 606 or PSY 651; and HSMS 699.

**Master of Industrial Education Degree Programs (M.I.E.)**

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**

Successful completion of the program and requirements related to certification lead to recommendation for North Carolina certification.

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**

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.)**

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 certification leads to recommendation for North Carolina certification.

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 semester hours, including:

Public Affairs core, 21 hours: MGT 608, PA 670, 671, 672, 673, 674, 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, PSC 521, 593, 595, 676.
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 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. Successful completion of any of the programs, except for the two-year college and non-school programs, and requirements related to certification will lead to recommendation for North Carolina certification.

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 to 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 to 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 to 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>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>English</td>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

Each program requires a minimum of 30 semester hours of graduate study. The requirements are as follows:

Professional component, 12 hours: EDCI 603, 605, or 700; EDCI 602 or 606; 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, 603, or 694. (At least one of these elective courses (three hours) must be taken at the 600 level.)

Physical education majors will take EDCI 604 and must select one course from PSY 621, 624, or 625. Students must take PE 620 and 696 and select one of the following two areas and take a minimum of nine hours from (1) PE 650, 660, 665 or (2) PE 630, 640, 675, 615, 600. The student must select nine hours from an area of interest not taken previously and/or PE 694, 676, 699, PSY 541, or TR 570.

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>English</th>
<th>Mathematics</th>
<th>Physical Education</th>
<th>Social Sciences</th>
</tr>
</thead>
</table>

42
Each program requires a minimum of 35 semester hours of graduate study. The programs do not lead to certification. The course requirements are as follows:

Academic major approved by academic adviser, 24 hours.

Professional core, 11 hours: EDCI 602 or 606, PSY 621, EDHE 605 and 686. (A person with one or more years of teaching experience or a person who holds a teaching certificate 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.

Curriculum and Instruction

The program leading to the M.A.Ed. degree in curriculum and instruction requires a minimum of 35 semester hours and contains student options for public school and two-year college teaching. The course requirements are:

Public School Curriculum and Instruction

Applicants must hold or qualify for the North Carolina Class A certificate in the chosen field or a comparable certificate from another state.

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

Curriculum, 3 hours, and EDSU 605.

Concentration in teaching field, 18 hours. Students must complete all courses required for the graduate teaching certificate in their chosen field. Options in biology, chemistry, English, social sciences, and individually approved multidisciplinary studies.

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 English Department head. 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 Teaching Curriculum and Instruction

Academic area, 18 hours: Options in biology, chemistry, English, social sciences, and individually approved multidisciplinary studies.

Professional core, 11 hours: EDCI 602 or 606, PSY 621, EDHE 605, and EDHE 686. (A person with one or more years teaching experience or a person who holds a teaching certificate may, upon recommendation of the adviser and department head, substitute EDHE 695 for EDHE 686).

Curriculum, 3 hours, and Supervision, 3 hours.

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 English Department head. 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

The program leading to the M.A.Ed. degree in reading education requires a minimum of 36 semester hours of graduate study. The two-year college teaching option requires a minimum of 33 semester hours. The course requirements are:

Public School

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

Students interested in teaching reading in a two-year college need not possess the class A teaching certificate.

Modified professional component, 11 hours: EDCI 602; EDHE 605; EDHE 686; and PSY 621 or 625.

Reading core, 17 hours: EDRD 520, 553, 573, 660, and 661.

Guided electives, 5 hours.

Counseling

The programs leading to the M.A.Ed. degree in school counseling and community counseling each require a minimum of 48 semester hours of graduate study. Additional work (up to 9 semester hours) may be added to supplement the undergraduate background.

All students complete a 27-hour common professional core, including a research component, and also meet the specialty requirements of the program they select. The professional core courses are:

Professional core (add to requirements of specialty), 27 hours: COUN 605, 615, 625, 630, 635, 640, 645, 650, and EDCI 602.

Specialty requirements, 21 hours, as follows:

School Counseling: COUN 660, 687 (6 hours), 686, and 9 hours of guided electives.

Community Counseling: COUN 623, 687 (6 hours), 686, and 9 hours in 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 631, 682, 687, and COUN 605.

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 604, 629, 630 and 3 hours of guided electives.
Gifted and Talented

The program leading to the M.A.Ed. degree in gifted and talented is on inactive status and no new students are being enrolled.

The program leading to the M.A.Ed. degree in gifted and talented requires a minimum of 36 semester hours of graduate study, including:

Professional component, 12 hours: EDCI 605, 603, or 700; EDCI 602 or 606; EDCI 604 or EDEL 601; and PSY 621, 624, or 625.

Gifted and Talented courses, 24 hours SPED 550; 551; 552; 600; SPED 682 or EDCI 699; SPED 687; COUN 605; and EDEL 566.

Mental Retardation (on inactive status)

The program leading to the M.A.Ed. degree in mental retardation requires a minimum of 36 semester hours of graduate study, including:

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

Mental Retardation area, 21 hours: SPED 604; 629 or 630; 631; 682; 687; EDCD 576 or 678; and COUN 605.

Electives, 3 hours.

Educational Administration, Public School

The program leading to the M.A.Ed. degree in public school administration requires a minimum of 33 semester hours of graduate study, including:

Professional component, 12 hours: EDCI 602; EDCI 604; 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 The Politics of Educational Decision Making (EDAD 720).

Administration, Organization, and Supervision, 18 hours: EDAD 600, 610, 684, 685, 695, EDSU 605 and 5 hours of guided electives.

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 certificate 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 certificate: 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 certificate: 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 certificate, 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 certificate or a comparable certificate 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 certificate will not lead to a recommendation for teacher certification.

Education Specialist Degree Programs

The programs leading to the Ed.S. degree include options which lead to the recommendation for advanced certificates for curriculum specialists, elementary educators, middle grades educators, principals, superintendents, and general supervisors. Except for two-year college teaching, successful completion of any of the programs and the requirements related to certification will lead to recommendation for North Carolina certification. Persons applying to programs at the Ed.S. level must hold or qualify for the master's level certificate in the field chosen. Options individually adjusted to meet the needs of other educators may be approved by the appropriate department(s) and the graduate school. The Education Specialist degree in curriculum and instruction is designed to provide training at the sixth-year level for secondary education curriculum specialists in biology, chemistry, English, home economics, industrial education, social sciences, and reading. All programs require a minimum of 30 semester hours above the master's degree as well as comprehensive examinations, written or oral or both, in the major and minor fields.

Curriculum and Instruction

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

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 English Department head. 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

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.

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

Professional component, 12 hours: EDCI 606; EDCI 604, 702, or EDEL 601; 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 The 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 604; 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

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 or EDEL 601; 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.

Note: Programs in Elementary Education are being revised. For further information about these revisions, please contact the department head.

Elementary Education (K-6)
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)
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 to 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.

Certificates of Advanced Study

School Psychology
The program leading to the Certificate of Advanced Study in school psychology is on inactive status and no new students are being enrolled.

Counseling
The Certificate of Advanced Study in counseling is designed for individuals who hold the master's degree and "G" certification 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.
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 3 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 3 hours of credit and may be repeated once for a maximum of 6 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

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Field of Study</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT</td>
<td>Accounting</td>
<td>Accounting and Information Systems</td>
</tr>
<tr>
<td>ANTH</td>
<td>Anthropology</td>
<td>Geosciences and Anthropology</td>
</tr>
<tr>
<td>ART</td>
<td>Art</td>
<td>Art</td>
</tr>
<tr>
<td>ASI</td>
<td>Arts and Sciences Interdisciplinary</td>
<td>School of Arts and Sciences</td>
</tr>
<tr>
<td>AST</td>
<td>Astronomy</td>
<td>Chemistry and Physics</td>
</tr>
<tr>
<td>BA</td>
<td>Business Administration</td>
<td>School of Business</td>
</tr>
<tr>
<td>BIOL</td>
<td>Biology</td>
<td>Biology</td>
</tr>
<tr>
<td>CDFR</td>
<td>Child Development and Family Relations</td>
<td>Human Environmental Sciences</td>
</tr>
<tr>
<td>CHEM</td>
<td>Chemistry</td>
<td>Chemistry and Physics</td>
</tr>
<tr>
<td>CIS</td>
<td>Computer Information Systems</td>
<td>Accounting and Information Systems</td>
</tr>
<tr>
<td>CJ</td>
<td>Criminal Justice</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>COUN</td>
<td>Counseling</td>
<td>Human Services</td>
</tr>
<tr>
<td>CS</td>
<td>Computer Science</td>
<td>Mathematics and Computer Science</td>
</tr>
<tr>
<td>CTM</td>
<td>Clothing, Textiles, and Merchandising</td>
<td>Human Environmental Sciences</td>
</tr>
<tr>
<td>ECON</td>
<td>Economics</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>EDAD</td>
<td>Educational Administration</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>EDCD</td>
<td>Communication Disorders</td>
<td>Human Services</td>
</tr>
<tr>
<td>EDCl</td>
<td>Curriculum, Research, Foundations</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>EDEL</td>
<td>Elementary Education</td>
<td>Elementary Education and Reading</td>
</tr>
<tr>
<td>EDHE</td>
<td>Higher Education</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>EDPY</td>
<td>Education and Psychology</td>
<td>School of Education and Psychology</td>
</tr>
<tr>
<td>EDRD</td>
<td>Reading</td>
<td>Elementary Education and Reading</td>
</tr>
<tr>
<td>EDSE</td>
<td>Secondary Education</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>EDSU</td>
<td>Educational Supervision</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>ENGL</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>FIN</td>
<td>Finance</td>
<td>Economics and Finance</td>
</tr>
<tr>
<td>FSM</td>
<td>Food Service Management</td>
<td>Human Environmental Sciences</td>
</tr>
<tr>
<td>GEOG</td>
<td>Geography</td>
<td>Geosciences and Anthropology</td>
</tr>
<tr>
<td>GEOL</td>
<td>Geology</td>
<td>Geosciences and Anthropology</td>
</tr>
<tr>
<td>HE</td>
<td>Home Economics</td>
<td>Human Environmental Sciences</td>
</tr>
<tr>
<td>Prefix</td>
<td>Field of Study</td>
<td>Department</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>HRD</td>
<td>Human Resource Development</td>
<td>Human Services</td>
</tr>
<tr>
<td>HSCC</td>
<td>Health Sciences</td>
<td>Health Sciences</td>
</tr>
<tr>
<td>HIST</td>
<td>History</td>
<td>History</td>
</tr>
<tr>
<td>HSEH</td>
<td>Environmental Health</td>
<td>Health Sciences</td>
</tr>
<tr>
<td>HSMS</td>
<td>Health Services Management/Supervision</td>
<td>Health Sciences</td>
</tr>
<tr>
<td>IET</td>
<td>Industrial Education and Technology</td>
<td>Industrial and Engineering Technology</td>
</tr>
<tr>
<td>LAW</td>
<td>Business Law</td>
<td>Administrative Services</td>
</tr>
<tr>
<td>MATH</td>
<td>Mathematics</td>
<td>Mathematics and Computer Science</td>
</tr>
<tr>
<td>MGT</td>
<td>Management</td>
<td>Management and Marketing</td>
</tr>
<tr>
<td>MKT</td>
<td>Marketing</td>
<td>Management and Marketing</td>
</tr>
<tr>
<td>MUS</td>
<td>Music</td>
<td>Music</td>
</tr>
<tr>
<td>ND</td>
<td>Nutrition and Dietetics</td>
<td>Human Environmental Sciences</td>
</tr>
<tr>
<td>OA</td>
<td>Office Administration</td>
<td>Administrative Services</td>
</tr>
<tr>
<td>PA</td>
<td>Public Affairs</td>
<td>Political Science and Public Affairs</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education</td>
<td>Health, Physical Education, Recreation</td>
</tr>
<tr>
<td>PHIL</td>
<td>Philosophy</td>
<td>Philosophy and Religion</td>
</tr>
<tr>
<td>PHYS</td>
<td>Physics</td>
<td>Chemistry and Physics</td>
</tr>
<tr>
<td>PRM</td>
<td>Parks and Recreation Management</td>
<td>Health, Physical Education, Recreation</td>
</tr>
<tr>
<td>PSC</td>
<td>Political Science</td>
<td>Political Science and Public Affairs</td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology</td>
<td>Psychology</td>
</tr>
<tr>
<td>SCI</td>
<td>Science Education</td>
<td>Chemistry and Physics</td>
</tr>
<tr>
<td>SOC</td>
<td>Sociology</td>
<td>Social Work and Sociology</td>
</tr>
<tr>
<td>SOCW</td>
<td>Social Work</td>
<td>Social Work and Sociology</td>
</tr>
<tr>
<td>SPEd</td>
<td>Special Education</td>
<td>Human Services</td>
</tr>
<tr>
<td>SSC</td>
<td>Social Sciences</td>
<td>School of Arts and Sciences</td>
</tr>
<tr>
<td>STA</td>
<td>Communication and Theatre Arts</td>
<td>Communication and Theatre Arts</td>
</tr>
<tr>
<td>TR</td>
<td>Therapeutic Recreation</td>
<td>Health, Physical Education, Recreation</td>
</tr>
</tbody>
</table>

**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; and 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.

50 693 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.

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 life styles of native North Americans; environmental adaptations, social organizations, religions, and arts. PREQ: 260.

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 life styles. PREQ: 260.

577 Cultures of Subsaharan Africa. (3)
Cultural diversity and development in Subsaharan 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. Lab fee charged. 6 Studio.

532 Design Problems. (3, R6)
PREQ: Permission of instructor. Lab fee charged. 6 Studio.

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

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

544 Sculpture Problems. (3, R6)
PREQ: Permission of instructor. Lab fee charged. 6 Studio.
551 Ceramics Problems. (3, R6)  
    PREQ: Permission of instructor. Lab fee charged. 6 Studio.

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

554 Glass Problems. (3, R6)  
    PREQ: Permission of instructor. Lab fee charged. 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. Lab fee  
    charged.

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 2- and 3-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.

654 Graduate Glass. (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.

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)
Philosophical, aesthetics, 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.

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)
The growth, development, and defense mechanisms of flowering plants. PREQ: 312 or permission of instructor. 3 Lecture, 3 Lab.

517 Biochemistry. (3)
The metabolism of carbohydrates, lipids, nucleic acids, and proteins in plant and animal systems. PREQ: 312, 332, 342, and CHEM 242, 370, or permission of instructor.

519 Cell Biology. (4)
Structure and function; techniques for the study of cells. PREQ: 312. 3 Lecture, 3 Lab.

520 Comparative Physiology. (4)
Vertebrate and invertebrate systems, nutrition, metabolism, respiration, circulation, excretion, reproduction, humoral and nervous integration. PREQ: 312, 332, 342, or permission of instructor. 3 Lecture, 3 Lab.

534 Terrestrial Ecology. (4)
Population, ecosystem, community structure, and dynamics; major North American biomes; field and descriptive methods; required weekend field trips. PREQ: 312, 332, 342. 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: 332. 2 Lecture, 6 Lab.

543 Evolutionary Processes. (3)
The mechanisms of evolution; emphasis on current research and hypotheses such as group selection, kin selection, r and K selection, and sympatric speciation. PREQ: 312, 332, 342.

551 Biology of Fungi. (4)
The slime molds and true fungi; life histories, morphology, host-parasite relationship, fine structure, and phylogeny. PREQ: 130. 3 Lecture, 3 Lab.
652 Plant Anatomy. (4)
Plant cells, tissue organization from a phylogenetic point of view; botanical micro-
techniques. PREQ: 130. 3 Lecture, 3 Lab.

653 Principles of Systematics. (4)
Identification, characterization, and classification of organisms, emphasizing use of
evidence from many biological disciplines; field studies of plants or animals. PREQ:
312, 332, 342. 3 Lecture, 3 Lab.

655 Vascular Plants. (4)
The biology of the higher plants; club and small club mosses, quill worts, scouring
rushes, ferns, gymnosperms, and angiosperms, in living and fossil form. PREQ: 312,
332, 342. 3 Lecture, 3 Lab.

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

659 Biostatistics. (3)
Statistical concepts and methods for biologists, especially students planning research
problems; design of experiments for computer analysis by ANOVA, single or multiple
regression, principal components. PREQ: An elementary statistics course or permis-
sion of instructor. 2 Lecture, 2 Lab.

660 Biology of Arthropods. (4)
Morphology, physiology, life histories, behavior, ecology, and systematics of arthro-
pods; field emphasis on insects or arachnids. PREQ: 131. 2 Lecture, 6 Lab.

661 Animal Behavior. (4)
Mechanisms, development, functional significance, and behavioral evolution from
viewpoints of ethology, neurophysiology, and experimental psychology. PREQ: 131 or
permission of instructor. 3 Lecture, 3 Lab.

662 Animal Development. (4)
Development in animals, gametogenesis, fertilization, cleavage, gastrulation, organo-
genesis, embryonic adaptations, differentiation, and growth. PREQ: 312, 332, 342. 3
Lecture, 3 Lab.

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

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

671 Biomembranes. (3)
Biochemistry of membrane structure and function. PREQ: 312, 332, 342, and CHEM
241, 242, 271, 370.

672 Biology of Secondary Compounds. (3)
Biochemistry, physiology, and function of secondary compounds stressing alkaloids,
phenolics, and terpenoids. PREQ: 517 or CHEM 242.

673 Molecular Biology. (3)

674 Biology of Secondary Compounds Laboratory. (2)
Techniques for isolating, identifying, and studying biological functions of alkaloids,
phenolics, and terpenoids. PREQ: 518 or CHEM 370.

676 Virology. (3)
Comparative aspects of animal, plant, and bacterial viruses; their classification,
structure, replication, pathogenesis, and interaction with host cells. PREQ: 513, 514 or
HSCC 260.

678 Biogeography. (3)
Plant and animal distribution; ecological and historical factors contributing to distribu-
tion of the earth's biota. PREQ: 332 or permission of instructor.
642 Developmental Genetics. (3)
Mechanisms of cell differentiation and morphogenesis in plants and animals. PREQ:
342 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.

678 Colloquium in Invertebrate Biology. (3)
Research advances in selected invertebrate phyla. PREQ: 373.

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

694 Topics in Biology. (1-6, R12)
PREQ: Permission of department head. S/U grading.

699 Thesis. (3, R6)

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 or 3, R5)
Economic, social, and public policies affecting managerial decisions; readings, prob-
lems, 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.

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)
PREQ: Permission of department head and director, graduate programs in business.

695 Seminar in Business Law. (3)
PREQ: Permission of instructor.

Chemistry (CHEM)

532 Instrumental Analysis. (3)
Theory and practice of modern chemical instrumentation, electrochemistry, spectro-
scopic methods and nuclear techniques. 2 Lecture, 3 Lab.
541 Advanced Organic Chemistry. (3)
Synthetic methods and mechanistic study to include selected topics emphasizing relationships between structure and reactivity. PREQ: 242 and 370.

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

551 Biophysical Chemistry. (4)
Applications of the principles and techniques of physical chemistry to the study of biochemical systems; for graduate students in biology. PREQ: 370 and MATH 140.

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

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

589 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.

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

621 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.

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

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

692 Topics in Inorganic Chemistry. (3, R6)

693 Topics in Analytical Chemistry. (3, R6)

694 Topics in Organic Chemistry. (3, R6)

695 Topics in Physical Chemistry. (3, R6)

696 Seminar. (1, R3)

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

699 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 day care 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.

600 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)
A 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)
A case study approach to the operation and management of fashion business enterprises.
PREQ: MKT 302, 304, CTM 346, 347 or permission of instructor.

Communication Disorders (EDCD)

572 Aural Rehabilitation. (3)
The 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: 471 or equivalent.

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

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.

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.

655 Pediatric Audiology. (3)
Audiological procedures; pathological processes in the development of the auditory
mechanism and behavior; medical management and treatment programs; practicum.
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.
672 Language Disorders in Adults. (3)
Theory, diagnosis, and treatment of adult language disorders.

673 Neurogenic Speech Disorders. (3)
Theory, diagnosis, and treatment of neurogenic speech disorders including apraxia, dysarthria, cerebral palsy, and dysphagia. PREQ: 574 or permission of instructor. COREQ: 672.

674 Diagnostics. (3)
Clinical procedures used in evaluating communication disorders.

675 Management of Communication Disorders. (3)
Analysis of clinical methods proven useful in the treatment of communicatively handicapped individuals.

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

678 Augmentative Communication Systems. (3)
Study of augmentative symbol systems for nonspeaking populations; focus on needs of handicapped individuals. PREQ: 576 or permission of instructor.

679 Language Assessment and Intervention. (3)
Advanced study of current language assessment/intervention techniques. PREQ: 576 or permission of instructor.

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.

683 Internship in Communication Disorders. (1-3, R9)
Supervised clinical experiences in varied settings.

695 Seminar in Articulation. (3)
Current issues in articulation; application of research to assessment and intervention.

696 Seminar in Language. (3)
Current issues in language acquisition; application of research to assessment and intervention.

697 Seminar in Fluency. (3)
Issues related to diagnosis and treatment. PREQ: 578 or permission of instructor.

698 Seminar in Voice. (3)
Issues related to the diagnosis and treatment of functional-organic voice disorders.

699 Thesis. (3, R6)
PREQ: EDCI 606 or EDCD 682.

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 data bases.

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

662 Data Base Management. (3)
Structure and design of static and dynamic data bases; the use of data base management software as an integral component of an information system.
Research Project in Computer Information Systems. (3, R6)
PREQ: Detailed project proposal must be approved by department head and director, graduate programs in business.

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

Computer Science (CS)

Computer Organization. (3)
Digital logic and basic structure of computers, addressing methods, instruction sets, microprogrammed control, I/O organization, arithmetic, memory, peripherals, software, computer communications. PREQ: 251.

Computer Design. (3)
Arithmetic unit, control unit, memory hierarchy, pipelining, load balancing, parallel computing using various topologies. PREQ: 251.

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.

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

Data Communications and Networks. (3)
Communication systems components, error detection and correction, network protocols. PREQ: 303, 351.

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

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

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

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

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

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

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

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 non-counseling majors.

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; issues.

623 Introduction to Community Counseling. (3)
History and development of community counseling; concepts and current practices in various specializations; projected trends. PREQ or COREQ: 605.

625 Counseling: Developmental Perspectives. (3)
Counseling issues related to social, cognitive, physical, and personality factors in human life-span development. PREQ: 605.
630 Theory of Individual Counseling. (3)
Theories and their applications; demonstrations and role playing; development of personal model of counseling. PREQ: 605 or equivalent.

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: 605.

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.

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. (3)
Organization, maintenance, evaluation, and improvement of developmental K-12 school counseling programs; relationship to total school program. PREQ: 630, 640. PREQ or COREQ: 625, 635, 650.

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 tapescripts 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. (3-6,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.

693 Problems in Counseling. (3)
Study of in-service problems; restricted to students employed as counselors. PREQ: Advanced standing; permission of adviser.

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

699 Thesis. (3, R6)

730 Advanced Theory and Technique 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. 9 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 con-
tact 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: 301; permission of instructor.

580 Reading and Research in Education. (3)
PREQ: Permission of department head.

595 Seminar in International Understanding. (3)
Intercultural relations and classroom implications.

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 identifica-
tion, 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 hypothe-
sis 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.

620 Instructional Design. (3)
Developing instructional training programs for education, industry, and government.
PREQ: Permission of instructor.

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.

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.

Educational Administration (EDAD)

600 Theory and Foundations of School Administration. (3)
Administrative structure and processes; theories, frameworks, and models of administrative behavior, governance, and organization.

610 The Principalship. (3)
Administrative and supervisory duties, problems, skills, and competencies required of a school principal.

620 School Law. (3)
Principles of school law; authority, responsibility, and liability of school boards, administrators, and teachers; significant court decisions.

630 School Finance and Business Management. (3)
Principles and practices of financing public education; revenue and allocation plans; budgeting; management of school funds.

640 School Plant Planning and Management. (2)
Determination of needs; planning construction and remodeling; efficient use of school plants.
650 School Personnel Administration. (3)
Theory, principles, and practices; recruitment, selection, assignment, evaluation, promotion, and tenure; staff development and welfare; collective negotiations.

660 School-Community Relations. (2)
Developing and maintaining appropriate relationships; communication with the public; techniques, instruments, and tools for improving relationships.

680 Problems in School Administration. (1, R3)
Discovery and implementation of practical solutions to problems encountered by school administrators. PREQ: Permission of adviser.

681 Independent Study. (1)
PREQ: Permission of adviser.

684 Elementary Principal Internship. (1)
PREQ: 600, 610, EDSU 605, and permission of adviser. S/U grading.

685 Secondary Principal Internship. (1)
PREQ: 600, 610, EDSU 605, and permission of adviser. S/U grading.

693 Topics in School Administration. (1, R3)
Scheduling; negotiations; budgeting; management information systems; surveys; changes in school law. PREQ: Permission of instructor.

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.

783 Internship in School Administration. (2)

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

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.

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 system level or at the institutional level in higher education. S/U grading. PREQ: 615.

795 Seminar in Supervision. (2)
PREQ: 605.

Elementary Education (EDEL)

565 Teaching the Child in Crisis. (3)
Exploration of crisis situations to improve teacher competency; methods for dealing with the child in crisis according to developmental levels.

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)
Incorporates reading development/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 Methods of 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 Methods of 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.

609 Logo for Teachers. (3)
Provides elementary and middle school teachers with a philosophical as well as a practical perspective for utilizing Logo in their classrooms. PREQ: 308 or 311 or permission of instructor.

614 Issues and Trends in Early Childhood Education. (3)

616 Issues and Trends in Intermediate Education. (3)
Provides a comprehensive study of current problems, issues, and trends which confront educators who teach in the intermediate grades.

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)
Presents 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.

664 Kindergarten Administration and Supervision. (3)
Development of programs for young children; staff development, community relations, and curriculum.

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 Elementary 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.
671 Instructional Leadership in Elementary Schools. (3)
Evaluation of curriculum, integration of theory and practice for cooperative development of decisions.

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 Early Childhood Education. (3)
Comparative studies of programs in historical and philosophical perspective. PREQ: 614 or 664.

716 Programs for Intermediate Grades. (3)
Analysis of programs for intermediate (4-6) grades; historical and philosophical perspectives. PREQ: 601 or 616 or permission of instructor.

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 the Professions. (3)
Study and practice of technique and form in writing for business, industry, and the professions; organizing, drafting, and revising writing of all lengths, from brief memoranda and letters to reports and proposals.

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)
Contrastive 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; adaptation of 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. 3 Lecture.

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.

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.
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, and 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/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: 270 or permission of instructor.

594 Special Topics in English as a Second Language. (3, R6)

611 Writing Seminar for Teachers. (3 or 6, R6)
The 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/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 (HSEH)

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

575 Environmental Program Administration. (3)
An intensive study of regulatory program administration; focus on the 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 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: 250 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 X-Ray Diffraction and Analytical Methods. (3)
Theory of diffraction; production and interpretation of powder photographs and diffractometer curves; other chemical and rock preparation techniques. PREQ: Permission of instructor. 2 Lecture, 2 Lab.

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

593 Special Problems in Geology. (2, R4)

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

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

Health Sciences (HSCC)

610 Development, Supervision, and Evaluation of Clinical Education. (3)
An overview of principles and methods of teaching health care occupational skills in clinical settings; emphasis will be on defining the educational needs of various health providers, developing a program of study, supervision, and evaluating the outcome. PREQ: Acceptance in the MHS program or permission of instructor.

Health Services Management and Supervision (HSMS)

550 Financial Management in Health Care. (3)
Selected knowledge and skills related to budgeting and the financial management of clinical departments and service units. PREQ: 320, 340, or permission of instructor.
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.

610 Service Delivery Systems In Health Care. (3)
Rapidly changing patterns of service provisions in health care; new delivery systems and changing approaches to the organization of care. PREQ: Acceptance in the MHS program or permission of instructor.

620 Health Regulation and Practice Law. (3)
Regulatory and legal controls over the practice of health disciplines and the provision of service; forces in the provider, payer, and government systems. PREQ: Acceptance in the MHS program or permission of instructor.

630 Manpower Dynamics in Health Care. (3)
Labor force issues in the health setting as a function of the ability to provide services. PREQ: Acceptance in the MHS program or permission of instructor.

640 Information Systems for Health Providers. (3)
Individual use of available data bases, spreadsheets, and statistical package computer software in care-providing applications. PREQ: Acceptance in the MHS program or permission of instructor.

650 Quality Assurance Issues and Outcomes. (3)
Determination of appropriate measures and outcomes for quality of patient care considering ethical, resource, and professional issues. PREQ: Acceptance in the MHS program or permission of instructor.

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 Problems In Health Care. (3)
Seminar on current issues emphasizing national and regional topics. PREQ: Acceptance in the MHS program or permission of instructor.

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.

699 Thesis. (3)
PREQ: Permission of instructor.

Higher Education (EDHE)

531 Foundations of Adult Education. (3)

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; the development of the modern state; the scientific revolution; the rise of capitalism; social change.

513 Europe in the 18th Century. (3)
The Old Regime; wars of expansion, the Enlightenment; the French Revolution and Napoleon.

514 Europe in the 19th 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 Germany; World War II; postwar reconstruction and reorganization; the Cold War.

531 Colonial America, 1492-1763. (3)
Political, social, economic, and cultural characteristics.

532 The Revolutionary Era, 1763-1800. (3)
The 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 The Emergence of Industrial America, 1877-1920. (3)
Growth and conflict of organized industry and organized labor; the agrarian decline and revolt; American imperialism, progressive reform, World War I.

536 The United States since 1920. (3)
Roaring Twenties, Depression and New Deal; World War II; America as Cold-War superpower; domestic developments.

542 A History of Black America. (3)
Role of the Negro 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 interest of the Antebellum South; impact of Civil War and Reconstruction; the New South; the 20th century South; emphasis on regional differences and social transition.
Cherokee History. (3)  
Pre-contact Cherokee society; acculturation; Removal, post-Removal development of the Cherokee Nation West and the Eastern Band of Cherokee.

Southern Appalachian Culture. (3)  
Regional history and folkways in the period of geographic isolation; change in an age of improved transportation and communication.

Women in American History. (3)  
The historic role of women; attitudes in various periods; women in American culture; the women's rights and feminist movements.

History of the Mexican Nation. (3)  
Mexico since 1810; 19th century conflicts; Revolution, 1910-1917; progress to the present.

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.

Archives and Museum Management. (3)  
The preservation, management, and display of archival materials and museum artifacts, with emphasis on museum management. Lecture and fieldwork.

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.

Historic Sites and Historic Preservation. (3)  
Aspects of historic preservation; emphasis on aesthetic, legal, financial, and public relations considerations. Lecture and fieldwork.

Cooperative Education in History. (3)  
PREQ: Enrollment for at least one term in the M.A. in American History-Public History concentration; B average in graduate work; approval of department head, adviser, and cooperative education coordinator. S/U grading.

Topics in History. (3, R12)

American Historiography. (3)  
Survey of the principal historians, their aims, methods, materials, and philosophy.

Readings in History I, II, III, IV. (3, R6 each course)

Major interpretative monographs and articles within a selected area. May not be taken more than twice for credit without departmental approval.

Internship in History. (1-3, R-3)  
A supervised internship in a public history institution or setting. PREQ: Permission of department head. S/U grading.

Problems in American History. (3, R9)  
PREQ: Preparation in topic or permission of instructor.

Seminar in American History and American Studies. (3)  
Intensive investigation of selected topics in American history and American studies.

Thesis. (3, R6)

Home Economics (HE)

Career Exploration. (3)  
The 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)
An elective in-depth 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 advisor, 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.

670 Program Evaluation. (3)
The role, design, and implementation of program evaluation procedures.

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 employed. PREQ: Admission to M.S. in Human Resource Development program. PREQ or COREQ: 610. S/U grading.

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 Education and Technology (IET)

513 Advanced Graphics Arts. (3)
  Printing theories; work in duotone, half-tone, multicolor, and graphic communication techniques. PREQ: 313.

514 (HE 514) Career Exploration. (3)

522 Advanced Polymer Technology. (3)
  Theory and application of molding processes; emphasis on thermoplastic and thermoset injection; topics in polymer science and microprocessing. PREQ: 420 or permission of instructor.

532 Shop/Laboratory Organization and Management. (3)
  Supplies, equipment, safety; development of a planned faculty for industrial/vocational education. PREQ: Departmental approval.

540 Wood Technology. (3)
  Wood technology for furniture and non-furniture uses; individual assignments in furniture design. PREQ: 140. Lab fee charged. 2 Lecture, 2 Lab.

560 Industrial Materials and Processes. (3)
  An overview of industrial materials as related to contemporary manufacturing processes. 2 Lecture, 2 Lab. PREQ: Permission of instructor.

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)
  An elective in addition to existing program requirements. PREQ: Enrollment for at least one term in the M.S. in Technology or M.I.E.; a B average in graduate work; approval of department head, adviser, and cooperative education coordinator. S/U grading.

593 Topics in Industrial Education. (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 Education. (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; 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)
The 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.

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, advisor, and cooperative education coordinator. S/U grading.

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

601 Modern Mathematics for Teachers I. (3)
Natural numbers, whole numbers, integers, rational and irrational numbers; for middle grades teachers. PREQ: Permission of department head.

602 Modern Mathematics for Teachers II. (3)
Topics from probability and statistics to include permutations, combinations and distribution. PREQ: 601 or permission of department head.

603 Modern Mathematics for Teachers III. (3)
Geometric concepts of proof; congruence, similarity and geometric equalities and inequalities. PREQ: 602 or 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 Modelling. (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.

642 Computer Science. (3)
Hardware, software, language, systems, simulation.

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)

501 Music in the Elementary School. (2)
Classroom activities for in-service teachers; demonstrations and practice work.

503 Marching Band Techniques. (2)
PREQ: 326.

505 Workshop in Music Education. (2)

521 Wind Literature. (3)
Literature of wind instruments; emphasis on authentic performance practices. PREQ: 278.

522 Vocal Literature. (3)
Survey of solo vocal literature from the 16th century to the present. PREQ: 278.

523 Choral Literature. (3)
Literature from the Renaissance to the present; emphasis on style and authentic performance practices. PREQ: 278.

524 Keyboard Literature. (3)
Keyboard literature from the Baroque to the present. PREQ: 278.
525 Studies in Contemporary Music. (3) 
Styles and issues of 20th century music. PREQ: 351.

528 Choral Conducting. (3) 
Study and application of gesture communication and analysis related to choral conducting. PREQ: 328, 278.

529 Instrumental Conducting. (3) 
Application of techniques and analysis to instrumental conducting. PREQ: 328, 278.

571 Arranging for High School Band and Chorus. (3) 
Arranging for instrumental and choral ensembles. PREQ: 470.

572 Jazz Arranging. (3) 
Techniques of instrumental and vocal jazz arranging. PREQ: 470.

577 Contrapuntal Techniques. (3) 
Survey of contrapuntal practice from 1500 to the present, focusing on the 16th, 18th, and 20th century techniques. PREQ: 278.

578 Compositional Techniques. (3) 
Composition in styles from the tonal period to the present. PREQ: 278, 477.

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.

595 Seminar in Arts Management. (3) 
Principles and problems in arts management.

596 Seminar in the Music Industry. (3) 
Principles and problems of the music industry.

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.

631 Form and Analysis. (3) 
Analysis of music from the Middle Ages through the Romantic Period. PREQ: 630 or permission of department head.

632 Twentieth Century Analysis. (3) 
The analysis of 20th century compositional styles, forms and techniques. PREQ: 630 or permission of department head.

640 Studies in Pedagogy. (3, R9) 
The techniques and materials of teaching for voice and instruments.

660 Music in Worship. (3) 
Music for Christian worship services.
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)
The 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: FSM 231 or permission of instructor. 2 Lecture, 2 Lab.

533 Methods in Human Nutrition and Foods. (3)
Standard procedures for nutrient analysis, including proximate analysis of foods; determination of individual health and nutrient status; introductory experimental design and methodology. PREQ: 334; CHEM 133. 1 Lecture, 6 Lab.

534 Experimental Methods of Foods. (4)
Techniques of sensory, physical, and objective evaluation in scientific foods and food products experimentation. PREQ: FSM 231; CHEM 133. 2 Lecture, 4 Lab.

536 Advanced Human Nutrition. (4)
Normal nutrition in relation to the biochemical and psychological functioning; interrelationships of nutrients and their effects on body needs. PREQ: 334; BIOL 292; CHEM 133.

537 Diet Therapy. (3)
Mechanisms by which food contributes to the maintenance of health, prevention of disease, and correction of nutritional disorders. PREQ: 536 or CHEM 133 and BIOL 292.
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, R6)
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: 330 and FSM 231 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)

540 Travel and Tourism. (3)
The travel and tourist industry, national and international; locational characteristics, terminology, demographics, economic impact and trends, attitudes and skills required.
PREQ: Permission of instructor. 2 Lecture, 2 Lab.

550 Elements of Parks and Recreation Planning. (3)
Elements of site and facility planning and design; methods and techniques; preparation of a site development plan. PREQ: Permission of instructor. 2 Lecture, 2 Lab.

560 Management of Natural and Cultural Resources. (3)
Analysis of specific considerations and techniques in recreation resource and visitor management, historical conservation and restoration; management problems. PREQ: Permission of instructor. 2 Lecture, 2 Lab.

561 Community Recreation Management. (3)
History, principles, organization, and supervision of community programs; personnel functions; agency coordination. PREQ: Permission of instructor. 2 Lecture, 2 Lab.

580 Independent Study. (1-3, R6)

583 Internship in Parks and Recreation Management. (1-3, R6)

593 Special Topics. (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)

512 Physical Education for the Mentally Retarded. (2)
Survey of activities and administration of programs for the mentally retarded.

514 Camp Leadership. (2)

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 Sport Administrator. (3)
Development of a risk management approach to prevent lawsuits in sport settings; comprehensive study of written and case law 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.

630 Principles of Physical Education. (3)
History, philosophies, aims, and objectives of physical education.
640 Administration of Physical Education. (3)
The organization and administration of the physical education programs in the school.

650 Physiology of Motion. (3)
Physiological adaptations resulting from different levels of performance.

660 Scientific Foundations of Physical Activity. (3)
An introduction to the functional changes brought about by acute and chronic exercise.

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)
This course will acquaint the student with some of the techniques used for the study of 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 602, or permission of instructor.

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.

509 National Security Policy. (3)
Substance and processes of strategy and policy-making; relationship of power to foreign policy. PREQ: 231 or permission of instructor.

511 Civil Rights and Liberties. (3)
Judicial interpretation of First Amendment freedoms, rights of the accused, and rights of racial minorities.

521 Political and Organizational Leadership. (3)
The 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.

549 Political Socialization. (3)
Social and psychological processes related to the development of political values and ideas.
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)  
The theory and practice related to self-understanding, problem-solving, and interpersonal relationships. PREQ: 250 and 6 hours of psychology or permission of instructor.

512 Attitudes and Public Opinion. (3)  
Attitude structure and functions; attitude-behavior controversy; attitude change; public opinion and mass communication; diffusion of innovations. PREQ: 310 or permission of instructor.

515 Community Psychology. (3)  
The application of psychological, social, and ecological principles and theories to settings in community life. PREQ: 250 or permission of instructor.

526 Death and Dying. (3)  
The 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 human 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)  
A 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)
The etiology, characteristics, assessment, and treatment of deviation; learning difficulties, behavioral and psychotic disorders, and special 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.

612 Group Dynamics. (3)
Dynamic processes in social facilitation, crowding, de-individuation, social influence, leadership, group performance, and group decision making. 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.

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. (1)
Experimental designs, literature review, and scientific writing styles; planning and writing a research proposal. PREQ: 651.

661 Psychological Assessment I. (4)
The 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.

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. (3)
Theory and practice of psychotherapy; neo-Freudian, non-directive and reality therapy; supervised problems. PREQ: Admission to 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)
A 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)
684 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.

699 Thesis. (3, R6)

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.

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)

503 Reading Conference I, II. (2, 2)  
PREQ: 3 hours in reading coursework or teaching experience. S/U grading.

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 Developmental Reading Instruction for the Middle Grades. (3)  
Methods and materials for teaching developmental reading in the middle grades.

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 Reading Diagnosis and Correction. (4)  
Evaluation and diagnosis of reading problems; supervised experience in corrective  
reading. PREQ: 533 or 543 or 553.

641 Investigation and Research in Teaching Reading. (3)  
PREQ: EDCI 602 and 9 hours in reading courses.

651 Clinical Procedures in Remedial Reading. (3)  
Evaluation and diagnosis of severe reading problems; supervised practicum. PREQ:  
573.

660 Reading Programs in Two-Year Colleges. (3)  
Analysis of reading programs in two-year institutions; the role of the reading specialist.  
PREQ: 553 and 573. 2 Lecture, 2 Lab.

661 Developmental Reading. (3)  
Comparative study of 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)  
The psychological foundations of reading; history of reading instruction. PREQ: G  
Certificate 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 certificate 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 certificate in  
reading or permission of instructor. 2 Lecture, 2 Lab.

740 Projects in Reading Research. (3)  
Initiating, conducting, and analyzing a research project. PREQ: G certificate 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 certificate in reading or permission of instructor.

780 Independent Study in Reading Education. (3)  
PREQ: G certificate 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 certificate 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.

Secondary Education (EDSE)

586 Internship in a Second Teaching Area. (3)
Supervised experience for certification in a second teaching area.

680 Independent Study in Secondary Curriculum. (1, 1)
681 PREQ: Approval of department head.

Social Sciences (SSC)

514 Cross-Cultural Communications. (3)
Cultural differences affecting communication between Americans and others. PREQ: Permission of instructor.

Social Work (SOCW)

593 Topics in Social Work. (1-3, R6)

Sociology (SOC)

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.

514 (ANTH 514) Minority Groups. (3)
Relations between dominant and subordinate races and ethnic groups; historical and comparative aspects; Blacks, Chicanos, and Indians.

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 the context of 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.

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.

504 Educational Programs for Students with Behavior 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.

531 The Physically Handicapped Child. (3)
Social, psychological, and medical problems related to children with physical disabilities.

550 The Gifted Child. (3)
Characteristics, problems, and special needs of gifted and talented children and youth.

551 Teaching the Gifted Student. (3)
Approaches under common administrative structures and in ideal settings; applications of learning theories.

552 Social Populations in Gifted Education. (3)
Problems involving able children with various educational limitations; emphasis on bright-average as well as highly gifted children.

560 Structure and Function of the Eye. (2)
Visual perception and perceptual development; demonstrations and practice in visual screening.

561 Methods of Teaching the Visually Impaired. (2)
The use of braille, readers, and other devices.

562 Orientation and Mobility of the Visually Impaired. (2)
Theory supported by practicum experiences.

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.

604 Current Issues in Special Education. (3)
Investigation and interpretation of educational issues in special education.

629 Educational Programs for Students with Mental Retardation. (3)
The study of educational programs and services for students with mental handicaps.

630 Teaching Students with Mild to Moderate Mental Retardation. (3)
Objectives, methods, and materials for students with mild to moderate mental retardation. PREQ: 629 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)
Analysis of one program model in depth; development of instructional strategies from this approach; examination of interdisciplinary approaches to treatment. PREQ: 504; PSY 574 or permission of advisor.

687 Practicum in Special Education. (1-3, R3 each course)
Supervised experience in a school or clinical setting. PREQ: Written application; approval of instructor and adviser.

Speech and Theatre Arts (STA)

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

595 STA Seminar. (3)

Therapeutic Recreation (TR)

570 Personal Growth through Outdoor Adventure. (3)
Strategies and techniques for conducting individual and group initiatives, values clarification sessions, and environmental awareness exercises in an outdoor setting. Field trips required. 2 Lecture, 2 Lab.
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 multicampus 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 eighteenth 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 black 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 Women's College (now the University of North Carolina at Greensboro). The new multicampus 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.

Board of Governors

Samuel H. Poole, Chairman ................................................................. Raleigh
W. Travis Porter, Vice-Chairman ...................................................... Research Triangle Park
Charles Z. Flack, Jr., Secretary ......................................................... Forest City
Roderick D. Adams ........................................................................ Durham
Mark L. Bibbs .................................................................................. Carrboro
Lois G. Britt ........................................ Mount Olive
C. C. Cameron ....................................... Charlotte
Philip G. Carson* .................................. Asheville
J. Earl Danieley ..................................... Elon College
Walter R. Davis ..................................... Kitty Hawk
Charles D. Evans ................................... Manteo
John A. Garwood ................................... North Wilkesboro
R. Phillip Haire ................................... Sylva
Alexander M. Hall ................................ Wilmington
James E. Holshouser, Jr.* ......................... Southern Pines
Wallace N. Hyde ................................... Raleigh
Robert L. Jones* ................................... Raleigh
John R. Jordan, Jr.* ................................ Raleigh
Betty R. McCain .................................... Wilson
Reginald F. McCoy ................................ Laurinburg
Martha F. McNair ................................... Winston-Salem
D. Samuel Neill .................................... Hendersonville
Ellen S. Newbold .................................... Rose Hill
Maxine H. O’Kelley ................................ Burlington
J. Ward Purrington ................................ Raleigh
Marshall A. Rauch ................................... Gastonia
Benjamin S. Ruffin ................................ Winston-Salem
Maceo A. Sloan ..................................... Durham
Asa T. Spaulding, Jr. ............................... Raleigh
Joseph H. Stallings ................................ Raleigh
Thomas F. Taft ...................................... Greenville
H. Patrick Taylor, Jr. .............................. Wadesboro
Priscilla P. Taylor ................................ Greensboro
Joseph E. Thomas .................................. New Bern
Harold H. Webb .................................... Raleigh
Barbara D. Wills-Duncan .......................... Raleigh
Ruth Dial Woods .................................... Lumberton

*Emeriti

General Administration
C.D. Spangler, Jr., B.S., M.B.A., D.H.L., LL.D. ........................................ President
Raymond H. Dawson, B.A., M.A., Ph.D. ........................................... Vice-President, Academic Affairs
Roy Carroll, B.A., M.A., Ph.D. ..............................................Vice-President, Planning
Nathan Simms, Jr., B.S., M.S., Ph.D. .....................Vice-President, Student Services and Special Programs
L. Felix Joyner, A.B. ..........................................................Vice-President, Finance
Jasper D. Memory, B.S., Ph.D. .........................Vice-President, Research and Public Service
Wyndham Robertson, A.B. .................................Vice-President, Communications
Jay M. Robinson, B.S., M.A., Ed.D. .....................Vice-President, Public Affairs
David G. Martin, B.A., LL.D. .................................Secretary of the University
Richard H. Robinson, Jr., A.B., LL.B. ....................Assistant to the President

REGISTER/WESTERN CAROLINA UNIVERSITY

Western Carolina University is one of the sixteen constituent members of The University of North Carolina. There are undergraduate schools of Applied Sciences, Arts and Sciences, Business, Education and Psychology, and 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 certification of school principals and superintendents in 1965.

The graduate division was replaced in 1967 by the present Graduate School.

Board of Trustees
William F. Forsyth, Chairman ........................................Murphy
Orville D. Coward, Vice-Chairman ...............................Sylva
Alan Allman, Secretary ....................................................Penrose

Terms Expiring in 1993
Charles E. Cagle .........................................................Sylva
Orville D. Coward .......................................................Sylva
William F. Forsyth .......................................................Murphy
W.D. McKee, Jr. .........................................................Cashiers
Charles Pine .............................................................Asheville
Kenneth F. Wilson ......................................................Waynesville

Terms Expiring in 1995
Levern H. Allen ........................................................Silver Spring, MD
Alan D. Allman ........................................................Penrose
Mollie G. Blankenship ...............................................Cherokee
R. Scott Lindsay .............................................. Murphy
Jim L. Moore .............................................. Sylva
Stephen W. Woody ........................................ Asheville

Ex Officio
John Connett .............................................. Statesville

Academic and Administrative Officers*
Myron L. Coulter .............................................. Chancellor
Judy H. Dowell .............................................. Assistant to the Chancellor
Charles Ambrose ............................................ Special Assistant to the Chancellor
John H. Wakeley ............................................ Vice-Chancellor for Academic Affairs
Judith M. Stillion ............................................ Associate Vice-Chancellor for Academic Affairs
Michael E. Malone ........................................... Assistant Vice-Chancellor for Academic Affairs
James E. Dooley ............................................ Vice-Chancellor for University Services
Glenn W. Stillion ............................................ Vice-Chancellor for Student Development
C. Joseph Carter ............................................ Vice-Chancellor for Business Affairs
Anthony A. Hickey ........................................... Dean, Research and Graduate Studies
Steven P. Yurkovich ........................................ Associate Dean, Research and Graduate Studies
Kathleen M. Owen ........................................... Assistant to the Graduate Dean
Harry E. Ramsey ........................................... Assistant to the Chancellor for WCU Programs in Asheville
Clifford R. Lovin ........................................... Dean, School of Arts and Sciences
J.C. Alexander, Jr. ........................................... Associate Dean, School of Arts and Sciences
John F. McCready ........................................... Dean, School of Business
Gurney E. Chambers ......................................... Dean, School of Education and Psychology
Marilyn E. Feldmann ....................................... Associate Dean, School of Education and Psychology
J. Dale Pounds ............................................... Dean, School of Applied Sciences
Noelle L. Kehrberg ......................................... Associate Dean, School of Applied Sciences
Diana M. Henshaw .......................................... Dean, Continuing Education and Summer School
John C. Deupree .............................................. Registrar
Ellerd M. Hulbert .......................................... Director of International Development
Jennifer Williams ........................................... Minority Student Adviser
Richard R. Cameron ...................................... Director, Veterans Affairs; International Student Adviser
Bonita S. Jacobs ........................................... Dean, Student Development
W. Glenn Hardesty ......................................... Director, Financial Aid
William J. Kirwan .......................................... University Librarian
A. Douglas Reed ............................................ Director, Public Information
Donald O'Neal ................................................................. Director, Health Services
Arthur Eugene McAbee .................................................. Director, Public Safety

* Only officers thought to be of special interest to graduate students are listed. See General Catalog for complete listing.

The Graduate School
Anthony A. Hickey, Dean ................................................. Steven P. Yurkovich, Associate Dean

Graduate Council
Anthony A. Hickey, Chairman

Davia M. Allen ........................................ Joseph B. Klerlein .......... Linda Reida
C. Dale Carpenter ........................................ Scott W. Minor ............... Austin H. Spencer
Walter E. Foegelle ........................................ Allen M. Moore .............. James C. Taylor*
J. Richard Gentry ........................................ James M. Morrow .......... C. Claude Teagarden

*Graduate Student member
REGISTER/GRADUATE FACULTY

SCHOOL OF ARTS AND SCIENCES

Department of Art

Bill Buchanan
Assistant Professor of Art. M.F.A., University of Alabama

Joan Falconer Byrd
Associate Professor of Art. M.F.A., University of Wisconsin-Madison

Robert Godfrey
Professor and Head, Department of Art. M.F.A., Indiana University

Cathryn Griffin
Assistant Professor of Art. M.F.A., Yale University

Jon Charles Jicha
Associate Professor of Art. M.F.A., Kent State University

Lois Petrovich-Mwaniki
Assistant Professor of Art. Ph.D., Purdue University

James E. Smythe
Professor of Art. M.F.A., Virginia Commonwealth University

James P.W. Thompson
Assistant Professor of Art. Ph.D., University of North Carolina at Chapel Hill

Department of Biology

Richard Conrad Bruce
Professor of Biology; Director, Highlands Biological Station. Ph.D., Duke University

Frederick Alexander Coyle
Professor of Biology. Ph.D., Harvard University

Frederick Williams Harrison
Professor of Biology. Ph.D., University of South Carolina

Roger H. Lumb
Professor and Head, Department of Biology. Ph.D., University of South Carolina

Henry Richard Mainwaring
Associate Professor of Biology. Ph.D., University College of Wales at Aberystwyth

Allen Murdoch Moore
Associate Professor of Biology. Ph.D., University of Texas at Austin

Jack Daniel Pittillo
Professor of Biology. Ph.D., University of Georgia

James William Wallace, Jr.
Professor of Biology. Ph.D., University of Texas at Austin

Jerry Lee West
Professor of Biology. Ph.D., North Carolina State University at Raleigh

Department of Chemistry and Physics

John Roger Bacon
Professor of Chemistry. Ph.D., University of Iowa

Richard C. Berne
Professor and Head, Department of Chemistry and Physics. Ed.D., University of Virginia
David J. Butcher  
Assistant Professor of Chemistry. Ph.D., University of Connecticut

Paul A. Heckert  
Associate Professor of Physics. Ph.D., University of New Mexico at Albuquerque

F. Glenn Liming, Jr.  
Associate Professor of Physics. Ph.D., Duke University

Gene Franklin Morris  
Associate Professor of Chemistry. Ph.D., Kansas State University

Gary Lee Pool  
Professor of Chemistry. Ph.D., University of Wyoming

Frank Thomas Prochaska  
Associate Professor of Chemistry. Ph.D., University of California-Berkeley

Edwin George Vassian  
Professor of Chemistry. Ph.D., University of Missouri

Royce Stanley Woosley  
Professor of Chemistry. Ph.D., Ohio University

Department of Communication and Theatre Arts

Joseph C. Alexander, Jr.  
Associate Dean, School of Arts and Sciences; Associate Professor of Communication and Theatre Arts. Ph.D., Ohio University

Department of English

James Clyde Addison  
Associate Professor of English. Ph.D., University of Tennessee

Richard L. Boyer  
Assistant Professor of English. M.F.A., University of Iowa

James Edwin Byer  
Associate Professor of English. Ph.D., Duke University

Ralph Stevens Eberly  
Associate Professor of English. Ph.D., University of Michigan

Harold F. Farwell, Jr.  
Associate Professor of English. Ph.D., University of Wisconsin-Madison

William R. Higgins  
Associate Professor of English. Ph.D., Tulane University

Marillyn M. Jody  
Professor of English. Ph.D., Indiana University

Nancy Carol Joyner  
Professor of English. Ph.D., University of North Carolina at Chapel Hill

Dennis Joseph McKevlin  
Associate Professor of English. Ph.D., University of New Mexico

Joseph Avery Melges  
Associate Professor of English. Ph.D., University of Florida

Gayle H. Miller  
Assistant Professor of English. Ph.D., University of Georgia
J. Karl Nicholas  
Professor and Head, Department of English. Ph.D., University of Southern California

James R. Nicholl  
Professor of English. Ph.D., University of Texas at Austin

Phillip Tyree Wade  
Professor of English. Ph.D., University of North Carolina at Chapel Hill

**Department of Geosciences and Anthropology**

Patrick George Morris  
Associate Professor of Anthropology. Ph.D., University of California-Berkeley

Jeffrey W. Neff  
Associate Professor of Geosciences. Ph.D., University of Tennessee

Steven Peter Yurkovich  
Associate Dean, Research and Graduate Studies; Professor of Geology. Ph.D., Brown University

**Department of History**

William L. Anderson  
Professor of History. Ph.D., University of Alabama

John Luther Bell, Jr.  
Professor of History. Ph.D., University of North Carolina at Chapel Hill

H. Tyler Blethen III  
Professor of History; Director, Mountain Heritage Center. Ph.D., University of North Carolina at Chapel Hill

David R. Dorondo  
Assistant Professor of History. Ph.D., University of Oxford

James A. Lewis  
Creighton Sossamon Professor of History; Coordinator of Social Science Program. Ph.D., Duke University

Clifford Ramsey Lovin  
Dean, School of Arts and Sciences; Professor of History. Ph.D., University of North Carolina at Chapel Hill

Gerald Schwartz  
Professor of History. Ph.D., Washington State University

Brian George Joseph Walton  
Associate Professor of History. Ph.D., Vanderbilt University

Max Ray Williams  
Professor of History. Ph.D., University of North Carolina at Chapel Hill

Curtis W. Wood, Jr.  
Professor and Head, Department of History; Senior Research Associate, Mountain Heritage Center. Ph.D., University of North Carolina at Chapel Hill

**Department of Mathematics and Computer Science**

John Martin Baker  
Associate Professor of Mathematics. Ph.D., Florida State University

Abdulkader O. Barbir  
Assistant Professor of Mathematics and Computer Science. Ph.D., Louisiana State University
James Ralph DeVane  
Associate Professor of Mathematics; Director, Center for Mathematics and Science Education.  Ed.D., University of Georgia

James Michael Dolan  
Associate Professor of Mathematics.  Ph.D., University of Tennessee

Joseph B. Klerlein  
Professor and Head, Department of Mathematics and Computer Science.  Ph.D., Vanderbilt University

Shanmugasadasivam Manickam  
Professor of Mathematics.  Ph.D., University of Toronto

James R. Marshall  
Associate Professor of Mathematics.  M.S., University of Illinois

Nicholas Norgaard  
Assistant Professor of Mathematics.  Ph.D., University of Georgia

Richard L. Stephens  
Assistant Professor of Mathematics.  Ph.D., University of South Florida

David Boyce Teague  
Associate Professor of Mathematics.  Ph.D., North Carolina State University at Raleigh

Dan Bascom Wells  
Associate Professor of Mathematics.  M.S., University of Kentucky

Department of Music  

Maxie E. Beaver  
Associate Professor of Music.  Ed.D., University of North Carolina at Greensboro

Betsy Clifford Farlow  
Associate Professor of Music.  Ph.D., University of North Carolina at Chapel Hill

Mario A. Gaetano  
Assistant Professor of Music.  D.M.A., Memphis State University

Robert A. Holquist  
Associate Professor of Music.  D.M.A., University of Iowa

Robert Kehrberg  
Associate Professor of Music.  D.A., The University of Northern Colorado

John Thomas West  
Associate Professor of Music; Band Director.  Ph.D., Florida State University

Department of Political Science and Public Affairs  

Cecil Donald Livingston  
Associate Professor of Political Science and Public Affairs.  Ph.D., University of Mississippi

Gordon E. Mercer  
Professor and Head, Department of Political Science and Public Affairs.  Ph.D., University of Florida

Charles Joseph Stevens  
Associate Professor of Political Science and Public Affairs.  Ph.D., Duke University

Department of Social Work and Sociology  

Wilburn Hayden, Jr.  
Associate Professor and Head, Department of Social Work and Sociology.  Ph.D., University of Toronto
Anthony Andrew Hickey  
Dean, Research and Graduate Studies; Professor of Sociology. Ph.D., Cornell University  

Homer Edward Price, Jr.  
Associate Professor of Sociology. Ph.D., University of California-Berkeley

SCHOOL OF BUSINESS

Department of Accounting and Information Systems

John Alan Beegle  
Professor of Accounting. Ph.D., St. Louis University  

James W. Cartland  
Associate Professor of Accounting and Information Systems. Ph.D., University of Georgia  

JoAnn C. Carland  
Associate Professor of Computer Information Systems. Ph.D., University of Georgia  

C. Claude Teagarden  
Associate Professor and Head, Department of Accounting and Information Systems. J.D., University of Illinois

Department of Administrative Services

Retha Hoover Kilpatrick  
Professor and Head, Department of Administrative Services. Ed.D., University of Georgia  

John Franklynn McCreary  
Dean, School of Business; Professor of Business Education. Ed.D., University of Tennessee  

Rita Thomas Noel  
Assistant Professor of Administrative Services. Ph.D., University of Tennessee

Department of Economics and Finance

William Larry Boyd  
Professor and Head, Department of Economics and Finance. Ph.D., Texas A & M University  

Patrick A. Hays  
Associate Professor of Finance. Ph.D., University of North Carolina at Chapel Hill  

Stephen B. Jarrell  
Professor of Economics and Finance. Ph.D., Purdue University  

Heydar Pourian  
Associate Professor of Finance. Ph.D., University of Wisconsin-Milwaukee  

Austin H. Spencer  
Professor of Economics and Finance. Ph.D., Indiana University

Department of Management and Marketing

John R. Adams  
Professor of Management. Ph.D., Syracuse University  

Myron J. Leonard  
Professor of Marketing. Ph.D., University of Georgia  

Stephen D. Owens  
Associate Professor of Management. Ph.D., North Texas State University
Francis M. Webster
Associate Professor of Management. Ph.D., Michigan State University

SCHOOL OF EDUCATION AND PSYCHOLOGY

Department of Administration, Curriculum, and Instruction

Lawrence Hinkle Arney
Associate Professor of Higher Education; Director, Cherokee Center. Ed.D., University of Florida

Donald M. Chalker
Head, Department of Administration, Curriculum, and Instruction; Associate Professor of Education. Ed.D., Wayne State University

Gurney Ernest Chambers
Dean, School of Education and Psychology; Professor of Education. Ph.D., George Peabody College for Teachers

William A. Claus
Associate Professor of Education; Director, Office for Rural Education. Ph.D., University of Miami

Lewis Edward Cloud
Professor of Education. Ed.D., Ball State University

Marilyn E. Feldmann
Associate Dean, School of Education and Psychology; Assistant Professor of Education. Ph.D., Illinois State University

Richard M. Haynes
Assistant Professor of Education. Ph.D., Duke University

Mary Jean Ronan Herzog
Assistant Professor of Education. Ed.D., University of Tennessee

John Casey Hurley
Assistant Professor of Education. Ph.D., University of Wisconsin

John W. McFadden, Jr.
Associate Professor of Education. Ed.D., University of Florida

Robert Beasley Pittman
Professor of Education. Ph.D., University of North Carolina at Chapel Hill

Joe Daniel Walters
Associate Professor of Education. Ed.D., University of Florida

Department of Elementary Education and Reading

Barbara H. Capps
Associate Professor of Elementary Education. Ph.D., Indiana University

Judith E. Clausc
Assistant Professor of Elementary Education. Ph.D., University of Arizona

Myron L. Coulter
Chancellor; Professor of Education. Ed.D., Indiana University

Richard Scott Craddock
Professor of Elementary Education. Ed.D., Duke University

Clarence Joe DelForge, Jr.
Associate Professor of Elementary Education. Ed.D., North Texas State University
John Richard Gentry
Professor of Elementary Education. Ph.D., University of Virginia

Lester L. Laminack
Associate Professor of Elementary Education. Ed.D., Auburn University

Eleanor W. Lofquist
Associate Professor of Elementary Education. Ed.S., Western Carolina University

Jane C. Perlmutter
Assistant Professor of Elementary Education. Ed.D., University of Georgia

George M. Schuncke
Professor and Head, Department of Elementary Education and Reading. Ph.D., Stanford University

Department of Health, Physical Education, and Recreation

Susan C. Brown
Assistant Professor of Health, Physical Education, and Recreation. Ph.D., Ohio State University

James G. Bryant, Jr.
Associate Professor of Health, Physical Education, and Recreation. Ed.D., George Peabody College for Teachers

Robert Glenn Ray
Professor and Head, Department of Health, Physical Education, and Recreation. Ed.D., University of Georgia

Charles Willard Schrader
Professor of Health, Physical Education, and Recreation. Ed.D., Auburn University

Otto Hugh Spilker
Professor of Health, Physical Education, and Recreation. P.E.D., Indiana University

Department of Human Services

Ellen Hedrick Bacon
Associate Professor of Special Education. Ph.D., University of North Carolina at Chapel Hill

Lisa A. Bloom
Assistant Professor of Special Education. Ph.D., West Virginia University

C. Dale Carpenter
Professor of Special Education. Ed.D., Auburn University

Mary D. Deck
Assistant Professor of Counselor Education. Ph.D., University of Virginia

Arthur Michael Dougherty
Professor and Head, Department of Human Services. Ph.D., Indiana State University

Larry B. Grantham, Jr.
Associate Professor of Education. Ph.D., University of Southern Mississippi

James J. Kirk
Assistant Professor of Education. Ed.D., Northern Illinois University

James Mack Morrow, Jr.
Professor of Counselor Education. Ph.D., University of North Carolina at Chapel Hill

Robert Mitchell Rigdon
Professor of Counselor Education. Ed.D., University of Georgia
Yvonne N. Saddler  
Assistant Professor of Education. Ed.S., University of Georgia

David A. Shapiro  
Associate Professor of Education. Ph.D., Indiana University

Department of Psychology

William L. Chovan  
Professor of Psychology. Ph.D., Case Western Reserve University

Bruce B. Henderson  
Professor and Head, Department of Psychology. Ph.D., University of Minnesota

Harold A. Herzog, Jr.  
Professor of Psychology. Ph.D., University of Tennessee

David M. McCord  
Assistant Professor of Psychology. Ph.D., University of Alabama

Eugene E. McDowell III  
Professor of Psychology. Ph.D., University of North Carolina at Chapel Hill

Scott W. Minor  
Professor of Psychology. Ph.D., Virginia Commonwealth University

Mildred K. Randolph  
Assistant Professor of Psychology. Ph.D., University of South Carolina

Judith Morton Stillion  
Associate Vice-Chancellor for Academic Affairs; Professor of Psychology. Ph.D., University of Alabama

John H. Wakeley  
Vice-Chancellor for Academic Affairs; Professor of Psychology. Ph.D., Michigan State University

Mary S. Wheeler  
Assistant Professor of Psychology. Ph.D., Georgia State University

Hedy J. White  
Associate Professor of Psychology. Ph.D., Claremont Graduate School

SCHOOL OF APPLIED SCIENCES

Department of Health Sciences

Thomas Francis Connelly, Jr.  
Associate Professor of Health Sciences. Ed.D., University of Kentucky

Walter Edward Foegelle  
Associate Professor of Health Sciences. Ed.D., Indiana University

Scott E. Higgins  
Associate Professor of Health Sciences. Ph.D., University of South Carolina
Department of Criminal Justice
Ellis Duane Davis
Professor of Criminal Justice. Ph.D., University of Southern Mississippi

William Douglas Hyatt
Associate Professor of Criminal Justice. L.L.M., Georgetown University

Department of Human Environmental Sciences
Davia M. Allen
Associate Professor and Head, Department of Human Environmental Sciences. Ph.D., University of South Carolina

Barbara Anne Cosper
Associate Professor of Human Environmental Sciences. Ph.D., Kansas State University

Judy H. Dowell
Assistant to the Chancellor; Professor of Human Environmental Sciences. Ph.D., Florida State University

Jane S. Hall
Assistant Professor of Human Environmental Sciences. Ph.D., University of Tennessee

Noelle L. Kehrberg
Associate Dean, School of Applied Sciences; Professor of Human Environmental Sciences. Ph.D., Virginia Polytechnic Institute and State University

Sandra D. Skinner
Assistant Professor of Human Environmental Sciences. M.B.A., Bowling Green State University

Department of Industrial and Engineering Technology
Aaron K. Ball
Associate Professor of Industrial and Engineering Technology. Ed.D., Virginia Polytechnic Institute and State University

Jerry Lee Cook
Professor of Industrial and Engineering Technology. Ed.D., University of Tennessee

J. Dale Pounds
Dean, School of Applied Sciences; Professor of Industrial and Engineering Technology. M.S.C.E., Purdue University

James D. Turner
Associate Professor of Industrial and Engineering Technology. Ph.D., Clemson University

AFFILIATE GRADUATE FACULTY MEMBERS
Louis Alexander, Department of Chemistry and Physics
Charles M. Ambrose, Department of Administration, Curriculum, and Instruction
Elizabeth Barnhardt, Department of Chemistry and Physics
Linda S. Bowers, Department of Human Services
Leslie O. Gant, Department of Human Services
Sherry B. Hayes, Department of Human Services
Gilbert Leebrick, Department of Biology
Nina Marable, Department of Human Environmental Sciences
John C. Morse, Department of Biology
Franklin Parker, Department of Administration, Curriculum, and Instruction
Ronald H. Peterson, Department of Biology
Jane Schulz, Department of Human Services
Barbara S. Smith, Department of Administration, Curriculum, and Instruction
Peter S. White, Department of Biology
Olin R. Wood, Department of Administration, Curriculum, and Instruction
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.
INDEX

Academic and Administrative Officers, 96
Academic Appeals Procedure, 28
Academic Dismissal, 24
Academic Regulations, 23
Accounting, 50
Accreditation, 16
Administration, 16
Admissions, 29
Admission and Degree Requirements, 29
Admission Requirements, 31
American History, 36
Anthropology, 51
Appeal Procedure, 24
Application Fee, 19
Application Procedure, 29
Applied Mathematics, 37
Art, 51
Art Education, 36
Arts and Sciences Interdisciplinary, courses 53
Asheville Programs, 12
Astronomy, 53
Auditing, 24
Behavioral Disorders, 44
Biochemistry Program, 38
Biology, 37, 53
Board of Governors, 93
Board of Trustees, 95
Bookstore, 11
Bureau of Educational Research and Development, 15
Business Administration, 55
Business Law, 55
Calendar, 2
Career and Planning and Job Placement, 10
Categories of Admission, 29
Center for Improving Mountain Living, 14
Certificates of Advanced Study, 33, 48
Certification, 34
Changes in Requirements and Regulations, 35
Chemistry, 38, 55
Child Development/Family Relations, 56
Class Attendance, 23
Clothing, Textiles, and Merchandising, 57
Communication and Theatre Arts, 92
Communication Disorders, 38, 57
Comprehensive Examinations, 34
Computer Center, 15
Computer Information Systems, 58
Computer Science, 59
Computing Resources, 15
Conduct, Standards of, 26
Continuing Education and Summer School, 13
Continuing Education Units (CEU) Credit, 25
Cooperative Ph.D./Bowman Gray School of Medicine, 38
Counseling and Psychological Services, 10
Counseling, 44, 48, 60
Course Descriptions, 49
Course Loads, 23
Course and Grade Policies, 23
Credit Policies, 25
Credits and Class Meetings, 49
Criminal Justice, 62
Curriculum and Instruction, 43, 46, 62
Degree Outlines, 36
Degree Programs List, 6
Degree Requirements, 29
Developmental Evaluation Center, 15
Dietetics, Preprofessional Practice, 39
Economics, 63
Education and Psychology, 64
Education Specialist Degrees, 33, 46
Educational Administration, 45, 47, 63
Educational Supervision, 45, 47, 65
Elementary Education, 41, 48, 65
English, 37, 68
Environmental Health, 70
Experiential Credit, 25
Faculty and Student Research, 16
Faculty Center for Teaching Excellence, 14
Fees, Expenses, and Financial Aid, 18
Finance, 70
Financial Aid, 21
Food Service Management, 70
Foreign Language Requirement, 34
General Administration, 94
Geography, 70
Geology, 71
Gifted and Talented, 45
Grade Average for Graduation, 24
Grading System, 23
Graduate Assistantships, 20
Graduate Council, 97
Graduate Faculty, 98
Graduate Programs and Degree Outlines, 36
Graduation, Application for, 34
Graduation Attendance, 35
Guest Matriculant, 30
Handicapped Student Services, 28
Health Sciences, 71
Health Services Management and Supervision, 71
Health Services, 10
Higher Education, 72
Highlands Biological Station, 13
History, 73
History, University of North Carolina, 93
Home Economics, 39, 42, 74
Housing, 9
Human Resource Development, 39, 75
Illegal Drug Policy, 26
Incomplete Grades, 23
Industrial Education and Technology, 76
In-Service Education Program, 25
Insurance, 10