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 School Issue is one of the three issues of The Record published by Western Carolina University giving full details of academic programs and regulations. Others in the series are the General Catalog Issue and Summer School Issue.

Copies of the appropriate issues are made available to all students registered at the university, all public and private high schools and institutions of higher learning in North Carolina, high school principals and guidance counselors, and the college and university libraries. Additional copies are available from the Office of Research and Graduate Studies, Western Carolina University, Cullowhee, North Carolina 28723, telephone (704) 227-7398. Seven thousand copies of this public document were printed at a cost of $6,951, or $0.99 per copy.
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GRADUATE SCHOOL CALENDAR

Fall Semester 1990

August 23, Thursday, 3:00-6:00 p.m.
August 26, Sunday
August 27, Monday

August 27, Monday, 4:30-7:00 p.m.
August 28-29, Tuesday-Wednesday, 9:00 a.m.-4:00 p.m.
August 28, Tuesday

August 29, Wednesday
September 1-3, Sat., 5:00 p.m.-Mon.
September 4, Tuesday, 8:00 a.m.
September 24, Monday
October 13-16, Sat., 5:00 p.m.-Tues.
October 17, Wednesday, 8:00 a.m.
October 29, Monday

November 5-16, Monday-Friday

November 21-25, Wed., 2:00 p.m.-Sun.
November 26, Monday, 8:00 a.m.
December 3, Wednesday

December 11, Tuesday
December 12, Wednesday
December 13-19, Thursday-Wednesday
December 20, Thursday

Spring Semester 1991

January 10, Thursday, 3:00-6:00 p.m.
January 13, Sunday
January 14, Monday, 4:30-7:00 p.m.
January 14, Monday, 9:00 a.m.-4:00 p.m.

January 14, Monday, 6:00 p.m.

January 15, Tuesday
January 15-18, Tuesday-Friday
January 21, Monday
February 15, Friday
March 2-10, Sat., 5:00 p.m.-Sun.
March 11, Monday, 8:00 a.m.
March 22, Friday

March 29-31, Fri., 8:00 a.m.-Sunday
April 1, Monday, 8:00 a.m.
April 1-12, Monday-Friday
April 26, Friday

Registration in Asheville
Registration in Cullowhee for new and readmitted students
Registration in Asheville continues
Registration continues in Cullowhee; schedule changes
All classes in Asheville and evening classes in Cullowhee begin
Day classes in Cullowhee begin
Labor Day holiday
Classes resume
Last day to drop a course with a "W"
Fall holiday
Classes resume
Last 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

A late registration fee of $10.00 will be charged for all classes in Cullowhee.
April 29, Monday

May 3, Friday
May 6-10, Monday-Friday
May 11, Saturday

Summer Term 1991

May 28-August 2
May 28-June 28
July 2-August 2
July 19, Friday

July 22, Monday

August 2, Friday

Fall Semester 1991

August 22, Thursday, 3:00-6:00 p.m.
August 25, Sunday
August 26, Monday, 9:00 a.m.-4:00 p.m.

August 26, Monday, 4:30-7:00 p.m.
August 27-28, Tuesday-Wednesday
  9:00 a.m.-4:00 p.m.
August 27, Tuesday

August 28, Wednesday
August 31-September 2, Saturday, 5:00 p.m.-Monday
September 3, Tuesday, 8:00 a.m.
September 23, Monday
October 12-15, Saturday, 5:00 p.m.-Tuesday
October 16, Wednesday, 8:00 a.m.
October 28, Monday

November 4-15, Monday-Friday
November 27-December 1
  Wednesday, 2:00 p.m.-Sunday
December 2, Monday, 8:00 a.m.
December 4, Wednesday

December 10, Tuesday
December 11, Wednesday
December 12-18, Thursday-Wednesday
December 19, Thursday

Spring Semester 1992

January 9, Thursday, 3:00-6:00 p.m.
January 12, Sunday
January 13, Monday, 4:30-7:00 p.m.

Last day for written results of comprehensive examinations to be submitted to the graduate school for spring commencement
Last day of classes
Final examinations
Commencement

Summer session (ten-week session)
First summer session
Second summer session
Last day for completed theses to be submitted to the graduate school for summer commencement
Last day for written results of comprehensive examinations to be submitted to the graduate school for summer school
Commencement

Registration in Asheville
Residence halls open for all students
Registration in Cullowhee for new and readmitted students
Registration in Asheville continues
Registration continues in Cullowhee; schedule changes
All classes in Asheville and evening classes in Cullowhee begin
Classes in Cullowhee begin
Labor Day holiday

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

Registration in Asheville
Residence halls open
Registration in Asheville continues
January 13, Monday
January 13, Monday, 6:00 p.m.
January 14, Tuesday
January 14-17, Tuesday-Friday
January 20, Monday
February 14, Friday
February 29-March 8, Saturday, 5:00 p.m.-Sunday
March 9, Monday, 8:00 a.m.
March 23, Monday

March 30-April 10, Monday-Friday
April 17-19, Friday, 8:00 a.m.-Sunday
April 20, Monday, 8:00 a.m.
April 24, Friday

April 27, Monday

May 1, Friday
May 4-8, Monday-Friday
May 9, Saturday

Registration in Cullowhee for new, continuing, and readmitted students
Evening classes in Cullowhee begin
Day and evening classes in Asheville begin
Day classes in Cullowhee begin
Late registration 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 spring commencement
Last day for written results of comprehensive examinations to be submitted to the graduate school for spring commencement
Last day of classes
Final examinations
Commencement
<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>
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<td>Biology/M.S.</td>
<td>GRE Gen. &amp; Subj.</td>
<td>Biology</td>
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<td>Biology</td>
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<tr>
<td>Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Biology; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Two-Year College/ M.A.Ed.</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Biology; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Business Administration/ M.B.A.</td>
<td>GMAT</td>
<td>School of Business</td>
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<td>Business</td>
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<tr>
<td>Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Administrative Services; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Chemistry/M.S.</td>
<td>GRE Gen. &amp; Subj.</td>
<td>Chemistry and Physics</td>
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<td>Chemistry</td>
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<td>Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Chemistry and Physics; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Chemistry and Physics; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Counseling</td>
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<tr>
<td>School Counseling/ M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Human Services</td>
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<tr>
<td>Student Personnel Services in Higher Education /M.A.Ed.**</td>
<td>GRE Gen.</td>
<td>Human Services</td>
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<tr>
<td>Community Agency Counseling/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Human Services</td>
</tr>
<tr>
<td>(including programs for persons in programs such as rehabilitation and general agency counseling)</td>
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<tr>
<td>Counseling/C.A.S.**</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Curriculum and Instruction/ M.A.Ed.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</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>
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<tr>
<td>Curriculum and Instruction/ Ed.S.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Areas of specialization include: Biology, Chemistry, Counseling**, Curriculum and Instruction, English, Home Economics, Industrial Education, Reading, Physical Sciences, Social Sciences</td>
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</tr>
<tr>
<td>Educational Administration</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Public School Administration/M.A.Ed.*</td>
<td>Two of: NTE Core, GRE Gen., or MAT</td>
<td>Same as above</td>
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<tr>
<td>Two-Year College/ M.A.Ed.</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Same as above</td>
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<tr>
<td>Public School Administration/Ed.S.*</td>
<td>Two of: NTE Core, GRE Gen., or MAT</td>
<td>Same as above</td>
</tr>
<tr>
<td>Educational Media**</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Elementary Education and Reading; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Educational Supervision</td>
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</tr>
<tr>
<td>Early Childhood (K-4)/ M.A.Ed.<em>/Ed.S.</em></td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Elementary Education and Reading; Administration, Curriculum, and Instruction</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>
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</thead>
<tbody>
<tr>
<td>Intermediate Grades (4-6)/ M.A.Ed.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Same as above</td>
</tr>
<tr>
<td>Middle Grades (6-9)/ M.A.Ed.<em>/Ed.S.</em></td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Same as above</td>
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<tr>
<td>Subject Specialties/ M.A.Ed.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Curriculum-Instruction/ M.A.Ed.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>Instructional Technology Specialist-Computers/ M.A.Ed.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Elementary Education and Reading; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Elementary/Ed.S.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
</tr>
<tr>
<td>General/Ed.S.*</td>
<td>NTE Core &amp; GRE Gen., or MAT</td>
<td>Administration, Curriculum, and Instruction</td>
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<tr>
<td>Elementary Education</td>
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<tr>
<td>Early Childhood (K-4)/ M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Elementary Education and Reading</td>
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<tr>
<td>Intermediate Grades (4-6)/ M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Same as above</td>
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<td>Middle Grades (6-9)/ M.A.Ed.*</td>
<td>GRE Gen.</td>
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<tr>
<td>Early Childhood (K-4)/ Ed.S.*</td>
<td>GRE Gen.</td>
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<td>Intermediate Grades (4-6)/ Ed.S.*</td>
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<tr>
<td>Middle Grades (6-9)/ Ed.S.*</td>
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<tr>
<td>English/M.A.</td>
<td>GRE Gen. &amp; Subj.</td>
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<tr>
<td>English Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>English; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Two-Year College Teaching/M.A.Ed.</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
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<tr>
<td>Health Sciences/M.H.S.</td>
<td>GRE Gen.</td>
<td>School of Nursing and Health Sciences</td>
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<td>History, American/M.A.</td>
<td>GRE Gen. &amp; Subj.</td>
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<tr>
<td>Home Economics/M.S.</td>
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<td>Human Resource Development/ M.S.</td>
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<td>Industrial Arts Education</td>
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<td>Secondary Education/ M.I.E.*</td>
<td>GRE Gen., or NTE Core &amp; Area</td>
<td>Industrial Education and Technology; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Two-Year College Teaching/M.I.E.</td>
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<td>Industrial Technology/M.I.T.</td>
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<tr>
<td>Junior and Community College Teaching/M.A.Ed.</td>
<td>GRE Gen.</td>
<td>Industrial Education and Technology; Subject specialist department; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Mathematics, Applied/M.S.</td>
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<td>Mathematics and Computer Science</td>
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<td>Mathematics Secondary Education/ M.A.Ed.*</td>
<td>GRE Gen. or NTE Core &amp; Area</td>
<td>Administration, Curriculum, and Instruction</td>
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<tr>
<td>Two-Year College Teaching/M.A.Ed. Music/M.A.</td>
<td>GRE Gen.</td>
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<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>
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<tr>
<td>Programs/Degrees</td>
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<td>Physical Education</td>
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<td>Two-Year College</td>
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<td>GRE Gen. or NTE</td>
<td>Chemistry and Physics; Administration, Curriculum, and Instruction</td>
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<td>Two-Year College</td>
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<tr>
<td>Teaching/M.A.Ed.</td>
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<td>Project Management/M.P.M.</td>
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<tr>
<td>Clinical/M.A.</td>
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<tr>
<td>School/M.A.*</td>
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<td>School (Level II)/C.A.S.**</td>
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<td>Psychology</td>
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<tr>
<td>Public Affairs/M.P.A.</td>
<td>GRE Gen.</td>
<td>Political Science and Public Affairs</td>
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<td>Reading Education</td>
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<td>Public School/M.A.Ed.*</td>
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<td>Elementary Education and Reading</td>
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<td>Two-Year College</td>
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<td>Secondary Education/M.A.Ed.*</td>
<td>GRE Gen. or NTE</td>
<td>Subject specialist department; Administration, Curriculum, and Instruction</td>
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<tr>
<td>Core &amp; Area</td>
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<tr>
<td>Social Sciences</td>
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<td>Special Education</td>
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<tr>
<td>Communication Disorders/M.A.Ed.*</td>
<td>GRE Gen.</td>
<td>Human Services</td>
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<td>Communication Disorders/M.S.</td>
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<tr>
<td>Gifted and Talented/M.A.Ed.**</td>
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<tr>
<td>Mental Retardation/M.A.Ed.*</td>
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<tr>
<td>General</td>
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<td>Behavioral Disorders/M.A.Ed.*</td>
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<tr>
<td>Learning Disabilities/M.A.Ed.*</td>
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<tr>
<td>Mental Retardation/M.A.Ed.*</td>
<td>GRE Gen.</td>
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</tbody>
</table>

7
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.

There is airline service to Asheville and regular bus service between Asheville and Sylva. The university provides a bus service between Sylva and Cullowhee for students. Taxi service is also available.

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, Dr. Douglas Davis, 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 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, and Carolina Mountain 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. An ice skating rink, rifle range, and serving kitchen also are available.
GRADUATE STUDY AT
WESTERN CAROLINA UNIVERSITY

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

Western Carolina University is a state-supported co-educational institution with a student body of almost 6,500, 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 ten 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, intermediate education, and early childhood 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, English, health sciences, history, home economics, human resource development, mathematics, music, project management, public affairs, 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, mental retardation, general special education (with concentrations in behavioral disorders, learning disabilities, and mental retardation,) public affairs, social science, 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 early childhood educators, intermediate educators, middle grades educators, principals, superintendents, general supervisors, and curriculum specialists in a number of fields in secondary education. Two-year college programs are available at the master's and Ed.S. levels.

Some of the courses for master's degrees in biology, communication disorders, curriculum and instruction, English, history, home economics, industrial technology, 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 234, Phillips Administration Building, on the campus of the University of North Carolina at Asheville. Additional information is available from Western Carolina University Programs in Asheville, University Heights, UNC-A 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 380,000 books and bound periodical volumes and more than a million units of microform. Approximately 3,000 serial subscriptions are received, including regional, national, and international newspapers. Fifteen thousand volumes and 40,000 microforms are added annually.

As a selective federal depository, the library holds more than 110,000 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 80,000 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 manuscripts and rare books pertaining to the Eastern Band of the Cherokee Indians, western North Carolina and southern Appalachia, wilderness conservation in the eastern mountains, and the behavioral characteristics of spiders, as well as university archives.

The library offers online computer-based bibliographic searching of reference indexes via the DIALOG group of data bases which cover a wide range of subject areas in science, technology, education, social sciences, and business. Interlibrary loan service is available to obtain materials not owned by Hunter Library.

Hunter Library of Western Carolina University and D. Hiden Ramsey Library at the University of North Carolina at Asheville cooperate closely and permit reciprocal lending to students, faculty, and staff. Additionally, Hunter Library provides library materials in the D. Hiden Ramsey Library for Western Carolina University courses and programs offered on the Asheville campus.

**Faculty Center for Teaching Excellence.** The Faculty Center for Teaching Excellence is a catalyst for faculty interaction on teaching. The center sponsors workshops, seminars,
colloquia, and other activities designed to encourage faculty members to exchange ideas and share their expertise on teaching. Underlying all activities is the assumption that frequent interaction inspires good teachers to be at their best. The Center’s ultimate goal is to foster a campus-wide climate that allows teaching excellence to flourish.

**University Writing Center.** A trained staff of faculty, graduate assistants, and peer tutors are 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 AV equipment circulation, instructional materials, production, and equipment maintenance and repair. The Center also has a media classroom for showing a variety of non-print media forms to groups and an area equipped with microcomputers, video and audio cassette players.

**Center for Improving Mountain Living.** The Center for Improving Mountain Living (CIML) channels university resources into technical assistance projects for regional and rural development. Projects focus on improving economic, social, environmental, and cultural conditions in rural mountainous regions. CIML offers workshops and conferences; provides counseling and technical assistance to small businesses and to city and county governments and local development organizations; analyzes information; provides staff for Western North Carolina Tomorrow, a 17-county citizens’ organization; helps strengthen local governments by enabling public officials to get needed training; promotes intergenerational solutions to problems of youth and the aged and provides technical assistance in the delivery of human services. Through CIML, Western Carolina University administers the Center for PVO/University collaboration in Development, an alliance of universities and private voluntary organizations committed to serving the needs of people across the world. The Joint Center manages collaborative Water Harvesting/Aquaculture and On Farm Seed Technology Projects funded by the Agency for International Development.

**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 Health Services and Council on Developmental Disabilities, North Carolina Department of Human Resources, Smoky Mountain Area Mental Health, 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 is an agency of the School of Education and Psychology. The bureau coordinates the 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 50 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 the basement of Hunter Library are two additional computing laboratories. The microcomputer laboratory has thirty-five computer terminals and the VAX terminal laboratory has twenty-three computer terminals available for student use. Access is gained through the basement of Stillwell Science building.

An eight-station microcomputer area is located in Hunter Library for student use.

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 VAX 11/780 computers and one VAX 8530. These computers operate under the VAX/VMS operating system, supporting batch and interactive computing simultaneously. There is a total of 256 terminal ports available. The three systems are linked together using Ethernet and DECnet.

Each of the VAX 11/780 systems has 1,024 megabytes of disk storage and two tape drives. The VAX 8530 system has 2,280 megabytes of disk storage and one tape drive. Three printers can be switched between the systems. Software programming language include Basic,
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, BITNET, USENET, etc.) are available through an intercampus network called LINCNET. WCU is a BITNET 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 action of 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. Temporarily located in Madison Hall on the university campus, the center is expected to move in 1990 to a new $7 million facility now under construction on N.C. 107 on the western side of the campus. The center is 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 Psychological Association
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 1990-91 academic year. The university reserves the right to alter any charges without prior notice upon direction from appropriate governing authorities.

Fees Per Semester

**Full-time Graduate Student**

<table>
<thead>
<tr>
<th>Tuition and Academic Fees</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina Student</td>
<td>$260.00</td>
</tr>
<tr>
<td>Out-of-State Student</td>
<td>$2,446.00</td>
</tr>
<tr>
<td>*Required Fees</td>
<td>$282.00</td>
</tr>
</tbody>
</table>

**Room**

| Room                     | $590.00 |

**Board (Required of all residence hall students)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15 meals per week</td>
<td>$465.00</td>
</tr>
<tr>
<td>21 meals per week</td>
<td>$500.00</td>
</tr>
</tbody>
</table>

**Totals:**

**Day Student**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina rate</td>
<td>$542.00</td>
</tr>
<tr>
<td>Out-of-State rate</td>
<td>$2,728.00</td>
</tr>
</tbody>
</table>

**Residence Hall Boarding Student**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina rate</td>
<td></td>
</tr>
<tr>
<td>15 meals per week</td>
<td>$1,597.00</td>
</tr>
<tr>
<td>21 meals per week</td>
<td>$1,632.00</td>
</tr>
<tr>
<td>Out-of-State rate</td>
<td></td>
</tr>
<tr>
<td>15 meals per week</td>
<td>$3,783.00</td>
</tr>
<tr>
<td>21 meals per week</td>
<td>$3,818.00</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>82.95</td>
<td>629.95</td>
</tr>
<tr>
<td>2</td>
<td>100.90</td>
<td>647.90</td>
</tr>
<tr>
<td>3</td>
<td>183.85</td>
<td>1,276.85</td>
</tr>
<tr>
<td>4</td>
<td>201.80</td>
<td>1,294.80</td>
</tr>
<tr>
<td>5</td>
<td>219.75</td>
<td>1,312.75</td>
</tr>
<tr>
<td>6</td>
<td>302.70</td>
<td>1,942.70</td>
</tr>
<tr>
<td>7</td>
<td>320.65</td>
<td>1,960.65</td>
</tr>
<tr>
<td>8</td>
<td>338.60</td>
<td>1,978.60</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**

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application fee (explained below)</td>
<td>$15.00</td>
</tr>
<tr>
<td>Cap, gown, and hood</td>
<td>Obtained through WCU Bookstore</td>
</tr>
<tr>
<td>Late registration fee</td>
<td>$10.00</td>
</tr>
<tr>
<td>Cooperative Education fee (work semesters only)</td>
<td>$30.00</td>
</tr>
</tbody>
</table>

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, $67.00; Recreation and Cultural, $51.00; Athletics, $69.50; Athletic Facilities, $16.00; University Center, $58.50; Graduate fee, $18.00; 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 $15.00 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 $15.00 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 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 $1,000 to $5,000 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 normally will be expected to be registered as full-time students and must maintain a grade point average of 3.0 on all graduate work attempted. Exceptions must be approved by the dean of research and graduate studies. In order to have a graduate assistantship, the student 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 $4,500 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/she claims that he/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 advisor, 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 QPR) 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. Any student who accumulates more than three course grades below B, or more than nine semester hours of grades below B, will automatically be dismissed from the graduate school. Students who have been admitted provisionally and fail to meet the terms of their 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. Students may appeal the dismissal action to the Graduate Council.

Course Repeat Policy. A graduate student may repeat any course one time, with the approval of the adviser, department head, and dean of research and graduate studies. The original grade earned in the repeated course remains on the student's transcript and is calculated in the student's cumulative average. If a degree credit course is repeated in which the student earned an F and a second F is earned, the student is automatically eliminated as a candidate for a graduate degree.

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 an accredited institution for graduate credit.

Graduate students who have been admitted to graduate school may enroll at other 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 QPR.

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 director 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 continue 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, methaqualone), 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 that 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 $15.00 non-refundable application processing fee and (2) arrange to have letters of recommendation, official test scores, as required for the program selected, and two 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 $15.00 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 graduate work. In order to move from provisional status to regular degree status, students must earn a 3.0 QPR in their first 12 semester hours of graduate credit or the first term of full-time study (9 hours or more). If a provisional student earns less than a 3.0 QPR, the offer of admission to the graduate school will be withdrawn.

Special Admission. Students may 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 their application an unofficial transcript from an accredited institution. A maximum of 12 semester hours with grades of B or better earned as a special graduate student may be approved for transfer toward a degree. 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. Non-degree seeking 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 an accredited institution and normally must have earned at least a 2.75 QPR 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. A maximum of 12 semester hours, with grades of B or better earned as a non-degree seeking student may be approved for transfer toward a degree. 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.

Guest Matriculant. Students enrolled at other 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 also must 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 satisfactory score 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 an 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, communication disorders, home economics, human resource development, music, and psychology. For American history, applied mathematics, biology, chemistry, 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.

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. When the NTE is the required test for admission, both the Core and Specialty Area are normally required, but the Specialty Area may be waived for programs in which no area test is available.

Programs which require the NTE and the GRE or MAT test scores for admission are public school administration and educational supervision, all areas. Students applying for the two-year college administration program may use scores on two of the following tests: GRE General, NTE Core, or MAT.

Programs for which the GRE is the required admissions test include: early childhood education; intermediate grades education; middle grades education; reading education; physical education; home economics; school counseling; community agency counseling; mental retardation; communication disorders; and special education, general.

Programs that require satisfactory test scores on the NTE or GRE are: curriculum and instruction; secondary education, all areas (except home economics and physical education); and two-year college teaching, all areas.
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

A Graduate Management Admissions Test (GMAT) score and an undergraduate QPR sufficient to meet formula minimums are required. 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.

Applicants possessing a bachelor's degree in any field may elect to accelerate taking prerequisites for admission to the M.B.A. program. Four graduate-level courses are available to meet this admission requirement. To be admitted to accelerated prerequisites, a GMAT score and an undergraduate QPR sufficient to meet approved standards are required. Information about scheduling for these courses and their content may be obtained from the director of graduate programs in business.

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

Applicants must have a cumulative grade point average of B or higher in all undergraduate coursework and non-health courses.

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 Industrial Technology Degree

Applicants must present a satisfactory score on the Graduate Record Examinations General Test and 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 M.I.T. program for graduates of other curricula include a minimum of 16 hours of undergraduate work in four different technical areas.

Each student must demonstrate computer competency prior to completion of 6 semester hours of the program. Students who lack this experience must complete an advisor approved computer class.

Three recommendations from former instructors who are in a position to judge the student’s aptitude for graduate study and/or a letter of reference from the applicant’s supervisor in industry 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 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

Applicants must present a satisfactory score on the Graduate Management Admissions Test (GMAT) and an undergraduate QPR 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.

Applicants possessing a bachelor’s degree in any field other than business administration may elect to accelerate completion of the prerequisites for admission to the M.P.M. program. Four intensive graduate-level courses involving 14 semester hours of credit are available to meet this admission requirement. Except for accounting, these accelerated courses are modulized to meet individual needs. To be admitted to these intensive graduate level courses, a GMAT score and an undergraduate QPR sufficient to meet standards are required. 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

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 school administration, supervision, and curriculum and instruction programs must submit scores on the NTE Core and scores on either the Miller Analogies Test or the GRE General Test. For the two-year college programs, applicants must submit satisfactory scores on two of the following three examinations: the GRE General Test, the Miller Analogies Test, or the NTE Core. In the early childhood, intermediate grades, 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 programs leading to the Certificate of Advanced Study in counseling and school psychology are on inactive status and no new students are being enrolled.

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 degrees in biology and chemistry. Candidates for the Master of Science degree in chemistry may substitute demonstrated ability in computer programming. 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 option), art education, 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 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, and the Master of Science in home economics.

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.
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 a minimum of 30 semester hours of graduate study, 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 both written and oral comprehensive examinations. The written examination must be passed before the oral is taken.

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.

**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 34-36 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, 10-12 semester hours of professional education courses (EDCI 602, 604, 684, and PSY 621), and 3 semester hours of research and thesis.

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 than 2 hours in applied music); 12 additional hours of coursework in music selected with the adviser's approval; 9 hours of approved coursework outside music; and a thesis (including oral defense) or lecture-recital, 3 hours.

Successful performance on a written 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.

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. Students are required to fulfill a part-time teaching assignment during at least one semester and must pass an examination (or designated courses with grades of B or better) to show proficiency in one of the following: (1) reading knowledge in a foreign language or (2) computer programming. A grade of B or better in CHEM 601, 602, 603, and 604 is required for graduation. An oral defense of the thesis is required.

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 may be earned for the literature review and competence demonstrated in a general oral examination. 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 36 hours of graduate study, including the completion of a supervised clinical practicum and either a thesis project or a minor. The program is designed to meet the needs of students who wish to work in non-school settings. The program adheres strictly to the academic and clinical training requirements set by the American Speech-Language-Hearing Association and the North Carolina Board of Examiners for Speech and Language Pathologists and Audiologists.

The course requirements in the major are: EDCD 574, 650, 672, 674, 676, and 6 hours of guided electives in speech-language disorders. Enrollment in clinical practicum, EDCD 683 is also required and must total 6 hours. Additionally, a thesis option or a minor option must be selected for a total of 9 hours. Minor option areas include: language disorders, private practice and business administration, learning disabilities, psychology, counseling, and reading disabilities.

A comprehensive examination (written and/or oral) covering both the major concentration and the minor area is required. Students who select the thesis option will be required to complete only an oral examination on the thesis project.

Home Economics

Requirements for the M.S. program in home economics include the completion of either a minimum 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, EDEM 600, 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, EDEM 505, 522, 531, 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.

**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 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; EDEM 520, 521, and 531; 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 program for the Master of Industrial Education degree for secondary teaching requires a minimum of 31-33 semester hours of graduate study. The two-year college option requires a minimum of 30 semester hours. 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.


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 9-10 hours of guided electives in industrial education.

Master of Industrial Technology Degree Program (M.I.T.)

Requirements for the Master of Industrial Technology degree 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 Music Education Degree Program (M.M.E.)

The Master of Music Education degree requires a minimum of 32 hours, including:

Professional education, 10-12 hours: EDCI 602; EDCI 684; PSY 621, 624, or 625; and one course elected from supervision, curriculum and materials, foundations and research, or educational psychology.

An area of concentration, 9 hours, selected from (a) General Music, MUS 695, 698, 680; (b) Instrumental Music, MUS 695, 697, 680; (c) Choral Music, MUS 695, 696, 680. (MUS 593-Topics Orff-Schulwerk Levels II or III, MUS 682, or MUS 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, 2-4 hours.

Successful performance on an oral comprehensive examination administered by the candidate’s advisory committee also is required.

Successful completion of the program and requirements related to certification lead 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.

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.

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

Early Childhood Education (K-4)

The program leading to the M.A.Ed. in early childhood 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 CDFR 660.

Methods, Materials, Teaching Strategies, 9 to 12 hours: EDEL 614, 670, and 3 to 6 hours selected from approved courses in elementary education.

Subject-Matter Area(s), 9 to 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 to 3 hours.

Intermediate Education (4-6)

The program leading to the M.A.Ed. degree in intermediate 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 625 or 624.

Methods, Materials, Teaching Strategies, 6 to 9 hours: EDEL 616, 670, and 0 to 3 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 (including reading), mathematics, music, science, social studies.

Electives, 3 to 6 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 601; EDCI 605 or 506 or 603; PSY 625 or 624.

Methods, Materials, and Teaching Learning Strategies, 6-9 hours: EDEL 618, 670, and 0 to 3 hours in approved elementary/middle grades education courses.

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

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

Secondary Education

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

<table>
<thead>
<tr>
<th>Biology</th>
<th>Chemistry</th>
<th>Mathematics</th>
<th>Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Education</td>
<td>English</td>
<td>Physical Education</td>
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</tbody>
</table>

Each program requires a minimum of 30-33 semester hours of graduate study. The requirements are as follows:

Professional Component, 12-15 hours: EDCI 603, 605, or 700; EDCI 602 or 606; EDCI 604 or 607; EDCI 684; 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 course except MATH 601, 602, 603, or 694. (At least one of these elective courses (3 hours) must be taken at the 600 level.)

Physical education majors will take EDCI 604 and may elect PSY 624 instead of PSY 621 or 625. Students must take PE 620 and 696 and select one course from PE 650 or 660, and one course must be selected from PE 630, 640, or 670. (Physical education majors are not required to take EDCI 684.)

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, 13-15 hours: EDCI 606 or 602; EDCI 605 or 603 or 700; EDCI 604 or 607; EDCI 684; and PSY 621 or 625.

Core requirement, 3 hours: HE 601.

Guided electives, 15-20 hours: Any combination within the department of home economics or in approved areas outside the department of home economics.

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>Physical Education</th>
<th>Social Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry</td>
<td>Mathematics</td>
<td>Physical Sciences</td>
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</table>

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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 36-38 semester hours and contains student options for the 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, 13-15 hours: EDCI 602; 604; 605; 684; 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 multi-disciplinary 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 multi-disciplinary 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.

Educational Media, Public School

The program leading to the M.A.Ed. degree in educational media (Public School) is on inactive status and no new students are being enrolled.
The program leading to the M.A.Ed. degree in educational media for elementary and secondary school personnel requires a minimum of 30 semester hours of graduate study, including:

Professional Component, 12 hours: EDCI 603, 605, or 700; EDCI 602 or 606; EDCI 604 or 607; and PSY 621, 624, or 625.

Media courses, 15-18 hours: EDEM 520 or 631; 503 or 510 or 512; 521 or 620 or 600 or 696; 522 or 530 or 531 or 630 (3 to 6 hours) and 686.

Guided electives, 0 to 3 hours.

**Educational Media, Two-Year College**

The program leading to the M.A.Ed. degree in educational media (Two-Year College) is on inactive status and no new students are being enrolled.

The program leading to the M.A.Ed. in educational media for junior college, technical institute, and community college personnel requires a minimum of 36 semester hours of graduate study, including:

Professional Component, 9 hours: EDCI 602 or 606; PSY 621; and EDHE 605.

Media courses, 24 hours: EDEM 503 or 512 or 510; 505; 521 and 520 or 631; 522 and 530 or 531; and 620 and 686.

Related elective, 3 hours.

**Non-School Media Specialist**

The program leading to the M.A.Ed. degree in educational media (Non-School) is on inactive status and no new students are being enrolled.

The program in non-school media is designed to serve the needs of persons planning careers in media outside a school setting. The program requires a minimum of 30 semester hours of graduate study, including:

Media courses, 21 hours: EDEM 521; 522; 530; 531; 620; EDEM 686, and 511 or 512.

Research, 3 hours: EDCI 602.

Electives, 6 hours, selected from EDEM 600, 630, 631, EDAD 600 or 650.

**Reading Education**

The program leading to the M.A.Ed. degree in reading education requires a minimum of 33 semester hours of graduate study and includes options for public school and two-year college personnel. The course requirements are:

**Public School**

Professional Component, 12 hours: EDCI 602; EDEL 601 or EDCI 604; EDCI 605, 506, or 700; and PSY 624, 625, or 621.

Reading Core, 13 hours: EDRD 641, 651, 661, 672.

Guided electives, 8 hours, selected from reading, elementary education, special education, psychology, English.

**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.

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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, student personnel services in higher education, and community agency 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 24-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 specialties), 24 hours: COUN 605, 615, 630, 635, 640, 645, 650, and EDCI 602.

Specialty requirements, 24 hours, as follows:

School Counseling: COUN 655, 660, 684 (6 hours), 686, and 9 hours of guided electives.

Student Personnel Services in Higher Education: COUN 655, 661, and 684 (6 hours), 686, and 9 hours of guided electives.

Community Agency Counseling: COUN 623, 684 (6 hours), 686, and 12 hours in guided electives.

Communication Disorders

The program leading to the M.A.Ed. degree in communication disorders requires a minimum of 36 semester hours of graduate study. Basic program requirements include:

Professional Component, 12 hours: EDCI 602; EDCI 603, 605, or 700; EDCI 604, 607, or EDEL 601; and PSY 621, 624, or 625.

Communication Disorders courses, 24 hours: EDCD 574, 650, 672, 674, 676, 683, and guided electives in both language disorders and speech disorders.

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, 607, 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 2-3 hours of guided electives.

Mental Retardation concentration: SPED 629 or 630; SPED 604; EDCD 576 or 678; 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, 607, 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

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, 607, 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, 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 early childhood education, intermediate 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:

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

**Intermediate Grades Education.** Concentration in area of teaching certificate: 18 hours in methods, materials, and techniques of teaching intermediate grades education, and study in one or more of the following areas: art, language arts, mathematics, music, physical education, 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 as listed below include options which lead to the recommendation for advanced certificates for curriculum specialists, early childhood educators, intermediate grades educators, middle grades educators, principals, superintendents, and general supervisors. Successful completion of any of the programs, except for two-year college and non-school programs, and 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, physical sciences, social sciences, and reading. The public school programs require a minimum of 31-33 semester hours above the master's degree. The two-year college programs require a minimum of 30 semester hours above the master's. All programs require comprehensive examinations, either 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 30-33 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 30-33 hour requirement for the degree.
Public School or Two-Year College Teaching

Curriculum and Foundations, 12-15 hours: EDCI 603, 605, or 700; EDCI 604 or 607; EDCI 609; EDCI 702; and EDCI 784. (Students in the Two-Year College program will take EDHE 610 instead of EDCI 604 or 607.)

Areas of specialization, 18 hours, available in biology, chemistry, English, home economics, industrial education, physical sciences, 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 600, 601, 604, 606, 607, 608, 700, EDSE 680, 681.

PSY 610 or 612, 3 hours, and 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, 607, 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 607, 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.

Early Childhood Education (K-4)
The program leading to the Ed.S. degree in early childhood education requires a minimum of 36 semester hours above the master’s, including:

Professional Component, 12 hours: EDEL 782, 680, or EDCI 606; EDEL 695, 701, EDCI 604 or 702; EDCI 601, 605, or 700; PSY 621 or EDCI 609.

Organization, Supervision, and Methods, 9 to 12 hours: EDEL 714; 770; 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.

Intermediate Grades Education (4-6)
The program leading to the Ed.S. degree in intermediate education requires a minimum of 36 semester hours above the master’s, including:

Professional Component, 12 hours: EDEL 680, 782, or EDCI 606; EDEL 695, 701, EDCI 604 or 702; EDCI 601, 605, or 700; PSY 621 or EDCI 609.

Organization, Supervision, and Methods, 9 to 12 hours: EDEL 716; 770; and 3 to 6 hours selected from approved courses in elementary education.

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

Electives, 0 to 3 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: EDEL 680, 782, or EDCI 606; EDEL 695, 701, EDCI 604 or 702; EDCI 601, 605, or 700; PSY 621 or EDCI 609.

Organization, Supervision, and Methods, 9 to 12 hours: EDEL 718; 770; and 3 to 6 hours selected from approved courses in elementary 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 program leading to the Certificate of Advanced Study in counseling is on inactive status and no new students are being enrolled.
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

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**Accounting (ACCT)**

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

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

**661 Advanced Theory.** (3)
Pronouncements of the American Institute of CPAs, the Financial Accounting Standards Board, and Cost Accounting Standards Board; current accounting literature.

**662 Taxation and Business.** (3)
Tax laws affecting business decisions involving capital expenditures; timing of income and expenditures; and alternative financing.

**682 Research Project.** (3, R6)
PREQ: Permission of department head and director, graduate programs in business.

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

514 (SOC 514) Minority Groups. (3)

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

519 (SOC 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)
Ethnographic studies of economic systems, family and political institutions, myths, rituals, and religions. PREQ: 260.

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.

552 Metalsmithing 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.

566 Ceramic Technology. (3) 
Practical applications of ceramic technology including kiln building, glaze formulation. 
PREQ: Permission of instructor. 2 Lecture, 4 Lab.

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

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.
Graduate Seminar in Art History. (3, R6)

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

Thesis. (3)

Astronomy (AST)

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

Biology (BIOL)

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

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

Plant Physiology. (4)
The growth, development, and defense mechanisms of flowering plants. PREQ: 312 of permission of instructor. 3 Lecture, 3 Lab.

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.

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

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.

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.

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.

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.

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.

Plant Anatomy. (4)
Plant cells, tissue organization from a phylogenetic point of view; botanical microtechniques. PREQ: 130. 3 Lecture, 3 Lab.
553 **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.

555 **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.

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

567 **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 permission of instructor. 2 Lecture, 2 Lab.

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

571 **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.

575 **Animal Development.** (4)  
Development in animals, gametogenesis, fertilization, cleavage, gastrulation, organogenesis, embryonic adaptations, differentiation, and growth. **PREQ:** 312, 332, 342. 3 Lecture, 3 Lab.

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

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

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

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

613 **Molecular Biology.** (3)  

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

622 **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.

632 **Biogeography.** (3)  
Plant and animal distribution; ecological and historical factors contributing to distribution 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, problems, cases. PREQ: Permission of director, graduate programs in business.

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

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

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

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)

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.
§51 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.

§52 Physical Chemistry. (3, 3)
Introduction to thermodynamics, kinetics, quantum mechanics, and statistical mechanics. Credit for 552 is not applicable to M.S. in chemistry. PREQ: 321, MATH 255, and PHYS 231.

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

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

§595 Seminar. (1, R4)

§601 Graduate Survey of Inorganic Chemistry. (2)

§602 Graduate Survey of Analytical Chemistry. (2)

§603 Graduate Survey of Organic Chemistry. (2)

§604 Graduate Survey of Physical Chemistry. (2)

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

§692 Topics in Inorganic Chemistry. (2, R6)

§693 Topics in Analytical Chemistry. (2, R6)

§694 Topics in Organic Chemistry. (2, R6)

§695 Topics in Physical Chemistry. (2, R6)

§699 Thesis. (3, R9)
PREQ: Permission of department head.

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 and relationships with other family members; life adjustments and sources of assistance.

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

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

§693 Topics in Child and Family Studies. (1-3, R6)
Clothing, Textiles, and Merchandising (CTM)

545 Apparel and Home Furnishings Product Analysis. (3)
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 and Organic Disorders of Speech. (3)
The etiology, evaluation, and treatment of voice and organic disorders of speech.

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.

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: 450, 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.

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 base systems.

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.

682 Research Project. (3, R6)
PREQ: Permission of department head and director, graduate programs in business.

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

Computer Science (CS)

552 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.

555 Computer Design. (3)
Arithmetic unit, control unit, memory, parallel computing systems, bit-slice architecture. PREQ: 303 or permission of instructor.

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

564 Microcomputer Development. (3)
Software and hardware development and interfacing for dedicated microcomputer applications. PREQ: PHYS 302 or IET 371 or CS 303. 2 Lecture, 2 Lab.
565 Data Communications and Networks. (3)
Communication systems components, error detection and correction, network protocols.
PREQ: 303, 351.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

605 The Helping Relationship. (3)
Analysis of the helping relationship; facilitating and initiating skills; demonstrations, role playing and recordings; professional and ethical issues.

610 Marriage and Family Counseling. (3)
Theory, research, and technique; needs within marriage and family relationships; conflict resolution.

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.

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 Agency Counseling. (3)
History and development of community agency counseling, concepts and current practices in various specializations, projected trends. PREQ or COREQ: 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; applications; career development for women, minorities, and handicapped persons.

655 Career Counseling. (3)
Sources of educational and occupational information; synthesis of information and assessment in counseling, placement, and follow-up techniques. PREQ: 650.

660 Organization of School Counseling Services. (3)
Development, maintenance, evaluation, and improvement of counseling services; relationship to total school program. PREQ: 630, 640. PREQ or COREQ: 635, 650.

661 Organization of Student Personnel Services. (3)
Functions of student personnel services in a variety of postsecondary educational institutions.

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

680 Independent Study in Counseling. (3)
PREQ: Advanced standing; permission of adviser.
683 Field Experience: Student Development. (3)  
Supervised experience in various areas of student development at a postsecondary institution. PREQ or COREQ: 630, 661. S/U grading. 9 hours per week.

684 Internship in Counseling. (3-6, R6)  
Supervised on-site experience in various counselor employment settings. PREQ: 686 and recommendation of adviser. PREQ or COREQ: 645. S/U grading. 20 hours per week per 3 hours credit.

686 Practicum in Counseling. (3)  
Application of skills in settings that approximate employment; transcripts required. PREQ: 605, 615, (3 hr. sections only). PREQ or COREQ: 630, 635, 640, 650 (3 & 4 hr. sections); permission of adviser. S/U grading. 12-16 hours per week.

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. or Ed.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. PREQ: Admission to C.A.S. or Ed.S. program in counseling; 730. S/U grading. 9 hours per week.

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.
504 **Aerospace Education.** (3)
Air and space transportation today; preparation of units for various groups and subjects; field trip.

505 **Foundations in English as a Second Language.** (3)
Historical, political, and social impact of non-English speaking students on the public school; effects of federal, state, and local agencies on bilingual/ESL programs. **PREQ:** Permission of instructor.

506 **Contemporary Philosophies of Education.** (3)
Contemporary philosophies; implications for practice; works of Brameld, Hutchins, Dewey, and Whitehead. **PREQ:** 301; permission of instructor.

507 **Problems in the Junior High School Program.** (3)

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

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

600 **Community Resources Education.** (3)
Uses of community resource problems in the curriculum.

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

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

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

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

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

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

607 **The Secondary School Curriculum.** (3)
Scope, function, methods, and improvement of the curriculum with special emphasis on relating theory to practice.

608 **Evaluation of Secondary School Curriculum.** (3)
Evaluation of methods of improving curriculum; standards and guidelines of accrediting agencies.

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

684 **Practicum in Curriculum and Instruction, Public School.** (1-3)
The course is designed to provide the student an opportunity to relate theory to practice in a public school setting. **S/U grading.** **PREQ:** Approval of co-advisors semester prior to scheduling.

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

696 **Graduate Seminar in Education.** (1, 1)
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.

784 Advanced Practicum in Curriculum and Instruction, Public School. (1-3)
The course is designed to provide the student an opportunity to relate theory to practice in a public school setting. S/U grading. PREQ: Approval of co-advisors semester prior to scheduling.

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 economics policies.

682 Research Project. (3, R6)
PREQ: Permission of 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)

520 School Law for Teachers. (2)
Basic concepts of school law, tort liability, teacher rights and responsibilities, student rights, due process, student control and discipline.

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. COREQ: 680, 681, or 693.

650 School Personnel Administration. (3)
Theory, principles, and practices; recruitment, selection, assignment, evaluation, promotion, and tenure; staff development and welfare; collective negotiations. COREQ: 680, 681, or 693.
660 School-Community Relations. (2)
Developing and maintaining appropriate relationships; communication with the public; techniques, instruments, and tools for improving relationships. COREQ: 680, 681, or 693.

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.

730 Quantitative Methods for Administrators. (3)
Statistical and mathematical techniques for policymaking, decision making, and hypothesis testing.

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 Media (EDEM)

503 Teaching Effective Use of the Media Center. (3)
Correlating media center materials with the school curriculum; methods and materials to help students and teachers become effective users of facilities.

505 Audiovisual Education. (3)
Practical applications of audiovisual materials and associated equipment.

510 Children's and Adolescent Literature. (3)
The history of books for children and adolescents; study of authors and illustrations; principles of book selection.

511 Classification and Cataloging of Media. (3)
Processing and cataloging print and nonprint media; use of printed cards.

512 Reference and Curricular Materials. (3)
Study of reference sources; case studies; written and oral research projects.

520 Preparation of Projected Materials. (3)
Use of overhead projection; transparency production; investigation of slide making; associated graphics. Lab fee charged.

521 AV Equipment Management and Maintenance. (3)
Orientation of personnel; equipment testing and operation; parts sources and replacement; purchasing and storage; record keeping; transportation; assignment.

522 Instructional Photography. (3)
Operation of 35mm still cameras; development and printing of black and white prints; application of pretest, posttest, and behavioral objectives. Lab fee charged.

530 Radio Broadcasting. (3)
The use of radio and its corollaries for education and instruction; writing, producing, recording; ethical practices and federal regulations.

531 Instructional Television. (3)
Operation of video recording equipment; audio applications, script writing, title design; production; critique of teaching tapes.

580 Individual Study and Research. (3)
PREQ: Permission of instructor.

590 Topics in Media. (1, R3)
Operation and use of standard audiovisual, photography, and television presentation and production equipment. PREQ: Consent of instructor.

593 Studies in Media. (1, 1, 1)
594 Production facilities, services, equipment and state product evaluation, and laboratory management. PREQ: Permission of instructor.

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

620 Program Organization/Administration. (3)
Services, evaluation, maintenance, delivery, and record keeping; planning workshops and operation of production areas; budgeting. PREQ: Permission of instructor.

630 Motion Media: Film and Television. (3)
Operation and use of film and videotape equipment; production of instructional film and tape.

631 Multimedia Production. (3)
Incorporation of media components for programming, application of multiple sensory inputs, design of compatible communication channels.
686 Practicum in Media Program Management. (3)
Field experience in operating programs in schools, industry, or higher education.
PREQ: Permission of instructor.

696 Seminar in Communication Media. (3)
PREQ: Permission of instructor.

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

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.

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

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

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

Seminar in Elementary Education. (3)

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

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

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.

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

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.

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

English (ENGL)

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.

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

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

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.

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.

560 **American Writers before 1918.** (3)
Study of the most significant American writers from Franklin through the writers prominent before 1918.

570 **Twentieth Century British and American Writers.** (3)
Study of the work of the most prominent novelists, playwrights, and poets from the early 20th century to the present.

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.

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, optimal capital structure, capital asset pricing model, 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. (3, R6)
PREQ: Permission of 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 intranational 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. (3)
Measures of manufacturing; location theory; decision making factors in the regional location of manufacturing industries. PREQ: 250.

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

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

670 Quantitative Methods in Area Analysis. (3)
Cartographic and statistical analysis of areal data. PREQ: 370 and a course in statistics.
1 Lecture, 4 Lab.

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

695 Seminar in Geographic Theory and Methodology. (3)
Historical development of concepts, methodology, and philosophy; current trends. PREQ: 8 hours of geographically related courses.

699 Thesis. (3)

**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: Permis-
sion 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)
602 A survey of the elements of physical and historical geology, weather, climate, and their
effect on geomorphic process.

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

Health Sciences (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, 1800-1919. (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, 1914-1955. (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.

545 Cherokee History. (3)
   Pre-contact Cherokee society; acculturation; Removal, post-Removal development of the Cherokee Nation West and the Eastern Band of Cherokee.

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

551 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.

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

572 Local History and Genealogy. (3)
   Role of the family and the community in shaping state, regional, and national developments; emphasis on research techniques and local resources. Lecture and fieldwork.

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

575 Historical Editing. (3)
   Analysis of manuscripts, government documents, and transcripts of oral testimony; emphasis on evaluation, selection, transcription, and annotation of materials and completion of an editorial project. Lecture and fieldwork.

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

589 Cooperative Education in History. (3)
   PREQ: Enrollment for at least one term in the M.A. in American History-Public History concentration; B average in graduate work; approval of department head, advisor, and cooperative education coordinator. S/U grading.
593 Topics in History. (3, R12)

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

680 Readings in History I, II, III, IV. (3, R6 each course)
681 Major interpretative monographs and articles within a selected area. May not be taken more than twice for credit without departmental approval.

683 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.

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

695 Seminar in American History. (3)
Intensive investigation of selected topics in American history.

699 Thesis. (3, R6)

Home Economics (HE)

514 (IET 514) 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 2/3 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 MIT or MIE; 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)
Purpose 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.

610 Quantitative Analysis for Business II. (3)
Focus on advanced theory and application; case analysis and nonlinear programming. PREQ: 606.

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: Departmental approval.

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: Approval of department head.

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)
Multiple integrals and change of variables; Leibnitz's Rule; line and surface integrals; Green's and Stoke's theorems; sequences and series of vectors and functions.

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)
Geometric concepts of proof; congruence, similarity and geometric equalities and inequalities. PREQ: 601 or permission of department head.

603 Problems in Middle Grades Mathematics. (3)
Current research findings in the learning and teaching of mathematics and probability. 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. (3)
Sequences; limit, continuity, differentiation and integration theories of real valued functions; sequences and infinite series of real valued functions. PREQ: 523.

624 Complex Analysis. (3)
Holomorphic and elementary functions; power series, integration, and representation theorems; the calculus of residues. PREQ: 523.

630 Mathematical Modeling. (3)
Models of physical phenomena; emphasis on derivation of the model and methods of solution. PREQ: 523, 562.

632 Methods of Applied Mathematics. (3)
Special functions; calculus of variations; integral equations. PREQ: 523, 562.

634 Partial Differential Equations and Boundary Value Problems. (3)
Classification, characteristics, eigenfunctions, Green's function, maximum principle. PREQ: 523, 562.

640 Numerical Analysis. (3)
Selected topics in numerical analysis. PREQ: 540.

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 for the Elementary Teacher. (3)
Sets, natural numbers, whole numbers, integers, rationals, real numbers, other topics; not open to students with credit for 210 and 211 or equivalents; open to middle grades majors, but will not satisfy mathematics subject-area requirement.

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 Counterpoint. (3)
Contrapuntal techniques and procedures of the late Renaissance through the 19th century. 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)

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. COREQ: 437 or 537.

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.

638 Community Nutrition. (3)
Public health nutrition; assessment of the nutritional status of residents.

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)

500 The Elementary Physical Education Curriculum. (3)  
Basic beliefs; guidelines for learning, nature of the learner, developing and implement-  
ing an effective program.

510 Prevention and Treatment of Athletic Injuries. (3)  
The medical examination, conditioning drills, prevention of injuries, bandaging, and  
the treatment of major injuries in varsity athletics.

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

514 Camp Leadership. (2)

620 Advanced Tests and Measurements. (3)  
Construction and evaluation of tests in physical education.

630 Principles of Physical Education. (3)  
History, philosophies, aims, and objectives of physical education.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>640</td>
<td>Administration of Physical Education.</td>
<td>(3)</td>
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<tr>
<td></td>
<td>The organization and administration of the physical education programs in the school.</td>
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<tr>
<td>650</td>
<td>Physiology of Motion.</td>
<td>(3)</td>
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<td></td>
<td>Physiological adaptations resulting from different levels of performance.</td>
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<tr>
<td>660</td>
<td>Scientific Foundations of Physical Education.</td>
<td>(3)</td>
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<tr>
<td>670</td>
<td>Administration of Intramural Programs.</td>
<td>(2)</td>
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<td></td>
<td>History and objectives; units of competition; program of activities; scheduling; scoring plans, rules and regulations; special problems.</td>
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<tr>
<td>680</td>
<td>Organization and Administration of Athletics.</td>
<td>(2)</td>
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<tr>
<td></td>
<td>The organization and management of varsity athletic programs; problems associated with competitive athletics.</td>
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<tr>
<td>694</td>
<td>Special Problems.</td>
<td>(1-3)</td>
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<tr>
<td></td>
<td>Topics in physical education, athletics, recreation, dance, and related areas.</td>
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<tr>
<td>696</td>
<td>Seminar/Practicum in Physical Education.</td>
<td>(3)</td>
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<td>2 Lecture, 2 Lab.</td>
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**Physics (PHYS)**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>601</td>
<td>Topics in Physics Education I, II.</td>
<td>(3, 3)</td>
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<tr>
<td>602</td>
<td>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.</td>
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</tbody>
</table>

**Political Science (PSC)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>507</td>
<td>American Political Parties.</td>
<td>(3)</td>
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<tr>
<td></td>
<td>American political parties and their role in the government and politics of contemporary society; current national issues.</td>
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<tr>
<td>509</td>
<td>National Security Policy.</td>
<td>(3)</td>
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<td></td>
<td>Substance and processes of strategy and policy-making; relationship of power to foreign policy. PREQ: 231 or permission of instructor.</td>
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<tr>
<td>511</td>
<td>Civil Rights and Liberties.</td>
<td>(3)</td>
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<td></td>
<td>Judicial interpretation of First Amendment freedoms, rights of the accused and rights of racial minorities.</td>
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<tr>
<td>521</td>
<td>Political and Organizational Leadership.</td>
<td>(3)</td>
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<td></td>
<td>The concepts and processes of leadership as related to political and public organizations. PREQ: 6 hours of political science or permission of instructor.</td>
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<tr>
<td>536</td>
<td>Dynamics of World Order.</td>
<td>(3)</td>
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<td></td>
<td>Alternative approaches to meeting social and political needs in a changing global environment; conditions and practices of interdependence.</td>
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<tr>
<td>549</td>
<td>Political Socialization.</td>
<td>(3)</td>
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<td></td>
<td>Social and psychological processes related to the development of political values and ideas.</td>
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<tr>
<td>580</td>
<td>Readings in Political Science.</td>
<td>(3)</td>
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<td>PREQ: Department approval.</td>
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<tr>
<td>593</td>
<td>Contemporary Political Systems.</td>
<td>(3, R6)</td>
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<td></td>
<td>Problems in the structure and functions of selected political systems reflected against their political cultures.</td>
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<tr>
<td>595</td>
<td>Seminar: American Political System.</td>
<td>(3)</td>
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<tr>
<td></td>
<td>Current issues in American government and politics.</td>
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</tbody>
</table>
Psychology (PSY)

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 Learning, Memory, and Cognition. (3)
Review of principles and phenomena of learning and memory; current topics in cognitive psychology. 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 Behavior Modification. (3)
Behavior modification techniques and their application in school and clinical settings. PREQ: 544 or equivalent.

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.

680 Directed Study in Psychology. (3, R6)

683 Internship in Psychology. (6, 6)
Six-month, full-time or nine-month, part-time internship in a clinical or school setting. PREQ: 686. S/U grading.
686 **Practicum.** (4)  
Application of psychological theory in the educational setting; observation of practices of school psychologists; participation in school psychological services under field and university supervision. **PREQ:** 673.

693 **Topics in Psychology.** (3, R9)  
**PREQ:** 250 or permission of instructor.

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.

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. (4)
Methods and materials for students who have severe reading difficulties; 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)
Trends, issues, and research problems in science education. PREQ: 611 or 621 or permission of instructor.

Secondary Education (EDSE)

512 Methods for Foreign Languages and ESL. (3)
The history and methodologies of teaching foreign languages and English as a second language (ESL); practice in teaching and testing the four language skills. PREQ: Permission of instructor.

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)
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)

512 Education and Society. (3)
The structure and process of formal education; relation to other facets of society.

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

517 (ANTH 517) Southern Appalachian Culture. (3)

519 (ANTH 519) Comparative Family. (3)

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.

556 Sociology of Law. (3)
The effect of social factors on legal structures; administration of criminal law, the impact of legal sanctions.

580 Independent Study in Sociology. (1-2, R6)
PREQ: Written application; approval of instructor and adviser.
Special Education (SPED)

504 Educational Programs for Students with Behavior Disorders. (3)
Study of identification procedures, affective and behavioral techniques and instruc-
tional programs for teaching students with behavioral disorders.

513 Teaching Adolescents with Learning Problems. (3)
Survey and evaluation of curricular models; diagnosis; developing instructional strate-
gies, establishing goals and objectives.

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

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 methodolo-
gies of problem solving.

603 Administration of Special Education Programs. (3)
Administrative practices and problems of organization, staffing, curricular develop-
ment, and supervision of special education.

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

629 Curriculum for the Moderately and Severely Retarded Child. (3)
Objectives, methods, and materials for moderately and severely retarded children, including those with multiple handicaps.

630 Problems in Teaching the Mentally Retarded. (3)
Experimental teaching and investigation of experimental programs.

631 Appraisal of Exceptional Children. (3)
Assessment techniques traditionally used by special education teachers to evaluate children.

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)
688 Supervised experience in a school or clinical setting. PREQ: Consent of instructor.

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.
The University of North Carolina comprises all the public institutions of higher education in North Carolina that confer degrees at the baccalaureate level or higher. The University was authorized by the State Constitution in 1776, and it was chartered in 1789 by the General Assembly.

The University of North Carolina opened its doors to students at Chapel Hill in 1795. Thereafter, beginning in the latter part of the nineteenth century, the General Assembly of North Carolina has established and supported fifteen other public senior institutions in keeping with Article IX, Section 8, of the Constitution of North Carolina which provides that the "General Assembly shall maintain a public system of higher education, comprising The University of North Carolina and such other institutions of higher education as the General Assembly may deem wise."

By 1969, The University of North Carolina included six constituent institutions, governed by a single Board of Trustees. This multi-campus University had its beginnings in legislation enacted in 1931 that defined The University of North Carolina to include the University of North Carolina at Chapel Hill, North Carolina State University at Raleigh, and the University of North Carolina at Greensboro. In the 1960s three additional campuses were added: the University of North Carolina at Asheville, the University of North Carolina at Charlotte, and the University of North Carolina at Wilmington.

Beginning in 1877, the General Assembly of North Carolina established or acquired ten additional separately governed state-supported senior institutions of higher education. They are: Appalachian State University, East Carolina University, Elizabeth City State University, Fayetteville State University, North Carolina Agricultural and Technical State University, North Carolina Central University, North Carolina School of the Arts, Pembroke State University, Western Carolina University, and Winston-Salem State University. Then, in 1971, the General Assembly redefined The University of North Carolina, and under the terms of that legislation all sixteen public senior institutions became constituent institutions of The University of North Carolina.

The constitutionally authorized Board of Governors of The University of North Carolina was designated the Board of Governors and this body is by law The University of North Carolina. The Board of Governors consists of thirty-two members elected by the General Assembly, and it is charged with "the general determination, control, supervision, management, and governance of all affairs of the constituent institutions." The chief executive officer of The University is the President.

Each constituent institution of The University has its own faculty and student body. The chief administrative officer of each institution is the chancellor, and the chancellors are responsible to the President.

Each constituent institution also has a board of trustees composed of thirteen members: eight elected by the Board of Governors, four appointed by the Governor, and the elected president of the student body ex officio. (The School of the Arts has two additional ex officio trustees.) The principal powers of these institutional boards are exercised under a delegation of authority from the Board of Governors.

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*Emeriti

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Western Carolina University is one of the sixteen constituent members of The University of North Carolina. There are undergraduate schools of Arts and Sciences, Business, Education and Psychology, Nursing and Health Sciences, Technology and Applied Science, 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.

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* Only officers thought to be of special interest to graduate students are listed. See General Catalog for complete listing.
The Graduate School
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Kendall W. King**

*Graduate Student member
**Ex Officio member
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SCHOOL OF ARTS AND SCIENCES

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

Lee Budahl
Associate Professor of Art. Ph.D., University of Maryland

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

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

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

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

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

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Associate Professor of Biology. Ph.D., Virginia Polytechnic Institute

James Heathman Horton
Professor of Biology. Ph.D., University of North Carolina at Chapel Hill

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

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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
Associate Professor and Acting Head, Department of Biology. Ph.D., North Carolina State University at Raleigh

Clarence Paul Wright
Associate Professor of Biology. Ph.D., University of Utah

+ Indicates Full Graduate Faculty member status; other members listed hold associate status.
Department of Chemistry and Physics

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

Joseph Yarnall Bassett, Jr.
Professor of Chemistry. Ph.D., University of North Carolina at Chapel Hill

Richard C. Berne
Professor of Science Education. Ed.D., University of Virginia

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

F. Glenn Liming, Jr.
Associate Professor and Head, Department of Chemistry and 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 English

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

James Edwin Byer
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Harold F. Farwell, Jr.
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William Reynolds Higgins
Associate Professor of English. Ph.D., Tulane University

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Professor and Head, Department of English. Ph.D., University of Texas at Austin

Philip Tyree Wade
Professor of English. Ph.D., University of North Carolina at Chapel Hill
Department of Geosciences and Anthropology

+ Arden William Horstman  
Associate Professor of Geology. Ph.D., University of Colorado

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

Jeffrey W. Neff  
Associate Professor and Head, Department of Geosciences and Anthropology. Ph.D., University of Tennessee

Anne F. Rogers  
Assistant Professor of Anthropology. Ph.D., University of Georgia

+ P. Gary White  
Associate Professor of Geography. Ph.D., University of Denver

+ John Thomas Wilcox  
Associate Professor of Geology. Ph.D., Columbia University

+ Steven Peter Yurkovich  
Associate 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

+ Ellerd Miner Hulbert  
Professor of History; Director of International Development. Ph.D., University of Chicago

+ James A. Lewis  
Creighton Sossomon 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 and Head, Department of History. Ph.D., University of North Carolina at Chapel Hill

+ Curtis W. Wood, Jr.  
Professor 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

+ 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

+ Albert F. Gilman III  
Professor of Mathematics. Ph.D., Indiana University

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

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

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

+ Lee Hammack Minor  
Associate Professor of Mathematics. Ph.D., Vanderbilt University

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

+ Baxter Norton  
Assistant Professor of Mathematics. M.A., Louisiana State University

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 Modern Foreign Languages

+ Lewis F. Sutton  
Professor of French. Ph.D., University of North Carolina at Chapel Hill

Department of Music

+ Eva Jacqueline Adcock  
Associate Professor of Music. Ph.D., Florida State University

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

+ James E. Dooley  
Vice-Chancellor for Development and Special Services; Professor of Music. Ph.D., Florida State University

+ 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  
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Robert W. Kehrberg  
Associate Professor and Head, Department of Music. D.A., University of Northern Colorado

+ Robert R. Trevarthen, Jr.  
Professor of Music. M.M., University of Michigan

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

101
Philosophy and Religion

+ Michael Paul Jones
Associate Professor of Philosophy; Coordinator, Associated Area of Philosophy and Religion.
Ph.D., University of Texas at Austin

Department of Political Science and Public Affairs

William Robert Latimer
Associate Professor of Political Science and Public Affairs. M.A., University of Wisconsin

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

+ Gordon E. Mercer
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