THE GRADUATE SCHOOL BULLETIN 2017-18

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The Graduate School’s Internet address is: grs.uncg.edu

The University of North Carolina at Greensboro
The Graduate School
241 Mossman Building
PO Box 26170
Greensboro, NC 27402-6170
VOICE: 336.334.5596

GRADUATE OFFICE FAX: 336.334.4424

ADMISSIONS FAX: 336.256.0109

EMAIL: gradinquiry@uncg.edu
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Students are responsible for complying with all deadlines for their individual programs of study.

**Fall 2017**

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<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 7-11, Mon.-Fri.</td>
<td>Orientation, advising, and registration for all students based on student population and classification</td>
</tr>
<tr>
<td>August 7, Monday</td>
<td>Fall semester opens</td>
</tr>
<tr>
<td>August 8, Tuesday</td>
<td>State of the Campus Address</td>
</tr>
<tr>
<td>August 8, Tuesday</td>
<td>New Student Orientation, EUC Auditorium, 4:00 – 5:30 pm</td>
</tr>
<tr>
<td>August 9, Wednesday</td>
<td>New Student Orientation, EUC Auditorium, 6:00 – 7:30 pm</td>
</tr>
<tr>
<td>August 15, Tuesday</td>
<td>Classes begin, 8:00 am</td>
</tr>
<tr>
<td>August 15-21, Tues.–Mon.</td>
<td>Late registration and schedule adjustment</td>
</tr>
<tr>
<td>August 21, Monday</td>
<td>Last day to change courses or course sections without special permission. Financial Aid satisfactory academic progress appeals deadline; hours locked for financial aid purposes. Last day to withdraw from a course for tuition and fees refund</td>
</tr>
<tr>
<td>August 22, Tuesday</td>
<td>Deadline for graduate students to apply to graduate in December 2017</td>
</tr>
<tr>
<td>September 4, Monday</td>
<td>Labor Day holiday. Classes dismissed; offices closed</td>
</tr>
<tr>
<td>October 5, Thursday</td>
<td>Founders Day</td>
</tr>
<tr>
<td>October 6, Friday</td>
<td>Instruction ends for Fall Break, 6:00 pm</td>
</tr>
<tr>
<td>October 9, Monday</td>
<td>Last day to withdraw from a course without incurring a WF grade (withdraw failing)</td>
</tr>
<tr>
<td>October 11, Wednesday</td>
<td>Classes resume after Fall Break, 8:00 am</td>
</tr>
<tr>
<td>October 11 -November 14</td>
<td>Spring and Summer 2018 advising for continuing students, by appointment</td>
</tr>
<tr>
<td>October 20, Friday</td>
<td>Final date for December doctoral candidates' oral examinations</td>
</tr>
<tr>
<td>October 23-November 14</td>
<td>Spring and Summer 2018 registration for continuing students</td>
</tr>
<tr>
<td>November 3, Friday</td>
<td>Deadline for filing dissertation &amp; original signature pages with The Graduate School</td>
</tr>
<tr>
<td>November 13, Monday</td>
<td>Deadline for filing thesis with The Graduate School</td>
</tr>
<tr>
<td>November 21, Tuesday</td>
<td>Instruction ends for Thanksgiving holiday, 10:00 pm</td>
</tr>
<tr>
<td>November 27, Monday</td>
<td>Classes resume, 8:00 am</td>
</tr>
<tr>
<td>November 29, Wednesday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>November 30, Thursday</td>
<td>Final date for complete clearance of December graduate degree candidates, including electronic submission of final thesis or dissertation to The Graduate School and payment of fees owed to the University</td>
</tr>
<tr>
<td>November 30, Thursday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>December 1, Friday</td>
<td>Financial aid priority filing period ends for 2018-2019 academic year.</td>
</tr>
<tr>
<td>December 1-2, 4-7</td>
<td>Final examinations</td>
</tr>
<tr>
<td>December 7, Thursday</td>
<td>December Doctoral Hooding Ceremony, UNCG Auditorium, 3:00</td>
</tr>
<tr>
<td>December 8, Friday</td>
<td>December Commencement, Greensboro Coliseum</td>
</tr>
</tbody>
</table>
### Spring 2017

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2-5, Tuesday-Friday</td>
<td>Orientation, advising, and registration for all students based on student population and classification</td>
</tr>
<tr>
<td>January 8, Monday</td>
<td>Classes begin, 8:00 am</td>
</tr>
<tr>
<td>January 8-12, Mon.-Fri.</td>
<td>Late registration and schedule adjustment</td>
</tr>
<tr>
<td>January 12, Friday</td>
<td>Last day to change courses or course sections without special permission. Financial Aid satisfactory academic progress appeals deadline; hours locked for financial aid purposes. Last day to withdraw from a course for tuition and fees refund</td>
</tr>
<tr>
<td>January 15, Monday</td>
<td>Dr. Martin Luther King Jr. holiday. Offices closed</td>
</tr>
<tr>
<td><strong>January 16, Tuesday</strong></td>
<td><strong>Deadline for graduate students to apply to graduate in May 2018</strong></td>
</tr>
<tr>
<td>March 2, Friday</td>
<td>Last day to withdraw from a course without incurring a WF grade (withdraw failing)</td>
</tr>
<tr>
<td>March 3, Saturday</td>
<td>Instruction ends for Spring Break, 1:00 pm</td>
</tr>
<tr>
<td>March 12, Monday</td>
<td>Classes resume after Spring Break, 8:00 am</td>
</tr>
<tr>
<td>March 12 -April 18</td>
<td>Fall 2018 advising for continuing students, by appointment</td>
</tr>
<tr>
<td>March 14, Wednesday</td>
<td>Final date for May doctoral candidates’ oral examinations</td>
</tr>
<tr>
<td>March 21, Wednesday</td>
<td>Deadline for filing dissertation &amp; original signature pages with The Graduate School</td>
</tr>
<tr>
<td>March 26 –April 18</td>
<td>Fall 2018 registration for continuing students</td>
</tr>
<tr>
<td>April 3, Tuesday</td>
<td>Deadline for filing thesis with The Graduate School</td>
</tr>
<tr>
<td>April 6, Friday</td>
<td>Student Excellence Day</td>
</tr>
<tr>
<td>March 30, Friday</td>
<td>Spring Holiday. Classes dismissed; offices closed</td>
</tr>
<tr>
<td>April 25, Wednesday</td>
<td>Last day of classes, University follows Friday schedule</td>
</tr>
<tr>
<td>April 26, Thursday</td>
<td>Final date for complete clearance of May graduate degree candidates, including electronic submission of final thesis or dissertation to The Graduate School and payment of fees owed to the University</td>
</tr>
<tr>
<td>April 26, Thursday</td>
<td>Reading Day</td>
</tr>
<tr>
<td>April 27-28 &amp; Apr. 30–May 3</td>
<td>Final examinations</td>
</tr>
<tr>
<td>May 3, Thursday</td>
<td>May Doctoral Hooding Ceremony, UNCG Auditorium, 3:00</td>
</tr>
<tr>
<td>May 4, Friday</td>
<td>May Commencement, Greensboro Coliseum</td>
</tr>
</tbody>
</table>

### Summer 2018 – First Session: May 10 – June 13 (MBA May 7 – June 18)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 7, Monday</td>
<td>MBA Summer Session I classes begin</td>
</tr>
<tr>
<td>May 10, Thursday</td>
<td>Summer Session I classes begin</td>
</tr>
<tr>
<td><strong>May 14, Monday</strong></td>
<td><strong>Deadline for graduate students to apply to graduate in August 2018</strong></td>
</tr>
<tr>
<td>May 28, Monday</td>
<td>Memorial Day holiday. Classes dismissed; offices closed</td>
</tr>
<tr>
<td>June 1, Friday</td>
<td>Classes dismissed for Memorial Day are held on this date</td>
</tr>
<tr>
<td>June 13, Wednesday</td>
<td>Summer Session I final examinations</td>
</tr>
<tr>
<td>June 18, Monday</td>
<td>MBA Summer Session I final examinations</td>
</tr>
</tbody>
</table>

### Summer 2018 – Second Session: June 14 – July 20 (MBA June 19 – July 31)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 14, Thursday</td>
<td>Summer Session II classes begin</td>
</tr>
<tr>
<td>June 19, Tuesday</td>
<td>MBA Summer Session II classes begin</td>
</tr>
<tr>
<td>July 4, Wednesday</td>
<td>Independence Day holiday. Classes dismissed; offices closed</td>
</tr>
<tr>
<td>July 20, Friday</td>
<td>Summer Session II final examinations</td>
</tr>
<tr>
<td>July 31, Tuesday</td>
<td>MBA Summer Session II final examinations</td>
</tr>
<tr>
<td>August 3, Friday</td>
<td>Summer graduation date</td>
</tr>
</tbody>
</table>
THE GRADUATE SCHOOL

Message from the Vice Provost and Dean of The Graduate School

Welcome to the Graduate Bulletin of the University of North Carolina at Greensboro. The Bulletin serves as the student’s contract with the University and provides guidance relating to policies, procedures, and deadlines regarding graduate study. The Bulletin also provides descriptions of our post baccalaureate and graduate certificates, master’s degrees, and doctoral degree programs. Included are course descriptions, degree requirements, and other regulations. The Bulletin is provided in an electronic format that allows students and advisors to use key words to quickly and easily search and find the exact sections that pertain to questions at hand.

UNCG has a graduate enrollment of over 3,100 students. The University has grown over the years and there are now more than 50 certificate, 55 masters, 26 doctoral, and 2 education specialist programs available to students. In addition to being directly admitted into our degree programs, some students prefer to experience graduate education by taking courses as non-degree students through the VISIONS or BRYAN PRELUDE programs. Other students begin their studies in certificate programs and later work to complete a master’s degree.

The University is classified by the Carnegie Foundation as a doctoral granting institution with higher research activity. UNCG is also among a small group of universities that has earned the community engagement classification. The combination of these two designations is unique and affords students the benefits of research, outstanding faculty, and engagement with the community. Faculty bring the results of their research and community work into the classroom to make their teaching relevant to today’s problems. This multi-dimensional approach results in quality teaching that is supported through discovery of new knowledge and cooperative work with the community.

Please view this Graduate Bulletin as one of many resources available to you. If you have unanswered questions or want to explore further, please do not hesitate to visit The Graduate School or call our office at (336) 334-5596.

Kelly J. Burke, DMA
Vice Provost and Dean of The Graduate School

Mission Statement

The Graduate School at The University of North Carolina at Greensboro promotes excellence in graduate education through leadership and service within the University and greater community. Leadership is provided through the initiation of dialogue regarding issues and trends in higher education; the development of innovative and timely graduate programs; support for improvement of existing, viable programs; the endorsement of policies and practices contributing to high quality education endeavors; and proactive advocacy for graduate faculty and students. Service is provided through recruitment and enrollment of well qualified students; professional, accurate, and timely response to requests and concerns; the maintenance of processes and procedures that are efficient and consistent with academic policies; and responsible use of resources. The Graduate School is committed to building collegial and mutually supportive relationships with all constituencies to create learning environments that contribute to outstanding achievement in learning, discovery, scholarship, and service.

About The Graduate School

The Graduate School at The University of North Carolina at Greensboro (UNCG) is responsible for the welfare of all the graduate programs on campus and more graduate students from more than 30 states and a comparable number of foreign countries.

The University is organized into seven disciplinary units: the College of Arts and Sciences; the College of Visual and Performing Arts; the Joseph M. Bryan School of Business and Economics; the School of Education; the School of Health and Human Sciences; the School of Nursing; and the Joint School of Nanoscience and Nanoengineering,
with North Carolina Agricultural and Technical State University. The Graduate School has general supervision of graduate study throughout the colleges and schools.

The Vice Provost and Dean of The Graduate School is the chief administrative officer of The Graduate School, taking general responsibility for the development, improvement, and administration of all graduate study at the University. The Vice Provost and Dean of The Graduate School serves as admissions officer and administers services to graduate students and programs. All matters of policy, procedures, and graduate curriculum are developed, approved, and implemented in consultation with programs and the Graduate Studies Committee.

APPLICATION, ADMISSION, AND REGISTRATION

Applying for Admission

General Application Requirements

Graduate applicants must submit a completed online application, a nonrefundable application fee of $65 (USD), and the following supporting credentials:

- One official transcript of the applicant’s academic record from every college and university previously attended. If credit from one institution has been transferred to another and is listed on the receiving institution’s transcript, a transcript from the original institution is not required. If an applicant is currently enrolled in a degree program and will not graduate prior to an admission deadline, transcripts should be provided that reflect courses in progress. Prior to receipt of the final official transcript, students may be admitted for the first semester but will not be permitted to register for the following semester unless the final official transcript has been received.

- Applicants whose prior degree(s) is/are from a college or university outside the United States may also submit a third party credential evaluation, but it is not required. See Credential Evaluations below.

- Three letters of recommendation from former professors, employers, or persons well acquainted with the applicant’s academic potential.

- Official copies of GRE scores or results from other authorized examinations as required by the program to which one applies. Scores are valid for five years from the time originally taken.

- Any additional materials required by the program or department such as audition, interview, portfolio, resume, writing sample, personal statement, etc. Please refer to the Guide for Graduate Admissions or the departmental/program website for specific instructions and/or requirements.

All credentials must be in English and received by The Graduate School by the posted deadline. International applicants should refer to the section below entitled Additional Requirements for International Applicants.

Domestic applicants are required to have recommenders submit letters of recommendation electronically. International applicants may send paper recommendations. In addition, copies of official academic transcripts may be uploaded to the application electronically by converting the paper document to a PDF file and submitting it in the appropriate section of the application. Resumes, personal statements, and requested forms also may be provided electronically by uploading the documents into the application prior to submission. Uploading required credentials and having recommenders provide recommendations electronically speeds the processing of applications. International applicants who cannot utilize these features may submit credentials by mail and are not disadvantaged in the admission process.

Pursuing Multiple Programs

Students may pursue only one degree program of a given level at a time.

Students may pursue one or more graduate certificate(s) simultaneously with a graduate degree program.
Application Deadlines
Unless otherwise stated in the Application and Admission section of the appropriate program or the Guide for Graduate Admissions, the application for a specific term of entry, including supporting credentials, must be received by the following deadlines:

Domestic Applicants:
• Fall Semester — July 1
• Spring Semester — October 1
• Summer Session — April 1

International Applicants:
• Fall Semester – May 15
• Spring Semester – September 15
• Summer Session – February 15

Deadlines may be extended one month if the international applicant is already in the U.S.

Additional Requirements for International Applicants
International applicants include citizens or permanent residents of a country other than the United States. International applicants may be in the United States on an educational, worker, or visitor visa, or be residing in their home country. International applicants must submit all application materials as described above. All supporting credentials must be in English and transcripts must be submitted to The Graduate School. International applicants on, or intending to be on, an F-1 or J-1 visa are required to certify that they have adequate financial resources to cover the cost of tuition and fees, accommodation and meals, insurance, and other living expenses. Financial forms and supporting bank/sponsor documents may be downloaded from www.uncg.edu/ipg.

English Proficiency
Non-native speakers of English must validate proficiency in the English language by one of three means.

1. Submit a satisfactory score on a language proficiency test. If the TOEFL is the chosen test, the minimum required score depends on the form of the exam taken (internet based - 79 or paper based - 550). A score of at least 6.5 is required on the IELTS. A score of at least 53 is required for the Pearson Test of English.

2. Have earned a baccalaureate or graduate degree from an accredited college or university in the United States.

3. Complete INTERLINK, the intensive English language program located on UNCG’s campus (http://nc.interlink.com).

The English language proficiency requirement may be waived if the applicant is a graduate of a university in a country where English is the official language.

Credential Evaluations
All supporting credentials must be in English. Applicants must arrange for The Graduate School to receive official or certified copies of transcripts of academic records from every college and university previously attended. For a transcript or diploma to be final and official, it must show no coursework in progress and must contain the name of the degree and date on which it was awarded.

Campus Safety
As part of the admissions process, each applicant is required to answer questions related to campus safety. A "yes" answer to one or more of the questions will not necessarily preclude an applicant from being admitted. However, failure to provide complete, accurate, and truthful information will be grounds to deny or withdraw admission, or to dismiss a student after enrollment.
UNCG Undergraduates Applying for Dual Registration

Undergraduate students at UNCG who plan to undertake graduate study at UNCG and who need no more than 12 semester hours of work to fulfill all requirements for the bachelor’s degree, may enroll in The Graduate School. Total graduate credit obtained in this dual status may not exceed 12 semester hours. Courses at the 600 level or above are applied to the graduate degree only. Students must apply for admission to a graduate program before requests for dual registration can be approved but do not have to be formally admitted until the end of the semester in which credit is earned. For dual registration status, the approvals of The Graduate School, the University Registrar’s Office, and the student’s major adviser are required. Contact the University Registrar’s Office (336-334-5946) for more information.

Approval for dual registration does not guarantee or constitute acceptance into any graduate program.

UNCG Undergraduates Applying to Accelerated Bachelor’s to Graduate Degree Programs (ADP)

The Accelerated Bachelor’s to Graduate Degree Program (ADP) is designed to provide a more efficient means to obtain a graduate degree. The program is for students who have a high GPA and want to start taking courses that will count towards both their undergraduate and graduate degrees. The University benefits from retaining its best students for advanced study and students benefit from the shortened time to degree.

The ADP allows a student to begin accumulating credits towards completion of a graduate degree while still enrolled as an undergraduate. Undergraduates participating in this program are given an early decision on their graduate application pending successful completion of the baccalaureate and are allowed to take specified graduate level courses during the spring semester of their junior year and/or during their senior year.

A maximum of 12 graduate credits taken during the undergraduate career may be applied towards completion of the graduate degree as long as the following criteria are met:

- The courses must be appropriate to attain the necessary competencies for the graduate degree,
- The student must earn a grade of “B” (3.0) or better in each course,
- The courses must be at the 500-level or above, and the student must fulfill the graduate level requirements of those courses.

These graduate-level courses will count towards the baccalaureate degree and the graduate degree, and the grades will be recorded on the undergraduate transcript and later on the graduate transcript. The Graduate School will authorize the acceptance of this credit on the student’s graduate record after the student has completed the undergraduate degree and has been admitted to the graduate program.

Academic units interested in participating in the ADP must provide a proposal to both the Undergraduate Curriculum Committee and the Graduate Studies Committee that indicates how the necessary courses will be incorporated into this accelerated program. Specific graduate courses (some may be at the 500 level) must be identified for the accelerated program rather than permitting the selection of electives.

Admission Procedure

Participation in the ADP by any academic unit is optional. Each academic unit will develop admission criteria based on the following guidelines:

1. Minimal criteria for admission will include a cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at the University of North Carolina, Greensboro (UNCG), and any additional criteria as determined by the academic unit.

2. The undergraduate student may not apply for admission to the ADP before the first semester of the junior year and must have completed at least 60 semester credits.

3. The student must apply for admission to the ADP through The Graduate School. This admission, if approved, will include admission to the graduate degree granting academic unit after the baccalaureate
degree is awarded. After admission into the ADP, the student will be identified as having ADP status through a student group within the records management system. To ensure a timely decision and access to course enrollment, students must apply for ADP admission by July 1 for Fall ADP course enrollment, November 15 for Spring enrollment, and April 1 for Summer enrollment.

International students who are admitted into the ADP will work with The Graduate School and the Office of International Affairs in order to apply for a visa extension.

Academic Advising and Records
Academic units that want to participate in the ADP will develop a clear admissions and advising process for the ADP. In departments where a formal ADP arrangement does not exist, a student may petition the department to offer an individualized ADP. In such cases at the discretion of the department, the student may be granted permission to negotiate an individualized ADP that is within the framework of the existing guidelines. The individualized ADP must be approved by both the department Director of Undergraduate Study and Director of Graduate Study, and then be submitted to The Graduate School. All students must submit the Request for Accelerated Degree Program (form found in graduate application) to the Graduate School and must simultaneously apply for admission to the appropriate graduate degree program.

To avoid losing eligibility for financial aid as an undergraduate student, ADP students should work with their advisors and develop individual graduation plans showing that the courses taken at the graduate level will meet requirements in their bachelor’s degree program.

Program Requirements
A student admitted into the ADP will complete up to twelve graduate credit hours that can be applied toward the undergraduate degree during the second-semester junior and senior year. Following admission to the graduate program, those courses may be incorporated into a graduate program. While an undergraduate, the student must enroll for graduate credit but will pay the appropriate undergraduate tuition for the specified graduate courses. Differential tuition fees will apply for those courses in programs that have been approved for these special fees.

Only courses in which a “B” or above has been earned will be included on the graduate plan of study. Students who complete the undergraduate degree may claim their status as graduate students (with the appropriate graduate credit) in the next semester or session after receiving the bachelor’s degree.

Admission to the ADP is a promise of formal admission to the Graduate School and the academic unit after completion of the bachelor’s degree. Students will not be required to take the GRE or other entrance examination unless stipulated by the department for the ADP. ADP students will still be considered undergraduate students until the baccalaureate degree is officially awarded. At that time, those students will be formally admitted into The Graduate School, and the courses will be reflected on both transcripts.

Visiting and Non-Degree-Seeking Students
VISIONS
Visiting and non-degree-seeking students who wish to pursue graduate studies for personal enrichment, professional knowledge, renewal of licensure, or any other reason are categorized as VISIONS students and must hold a baccalaureate degree from a recognized accredited college or university. A $25.00 non-refundable fee is charged each semester a VISIONS enrollment form is submitted.

VISIONS students are not eligible for financial aid.

Individuals who are permitted to enroll at the University as VISIONS students may take courses numbered 100-749 that have not been restricted by the departments (see The Graduate School’s webpages). Students wishing to enroll in graduate courses in the Department of Art or the Bryan School of Business and Economics must obtain
permission from the appropriate graduate program director. Visiting students who wish to enroll in MBA classes must provide a letter of good standing, signed by the dean of their graduate program, prior to registration. With the instructor’s approval, VISIONS students may submit a written petition to the Director of Graduate Study or the Department Head to enroll in a restricted course; however, independent study is reserved for only degree seeking students. Graduate credits earned as a VISIONS student may be applicable to a graduate degree or certificate.

Should a VISIONS student wish to apply for admission to The Graduate School, subject to the written recommendation of the major department and the approval of the Vice Provost and Dean of The Graduate School, up to nine (9) semester hours of such credit may be accepted toward a degree and up to three (3) semester hours of such credit may be accepted toward a certificate. Credit earned must fall within the timeline for completing the degree or certificate.

Public School Personnel
Public school teachers and administrators who wish to take courses solely for licensure renewal credit may do so as VISIONS students. If credit is to be applied to a graduate degree, the student must submit an application to The Graduate School before the completion of the course. If the student meets all requirements for full admission as a graduate degree student, she/he will receive the licensure renewal credit.

Bryan Prelude
The Bryan Prelude program is a non-degree status designed for individuals who wish to explore a potential degree program in Business Administration (MBA), Information Systems and Supply Chain Management (MS in Information Technology and Management), or MS in Accounting. Admitted applicants to the Bryan Prelude may enroll in select courses as outlined in the course requirements listed below. The abbreviated application is found online under the Bryan Prelude program listing. Participants in the Bryan Prelude program must apply each semester in which they intend to enroll by using the online application. A $25.00 non-refundable fee is charged each semester an application is submitted.

Bryan Prelude students who subsequently are admitted and enrolled in the Master of Business Administration, the Master of Science in Information Technology and Management, or the Master of Science in Accounting program may include no more than 6 hours of graduate level coursework earned while enrolled in the Bryan Prelude program. Bryan Prelude courses taken in preparation for the Bryan MS in Accounting are intended for individuals whose undergraduate degree is not in accounting and who wish to take undergraduate-level, prerequisite coursework for the Bryan MS in Accounting.

Requirements for Admission
Admission to the Bryan Prelude program is selective. To be considered all applicants must meet the following minimum standards: (1) an official undergraduate transcript, verifying an earned baccalaureate degree from an accredited college or university with an undergraduate grade point average of 3.00 or higher (on a 4.00 scale); (2) a clearly articulated statement of purpose indicating degree program interest; (3) a current resume. A combination of work experience and education could on rare occasions possibly substitute for GPA requirements.

Recommended Courses
Students admitted to the Bryan Prelude program may enroll in the following courses. Course selection and sequence is determined by applicant designation of interest in the MBA, MS in Information Technology and Management, or MS in Accounting program.

For Business Administration
- MBA 701 Quantitative Analysis for Decision Making (3)
- MBA 702 Financial and Managerial Accounting (3)
- MBA 703 Economic Policies and Impact on Global Outcomes (3)
- MBA 716 Leadership and Sustainable Business (3)
For Information Technology and Management
The following courses are recommended for students applying to MSITM without a business background. These are prerequisite courses and cannot be applied toward the master’s degree:

- ACC 202 Managerial Accounting (3)
- SCM 302 Operations Management (3)

For Accounting
The following prerequisite courses are recommended for students applying to Accounting without a baccalaureate in Accounting. These courses cannot be applied toward the master’s degree:

- ACC 202 Managerial Accounting (3)
- ACC 218 Financial Statement Preparation and Disclosures (3)
- ACC 318 Intermediate Accounting I (3)
- ACC 319 Intermediate Accounting II (3)
- ACC 325 Accounting Transaction Processing Systems (3)
- ACC 330 Cost Accounting (3)
- ACC 420 Federal Tax Concepts (3)
- ACC 440 Auditing Concepts (3)

For additional information on these courses along with potential undergraduate course prerequisite options, see the Bryan Prelude website.

ADMISSION TO GRADUATE STUDY
Each application to The Graduate School will result in one admission decision. Applicants are notified of offers of admission by letter from The Graduate School. Successful applicants are offered full graduate admission or provisional admission for a specific program in a specific term. If the admitted applicant does not register for the term specified in the admission letter, the admission may be subject to subsequent review.

Students may not be admitted to and graduate from the same degree or certificate program in the same academic term.

Full Graduate Admission
All applicants must have obtained the following:

1. A bachelor’s degree from an accredited college or university or appropriately-evaluated credentials for non-U.S. schools.
2. Satisfactory academic standing as an undergraduate or in a post-baccalaureate program: “B” (3.0 GPA) average or better.
3. Approval of the academic department in which the graduate student will major. (Assumes an undergraduate major appropriate to the proposed graduate study.)
4. Satisfactory scores on the Graduate Record Examination (GRE) (verbal, quantitative, and analytical writing) or other authorized examination as required by the respective graduate degree programs. Academic programs may request to waive the required examination if the applicant has a prior master’s degree, professional doctorate, or research doctorate in a closely related field from a regionally accredited institution of higher education.

Provisional Admission
Promising applicants who hold a baccalaureate degree but do not meet the formal requirements listed above may be granted provisional admission. Full graduate standing is granted when these students satisfactorily complete
prescribed courses or otherwise remove deficiencies. They must meet any special conditions attached to their admission, by either The Graduate School or their major department, no later than upon the completion of 15 semester hours of graduate credit.

Among provisionally admitted applicants may be the following:

1. Applicants with a bachelor’s degree from a non-accredited institution.
2. Applicants with a bachelor’s degree from an accredited institution who lack undergraduate work considered essential for graduate study.
3. Applicants whose scholastic records are below admission standards but who show promise for success. Other components of the application beyond the GPA or the required exam score may carry significant weight for provisional admission.

A graduate student admitted provisionally is not eligible for appointment to an assistantship or fellowship until full graduate standing is achieved. Provisionally admitted students will have specifically stated conditions that must be met to progress in the program. Provisionally admitted students who are dismissed for failing to meet the provisions of their admission will be eligible to submit a new application to The Graduate School after two semesters or the equivalent and may be admitted only upon the recommendation of the major department Head or Director of Graduate Study and with the approval of the Vice Provost and Dean of The Graduate School. While on academic dismissal, students are not eligible to take courses through the VISIONS program.

Deferral of Admission
Graduate admission to a degree or certificate program may be deferred for a maximum of one year from the initial term of admission. The student is responsible for contacting the department to determine if admission for subsequent terms is allowed.

To request a deferral of admission, admitted students must submit a completed Deferral of Admission Form provided by the admitting department’s Director of Graduate Study no later than the first day of classes of the term of initial admission. The deferral request must be for a specific term and may not exceed one year from the original term of admission. After considering the request, the department will forward the form to The Graduate School for processing and The Graduate School will notify the student of the decision. Merit-based financial aid (teaching/research assistantships, scholarships, and fellowships) will not be deferred and the student must compete again for the awards for the term of deferral (if approved).

Students who have not enrolled after one year and have not requested a deferral of admission will be required to reapply.

Military-affiliated students should contact The Graduate School at 336-334-5596 for individual assistance with extended deferrals.

Registration
Dates for registration periods for each semester are published in the Graduate School Bulletin and on the University Registrar’s website (www.uncg.edu/reg).

Registration at UNCG is an automated process conducted online through UNCGenie.

Prior to the assigned registration access window, all new and continuing students will receive an email from the University Registrar’s Office. The email will be sent to the @uncg.edu address and will contain the method to request a randomly assigned personal identification number (PIN). The email may also include a preassigned advising code; however, in certain programs students must see their advisers to obtain advising codes.
Continuing students who do not pre-register for the next semester during the Early Registration periods in November (for spring semester) and in April (for summer/fall semester) will be required to pay a late registration fee.

Immunization Clearance
Students who have been admitted to UNCG are required by North Carolina State law to submit an immunization form with appropriate verification of immunizations. This form is available online and must be satisfactorily completed and returned to Student Health Services.

 Failure to comply with this requirement within 30 calendar days from the first day of each semester will result in the student’s being administratively withdrawn from the University.

Students registered for four hours or less, or enrolled in only evening classes, are exempt from this requirement. If enrollment status changes (e.g., enrolled for more than four hours or daytime classes), students should consult with Student Health Services.

This requirement applies to all students, regardless of whether they are part-time or full-time. Students subjected to an administrative withdrawal for failure to comply with medical clearance requirements are entitled to a refund, subject to the guidelines of the University’s Refund Policy (see the section on Tuition and Fees).

Semester Hour, Course Prefix, Number, and Credit structure
The unit of academic work is the semester hour, defined as one 50-minute lecture period (or at least two such periods of laboratory or field work) per week throughout one semester.

Each course is represented by a three-letter symbol indicating the department directing the course and a three-digit number. Courses numbered 500-599 are open to advanced undergraduates and graduate students; courses numbered 600-749 are open only to graduate students; and courses numbered 750-899 are open only to doctoral students.

The first of the figures enclosed in parentheses immediately following the course title indicates the number of semester hour credits given for the course. Semester hour credit corresponds, unless otherwise stated, to one 50-minute class period per week through one semester. The second and third figures indicate the number of lecture and laboratory hours, respectively.

Prerequisites for a course are indicated in the course description by “Pr.” followed by appropriate requirements that must be met before that course may be taken. A hyphen (-) between course numbers indicates that no credit toward a graduate degree will be given for either course until both are successfully completed. A comma (,) between course numbers indicates that independent credit is granted for the work of one semester.

Example of Credit Structures

MST 528 Topics in Film Studies (3:2:3)
Pr. MST 225

In this example, the course is open to advanced undergraduate students and graduate students and has a prerequisite. It carries 3 semester hours of credit and meets for 2 lecture hours and 3 laboratory hours each week.
Cross-Listed Courses
Each semester a number of courses are cross-listed with courses taught in a different department. These courses meet in the same room at the same time but have different course prefixes and may have different numbers. Cross-listed courses are listed under the Cross-Listed Courses heading ("Same as . . ."). Students should be aware of cross-listings before registering in order to avoid taking a course for which they will not receive additional credit.

Service Learning Courses
UNCG defines Academic Service Learning as a teaching method that links community action and academic study so that each strengthens the other. Students, faculty, and community partners collaborate to enable students to address community needs, initiate social change, build effective relationships, enhance academic skills, and develop civic literacy. Service Learning encourages critical consideration of the ethical dimensions of community engagement.

Service Learning courses are marked (svl) after the course title and incorporate 15-20 hours of service.

Cross Registration
Students taking courses through an interinstitutional agreement must meet the standards for participation in the program as set by their home institution, including the transfer credit policies of The Graduate School, and must follow the rules and policies of both campuses. Students must be registered for at least half of their hours at UNCG the same semester in which they register through either the Interinstitutional or the Consortium agreement. Under Interinstitutional Registration and the Greater Greensboro Consortium, enrollment and payment of tuition and fees take place on the home campus. Students must pay the appropriate tuition and fees to the visited institution when participating in the UNC Online Interinstitutional Agreement.

Application forms and information are available at The Graduate School and the University Registrar’s Office. Unlike other courses accepted for transfer, grades received through an interinstitutional course are recorded on the student’s UNCG transcript and calculated into the student’s overall GPA. The Graduate School participates in the following three interinstitutional agreements.

Interinstitutional Registration
The Interinstitutional Registration program with North Carolina State University, University of North Carolina at Chapel Hill, University of North Carolina at Charlotte, North Carolina Central University, and Duke University allows degree-seeking graduate students at UNCG, with the approval of the Vice Provost and Dean of The Graduate School and upon recommendation of their advisers, to take courses at one of the campuses above. Eligible courses are limited to traditional, campus-based courses. Distance learning, extension, and online courses are not eligible.

Greater Greensboro Consortium
Through membership in the Greater Greensboro Consortium (GGC), UNCG also participates in an open-access agreement with North Carolina Agricultural and Technical State University and Greensboro College, located in Greensboro, High Point University, located in High Point, and Elon University, located in Elon, whereby degree-seeking students enrolled at UNCG may take courses at NC A&T, Greensboro College, High Point University, or Elon upon recommendation of their advisers and with the approval of the Vice Provost and Dean of The Graduate School. Eligible courses are limited to traditional, campus-based courses. Distance learning, extension, and online courses are not eligible.

UNC Online Interinstitutional Agreement
The UNC Online Interinstitutional Agreement allows degree-seeking graduate students at UNCG, with the approval of the Vice Provost and Dean of The Graduate School and upon recommendation of their advisers, to take online courses at the 15 other UNC system schools. Students must pay the appropriate tuition and fees to the visited institution. Requests should be submitted through The University of North Carolina Online web site.
http://online.northcarolina.edu/unconline/courses.php.

Distance Learning/Off-Campus Courses
Most off-campus and distance education courses are classified as “distance.” Distance learning courses are identified in UNCGenie by having “D” or “X” suffixes on the section number and in the campus code field and are managed through UNCG Online: The Division of Online Learning. These courses count toward graduate residence credit for students admitted to UNCG.

In Fall and Spring semesters graduate students taking 9 or more main (M) campus hours may take as many online distance (D) courses as their schedule will allow.

Students wishing to take off-campus or distance learning courses should contact UNCG Online: The Division of Online Learning. Academic credit cannot be applied to degree requirements until the student is fully admitted to UNCG as a degree-seeking student.

Auditing
Auditing a course is the privilege of being present in the classroom when space is available. No credit is involved, no examination is required, no grade is reported, and no computer access is available. Attendance, preparation, and participation in classroom discussion and activities are at the discretion of the department and the instructor. The deadline to register for an audit course or to change an audit course to credit is the last date courses can be added as specified in the official academic calendar.

A UNCG student who is registered for 12 hours or more may audit one course per semester without charge. A UNCG student who is registered for fewer than 12 hours may audit no more than two courses per semester. For auditing fees, see the section on Auditing Fees.

Auditing Fees
Current UNCG Students
A UNCG student who is registered for 12 credit hours or more may audit one course per semester with no additional charge. A UNCG student who is registered for fewer than 12 credit hours may audit no more than two courses per semester and is charged a fee of $15 per course. A UNCG student who is registered for zero credit hours will be charged a fee equal to the in-state or out-of-state tuition and fee rate of a 0-credit hour course for each course audited.

Registered auditors (persons not officially enrolled at UNCG) who do require a record of enrollment as an auditor should file a VISIONS form with The Graduate School and follow regular registration and payment procedures. A fee equal to the in-state or out-of-state tuition and fee rate of a 0-credit hour course is charged for each course audited. Fees are payable in full at the time of registration.

Visiting Auditors
Visiting auditors are classified as non-UNCG students who wish to take a course(s) without receiving a record of enrollment. Such individuals must apply to register through UNCG Online: The Division of Online Learning. A visiting auditor will not receive a record of enrollment and is charged a $125 fee for lecture courses. Visiting auditors are admitted to lecture courses when space is available with the approval of the department head in consultation with the instructor teaching the course requested.

To audit a 600- or 700-level course, a student must hold a bachelor’s degree.

Use of University Libraries
Students must be registered for credit and have a valid UNCG ID to check out materials from the University Libraries. Graduate students may check out items for one semester. If the Libraries are to be used for one month
or less, such as to finish courses with grades of Incomplete or for special assignments, students may obtain a letter from The Graduate School or their professor and present it to the Access Services Department in Jackson Library. During the summer months, students who preregistered for Fall may check books out of the University Libraries without being registered for credit or securing special approval.

**ACADEMIC REGULATIONS**

**University Policies**

All students at UNCG, graduate and undergraduate, are responsible for observing all federal, state, and local laws as well as the regulations of The University. The University has developed policies relating to certain kinds of behavior and circumstances, some of which are of particular interest or significance to graduate students. Judicial policies related to student conduct and full statements of the following policies may be found at deanofstudents.uncg.edu.

1. Academic Integrity Policy
2. Student Code of Conduct
3. Drug and Alcohol Policy and Operational Procedures
4. Copyright Compliance Policy
5. Discriminatory Conduct
6. Sexual Harassment
7. Traffic Procedures (including motor vehicle registration and parking regulation)
8. Public Records (academic and nonacademic)

**Online Learning**

UNCG ONLINE: The Division of Online Learning at the University of North Carolina at Greensboro offers a comprehensive service model to support and grow online learning at UNCG. Services primarily focus on new online program planning and incubation, online course development, marketing and recruitment, faculty support, and online student support services. For a detailed description of services please see [http://bit.ly/UNCGONLINEGUIDEBOOK](http://bit.ly/UNCGONLINEGUIDEBOOK).

Graduate credit earned for academic courses completed prior to admittance to the Graduate School is limited to 9 cumulative semester hours of credit. Students wishing to include distance/online learning work in their program should consult their advisors.

**Summer Session**

The University operates a Summer Session with classes beginning on a schedule of varying dates throughout the summer, thus enabling students to pursue a program of study best suited to their needs. Courses are open to graduate students desiring credit towards their advanced degree, certificate, or renewal of their teaching licensure. Special workshops and conferences enrich the opportunities for Summer Session study. A normal course load is six credit hours per five-week session.

Students whose programs require that specific faculty members be available to them should determine whether these faculty members will be on campus during the summer.

**Student Responsibilities**

Each graduate student’s program is planned with an adviser who is a graduate faculty member appointed by the department head or dean. The adviser interprets departmental requirements and arranges an orderly sequence of activities for the student’s progress toward the anticipated degree. The student is responsible for continuing in satisfactory academic standing and for meeting all the degree requirements and deadlines for graduation or licensure. Therefore, students are advised to consult with their advisers frequently and to request their advisers to develop a tentative written plan of study. This plan is to be placed on file in The Graduate School.
The Academic Integrity Policy states the precepts, violations, and obligations of academic integrity. In addition, graduate students are expected to comply with the social regulations of the University as set forth in the UNCG Policies for Students available online at deanofstudents.uncg.edu.

See also Best Practices in Advising and Mentoring Graduate Students, in the Appendices.

**Attendance**

**Class Attendance**

Regular class attendance is a responsibility and a privilege of University education. It is fundamental to the orderly acquisition of knowledge. Students should recognize the advantages of regular class attendance, accept it as a personal responsibility, and apprise themselves of the consequences of poor attendance. Instructors should stress the importance of these responsibilities to students, set appropriate class attendance policies for their classes, and inform students of their requirements in syllabi and orally at the beginning of each term.

**Student’s Responsibility**

- Knowledge of each instructor’s attendance policy and monitoring his or her class absences throughout the term.
- Familiarity with all materials covered in each course during absences and make-up of any work required by the instructor.
- Inform each instructor as far in advance as possible when conflicts or absences can be anticipated (e.g., athletic team events, work, medical procedures, religious observances, etc.) by email, phone, or by contacting the main office of the department that offers the course.
- Provide appropriate documentation so that each instructor can make an informed decision as to whether or not the absence is excusable.
- Initiation of requests for make-up work missed because of class absences. The decision to assist the student with make-up work, including tests, rests with the instructor.
- Follow-up on all notices from the Registrar regarding course enrollment in order to correct registration.

**Instructor’s Responsibility**

- Setting of reasonable regulations for class attendance as appropriate for class content, organization, methodology, and size.
- Description of attendance policies in course syllabi and announcement in class, particularly at the beginning of each term.
- Maintenance of class attendance records of enrolled students as appropriate for the attendance policy.
- Exaction of penalties for unsatisfactory class attendance. Possible penalties are lowering the course grade, including a grade of F, and, in extreme circumstances, dropping the student from the course.

**Dean of Students Office Responsibility**

- Notify each instructor on the student’s behalf when personal reasons (e.g., family emergency, illness, bereavement, birth of a child, military duty, etc.) prevent the student from properly notifying each instructor because of circumstances beyond the student’s control. The student or the student’s representative should contact the Dean of Students Office (336-334-5514) if the student is unable to make direct contact by email or phone with each instructor or is unable to leave word with each instructor’s department.
- Review documentation by a licensed health professional and confirm its receipt with each instructor if the student experiences a medical or psychological event that significantly impairs his/her ability to function successfully or safely as a student.
The student should be aware that assistance of the Dean of Students Office does not change in any way the outcome of the instructor’s decision regarding the student’s academic work, grades and performance in any given course.

Religious Observance

The University allows for a limited number of excused absences each academic year for religious observances required by the faith of the student.

- Students must notify instructors of absences in advance of the date of the religious observance. Instructors have the authority to specify, via written notice to students, the amount of lead time required and may require that the nature of the religious observance be specified and the student's participation be confirmed in writing by an official of the religious organization.

- When appropriate notice is provided by a student, the student must be granted at least two excused absences per academic year under this policy and must be allowed to make up or waive work and tests missed due to these particular absences. With regard to any test or other assignment that a student would miss due to notice of a required religious observance, faculty members may require the student to complete the test or assignment in advance of the originally scheduled date of the test or assignment. Beyond the minimum terms and limits of this policy, instructors maintain authority to establish and enforce the attendance policy for the courses they are teaching.

- The requirement for students to make such requests for excused absences applies only to days when the University is holding class.

Appeals (Attendance)

If a student thinks there is a discrepancy between the instructor’s exaction of a penalty for unsatisfactory class attendance and the stated policy or that there is an extenuating circumstance that may affect the instructor’s decision, then he or she should first make a request to the instructor. If there is no resolution at the informal stage or the student wishes to pursue a formal appeal, refer to the Graduate School Appeals Procedure.

Conflict of Interest

Student-Faculty Relationship

It is essential to the promotion of high academic standards and maintenance of sound professional practice that the student-faculty relationship be free of real or apparent conflicts of interest based on familiar relationships. To this end, a member of the faculty shall not serve in any capacity that will involve evaluating the academic performance of a graduate student when there exists between them a relationship in the first or second degree of affinity or consanguinity or when they otherwise are so closely identified with one another as to suggest a possible conflict of interest.

Faculty as Student

Members of the voting and non-voting faculty (as identified in sections 2.1 and 2.2 of the Constitution of the Faculty: The University of North Carolina at Greensboro) may not pursue a graduate degree or certificate in their home department or degree-offering unit. For exceptions, the unit Dean may petition the Vice Provost and Dean of The Graduate School.

Student as Faculty

Graduate students should not be assigned to graduate assistantships that generate conflicts of interest. In the rare instance that a graduate student must be assigned to teach a graduate level course, the department is required to seek permission from the Vice Provost and Dean of the Graduate School, providing rationale for the assignment and a plan to ensure that the assignment will not generate conflicts of interest.
Course Loads
Graduate students enrolled in nine or more credit hours per term are considered full-time. After completing all required coursework, a master’s student may be considered full-time while enrolled in a 3 credit hour thesis course (699). Master’s students may maintain full-time status with 3 credits of 699 for two terms.

After entering candidacy status, a doctoral student may be considered full-time while enrolled in a 3 credit hour dissertation course (799). Doctoral candidates may maintain full-time status with 3 credits of 799 until completion of the number of dissertation credit hours specified by their programs in the Graduate School Bulletin or their departmental plan of study.

Continued enrollment in thesis or dissertation credit hours beyond those that are required will not provide full-time status unless the student also enrolls in thesis extension, dissertation extension, and/or research extension courses to fulfill the 9 credit hour requirement.

Permission to enroll in extension courses will require verification by the committee chair that the student is making satisfactory progress.

Meeting Visa Requirements for International Students on an F-1 or J-1 Visa
Doctoral students on an F-1 or J-1 visa, upon and after admission to candidacy and after completion of all dissertation hours required on the plan of study, may enroll in one hour of dissertation extension each term to meet visa requirements.

Master’s students on an F-1 or J-1 visa, upon completion of all required course work and any thesis hours required on the plan of study, may enroll in one hour of thesis extension or research extension each term to meet visa requirements.

Each term, the academic department must supply a letter to the International Programs Center verifying that the student remains in good standing and is making satisfactory progress toward completion of the degree.

Transfer Credit (Graduate)
In some instances, work done in other institutions may be counted toward the degree or certificate. Please see Summary of Certificate Requirements, Summary of Master’s Requirements, and Summary of Doctoral Requirements for transfer credit information specific to the type of graduate program.

If transfer credit is to be considered, the following stipulations must be present:

- All credit offered in transfer must have been taken at an accredited graduate school and not have been used to complete the requirements for a degree.
- All credit to be transferred must fall within the time limit for the degree/certificate.
- The student must have earned a grade of B (3.0) or better on all transfer credit. In a four-letter grading system, only credit earned with either of the top two grades is transferable. The transfer of credit where a grade of P or its equivalent is received in a two- or three-letter grading system (such as P-F, S-U, or H-P-F) reduces hour for hour the number of C grades earned that may count toward the minimum requirements for the degree/certificate.
- The credit must be recorded on an official transcript placed on file with The Graduate School.
- It must be approved both by the student’s major department and by the Vice Provost and Dean of The Graduate School.
- It must be necessary to meet specific degree/certificate requirements.
- Hours only, not grades, may be transferred from other institutions. Quarter-hours do not transfer as semester hours. A fraction of an hour of credit will not be transferred. See sample below:

<table>
<thead>
<tr>
<th>Hours (quarter hours)</th>
<th>Equivalent (semester hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3-4</td>
<td>2</td>
</tr>
</tbody>
</table>
5 quarter hours transfer as 3 semester hours.
6-7 quarter hours transfer as 4 semester hours.
8 quarter hours transfer as 5 semester hours.
9-10 quarter hours transfer as 6 semester hours.

Independent Study (Graduate)
Independent study is reserved for certificate or degree seeking students. VISIONS/visiting students are not eligible to register for independent study. To be eligible for independent study, a student must have completed several regular courses of graduate work and attained at least a 3.0 average. Students may not register for independent study as a substitute for existing courses. Registration for independent study must have the approval of the instructor, the department head or dean, and the Vice Provost and Dean of The Graduate School.

Post-Baccalaureate and Post-Master’s Certificate students may count no more than 3 semester hours of independent study toward certificate requirements.

Master’s students may register for no more than 3 semester hours of independent study per semester and may count no more than 6 semester hours of independent study toward satisfying the minimum requirements for the master’s degree. At the discretion of the department, MFA students may earn up to a maximum of 20% of their required hours as independent study credits.

Doctoral students may count no more than 15 semester hours of independent study toward degree requirements.

Continuous Enrollment
Pursuit of a graduate degree should be continuous. Students pursuing a graduate degree program should normally be enrolled each Fall and Spring semester, or one semester during the academic year in combination with Summer Session, for coursework that is approved for their program of study and selected in consultation with the departmental Director of Graduate Study.

The policy on continuous enrollment normally requires that a student be enrolled continuously, as defined above, from the time of entry into a graduate degree program through the completion of all required coursework, including the required hours of 699 and 799. Students who have already enrolled in the maximum number of 699/799 hours but who have not yet completed the requirements for thesis/dissertation are required to enroll in additional coursework as described below.

Students completing their thesis or dissertation must enroll in and pay tuition and fees for not less than one nor more than three hours of thesis/dissertation extension credit each semester, after consultation with and approval by their faculty adviser. These hours will not count toward the degree. Students required to enroll in additional hours to complete their master’s thesis will enroll in departmental 801 (example: ART 801-Thesis Extension), and doctoral students completing their dissertation will enroll in departmental 802 (example: ENG 802-Dissertation Extension). All thesis and dissertation students must be enrolled in thesis/dissertation preparation (699/799) or the thesis/dissertation extension courses (801/802) for credit during the semester in which they complete their graduate work and are scheduled to receive their degrees.

A graduate student who has been admitted with full graduate standing to a graduate degree program but has not completed any 500-level or above courses at the University for two consecutive semesters (or a semester and Summer Session) is considered to have withdrawn from the curriculum. The student will be required to file an application for readmission to The Graduate School to resume the course of study. A student who withdraws will be required to comply with regulations and requirements in effect at the time of readmission to The Graduate School.
Students in planned summer-only programs of study should maintain annual summer session patterns of enrollment and course completion throughout the program of study for the degree.

**LEAVE OF ABSENCE**

The University of North Carolina at Greensboro supports a leave of absence policy to assist graduate students who are temporarily unable to continue their programs. The leave of absence may extend for up to one academic year. Acceptable reasons for requesting such a leave usually include military service, bereavement, illness, caregiving, maternity, and paternity. Students requesting a leave of absence must submit an application to their department/school/unit chairperson or director.

Preparing the Application for Leave of Absence

In consultation with the supervising faculty member, the Application for Leave of Absence form is to be completed by the student, and signed by both the student and the advisor or supervising faculty member. The application is to be submitted to the chairperson/director for review and signature before being forwarded to the Vice Provost and Dean of The Graduate School. Whenever possible, application should be made in advance of the anticipated leave or as soon as possible after commencement of the leave. Whenever possible, it is helpful if the commencement and termination of the leave coincide with the beginning of a semester or session.

It is the student’s responsibility to ensure that the proposed leave is compatible with the regulations of any granting agency from which funding would normally be received during the leave period and that such agencies are informed of the proposed leave. Students on student loan programs should clarify the consequences that such a leave may have on their repayment status. International students are advised to consult with the Office of International Students regarding their immigration status during a proposed leave.

Students granted a leave of absence will have their time-to-completion of degree extended by the amount of time granted in the leave of absence. The continuous enrollment policy will also be held in abeyance during this time.

Graduate student appointees who are granted a leave of absence will have their salary and stipend suspended during the period of their leave. If feasible, the remainder of their appointment will be held for them upon their return to the next term. In the event that a student appointee and chairperson/director disagree on the leave or its arrangements, students may appeal to The Graduate School. See Appeals Procedure.

Readmission After Failure to Maintain Continuous Enrollment Without a Leave Of Absence

A student who fails to enroll in courses for more than one semester without an official leave of absence must file an application for readmission and pay the $65.00 application fee.

**Grades**

**Graduate Grading Scale**

Plus/minus grades are incorporated into the GPA for all graduate level courses according to the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points Awarded Per Hour of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>F/WF</td>
<td>0.0</td>
</tr>
<tr>
<td>NR</td>
<td>0.0</td>
</tr>
</tbody>
</table>
• Grades of NR, not reported, are assigned in instances in which the instructor does not report a grade and the semester has officially closed.
• Grades of S, satisfactory, or U, unsatisfactory, are reported on all workshops and institutes, and certain seminars, field projects, internships, practica, music groups, and others.
• The grade point average is determined by dividing the accumulated number of grade points earned by the accumulated number of semester hours undertaken. Hours attempted but not passed must be included in this calculation. Courses graded S/U and courses transferred from another institution (except those courses taken through cross registration) may not be used in determining the UNCG grade point average.
• If a student receives a course grade other than Incomplete (I) and later submits additional work (whether that work is specified in the syllabus or not) after grades are posted, this work cannot be used as a basis for changing the assigned grade. Except for independent study or where specific provision is made in the course description, no student may repeat for credit a course for which he/she has earned credit. If a student repeats such a course, the grade will be recorded on the transcript, but no additional credit will be allowed toward graduation or toward the grade point average. A failing grade remains on the student’s academic record permanently.

Withdrawal from a Program or a Course
Graduate students who must withdraw from the University may do so by dropping all courses online through UNCGenie until the last day to drop without academic penalty. Students whose registration for all courses is cancelled must seek reactivation or readmission through The Graduate School to return to school in subsequent terms.

After the deadline to withdraw without penalty, and no later than the last day of classes, a Withdrawal (W) may be granted only with the permission of the Vice Provost and Dean of The Graduate School and if status in the course at the time of withdrawal is satisfactory. If the student is in failing status at the time of withdrawal, a grade of Withdrawal Failing (WF) is given. A course abandoned with insufficient reason for withdrawal is assigned the grade of F. In certain cases, faculty may initiate the withdrawal procedure for cause.

Incomplete (Graduate)
The symbol I indicates inability, for reasons beyond the student’s control, to complete course requirements by the end of the term in which the course was offered. The Incomplete may be removed by completion of the deferred requirements within six months from the last day of examinations in the term in which the course was taken. An Incomplete not removed within this time limit automatically becomes an F. A grade of I on any course, including work not required for the student’s program, must be removed before graduation. A grade of I cannot be removed with a grade of W.

In the case of a thesis, master’s production, or dissertation in progress, a grade of In Progress (IP) will be recorded each semester of registration for credit until completion of the thesis, master’s production, or dissertation, when a final grade of Satisfactory (S) will be assigned. Extension of thesis, research extension, and extension of dissertation courses also may be graded with IP on a limited basis, but faculty advisers may be required to provide documentation of the student’s satisfactory progress toward completion of the program.

S-U Courses
Grades for the following courses are reported as Satisfactory (S) or Unsatisfactory (U):

• All Practicum and Internship courses in Education and Library and Information Studies
• All Workshops and Institutes
• Thesis and dissertation courses (699, 799)
• 800-level extension courses (801, 802, 803)
• Other courses as indicated in the departmental listings
Academic Eligibility to Continue in Graduate School
Persons enrolled in The Graduate School are regarded as members of the student body of The University of North Carolina at Greensboro and are held responsible for conducting themselves in conformity with the moral and legal restraints found in any law-abiding community. Continued enrollment in The Graduate School is at all times subject to review of the student’s academic record and of the student’s actions with regard to observance of University rules and regulations.

Degree Programs
Fully admitted students will become academically ineligible to continue in The Graduate School under any of the following circumstances:

- Grades of U, F, or WF are received in any 6 semester hours.
- Grades of C+ or C are received in 9 semester hours.
- Any grade of U, F, or WF is received in combination with 6 semester hours of C+ or C grades.

Certificate Programs
Fully admitted students in Post-Baccalaureate and Post-Master’s Certificate programs will become academically ineligible to continue in an approved certificate program under any of the following circumstances:

- Any grade of U, F, or WF is received.
- Grades of C+ or C are received in more than 3 semester hours.

VISIONS Program (Visiting Students)
VISIONS/visiting students will become academically ineligible to continue in The Graduate School under any of the following circumstances:

- When grades of U, F, or WF (or D in an undergraduate course) are received in any 6 semester hours.
- When grades of C+ or C are received in 9 semester hours of any coursework taken (graduate or undergraduate.)
- When any grade of U, F, or WF (or D in an undergraduate course) is received in combination with 6 semester hours of C+ or C grade.

Bryan Prelude (Visiting Students)
Bryan Prelude students will become academically ineligible to continue in The Graduate School under any of the following circumstances:

- When grades of U, F, or WF (or D in an undergraduate course) are received in any 6 semester hours.
- When grades of C+ or C are received in 9 semester hours of any coursework taken (graduate or undergraduate.)
- When any grade of U, F, or WF (or D in an undergraduate course) is received in combination with 6 semester hours of C+ or C grade.

Readmission after Academic Dismissal
A fully admitted student who is dismissed for academic reasons will be eligible to submit a new application after two semesters or the equivalent and may be admitted only upon the recommendation of the major department head or Director of Graduate Study and with the approval of the Vice Provost and Dean of The Graduate School. While on academic dismissal, students are not eligible to take courses through the VISIONS program. The policy on Academic Eligibility to Continue in Graduate School does not apply to provisionally admitted students. (See Provisional Admission.)
Academic Progress and Professionalism
Satisfactory performance in The Graduate School also involves maintaining the professional standards and academic progress expected in a particular discipline or program. Failure to maintain the standards or progress set out in a student’s departmental or program handbook may result in dismissal of the student from the program.

Graduation and Commencement
Applying for Graduation
Students must formally apply for graduation to The Graduate School by the end of the first week of classes during the term in which they plan to graduate. Degrees are awarded at the end of each semester and the second summer session (i.e., in December, May, and August).

Diplomas and transcripts of students owing money to the University will be withheld until the account is cleared. Students may not be admitted to and graduate from the same degree or certificate program in the same academic term.

Students who do not apply for graduation before the published deadline for any semester may apply for graduation during the next semester. Students who have applied for graduation but fail to meet the requirements must reapply for graduation by the published deadline for the semester in which they will fulfill the requirements.

Degrees are conferred only after all requirements are completed and the Board of Trustees has taken official action.

GPA Requirement for Graduation
For the completion of graduate programs, the overall GPA for graduate courses taken at UNCG must be at least 3.0. Additionally, the overall GPA for all courses included on the student’s final Plan of Study must be at least 3.0. A GPA of 3.0 or better may be required in the major field at the option of the major department.

In the case of a student who has attempted the minimum number of semester hours for the degree or certificate without achieving the required GPA, the Vice Provost and Dean of The Graduate School, upon the recommendation of the department, may permit the student to continue taking courses in an effort to earn the required minimum GPA. If permission is granted, a maximum of 25% of the coursework hours required for the program may be added to the plan of study, not to exceed 12 hours. The additional hours may not be independent study.

Students completing all degree requirements by the end of the spring semester are encouraged to participate in the May Doctoral Hooding or Commencement ceremony. Students completing all degree requirements by the end of the fall semester are encouraged to participate in the December Doctoral Hooding or Commencement ceremony. Students completing all degree requirements by the end of the Summer Session may participate in either the May or December Doctoral Hooding or Commencement ceremony by applying to graduate, paying the graduation fee, and notifying The Graduate School. Degree candidates will not earn degrees nor be graduated from the University until they have completed all degree requirements. Participation in a commencement ceremony does not presume graduation from the University.

Only those doctoral candidates whose degree requirements are completed by the established deadlines (see the Academic Calendar) are authorized to participate in the University’s formal December or May Doctoral Hooding ceremony.

Graduation Fee
The graduation fee of $70 for master’s and Specialist in Education candidates, $85 for the combined MS/EdS candidates, and $70 for doctoral candidates is payable in the Cashier’s and Student Accounts Office. The Bryan
School requires an additional $25 graduation fee that goes directly to the Bryan School. Students who do not graduate in the term for which they originally applied must file a new application. Check with The Graduate School regarding your status.

Degree Name Changes
Graduates who have been awarded a degree by UNCG will not be able to convert that degree to another if later the name of the degree is changed.

Appeals Policy and Procedures
This policy provides a procedure for graduate students to make claims that their rights under University policy or under the law have been violated. This procedure is to be used to resolve grievances against decisions or action that were made by employees or agents of UNCG and that would adversely affect the student's progress toward a graduate degree. The procedures set forth below may be used by persons who are enrolled as UNCG graduate students.

This policy is not meant to supersede policies of general applicability such as the Policy on Discriminatory Conduct which are to be resolved by a separate body. In addition, this policy is not meant to supplant such existing policies as the Student Code of Conduct, Academic Integrity Policy, Residency Reclassification, Research Misconduct, or the Family Education Rights and Privacy Act.

There are two types of appeals available through The Graduate School: 1) Appeal of grades, and 2) Appeal based on misapplication or misinterpretation of University policy, regulation, rule, or procedure or a violation of state or federal law.

Appeal of Grades
A current student may appeal a grade within 90 calendar days of the date the grade was posted. The process of appeal must adhere to the following steps. An informal complaint is initiated by the student with the instructor assigning the grade. If the instructor endorses the change, the department/program head must also review the request. If approved, a Grade Change is initiated. If the informal appeal is not endorsed at the department/program level, the student may initiate a formal appeal. (See Appeals Procedure).

A retroactive Withdrawal may be requested in cases in which the student will be unable to complete the term and the deadline to drop without academic penalty has passed or when a grade of Incomplete has been assigned and the student is unable to complete the remaining requirements. Such withdrawals will only be considered when truly extenuating circumstances exist. The student is required to submit supporting documentation.

The process must adhere to the following steps:
- The student should submit a written request for a retroactive Withdrawal to the course instructor, preferably within 90 days but no later than 6 months from the posting date of the final letter grade.
- The instructor will review the request and determine whether or not to endorse the student's request. If the instructor is no longer employed by UNCG or chooses not to endorse the request, the student can submit the request to the Department Head/Chair.
- An endorsed request for retroactive Withdrawal should be submitted to The Graduate School for review by the Vice Provost or the Vice Provost's designee. If the request is not endorsed by both the Department and the Vice Provost, the student may initiate a formal appeal. (See Appeals Procedures)

Appeals of Misapplication or Misinterpretation of Policies or Procedures
An appeal of the application of a rule or regulation must be made by the student within 90 calendar days as determined by the date of the letter from The Graduate School informing the student of the decision in question.
Criteria for Appeals

Grade Appeals

This section applies when a student wants to appeal a final course grade that has been recorded by the Registrar on the student’s academic record. A currently enrolled student may appeal a grade within 90 calendar days of the date the grade was posted.

A grade appeal under this policy may be based on one or more of the following criteria:

- The grade(s) was/were calculated in a manner inconsistent with University policy, the syllabus, or changes to the syllabus.
- The grade(s) was/were erroneously calculated.
- Grading/performance standards were arbitrary.
- The instructor failed to assign or remove an Incomplete (“I”) or to initiate a grade change as agreed upon with the student.
- The student (who may or may not be currently enrolled) is requesting a retroactive Withdrawal from a course due to truly extenuating circumstances as demonstrated in supporting documentation.

A grade appeal cannot be made in response to a grade penalty assessed as a result of a violation of the Academic Integrity Policy.

Appeals of Misapplication or Misinterpretation of Policies or Procedures

This section applies when a currently enrolled student wants to appeal a decision that he or she perceives to be a misapplication or misinterpretation of University policy, regulation, rule, or procedure, or a violation of state or federal law. The appeal must be filed within 90 calendar days from the date of the letter informing the student of the decision in question.

An appeal under this policy may be based on one or both of the following criteria:

- The policy, regulation, rule, or procedure was applied in a manner inconsistent with University policy, the syllabus, or changes to the syllabus.
- The policy, regulation, rule, or procedure was arbitrarily or unequally applied.

Informal Appeals Procedure

Before initiating a formal appeal, a student is encouraged to initiate discussions with the instructor or, in the case of an appeal of regulations, with a Graduate School official. A written appeal is not necessary in the informal stage. During the informal procedure, the student discusses the appeal with the instructor or Graduate School official. Such meetings often help students understand the practices of instructors and other Graduate officials and often lead to resolution of disputes with students. If the instructor endorses the change, the department/program head must also review the request. If approved, a Grade Change is initiated. In the case of an informal appeal of regulations, the Graduate School official will forward recommendations to the Vice Provost and Dean of The Graduate School for a final decision.

Formal Appeals Procedure

If there is no resolution at the informal stage or the student wishes to pursue a formal appeal, the following processes must be followed:

Step 1 – Written Appeal to Department/Program or Graduate School.

The student must submit a written appeal to the department/program head or graduate school official. The formal letter must identify the basis of the appeal and must state in detail the applicable criteria for the appeal and why the student believes that the grade should be changed or how the policy, regulation, rule, or procedure was misapplied or misinterpreted.
The department/program head or graduate school official reviews the written appeal and uses normal administrative methods to learn of the facts and make a decision regarding it. Within a reasonable time, normally no longer than fifteen (15) calendar days, the department/program head or graduate school official sends a written response to the student, with a copy to the instructor or appropriate Graduate School officials. The Step 1 response shall include a recommendation of whether or not the instructor should re-evaluate the student’s work in the course(s) or the application of the regulation against the student should be re-evaluated.

In the case of a grade appeal, the department/program head cannot change the student’s grade without the instructor’s agreement. The instructor will determine if a grade change is warranted, and if so will submit a grade change.

The granting of exceptions to Graduate School regulations must receive the approval of the Vice Provost and Dean of The Graduate School. Therefore, after approval of the exception by the department/program, the appeal must be sent to the Vice Provost for final decision.

If the student is not satisfied with the outcome at Step 1, the student may proceed to Step 2.

**Step 2 – Written Appeal to The Graduate Studies Committee:**
The final date to initiate the Step 2 appeal is fifteen (15) calendar days after the student receives a response under Step 1. Failure to observe this time frame will result in a waiver of the right to proceed to Step 2.

Under Step 2, the student sends a copy of the formal appeal request and the decision of the instructor/Graduate School official from Step 1 to the Vice Provost and Dean of The Graduate School. If the student attempts to raise a new basis for an appeal after the original appeal at Step 2, he/she must present a new appeal under Step 1.

If the Vice Provost and Dean of The Graduate School determines that the formal appeal request does not qualify under the appeals criteria contained in this policy, the appeal will be dismissed subject only to the authority of the Chancellor. If the appeal meets the criteria, the Vice Provost and Dean of The Graduate School will transmit the appeals materials to the Chair of the Graduate Studies Committee and will send a copy of it to the Dean of the Student’s academic unit as notification of a pending appeal.

After conferring with the Chair of the Graduate Studies Committee, the Vice Provost and Dean of The Graduate School will notify the student, the instructor, and any witnesses who will be needed, of the time and place of the hearing. Each party shall be notified at least fifteen (15) calendar days in advance of the scheduled date of the hearing.

**Conduct of the Hearing**
The Chair of the Student Affairs Subcommittee of the Graduate Studies Committee has responsibility for ensuring that the proceedings are conducted in an orderly and fair manner. The Vice Provost and Dean of The Graduate School may be present during the hearing but will not take part in the questioning of witnesses or deliberations. The Vice Provost may, however, provide a brief impartial overview of the appeal at the beginning of the hearing. The Vice Provost’s statement shall be limited to a summary of the facts and issues present in the appeal and shall not include any opinions regarding the appeal.

All evidence including personal testimony will be heard by the Committee in the presence of the student, the instructor, and/or the Vice Provost and Dean of The Graduate School or his or her designee. Since the hearing is a normal part of the educational process and not a legal proceeding, neither the student nor the University shall have an attorney present. Following the presentations, the Subcommittee members will have an opportunity to ask questions of the presenters and witnesses. The student, the instructor, and/or appropriate representatives will have reasonable time, as determined by the Subcommittee Chair, to question witnesses and respond to evidence.
At the completion of the questioning all presenters, witnesses, and the Vice Provost, will leave the room and deliberation by the Subcommittee will begin.

At the conclusion of the hearing, the Chair of the Student Affairs Subcommittee of the Graduate Studies Committee will prepare a report describing the facts of the appeal as determined by the Committee after hearing the evidence and the Committee’s recommendations for the action which should be taken. The Chair of the Subcommittee will send the report within fifteen (15) calendar days, to the Vice Provost and Dean of The Graduate School.

Final Decision
The Vice Provost and Dean of The Graduate School has responsibility under this policy to make the final University decision in Graduate School appeals, subject only to the authority of the Chancellor. The Vice Provost’s decision will be communicated to the student and the instructor/Graduate School official within a reasonable time, normally no more than fifteen (15) calendar days, after receipt of the report from the Committee.

SUMMARY OF REGULATIONS ON CERTIFICATES AND DEGREES

POST-BACCALAUREATE AND POST-MASTER’S CERTIFICATES
A student may apply coursework from a certificate program toward a graduate degree at UNCG with the approval of the department offering the degree and The Graduate School.

Summary of Requirements for Certificates
- Satisfaction of all requirements for admission.
- A plan of study must be submitted to The Graduate School when a student in a certificate program applies for graduation.
- Satisfactory completion of all course requirements.
- Certificate students must maintain a minimum GPA of 3.0 in all certificate coursework and achieve a minimum overall GPA of 3.0 to graduate.
- Only three semester hours with a grade of C+ (2.3) or C (2.0) will count towards a certificate.
- With the exception of internship, practicum, independent projects or clinical work, all courses for a certificate will be letter graded.

Semester Hours Required for Certificates
In general, certificate programs should be between 12-18 semester hours at the 500-level or above with at least half of this course work at the 600-level or above.

Plan of Study for Certificates
The course work comprising the certificate program must be an integrated and organized sequence of study.

Time Limits for Certificates
Certificates awarded from UNCG indicate that our students have current, usable knowledge in their field; therefore, the certificate curriculum, including the capstone, must be completed within five academic years, from the date the first courses carrying graduate credit applicable to the student’s program are begun. However, if study for the program extends beyond three years, the student may need to meet new requirements.

Independent Study for Certificates
No more than 3 semester hours of independent study may be applied to the minimum number of semester hours required for completion of the graduate certificate program. (See additional requirements above in order to pursue Independent Study.)
Transfer Credit for Certificates
A maximum of three semester hours of transfer credit will be accepted toward a certificate.
(See Graduate Transfer Credit for more information)

MASTER’S DEGREES AND SPECIALISTS IN EDUCATION DEGREES
Programs at UNCG leading to a master’s degree hold the objective of a reasonable, comprehensive mastery of the subject matter in a chosen field, accomplished through study, training, and experience in research or other scholarly activities.

Summary of Requirements for Master’s Degrees
- Satisfaction of all requirements for admission.
- Submission of plan of study to The Graduate School prior to 50% of program completion.
- Satisfactory completion of all course requirements.
- Achievement of the required B (3.0) GPA overall, for courses listed on the plan of study, and, if required by the department, for the major.
- No more than six semester hours of credit evaluated as C+ (2.3) and/or C (2.0) applied toward the minimum hours required for the degree.
- An applied knowledge of one modern foreign language, or approved option, in programs having this requirement.
- Capstone Experience: The nature of this experience (or combination of experiences) will be left to the discretion of individual academic units. They may include some combination of (a) comprehensive written or oral examination, (b) thesis or research paper, (c) portfolio, (d) creative work, and/or (e) internship experience.
- Filing of an application for graduation and the final plan of study with The Graduate School by the end of the first week of classes of the term in which the degree will be granted and payment of the graduation fee.
- Payment of all accounts owed the University. Diplomas and transcripts of students owing money to the University will be held until the account is cleared.

All the requirements above must be met by the deadlines stated in the Academic Calendar. Some special programs may have additional requirements not listed above but explained in materials supplied by the major department or school.

Time Limit Master’s Degrees
Advanced degrees awarded from UNCG indicate that our students have current, usable knowledge in their field; therefore, the master’s curriculum, including the thesis, must be completed within five academic years, from the date the first courses carrying graduate degree credit applicable to the student’s program are begun. However, if study for the program extends beyond three years, the student may need to meet new requirements.

Semester Hours Required Master’s Degrees
Minimum semester-hour requirements, which vary with the degree, are stated under the respective departmental program description. Credit that is applied to one master’s degree cannot be applied to another master’s degree. No course below the 500 level will be counted towards graduate degree requirements. In all programs, at least one half of the work credited toward the degree must be in 600-level courses or above.

Plan of Study Master’s Degrees
A plan of study for the master’s degree (or Specialist in Education degree) must be outlined and signed by the student and director of graduate study/designee at the earliest practical time following the student’s admission to The Graduate School, but no later than 50% of the program’s completion. The plan must indicate the following:
All courses the student is expected to complete as a minimum requirement, including courses required for
the major, supporting courses, number of elective hours, and courses recommended for transfer.
Courses required by the department but not counted toward the degree, including prerequisite courses.
No more than 6 semester hours of independent study. At the discretion of the department, MFA
candidates may earn up to a maximum of 20% of their required hours as independent study hours. (See
additional requirements above in order to pursue Independent Study.)
No more than six semester hours of credit evaluated as C+ (2.3) and/or C (2.0) applied toward the
minimum hours required for the degree.
Capstone Experience.
Credit earned for STA 667 Statistical Counseling is not applicable to a graduate plan of study.

Copies of the approved plan of study must be filed in the student’s permanent folder in The Graduate School, in
the department’s files, and with the student. If changes have been made to the plan of study, a revised plan of
study must be submitted to The Graduate School by the end of the third week of classes of the semester in which
the student applies for graduation.

Language Requirements Master’s Degrees
Some programs require the student to demonstrate an applied knowledge of a modern foreign language.
Exceptions are made at the discretion of the major department.

Foreign students whose native language is not English, who are seeking a master’s degree in which a reading
knowledge of a modern foreign language is required, may not offer their native language as satisfaction of this
requirement. They may offer a reading knowledge of any other approved modern language, including English.
When English is offered, the examination will be of the traditional type and will be administered by the
Department of English or by the student’s major department in consultation with the Department of English.

Upon the recommendation of the department, The Graduate School may approve requests for graduate students
to pass a maximum of 12 semester hours of undergraduate level language courses by special examination. The
results of the examination (S-U) will be posted to the student’s graduate transcript. Permission will be limited to
language skills courses.

Capstone Experience Master’s Degrees
The capstone experience may consist of a comprehensive written or oral examination, thesis or research paper,
portfolio, creative work, internship, or some combination of these experiences. The requirement can be satisfied
after the student has completed at least two-thirds of the minimum program hours. If an unsatisfactory grade is
given on the first attempt to satisfy the requirement, no more than one additional attempt is permitted. If the
student fails to meet the department’s minimum criteria for the capstone experience on the second attempt, The
Graduate School will be notified and will send the student a letter of dismissal from the program.

The Thesis Master’s Degrees
Some master’s programs require a thesis; some offer a thesis or non-thesis option. A student in a thesis program
prepares a thesis under the guidance of a thesis committee consisting of a chair and two other members
appointed by the head of the major department or school. The committee members must hold membership on the
graduate faculty. Although all members of the committee may come from the major department, appointment of
one member from another department is encouraged.

Institutional Review Board (IRB) approval is required for research involving human subjects prior to acceptance of a
thesis based on such research.
The thesis must conform to rules established by the Graduate Studies Committee in the Guide for Preparation of Theses and Dissertations. The guide can be printed from The Graduate School’s website or paper copies can be obtained from the office at no cost.

An oral examination on the thesis may be required at the discretion of the major department or school, either for the individual or all students in a thesis program.

The process for submitting the thesis to The Graduate School has two components: submitting the approval copy and submitting the final copy. Specific instructions and deadline dates affiliated with each step are available in the Guide and the Academic Calendar.

Students file the thesis electronically via the online submission system available on The Graduate School’s website. The approved electronic submission must conform to the format requirements stated in the Guide and must be uploaded by the deadline dates as specified in the Academic Calendar. Publication of the thesis by UMI Dissertation Publishing/ProQuest Information and Learning is required by The Graduate School. There is no charge for traditional publishing. However, optional services requested by the candidate during submission may have associated charges.

Maximum credit allowed for the thesis is 6 semester hours. Additional 801 hours may be required to maintain continuous enrollment but will not count toward the degree.

Transfer Credit Master’s Degrees
(See Graduate Transfer Credit for more information)

At the master’s and specialist’s levels, credit may be given for graduate work taken at other institutions (including credit earned through the Greater Greensboro Consortium), but certain conditions must be met:

- Transfer credit may not exceed one-third of the minimum number of hours required by the student’s program.
- All credit offered in transfer must have been taken at an accredited graduate school and not have been used to complete the requirements for a degree.
- Such work must have been taken within the five-year time limit.
- The student must have earned a grade of B (3.0) or better on all transfer credit. In a four-letter grading system, only credit earned with either of the top two grades is transferable. The transfer of credit where a grade of P or its equivalent is received in a two- or three-letter grading system (such as P-F, S-U, or H-P-F) reduces hour for hour the number of C grades earned that may count toward the minimum requirement for the degree.
- The credit must be recorded on an official transcript placed on file with The Graduate School.
- It must be approved both by the student’s major department and by the Vice Provost and Dean of The Graduate School.
- It must be necessary to meet specific degree requirements.

Hours only, not grades, may be transferred from other institutions. Quarter-hours do not transfer as semester hours. A fraction of an hour of credit will not be transferred. See sample below:

- 2 quarter hours transfer as 1 semester hour.
- 3-4 quarter hours transfer as 2 semester hours.
- 5 quarter hours transfer as 3 semester hours.
- 6-7 quarter hours transfer as 4 semester hours.
- 8 quarter hours transfer as 5 semester hours.
- 9-10 quarter hours transfer as 6 semester hours.
Students must secure approval from their major advisor and the Vice Provost and Dean of The Graduate School in advance of registration at other universities. In general, however, not less than two-thirds of the total program for the master’s and specialists degrees must be completed at The University of North Carolina at Greensboro.

All credit to be transferred must come within the time limit described above and must be supported by placing an official copy of the transcript on file in The Graduate School. No credit will be transferred unless it is required to meet specific degree requirements.

No more than 3 semester hours of institute and workshop credit may be counted toward satisfying the minimum requirements for the master’s and specialists degrees.

**DOCTORAL DEGREES**

**Doctor of Philosophy**

The degree of Doctor of Philosophy is conferred upon those students who have completed, with high distinction, a prescribed period of intensive study and investigation in a single field of learning. Students must master the methods of study in the chosen field and demonstrate familiarity with what has been done and with the potentialities for further progress in the field. They must also demonstrate capacity for original and independent study or creative work and must present evidence of such investigation in a scholarly dissertation.

A PhD may be earned in communication sciences and disorders; community health education; computational mathematics; consumer, apparel, and retail studies; counseling and counselor education; economics; educational research, measurement and evaluation; educational studies; English; environmental health science; geography; history; human development and family studies; information systems; kinesiology; medicinal biochemistry; music education; nanoscience; nursing; nutrition; psychology; and special education.

**Doctor of Education**

The major premise of the Doctor of Education degree program is that students receive depth in subject matter as well as professional development. Therefore, the program is purposely flexible, allowing the students to develop under careful advisement a course of study best suited to their ability, personality, experience, and major professional goal. It is expected that each student will make a significant research contribution to the discipline culminating in a scholarly dissertation.

An EdD may be earned in counseling and counselor education, kinesiology, and educational leadership.

**Doctor of Musical Arts**

The Doctor of Musical Arts degree program is a performanc degree offered only in the School of Music. The requirements of The Graduate School stated below apply to the Doctor of Musical Arts; however, due to the highly specialized nature of the degree, the student should consult the Director of Graduate Study in the School of Music for specific requirements and procedures.

**Doctor of Nursing Practice**

The Doctor of Nursing Practice degree program is an applied degree offered only in the School of Nursing. The requirements of The Graduate School stated below apply to the Doctor of Nursing Practice; however, due to the highly specialized nature of the degree, the student should consult the information in the Doctor of Nursing Practice section regarding the specific requirements and procedures.

**Summary of Requirements for Research Doctoral Degrees (PhD, EdD, DMA)**

- Satisfaction of all requirements for admission to a doctoral program, including the removal of any deficiencies identified at the time of admission.
• An approved advisory/dissertation committee, to be filed in The Graduate School by the end of 18 semester hours.
• An approved plan of study, to be filed in The Graduate School by the end of 18 semester hours.
• Satisfactory completion of any language requirement or approved option.
• Satisfaction of the residence requirement.
• Satisfactory completion of any diagnostic qualifying examination that may be required by the major department or school.
• Satisfactory completion of all course requirements in the student’s approved program of study.
• Satisfactory completion of the preliminary written and oral examination and any additional work that may be required as a result of this examination.
• An approved dissertation topic, to be filed in The Graduate School.
• Admission to candidacy upon the satisfaction of the requirements above (formal application to be made in The Graduate School).
• Submission of a dissertation acceptable to the advisory/dissertation committee.
• Satisfactory oral defense of the dissertation.
• Acceptance of the dissertation by The Graduate School.
• Filing of an application for graduation with The Graduate School by the end of the first week of classes of the term in which the degree will be granted and payment of the graduation fee.
• Payment of all accounts owed in the University. Diplomas and transcripts of students owing money to the University will be held until the account is cleared.

The requirements above must be met by the deadlines stated in the Academic Calendar. Detailed explanations of these requirements follow. Some programs may have additional requirements not listed above but explained in materials supplied by the major department or school.

Admission Requirements
Admission to the doctoral program is distinct and separate from any previous admission to The Graduate School. For this reason, a student who has been admitted to a master’s degree program must reapply for doctoral study by notifying The Graduate School of the desire to be considered for admission to the advanced program. Admission to study for the doctorate normally follows completion of the master’s degree or its equivalent coursework, but some departments will consider admission directly from an undergraduate program in the case of exceptionally well-qualified applicants. Applicants who hold the master’s degree or its equivalent, however, are not automatically eligible for admission to doctoral study.

In addition to satisfactory entrance examination scores and recommendations (explained in the application materials), final approvals of the major department or school and of the Vice Provost and Dean of The Graduate School are required.

Advisory/Dissertation Committee
The advisory/dissertation committee, consisting of at least four members of the graduate faculty, shall assist the student with the preparation of the plan of study and shall guide and evaluate the doctoral dissertation. This committee will be appointed by the Vice Provost and Dean of The Graduate School upon the recommendation of the major department head or dean and must be mutually acceptable to the student and all committee members.

Of the four members, the chair must hold an Endorsement to Chair Doctoral Committees, and no more than one may be an Adjunct Member of the graduate faculty. The committee chair must be from the major department, and it is recommended that when appropriate, one member be selected from the minor area of study. If at any time the advisory/dissertation committee decreases in number to fewer than four members, additional members of the graduate faculty must be approved by the Vice Provost and Dean of The Graduate School to bring the number to at least four. See Policy on Appointment to the Graduate Faculty for further details.
The student must request the appointment of this committee no later than upon completion of the first 18 semester hours of graduate courses. Any subsequent changes in the advisory/dissertation committee must be submitted to The Graduate School for approval.

**Minor**

Certain doctoral programs may permit, encourage, or require a minor, which is a formalized curricular sequence of advanced work in one or more areas outside the major field but cognate to it. The student should ask the chair of his/her advisory/dissertation committee if a minor is appropriate or required. The minor must consist of at least 12 hours of study. The student's advisory/dissertation committee approves the minor, and it must appear on the doctoral plan of study.

For information concerning the doctoral minor in educational research and methodology, human development and family studies, information systems, and statistics, see the relevant academic program.

**Research Competence**

Competence in research is required of all doctoral students. Whereas the specific requirements will vary from field to field and according to the student’s professional objective, the plan of study must provide for mastery of techniques of research that not only are appropriate to the particular field of study but also will help prepare prospective holders of the doctorate to continue their intellectual and professional growth.

**Plan of Study**

A plan of study for the doctoral degree must be outlined by the student and the advisory/dissertation committee at the earliest possible time following admission of the student to The Graduate School, preferably at the end of the first semester of residence or not later than the completion of 18 semester hours. The plan must indicate the following:

- Major and minor fields of study.
- Specific courses the student is expected to complete as a minimum requirement.
- All specific core, seminar, language, and research requirements of the major department.
- No more than one quarter of the coursework credited to the degree, exclusive of the dissertation, at the 500 level.
- No more than 15 semester hours of independent study, exclusive of the dissertation. (See additional requirements above in order to pursue Independent Study.)
- No credit evaluated as B- (2.7) or less. All courses applied toward the degree must be B (3.0) or better, and additional hours must be taken for any hours earned with a grade of B- (2.7) or less.
- Credit earned for STA 667 Statistical Counseling is not applicable to a graduate plan of study.

A record of all graduate work the student has taken must accompany the proposed program. It is at this time that the advisory/dissertation committee evaluates the student’s qualifications to be recommended for further study in The Graduate School, further preparation for such study, or withdrawal. The committee may propose prerequisite coursework to be taken if it believes the student shows weaknesses that might be corrected by additional formal study.

The plan of study must be submitted to the Vice Provost and Dean of The Graduate School for approval. The Vice Provost reserves the right to refer any or all plans of study to the Graduate Studies Committee for review and recommendation.

Copies of the approved plan of study must be filed in the student’s permanent folder in The Graduate School, in the department’s files, with the chair and each member of the advisory/dissertation committee, and with the student. Any subsequent changes in the plan of study or in the subject of the dissertation must be submitted to The Graduate School for approval.
Language Requirement
Each candidate for the doctorate must show either a satisfactory reading knowledge of at least one modern foreign language relevant to the student’s major area of study, or, where approved, a satisfactory mastery of research skills at an appropriate level of competence.

The language or languages used to satisfy a language requirement must be approved by the student’s major advisor. French, German, and Spanish are most frequently used.

The language requirements must be passed prior to the preliminary examinations, and prior to admission to candidacy.
A student whose native tongue is a language other than English may use English, but not the native language, to satisfy a language requirement. When English is offered, the examination will be administered by the Department of English or by the student’s major department in consultation with the Department of English. A statement certifying the candidate’s proficiency in English must be filed in The Graduate School before the preliminary examinations may be taken.

Residence Requirement
Doctoral students are expected to satisfy a residence requirement, which provides them the opportunity for an extended period of intensive study and intellectual and professional development among a community of scholars.

The basic requirement is two consecutive semesters (minimum of 6 hours per semester) of graduate coursework (excluding independent study and dissertation hours) on this campus after admission to a doctoral program. Spring and fall may be considered consecutive semesters if summer courses are not regularly available in the program. The two sessions of summer school count as one semester. Undergraduate courses taken in support of a graduate program cannot count towards residence.

Residence Requirement - Online Doctoral Programs
The minimal residency requirement for online professional/practice doctoral programs will be met when students make a minimum of three required visits to campus as part of their graduate program:

- To participate in an orientation program prior to coursework to foster a sense of community with their peers and faculty, and to gain knowledge of UNCG resources available to them;
- Upon completion of coursework, to participate in written and oral comprehensive examinations, in discussion regarding the dissertation proposal with faculty, and in observation of a dissertation defense; and
- To participate in their dissertation defense at the culmination of the program.

Time Limits for Doctoral Degrees
Advanced degrees awarded from UNCG indicate that our students have current, usable knowledge in their field; therefore, all requirements for the doctorate, including the dissertation, must be completed within seven academic years. Post-master’s (or equivalent) credit that is to be applied to the student’s doctoral program must be no more than seven years old when the degree requirements are completed. This means that all coursework to be credited to the student’s doctoral program must fall within a seven-year period of time beginning with the date the first courses carrying graduate degree credit applicable to the student’s program are begun. If credit to be transferred was earned before enrollment at this University, the seven-year period of time commences with the beginning date of the term in which the transfer credit was earned.

The seven-year time limit does not apply to students who are admitted directly to a doctoral program upon completion of the baccalaureate. In this case, the time limit is ten years.
Transfer Credit for Doctoral Degrees
(See Graduate Transfer Credit for more information)

In some instances, work done in other institutions may be counted toward the degree, particularly work culminating in a master’s degree from a regionally accredited institution and representing an appropriate area of study. If the student proposes the transfer of credit from another graduate school, the work for which credit was received must be covered by the preliminary examination, and the transfer must be recommended by the student’s advisory/dissertation committee before The Graduate School will credit the work to the student’s doctoral program.

A maximum of one-third of non-dissertation course credit hours beyond the master's degree may be transferred to a doctoral program.

The following conditions apply to transfer credit for doctoral program:
- All credit offered in transfer must have been taken at an accredited graduate school.
- Such work must have been taken within the time limit described above.
- The student must have earned a grade of B (3.0) or better on all transfer credit. In a four-letter grading system, only credit earned with either of the top two grades is transferable.
- The credit must be recorded on an official transcript placed on file with The Graduate School.
- The credit must be approved by both the student’s doctoral advisory/dissertation committee and the Vice Provost and Dean of The Graduate School.
- The credit must be necessary to meet specific degree requirements.

Hours only, not grades, may be transferred from other institutions. Quarter-hours do not transfer as semester hours. A fraction of an hour of credit will not be transferred. See sample below:

- 2 quarter hours transfer as 1 semester hour.
- 3-4 quarter hours transfer as 2 semester hours.
- 5 quarter hours transfer as 3 semester hours.
- 6-7 quarter hours transfer as 4 semester hours.
- 8 quarter hours transfer as 5 semester hours.
- 9-10 quarter hours transfer as 6 semester hours.

Students must secure approval from their doctoral advisory/dissertation committee and the Vice Provost and Dean of The Graduate School in advance of registration at other universities. In general, however, not less than two-thirds of the total non-dissertation credit hours of doctoral degrees must be completed in residence courses at UNCG.

In order to ensure that the courses fall within the time limit permitted, the transfer credit will be accepted finally and posted to the transcript only at the time of completion of the degree requirements.

Preliminary Examination
When a student has removed any provisions or special conditions that may have been attached to admission, completed a minimum of 75% of the coursework contained in the program of study, passed any foreign language requirements, and completed the research skill requirements, that student is then eligible to take the preliminary examination. Individual departments may have additional requirements. Each doctoral student is required to pass the doctoral preliminary examination, which consists of both a written and oral examination. The written part is scheduled and prepared by the dissertation advisor with the assistance of the advisory/dissertation committee. The questions may cover any aspect of the coursework taken by the student during the period of this graduate study or any subject logically related and basic to an understanding of the subject matter of the major and minor
areas of study. Any transferred coursework is subject to examination at the time of the preliminary examination. The oral examination should be scheduled within one month following the written examination.

Unanimous approval is required for passing the preliminary examination. Approval may be conditional, however, upon the satisfactory completion of such additional work as may be required by the committee. However, if the student does not pass the preliminary examination, no more than one re-examination will be allowed. The re-examination will not be permitted during the semester in which the preliminary examination was failed. If the student fails to pass the re-examination, The Graduate School will send the student a letter of dismissal from the program.

The complete advisory/dissertation committee of at least four must participate in the holding of the preliminary oral examination.

Admission to Candidacy
When a student has completed all major and minor required courses, has passed the preliminary written and oral examinations, satisfied any language or skill requirements, and submitted a dissertation research outline that has been approved by his dissertation advisor and advisory/dissertation committee, that student may then make formal application in The Graduate School for admission to candidacy for the doctoral degree.

The Dissertation
The dissertation is the product of a thorough investigation of a basic and significant problem or question within the major area of study. An appropriate plan of research must be developed and executed by the student under the general guidance of the chair and the advisory/dissertation committee. Institutional Review Board (IRB) approval is required for research involving human subjects prior to acceptance of a dissertation based on such research.

The dissertation requirement is designed to develop the capacities of originality and generalization in the candidate. It should foster and attest to the development in the candidate of ability in scientific inquiry, understanding and mastery of the techniques of scholarship, and the art of exposition within the field of specialization. The advisory/dissertation committee, with such other professors as may be appointed by the Vice Provost and Dean of The Graduate School, shall examine the dissertation. No dissertation shall be accepted unless it secures unanimous approval of the advisory/dissertation committee.

It is expected that the dissertation will serve to demonstrate the student's ability to contribute to the development of research or scholarship within the discipline. As such, The Graduate School must be certain that the dissertation is a demonstration of the student’s ability to identify a problem, develop a methodology, carry out the necessary steps to gather data, analyze the findings, and form a defensible conclusion.

In the case of non-traditional dissertations that may contain chapters or sections with multiple authors, it is necessary to clarify the contribution of the dissertating student and others who may contribute to the dissertation. In situations where there may be multiple authors, it is the responsibility of the advisory/dissertation committee chair to identify the percentage of proposed work to be developed by each of the contributors and submit it to The Graduate School for approval. This must be done at the proposal stage and again at final defense if the original plan has been revised.

It is expected that the dissertating student will be identified as the primary author of each of the chapters. The introduction to the dissertation must be solely authored by the dissertating student and must contain the theoretical framework that unifies the chapters that follow. The dissertating student also must be the sole author of the concluding chapter in which the significance of the various articles is explained. It is also expected that within the dissertation, appropriate attribution will be given to the other authors who contribute to the chapters.

Students file the dissertation electronically via the online submission system available on The Graduate School’s website. In final form, the dissertation must comply with the rules prescribed by the Graduate Studies Committee
in the Guide for the Preparation of Theses and Dissertations. The approved electronic submission must be uploaded by the deadline dates as specified in the Academic Calendar.

Publication of the dissertation by UMI Dissertation Publishing/ProQuest Information and Learning is required by The Graduate School for all programs except the DNP. There is no charge for traditional publishing. However, optional services requested by the candidate during submission may have associated charges.

The process for submitting the dissertation to The Graduate School has two components: submitting the signed approval copy and submitting the final copy. The specific instructions and deadline dates affiliated with each step are available in the Guide and the Academic Calendar.

Dissertation hours vary according to the program but are never less than 12 semester hours, normally taken in units of three semester hours. For a complete explanation of requirements affecting dissertation registration, see the Policy on Continuous Enrollment.

Oral Defense
The doctoral candidate who has successfully completed all other requirements for the degree must defend the dissertation orally. The defense will be scheduled by the chair of the advisory/dissertation committee in consultation with the other committee members. The Graduate School will publish the dissertation title, date, time and location of the oral defense at least two weeks prior to the defense. The defense is open to all members of the University community who may wish to attend, as required by state laws on public meetings. The oral defense is administered by the advisory/dissertation committee according to program guidelines. The defense is largely related to the dissertation field of study including courses taken here and elsewhere. Approval of the defense must be attested to by all members of the advisory/dissertation committee. The results of the defense are to be reported in writing to the Vice Provost and Dean of The Graduate School.
GRADUATE DEGREE PROGRAMS

College of Arts and Sciences

Biology
MS in Biology
PhD in Environmental Health Science

Chemistry and Biochemistry
MS in Chemistry (Biochemistry optional concentration)
PhD in Medicinal Biochemistry

Communication Studies
MA in Communication Studies

Computer Science
MS in Computer Science

English
MA in English
MFA in Creative Writing
PhD in English

Geography
MA in Applied Geography (Geosciences Education for Teachers or Urban Planning and Economic Development optional concentration)
PhD in Geography

History
MA in History (also offers a Museum Studies concentration jointly with Department of Interior Architecture)
PhD in History

Interior Architecture
MFA in Interior Architecture

Languages, Literatures, and Cultures
MA in Languages, Literatures, and Cultures (French and Francophone Studies or Spanish concentration)
MAT in Teaching (French Education or Spanish Education concentration)
MEd in Curriculum and Instruction (French Education or Spanish Education concentration)

Mathematics and Statistics
MA in Mathematics (Mathematics or Applied Statistics concentration)
PhD in Computational Mathematics

Media Studies
MFA in Drama (Film and Video Production concentration)

Political Science
MA in Political Science
MPA in Public Affairs (Community and Economic Development, Local Government Management, or Nonprofit Management optional concentration)

Psychology
MA in General Experimental Psychology
MA/PhD in Clinical Psychology
PhD in Psychology (Cognitive, Developmental, General Experimental, or Social Psychology concentration)

Sociology
MA in Sociology (Criminology optional concentration)

Women’s and Gender Studies
MA in Women’s and Gender Studies

College of Visual and Performing Arts

School of Art
MFA in Studio Arts

School of Dance
MA in Dance (Dance Education, or Dance Theories and Practices concentration)
MFA in Dance (Choreography concentration)

School of Music
MM in Composition
MM in Music Education
MM in Music Performance (Accompanying and Piano Chamber Music, Conducting/Choral, Conducting/Instrumental, Early Keyboard Instruments, Organ, Piano, Piano Pedagogy, Strings/Winds/Percussion, Vocal Pedagogy, Voice, or Multiple Woodwinds concentration)
MM in Music Theory
DMA in Music
PhD in Music Education

School of Theatre
MFA in Drama (Acting, Directing, Design, or Theatre for Youth concentration)

Joseph M. Bryan School of Business and Economics

Accounting
MS in Accounting

Master of Business Administration
MBA
MSN/MBA in Health Management (jointly with School of Nursing)
Consumer, Apparel, and Retail Studies
MS in Consumer, Apparel, and Retail Studies
(Integrated Apparel and Related Industries optional concentration)
PhD in Consumer, Apparel, and Retail Studies
Economics
MA in Applied Economics
MA/PhD in Economics
PhD in Economics
Information Systems & Supply Chain Management
MS in Information Technology and Management
PhD in Information Systems
School of Education
Counseling and Educational Development
MS in Counseling (Clinical Mental Health, College Counseling and Student Development, Couple and Family Counseling, or School Counseling concentration)
MS/EdS in Counseling (Clinical Mental Health, Couple and Family Counseling, College Counseling and Student Development, or School Counseling concentration)
EdD in Counseling and Counselor Education
PhD in Counseling and Counselor Education
Educational Leadership and Cultural Foundations
MSA in School Administration
EdS in Educational Leadership (Advanced Principal and Superintendent licensure)
EdD in Educational Leadership (non-licensure)
PhD in Educational Studies (Cultural Studies concentration)
Educational Research Methodology
MS in Educational Research, Measurement, and Evaluation
MS/PHD in Educational Research, Measurement, and Evaluation
PhD in Educational Research, Measurement, and Evaluation
Library and Information Studies
MLIS in Library and Information Studies (Instructional Technology or Media Coordinator optional licensure)
Specialized Education Services
MEd in Special Education: Early Childhood Leadership and Advanced Teaching Licensure or Early Childhood Leadership and Program Administration (jointly with Department of Human Development and Family Studies)
MEd in Special Education: General Curriculum concentration
PhD in Special Education
Teacher Education and Higher Education
MAT in Teaching (Elementary Education K-6, Middle Grades Education, Science Education, Social Studies Education, or Teaching English to Speakers of Other Languages concentration)
MEd in Teacher Education (Elementary Education K-6, Elementary Mathematics, Instructional Technology, Middle/Secondary English Language Arts, Middle/Secondary Science Education, Middle/Secondary Social Studies Education, or Teaching English to Speakers of Other Languages concentration)
MEd in Student Personnel Administration in Higher Education
PhD in Educational Studies (Teacher Education and Development or Higher Education concentration)
School of Health and Human Sciences
Communication Sciences and Disorders
MA in Speech-Language Pathology
PhD in Communication Sciences and Disorders
Community and Therapeutic Recreation
MS in Parks and Recreation Management (Licensure Services Management or Therapeutic Recreation concentration)
Genetic Counseling
MS in Genetic Counseling
Gerontology
MS in Gerontology
Human Development and Family Studies
MEd in Birth-Kindergarten Interdisciplinary Studies in Education and Development (Early Childhood Leadership and Advanced Teaching Licensure or Early Childhood Leadership and Program Administration) jointly with Department Specialized Education Services
MS in Human Development and Family Studies
PhD in Human Development and Family Studies
Kinesiology
MS in Kinesiology (Applied Neuromechanics, Exercise Physiology, Community Youth Sport Development, Motor Behavior, Curriculum and Pedagogy Studies in Physical Education, Sport and Exercise Psychology, or Sports Medicine optional concentration)
MSAT in Athletic Training
EdD in Kinesiology (online)
MS/PhD in Kinesiology
PhD in Kinesiology (Applied Neuromechanics, Exercise Physiology, Curriculum and Pedagogy Studies in Physical Education, or Sport and Exercise Psychology optional concentration)

Nutrition
MS in Nutrition
PhD in Nutrition

Peace and Conflict Studies
MA in Peace and Conflict Studies (Professional Conflict Practice, Education, or International Peace Development optional concentration)

Public Health Education
MPH in Community Health Education
PhD in Community Health Education

Social Work
MSW in Social Work (Advanced Standing optional concentration) (jointly with North Carolina A&T State University)

Joint School of Nanoscience and Nanoengineering
Nanoscience
Professional MS in Nanoscience
PhD in Nanoscience

School of Nursing
Nursing
MSN (Nursing, Nursing Administration, or Nursing Education concentration)
MSN/MBA in Health Management (jointly with MBA Program)
DNP Doctor of Nursing Practice
(Adult/Gerontological Primary Care Nurse Practitioner, Executive Leadership, or Nurse Anesthesia concentration)
PhD in Nursing

Special Academic Programs
Applied Arts and Sciences Program
MA in Applied Arts and Sciences

Post-Baccalaureate and Post-Master’s Certificates
Graduate certificates offer structured and applied instruction directly related to the needs of working professionals. See departmental listings for further details.

Post-Baccalaureate and Post-Master’s certificates are offered in the following areas:

College of Arts and Sciences
African American and African Diaspora Studies
Post-Baccalaureate Certificate in African American Studies

Geography
Post-Baccalaureate Certificate in Global and Regional Studies
Post-Baccalaureate Certificate in Urban and Economic Development (jointly with Department of Political Science)

History/Interior Architecture
Post-Baccalaureate Certificate in Historic Preservation (jointly with Department of Interior Architecture)

Languages, Literatures and Cultures
Post-Baccalaureate Certificate in Advanced Spanish Language and Hispanic Cultural Studies

Mathematics and Statistics
Post-Baccalaureate Certificate in Statistics

Political Science
Post-Baccalaureate Certificate in Nonprofit Management
Post-Baccalaureate Certificate in Urban and Economic Development (jointly with Department of Geography)

Sociology
Post-Baccalaureate Certificate in Teaching Sociology

Women’s and Gender Studies
Post-Baccalaureate Certificate in Women’s and Gender Studies

College of Visual and Performing Arts
School of Music
Post-Baccalaureate Certificate in Music Composition
Post-Baccalaureate Certificate in Historical Keyboard Performance
Post-Baccalaureate Certificate in Jazz Studies
Post-Baccalaureate Certificate in Music Education
Post-Baccalaureate Certificate in Music Theory
Post-Baccalaureate Certificate in Musicology
Post-Baccalaureate Certificate in Ethnomusicology
Post-Master’s Certificate in Music Theory Pedagogy (within the PhD or DMA)
Joseph M. Bryan School of Business and Economics

Consumer, Apparel, and Retail Studies
Post-Baccalaureate Certificate in Global Apparel Supply Chain Management

Information Systems and Supply Chain Management
Post-Baccalaureate Certificate in Business Analytics
Post-Baccalaureate Certificate in Information Assurance, Security, and Privacy
Post-Baccalaureate Certificate in Information Technology
Post-Baccalaureate Certificate in Supply Chain, Logistics, and Transportation Management
Post-Master’s Certificate in Information Technology

MBA Program
Post-Baccalaureate Certificate in Business Foundations

School of Education
Counseling and Educational Development
Post-Master’s Certificate in Advanced School Counseling

Educational Research Methodology
Post-Baccalaureate Certificate in Educational Assessment

Educational Leadership and Cultural Foundations
Post-Master’s Certificate in School Administration
Post-Master’s Certificate in School Administration - Specialized Education
Post-Master’s Certificate in Urban School Leadership and Administration
Post-Master’s Certificate in Cultural Foundations and Social Justice Education

Library and Information Studies
Post-Baccalaureate Certificate in Special Endorsement for Computer Education (jointly with Department of Teacher Education and Higher Education)

Specialized Education Services
Post-Baccalaureate Alternative Initial Teacher Licensure (PAI)
Post-Baccalaureate Certificate Birth-Kindergarten Initial Licensure (jointly with Department of Human Development and Family Studies)
Post-Baccalaureate Certificate in Leadership in Early Care and Education (jointly with Department of Human Development and Family Studies)

Teacher Education and Higher Education
Post-Baccalaureate Certificate in Special Endorsement for Computer Education (jointly with Department of Library and Information Studies)
Post-Baccalaureate Certificate in Teaching English to Speakers of Other Languages

School of Health and Human Sciences
Gerontology
Post-Baccalaureate Certificate in Gerontology

Human Development and Family Studies
Post-Baccalaureate Certificate Birth-Kindergarten Initial Licensure (jointly with Specialized Education Services)
Post-Baccalaureate Certificate in Leadership in Early Care and Education (jointly with Specialized Education Services)

Nutrition
Post-Baccalaureate Certificate, Dietetic Internship

Peace and Conflict Studies
Post-Baccalaureate Certificate in Peace and Conflict Studies

School of Nursing
Nursing
Post-Baccalaureate Certificate in Nursing Administration
Post-Baccalaureate Certificate in Nursing Education

Special Academic Programs
Applied Arts and Sciences Program
Post-Baccalaureate Certificate in Global Studies

Accelerated Degree Programs
The Accelerated Bachelor’s to Graduate Degree Program (ADP) is designed to provide a more efficient means to obtain a graduate degree. The program is for students who have a high GPA and want to start taking courses that will count towards both their undergraduate and graduate degrees. The University benefits from retaining its best students for advanced study and students benefit from the shortened time to degree.
Accelerated Degree Programs are offered in the following areas:

**College of Arts and Sciences**

**Communication Studies**
- Accelerated BA to MA Degree Program in Communication Studies

**Community & Therapeutic Recreation**
- Accelerated BS to MS in Parks and Recreation Management

**Computer Science**
- Accelerated BS to MS Degree Program in Computer Science

**English**
- Accelerated BA to MA Degree Program in English

**Interior Architecture**
- Accelerated BFA to MFA Degree Program in Interior Architecture

**Geography**
- Accelerated BA to MA Degree Program in Geography

**Nanoscience**
- Accelerated BS in Physics to PhD in Nanoscience

**Women’s and Gender Studies**
- Accelerated BA to MA in Women’s and Gender Studies

**Joseph M. Bryan School of Business and Economics**

**Accounting**
- Accelerated BS to MS Degree Program in Accounting

**Consumer, Apparel, and Retail Studies**
- Accelerated BS to MS Degree Program in Consumer, Apparel, and Retail Studies

**Economics**
- Accelerated BA or BS to MA in Applied Economics

**Information Systems & Supply Chain Management**
- Accelerated BS to MS Degree Program in Information Technology and Management

**Licensure for Teachers and Professional School Personnel**

**Alternative Licensure Programs**

Persons who hold a baccalaureate degree (from a regionally accredited university/college) and would like to complete a non-degree licensure program in art, birth-kindergarten, dance, middle grades, music, special education, secondary, and health & physical education should contact the Alternative Licensure Advisor at (336) 334-3414.

See also: NC TEACH

**Advanced Licensure**

UNCG offers a number of options for advanced study in professional education. Master’s degree programs are offered in 26 professional licensure areas, including teaching, school counseling, media, administration, and social work. Several departments offer programs for students who have completed a bachelor’s degree but not a professional education program. Students in these programs earn a master’s degree along with initial licensure.

Departments also offer master’s degrees for students who hold initial teaching licensure but who would like to pursue advanced study in Education, Music, School Administration, Special Education, and School Counseling. Some departments have programs leading to Specialist in Education degrees and/or doctorates. Requirements for each program are aligned with the standards of its professional organization and the State Department of Public Instruction.

Upon completion of their programs, students should complete an online application for state licensure on the NC Department of Public Instruction website.

Graduate programs for the preparation of teachers and other professional school personnel are approved by the National Council for the Accreditation of Teacher Education and the North Carolina State Board of Education, which grants licensure as follows:

**Master’s Licensure (“M”) Pre-Kindergarten (B-K)**

- Elementary Education
- Elementary Math
- Middle Grades Education
- Secondary Education (English, Mathematics, Comprehensive Science, Comprehensive Social Studies)
- Latin

**K-12 Special Subject Areas**

- Dance, French, Music, Reading, Spanish, English as a Second Language
- Exceptional Children (K-12)
Special Education with Licensure in Learning
Disabilities or Behavior/Emotional Disabilities

Special Service Personnel
  Media Coordinator
  Media Supervision
  School Administrator
  School Counselor
  School Social Work
  Speech-Language Pathology
  Instructional Technology Specialist

Post-Master's Licensure
  Cultural Foundations and Social Justice
  Educational Leadership
Graduate Faculty
Appointment to the Graduate Faculty must be as a Member, Research Member, Academic Professional Member, or as an Adjunct Member of the Graduate Faculty. Doctoral Committees may be chaired only by individuals who have received an Endorsement to Chair Doctoral Committees. The Vice Provost and Dean of The Graduate School administers this policy as the designee of the Graduate Studies Committee and may approve exceptions to it. The Vice Provost or the Chair of the Graduate Studies Committee may ask for particular exceptions to be brought before the full Committee for consideration.

The full and current policy may be viewed on the Provost’s website at http://provost.uncg.edu/documents/personnel/graduate.pdf.

Graduate faculty members whose appointments are current as of the publication date of this Bulletin are listed by academic rank in the department(s) in which they serve. Each faculty member’s area of specialization is listed.

(E) = Endorsed to Chair Doctoral Committees

DEPARTMENT AND PROGRAM LISTINGS

This section sets forth UNCG’s graduate degree programs and descriptions of the courses of instruction offered.
COLLEGE OF ARTS AND SCIENCES
105 Foust Building • 336-334-5241 • aas.uncg.edu

Administration
John Kiss, Dean
Charles C. Bolton, Associate Dean
Dayna Touron, Associate Dean
Stanley Faeth, Associate Dean for Research

About
Welcome to The College of Arts & Sciences at The University of North Carolina at Greensboro. We are the largest of the university’s seven academic units, with 20 departments and seven interdepartmental programs that encompass the arts, humanities, social sciences, natural sciences, and mathematics. Through this diversity of offerings, the College provides an education that will give you the skills and knowledge needed for success in the complex and changing world you will face after graduation.

No matter where your career takes you, it will be important to remain flexible and confident of your ability to succeed throughout your working life. Employers are interested in people with flexible skills and a wide-ranging, multidisciplinary perspective. This is just what the College of Arts & Sciences has designed its curriculum to provide. The 21st century world may be full of unexpected challenges, but your experience here will prepare you to embrace those challenges as well as the opportunities they bring with them.

There are a number of ways in which faculty and staff guide your intellectual development so that you can succeed in your studies and prepare for the wide variety of career paths that will be open to you. We emphasize, for example, strong writing and speaking skills, critical thinking, international understanding, research and other “hands-on” experience. As you gain deeper knowledge in your major, you’ll be encouraged to also explore electives across a variety of subjects. Therefore, becoming conversant in more than one field is another important benefit of your time in the College.

Across all of the College’s academic programs, our renowned faculty members share a deep commitment to advancing discovery and learning; they bring that commitment both to classroom settings and to hands-on experiences such as research and internships. Your professors will be accomplished researchers, scholars, and artists, many with national and international reputations. At the same time, they are enthusiastic and dedicated teachers. Whatever the setting, their teaching and mentoring is informed and enlivened by their personal involvement in discovering new knowledge, exploring new artistic forms, or applying the results of research in new contexts.

I invite you to explore the College and what a learning experience here might mean for you. Each of our departments and programs has its own web site. You’ll find that by maintaining strong programs of research and scholarship, the College faculty work to advance our understanding of fundamental problems facing society today. You, too, will be able to use the knowledge and skills you learn here to succeed in the paths you take after graduation, enriching your own life while contributing to society.

John Z. Kiss, Ph.D.
Dean

Mission statement
The College of Arts and Sciences promotes discovery and learning by students and faculty in the sciences, the humanities, and the arts. Firmly grounded in a tradition of rigorous disciplinary inquiry, the College also recognizes the value of connections made across disciplinary boundaries and so supports and encourages interdisciplinary and
The College is dedicated to the liberal arts mission of higher education, which is to develop the knowledge and understanding needed by citizens of a free and just society. The College faculty are committed to offering courses and programs that prepare students to meet the challenges they will face throughout their lives by emphasizing skills of reasoning, writing, speaking, and independent thinking.

Departments and Programs in the College of Arts and Sciences.

- African American and African Diaspora Studies
- Anthropology
- Archaeology
- Biology
- Chemistry & Biochemistry
- Classical Studies
- Communication Studies
- Computer Science
- English
- Environmental and Sustainability Studies
- Freshman Seminar Program
- Geography
- History
- Interior Architecture
- International and Global Studies
- Languages, Literatures, and Cultures
- Mathematics & Statistics
- Media Studies
- Philosophy
- Physics & Astronomy
- Political Science
- Psychology
- Religious Studies
- Sociology
- Women's and Gender Studies
AFRICAN AMERICAN AND AFRICAN DIASPORA STUDIES PROGRAM
349 Curry Building • 336-334-5507 • aads.uncg.edu

Administration
Cerise L. Glenn, Program Director
Tara Green, Director of Graduate Study

About
Since 1982, the AADS Program has been central to UNCG’s goal to provide its increasingly diverse student population with an opportunity to study the cultures, histories, and experiences of the African World—from Africa, to the Americas, the Caribbean, and the Indian Ocean. Currently, we offer a Post-Baccalaureate Certificate.

Mission statement
The African American and African Diaspora Studies Program (AADS) advances the university’s commitment to diverse perspectives and inclusive learning environments through course offerings, programming, and community engagement. It fosters interdisciplinary study for undergraduate and post-baccalaureate students by examining how people of African descent have shaped our world. As a program located in a city with a history of Black sociopolitical movements, we provide a forum to engage the complexities of Black life across African diasporas.

Faculty
Professors
- Tara T. Green, African American literature, gender studies, Black leadership, African Diaspora in the U.S (Director of Graduate Study).

Associate Professor
- Sarah Jane Cervenak, Black Performance Studies, feminist theory.

Assistant Professor

Graduate Programs
- Post-Baccalaureate Certificate in African American Studies, (15)

Post-Baccalaureate Certificate in African American Studies, (15)
The Post-Baccalaureate Certificate in African American Studies requires 15 semester hours of course work. At least half of the total hours of course work must be at the 600 level or above. Online curriculum requirements consist of five core courses (15). Additional courses through other programs and departments may be taken upon approval by the Director of Graduate Study. Residential curriculum requirements consist of a core course (3) and 12 hours of AFS-related electives. Students who are also enrolled in a degree program must take at least 6 hours of course work outside the degree-granting department. Course work must be successfully completed within five academic years. Courses fulfilling the certificate program may be used to meet the requirements in a degree program in accordance with the policies of The Graduate School.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 500-word statement.
Online Certificate Requirements

Required Core Courses (15)

ADS 554 Independent Black Politics in the 19th Century (3)
ADS 610 African American Theoretical Perspectives (3)
ADS 650 Topics in African American Gender Studies (3)
ADS 652 Topics in Black Performance Studies (3)
ADS 653 Perspectives on the African American Experience (3)

Residential Certificate Requirements

Required Core Course (3)

ADS 610 African American Theoretical Perspectives (3)

Electives (12)

With the approval of the program graduate advisor, students choose 12 hours of electives from the following:

ADS 554 Independent Black Politics in the 19th Century (3)
ADS 650 Topics in African American Gender Studies (3)
ADS 652 Topics in Black Performance Studies (3)
ADS 653 Perspectives on the African American Experience (3)
ART 501 Topics in the History of Art (3)
ART 618 Topics in the History of Art (3)
ENG 650 Modern Literary and Cultural Theory (3)
ENG 663 Postcolonial Literary and Cultural Theory (3)
ENG 705 Cultural Studies (3)
ENG 729 Postcolonial Literatures (3)
ENG 730 Studies in American Literature (3)
ENG 735 Studies in African-American Literature (3)
ENG 737 Studies in Multi-Ethnic American Literature (3)
GEO 522 Geography of Livable Cities (3)
HIS 502 African American History: Selected Topics (3)
HIS 520 Southern History: Selected Topics (3)
HIS 546 American Cultural History: Selected Topics (3)
HIS 581 African History: Selected Topics (3)
HIS 710 Colloquium in the Atlantic World (3)
HIS 712 Slavery in the Americas (3)
HIS 713 African Americans after Slavery (3)
HIS 715 Atlantic World: Selected Topics (3)
HIS 723 Selected Topics in Nineteenth-Century United States History (3)
PSC 520 Urban Political System (3)
PSC 620 Urban Development Policy (3)
SOC 526 Comparative Minority Relations (3)
SOC 628 Social Movements (3)
SOC 643 Urban Sociology (3)
SOC 651 Criminology (3)
WGS 650 Feminist Theory: Intersections of Gender, Race and Class (3)
WGS 651 Feminist Research Analysis (3)
ART 501, ART 618, ENG 650, ENG 663, ENG 705, ENG 729, ENG 730, ENG 737, GEO 522, HIS 520, HIS 546, HIS 581, HIS 710, HIS 715, HIS 723, MUS 638, PSC 520, PSC 620, SOC 526, SOC 628, SOC 643, SOC 651, WGS 650, WGS 651: when relevant

ADS -African American and African Diaspora Studies Graduate Courses

ADS 554 Independent Black Politics in the 19th Century (3:3)
The origins, rise, and collapse of Black Populism, the independent black political movement between Reconstruction and the consolidation of Jim Crow, in the South.

**ADS 589 Experimental Course**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**ADS 600 Independent Study (3:3)**  
A supervised research project related to African American Studies at the graduate level.

**ADS 610 African American Theoretical Perspectives (3:3)**  
Historical and theoretical approaches to analyzing race, gender, and class as related to African Americans.

**ADS 650 Topics in African American Gender Studies (3:3)**  

**ADS 652 Topics in Black Performance Studies (3:3)**  
Implications of historical displays of Black people in relation to contemporary black performance, particularly as it involves a shift in bodies and terms.

**ADS 653 Perspectives on the African American Experience (3:3)**  
Investigates selected individuals, events, and social and cultural movements that have fundamentally shaped the course of African American advancement in mainstream society.

**ADS 711 Experimental Course**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
ANTHROPOLOGY, DEPARTMENT OF
426 Graham Building • 336-334-5132 • anthropology.uncg.edu

Administration
Robert Anemone, Department Head

About
Anthropology is the holistic study of the human experience. What this means is that Anthropologists share an interest in all aspects of being human, both in today’s world and in the past. Our field exists at the intersection of the Humanities, the Social Sciences, and the Natural Sciences, and appeals to a diverse group of students who come to Anthropology from many different backgrounds with diverse life experiences and varied intellectual interests.

Mission statement
We teach, research, and practice anthropology to explore the human experience across time and space, critically analyzing the interactions between culture, identity, and power.

Faculty
Professor
Robert Anemone, Physical anthropology, vertebrate paleontology, primate evolution, functional morphology (Head of Department).
Susan L. Andreatta, Political ecology, applied anthropology, Caribbean and U.S., Latin America. (E)
Arthur D. Murphy, Political economy, modern Mexico, immigration, the cultural consequences of disasters. (E)

Assistant Professors
Charles P. Egeland, Paleoanthropology, zooarchaeology, paleolithic, vertebrate taphonomy, Africa, Western Asia, U.S.
Donna J. Nash, Early states and empire, political economy, household archaeology, women and gender studies, Andean South America.
Linda F. Stine, Historic landscapes, social inequality through historical archaeology, S.E. archaeology, applied archaeology.

Graduate Programs
No graduate degree programs offered.

ATY – Anthropology Graduate Courses

ATY 501 Selected Topics in Anthropology (3:3)
Opportunity for advanced students to study in depth topic or issue of special interest.
Prerequisite
Permission of instructor
Notes
May be repeated for credit when topic varies.

ATY 502 Selected Topics in Anthropology (3:3)
Opportunity for advanced students to study in depth topic or issue of special interest.
Prerequisite
Permission of instructor
Notes
May be repeated for credit when topic varies.
ATY 520 Economic Anthropology (3:3)
An analysis of the economic organization of tribal and peasant peoples with special attention given to their participation in a world economy; emphasis is on economic models of social change.

ATY 523 Applying Archaeology in the Real World (3:3)
Overview of theory and skills needed to work as an applied archaeologist in the public sector. Topics include cultural resource management and public outreach projects.
Prerequisite
Not open to freshmen

ATY 524 Applying Anthropology in the Real World (3:3)
Application of anthropological method and theory in situations of directed sociocultural change.
Prerequisite
Not open to freshmen or sophomores

ATY 525 The Social Roots of Health and Disease (3:3)
Examination of the local and global processes that shape the current health environment in developing countries, drawing on work within social science and public health.
Prerequisite
Minimum of junior standing or permission of instructor

ATY 526 Food and Culture in a Global Context (3:3)
Examines the linkages among food producers, marketing strategies, and natural resource use in different cultures, and explores the influence of agriculture on society and the environment.
Prerequisite
Not open to freshmen and sophomores
Offered
Alt Spring

ATY 547 Myth, Magic, and Religion (3:3)
Examination of sacred and secular beliefs in cross-cultural perspective. Emphasis on symbols, ritual, and their functions.

ATY 553 Human Osteology: Description, Data Collection, and Analysis (3:2:3)
Detailed coverage of anatomical structures on bone and methods involving inventory, description, data collection, and analysis of human remains. Topics include functional and comparative skeletal anatomy, bone microstructure, and physiology.
Prerequisite
ATY 253 or BIO 105 or BIO 111

ATY 557 Primate Behavior (3:3)
An overview of primatology and of methods for studying the behavior of prosimians, monkeys, and apes. Involves experience in data collection, computerized data analysis, and producing a scientific report.
Prerequisite
ATY 357 or ATY 361

ATY 559 Disease and Nutrition in Ancient Populations (3:3)
Evaluation of past disease and nutritional status using skeletal remains and other tissues. Topics include differential diagnosis of pathology. Analysis of mummified material, and chemical methods of dietary reconstruction.
Prerequisite
ATY 253 or NTR 213 or BIO 105 or BIO 111
ATY 578 Research Methods in Historical Archaeology (3:3)
Advanced training in research methods in Historic Archaeology, involving on-site training in field, laboratory, and library components of Historic Archaeology.
Cross Listed Courses
Same as HIS 578, IAR 578
Prerequisite
Not open to freshmen and sophomores

ATY 583 Culture and Society (3:3)
Concepts of culture and society and their employment in understanding human behavior in a cross-cultural context.
Notes
May not be taken for credit by students who have prior credit for ATY 213. Not open for credit to anthropology majors.

ATY 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ATY 595 Contemporary Issues in Anthropology (3:3)
A capstone seminar focusing on current issues in anthropology, how they relate to the discipline, and their significance to anthropology's role in today's world. Should be taken during senior year.

ATY 597 Special Problems in Anthropology (3)
Opportunity for advanced students to undertake independent study or research of special interest.
Prerequisite
Permission of instructor

ATY 598 Special Problems in Anthropology (3)
Opportunity for advanced students to undertake independent study or research of special interest.
Prerequisite
Permission of instructor

ATY 601 Selected Topics in Anthropology (3)
Advanced level work on a selected topic in anthropology.
Prerequisite
Permission of instructor

ATY 602 Selected Topics in Anthropology (3)
Advanced level work on a selected topic in anthropology.
Prerequisite
Permission of instructor

ATY 671 Ethnographic Methods (3:3)
A guide to the conduct of ethnographic research; an introduction to culture theory, the elements of research design, data collection and analysis, and the sociological significance of an interpretative paradigm.
BIOLOGY, DEPARTMENT OF
312 Eberhart Building • 336-334-5391 • biology.uncg.edu

Administration
Matina Kalcounis-Rüppell, Department Head
Paul Steimle, Director of Graduate Study

About
Graduate students enrolled in either program have the opportunity to work with a research advisor from among 23 full-time faculty. Research areas range from the ecological to the cellular level, and include aquatic ecology, trophic interactions in lakes and streams, plant-microbe-herbivore interactions, microbial food chains, infectious disease ecology, plant evolution and population ecology, animal behavior, aging, cell motility, developmental, chromosome, cell cycle and viral genetics, neuroendocrine control of metamorphosis and glucose homeostasis. (Click (http://biology.uncg.edu/faculty/research_fac.html) for a detailed descriptions of faculty research). The broad range of training and research expertise among faculty members allows for an integrative approach to research studies in Biology for the MS degree and in Environmental Health Science for the PhD degree. Faculty in the department are funded from the National Institutes of Health, the National Science Foundation, and a variety of private funding agencies.

Mission statement
The UNCG Department of Biology endeavors towards excellence in conducting research and teaching biological concepts and skills to biology majors and graduate students, to prepare them for professional careers and more advanced study. We introduce non-biology majors to the foundations and applications of biology. By involving undergraduate and graduate students in research, we contribute to and increase society's knowledge across the broad spectrum of biology. We train doctoral students in Environmental Health Science, a complex and rapidly changing discipline. Through laboratory training and directed research experiences, we enhance our students' technical and analytical skills so that they can contribute meaningfully to an increasingly technological world. Our leadership in scientific innovation and discovery serves our students, profession, and our local and global communities.

Faculty

Professors
Amy L. Adamson, Virus-host cell interactions. (E)
Stanley H. Faeth, Community ecology, ecology and evolution of species interactions, urban ecology (E)
Anne E. Hershey, Aquatic ecology, lake trophic interactions, nutrient limitation and organic matter processing in arctic lakes, urban streams, and reservoirs. (E)
Matina C. Kalcounis-Rüppell, Mammal behavior and ecology (Head of Department). (E)
Bruce K. Kirchoff, Evolution of development, plant morphology and systematics, biological pedagogy. (E)
Esther M. Leise, Neurobiology, settlement and metamorphosis of marine invertebrates. (E)
Parke A. Rublee, Microbial food webs in aquatic ecosystems. (E)
Olav Rüppell, Honey bee health, evolutionary genetics and genomics, life history and behavior, and aging. (E)
Robert H. Stavn, Aquatic ecology, optical oceanography, ecology, zooplankton and lake optics. (E)
Paul A. Steimle, Molecular mechanisms of cell motility (Director of Graduate Study). (E)

Associate Professors
Yunbo Li, Molecular and cellular pharmacology and toxicology, cardiovascular medicine, cancer biology, natural products, drug discovery and development and inflammation.
Zhenquan Jia, Molecular toxicology. (E)
Karen S. Katula, Gene regulation, cell cycle control. (E)
Yashomati M. Patel, Diabetes, obesity and breast cancer biology. (E)
David L. Remington, Genetics of complex traits and adaptive evolution in plants. (E)
Malcolm Schug, Population genetics and evolutionary biology. (E)
John E. Tomkiel, Mechanisms of chromosome segregation, Drosophila genetics. (E)
Gideon Wasserberg, Ecology of infectious diseases, community ecology, ecological modeling. (E)

**Assistant Professors**
Martin Tsz-Ki Tsui, Water resources. (E)

**Emeritus Professors**
Robert E. Cannon, Microbiology. (E)
Vincent C. Henrich, Molecular aspects of hormonal regulation in development. (E)
Elizabeth P. Lacey, Evolutionary plant ecology, parental/maternal effects, phenotypic plasticity, reproductive thermoregulation. (E)

**Adjunct Graduate Faculty**
Barbara Blake, Mammalogy.
Jessica Homyack.
Timothy Johnston, Comparative studies of behavioral development and evolution, and the history of developmental theories in psychology and biology. (E)
Promod R. Pratap, Biophysical dynamics of active-transport systems, kinetics of the sodium pump (Na+-K+-ATPase) in mammalian kidney. (E)

**Graduate Programs**
- Master of Science (MS) in Biology, (30)
- Doctor of Philosophy (PhD) in Environmental Health Science, (55)

**Master of Science (MS) in Biology, (30)**
The 30-hour MS in Biology prepares students for careers in the biological sciences, and it provides a strong foundation for further academic training, such as medical school or a doctoral program. An advisory committee works closely with each student to tailor a specific curriculum to meet that student’s needs and interests. Students typically complete work for the master’s degree in 2-3 years.

Students in the biology master’s program have research and/or course work opportunities that reflect the diverse interests of faculty members within the Department. Please see the description of research of Biology faculty members and description of graduate courses in Biology.

The capstone experience provides graduates with specific knowledge and skills to be competitive in the life-sciences workplace. The capstone experience is a thesis or comprehensive written examination. Students will choose a capstone experience (thesis or exam) before matriculation into the program.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement explaining how the master’s degree at UNCG will help them achieve their career ambitions. Qualified applicants will have a strong undergraduate background in biology and science.

**Degree Requirements**
The MS in Biology requires 30 semester hours.

**Biology Electives (24-30)**
Students writing a thesis as a capstone experience must have at least 15 hours (including 6 hours of BIO 699 thesis) in 600-749 level courses.
Students taking a comprehensive examination as a capstone experience must have at least 15 hours in 600-749 level courses and cannot enroll in BIO 695, BIO 699, BIO 801 or BIO 803.

Students will select 24-30 hours from graduate level biology courses; up to 8 of these hours can be taken at the graduate level in other departments with the prior approval of the Director of Graduate Study.

Prior to the end of the first semester of enrollment, each student is expected to identify a Master of Science Advisory Committee composed of an advisor and two other faculty members; the Director of Graduate Study must approve the composition of the committee.

Environmental Health Science, PhD (55)
The PhD in Environmental Health Science requires a minimum of 55 semester hours and prepares students for senior-level positions in professions related to environmental health science in its broadest sense. The program trains students to become leaders in biological research relevant to environmental issues that directly and/or indirectly affect human health, and the program trains students to convey information effectively to the public. Students acquire an understanding of the multidisciplinary nature of environmental health issues from ecosystem to molecular levels. Students learn relevant research skills and conduct research under the guidance of one or more faculty members in the department.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a Curriculum Vitae and a personal statement that includes educational background, professional activities, research interests, career goals, reasons for choosing the program, and UNCG faculty whose research is of interest.

Degree Requirements
The departmental Graduate Studies Committee determines the number of non-dissertation credit hours required based on a student’s prior course work. No more than 25% of total hours (exclusive of dissertation) may be at the 500 level.

Required Core Courses (17)
- BIO 600 Introduction to Graduate Studies (1)
- BIO 707 Seminar in Environmental Health Science (2)
- BIO 731 Environmental Health Science I: Ecosystems to Individuals (3)
- BIO 732 Environmental Health Science II: Individuals to Molecules (3)
- BIO 734 Current Research in Environmental Health Science (1; 3 required)
- BIO 749 Research Lab Rotations (1)
- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)

Electives (Minimum of 9)
Students, with the approval of the departmental Graduate Studies Committee, research advisor, and/or Dissertation Committee, will select additional courses that pertain to their area of research to fulfill their degree requirements. A minimum of 9 hours of biology courses at the 500-700 level must be earned and a maximum of 6 credit hours can be at the 500 level.

Research and Dissertation (Minimum of 29)
- BIO 790 Directed Study in Environmental Health Science (1-6)
- BIO 791 Independent Doctoral Research (1-6)
- BIO 799 Dissertation (1-18)

Comprehensive Examination
The comprehensive examination consists of a written research proposal that must be orally defended in a public seminar and before a student’s dissertation committee. Successful completion and defense of the proposal allows the student to achieve candidate status, and thus, register for BIO 791 Independent Doctoral Research and BIO 799 Dissertation Defense

Students must present a seminar that is open to the public and satisfactorily defend their completed dissertation research to her/his dissertation committee.

**BIO – Biology Graduate Courses**

**BIO 501 Advanced Topics in Animal Ecology (3:3)**
Directed readings in the literature of physiological ecology, growth and regulation of populations, community structure, energy flow, mineral cycling, and other areas of current research interest.

*Prerequisite*
Permission of instructor

**BIO 502 Advanced Topics in Animal Physiology (3:3)**
Study of physiological mechanisms; selected problems from current literature.

*Prerequisite*
Permission of instructor

**BIO 503 Advanced Topics in Biochemistry (3:3)**
Directed readings and reports from the biochemical literature. Structure and biosynthesis of macromolecules and the composition and kinetic characteristics of biochemical pathways.

*Prerequisite*
Permission of instructor

**BIO 504 Advanced Topics in Cell Biology (3:3)**
Advanced treatment of cell biology covering selected topics such as gene regulation, protein sorting, cell cycle control, apoptosis. The course will consist of lectures and discussion of research articles.

*Prerequisite*
Permission of instructor

**BIO 505 Advanced Topics in Ecological Physiology (3:3)**
Study of a major topic in ecological physiology of animals, including mechanisms by which physiological processes change in response to environmental alterations and the ecological significance of those changes.

*Prerequisite*
Permission of instructor

**BIO 506 Advanced Topics in Genetics (3:3)**
Basic mechanisms of gene action in microbes, animals, and plants.

*Prerequisite*
Permission of instructor

**BIO 507 Advanced Topics in Neurobiology (3:3)**
Directed readings on fundamental physiological principles of nervous system functioning. Topics may include motor pattern generation, sensory transduction, sensori-motor integration, neurohormonal modulation of behavior.

*Prerequisite*
Permission of instructor

**BIO 509 Advanced Topics in Microbiology (3:3)**
Critical review of current research covering a wide range of topics including infectious diseases, bacterial physiology, marine microbiology, and immunology. Focus on students' interests or needs.

**BIO 510 Advanced Topics in Plant Ecology (3:3)**
Studies of special terrestrial communities or plant groups.

**Prerequisite**
Permission of instructor

**BIO 511 Advanced Topics in Plant Physiology (3:3)**
The physiology of growth and development in vascular plants treated in terms of phytohormones, nutrition, theories of transport, and environmental factors.

**Prerequisite**
Permission of instructor

**BIO 512 Advanced Topics in Plant Structure and Evolution (3:3)**
Study of current topics in plant structure, development, and evolution. A term paper is normally required.

**Prerequisite**
Permission of instructor

**BIO 513 Advanced Topics in Reproductive Biology (3:3)**
Directed readings and original research on reproductive biology, with emphasis on structural, regulatory, behavioral, and evolutionary aspects.

**Prerequisite**
Permission of instructor

**BIO 515 Advanced Topics in Vertebrate History (3:3)**
Directed/independent study of classification and phylogeny of particular vertebrate groups that results in a term paper.

**Prerequisite**
Permission of instructor

**BIO 520 Ecosystem Ecology and Biogeochemistry (3:3)**
Introduction to ecosystem function, structure, and dynamics; basic ecosystem theories; discussions of key processes governing energy flow and nutrient cycling; comparison of ecosystems; selected original literature.

**Prerequisite**
BIO 301 or permission of instructor

**Offered**
Alt Spring

**BIO 522 Landscape Ecology (3:3)**

**Prerequisite**
BIO 301; STA 271 recommended

**Corequisite**
BIO 523

**Offered**
Fall
BIO 523 Landscape Ecology Laboratory (1:0:4)
Field labs to observe different landscape structures and conduct course projects for comprehending principles of landscape ecology. Students will use computer labs for GIS basics, landscape analyses.
Prerequisite
BIO 301
Corequisite
BIO 522
Offered
Fall

BIO 526 Conservation Biology (3:3)
Introduction to habitat and species conservation; topics include genetic diversity, demographic patterns of rare species, habitat fragmentation, design and management of nature reserves, ecological restoration.
Prerequisite
BIO 301 and BIO 392; STA 271 recommended
Offered
Even Fall

BIO 527 Terrestrial Plant Ecology (3:2:3)
Application of principles of ecology to plants and plant communities. Experimental methods stressed in laboratory work. Two required weekend field trips.
Prerequisite
Permission of instructor
Offered
Odd Fall

BIO 528 Microbial Ecology (3:3)
Emphasis on current areas of active research with reference to applied problems.
Prerequisite
BIO 280 or BIO 481, or permission of instructor
Offered
Even Spring

BIO 529 Aquatic Ecology (3:3)
The study of the geology, physics, chemistry, and ecology of lakes, including reservoirs and streams with comparisons to the ocean.
Prerequisite
BIO 301 and CHE 114, or permission of instructor

BIO 530 Aquatic Ecology Laboratory (1:0:4)
Practical study of water chemistry methods, lake and stream morphometry, identification of freshwater zooplankton, benthic invertebrates and fish, and field trips to area reservoirs and streams.
Prerequisite
BIO 301
Corequisite
BIO 529
Offered
Fall

BIO 535 Biochemistry: Metabolic Regulation in Health and Disease (3:3)
Chemical properties of major cellular compounds; biosynthesis, degradation, and function of carbohydrates, lipids, proteins, nucleic acids, vitamins, and hormones; energy metabolism; enzymatic catalysis.

**Prerequisite**
BIO 355 or BIO 392, or permission of instructor

**Offered**
Spring

**BIO 536 Biology of Aging (3:3)**
An integrative look at biological theory and mechanisms to explain the diversity of the aging process, including human implications.

**Prerequisite**
BIO 301, BIO 355, BIO 392, or permission of instructor

**Offered**
Alt Fall

**BIO 538 Human Evolutionary Genetics (3:3)**
Study of primary literature testing hypotheses about human ancestry and evolution using molecular genetic methods.

**Prerequisite**
BIO 330, BIO 392, or permission of instructor

**BIO 540 Genes and Signals (3:3)**
Investigates the regulation of gene expression in bacteria, yeast, and higher eukaryotes, and explores how such regulatory systems have evolved.

**Prerequisite**
BIO 355 and BIO 392

**Offered**
Alt Spring

**BIO 541 Entomology (3:2:3)**
A theoretical and practical overview of the insect orders, selected topics of insect behavior, ecology, and evolution, and an introduction to human-insect interactions.

**Prerequisite**
BIO 301 and BIO 341, or permission of instructor. BIO 392 recommended.

**Offered**
Alt Fall

**BIO 543 Biophysics (3:3)**
Introduction to cellular biophysics, with emphasis on the physical properties of membranes, including membrane transport mechanisms and electrical properties of membranes.

**Cross Listed Courses**
Same as PHY 543

**Prerequisite**
BIO 355; and PHY 211/PHY 212 or PHY 291/PHY 292; and MAT 191; and CHE 114; or permission of instructor.

**Offered**
Alt Fall

**BIO 545 General Biochemistry Laboratory (1:0:3)**
Experimental work designed to complement lecture material of 535.

**Prerequisite OR Corequisite**
BIO 535
Offered
Fall

**BIO 549 Current Topics in Biology (1–3)**
Advanced topics courses in the biological sciences. Topics vary with instructor.

*Prerequisite*
BIO 112 and permission of instructor

**BIO 552 Metamorphosis (3:3)**
Readings, discussions, and oral presentations of current literature on metamorphosis in animals. Mechanisms controlling metamorphosis, evolution of complex life cycles, and adaptations to differing habitats.

*Prerequisite*
Three from BIO 301, BIO 330, BIO 355, BIO 392, BIO 422, BIO 441, BIO 454, BIO 470, and BIO 541 or permission of instructor

**BIO 554 Vascular Plant Systematics (4:3:3)**
Principles, methods and the history of systematic biology are covered in the context of vascular plant classification and evolution.

*Prerequisite*
BIO 330 or BIO 301 or BIO 392 or graduate standing in Biology

**BIO 555 Vertebrate Reproduction (3:3)**
An advanced treatment of the diversity of vertebrate reproductive biology, with emphasis on structural, regulatory, behavioral, and evolutionary aspects.

*Prerequisite*
One of BIO 277, BIO 425, BIO 453, BIO 464, BIO 470, or BIO 477 or permission of instructor

**BIO 560 Symbiosis (3:3)**
Symbiotic interactions of living organisms from an evolutionary perspective. Metabolic, genetic, behavioral, and ecological adaptations which allow symbioses to be formed and maintained will be discussed.

*Prerequisite*
Three from BIO 301, BIO 322, BIO 341, BIO 354, BIO 355, BIO 370, or BIO 392, or permission of instructor

**Offered**
Odd Spring

**BIO 567 Chemical Senses (3:3)**
Exploration and interactive discussion of chemosensory stimuli, chemosensory transduction mechanisms, neural processing of chemosensory information, and organismal consequences of chemoreception.

*Prerequisite*
BIO 355, and one of the following: BIO 277, BIO 472, BIO 477, BIO 479, PSY 435, PSY 436, or permission of instructor

**BIO 573 Drugs and the Brain (3:3)**
Pharmacology of major neurotransmitter systems in the brain and nervous system. Actions of clinically relevant drugs on these systems will be analyzed along with major drugs of abuse.

*Prerequisite*
BIO 355, and one of the following: BIO 277, BIO 477, BIO 479, PSY 230; or permission of instructor

**Offered**
Alt Fall

**Notes**
CHE 351 recommended.
BIO 575 Neuroanatomical Techniques (3:2:4)
Practical experience with a variety of neuroanatomical procedures used to investigate the structural framework of nervous systems in invertebrate and vertebrate preparations. Students will learn to conduct independent projects.
Prerequisite
BIO 111 and BIO 112, and BIO 355 and one of the following: BIO 453, BIO 472, BIO 477, BIO 479, PSY 435, or permission of instructor
Offered
Odd Spring

BIO 578 Hormones in Action (3:3)
Hormonal signaling in humans and other animals is examined using developmental, physiological, behavioral, cellular, and molecular perspectives, with special emphasis on the adrenal glands and the gonads.
Prerequisite
BIO 355 and BIO 392

BIO 579 Environmental Physiology (3:3)
Lectures, discussions, and student presentations on the physiology of animals as it is influenced by and is adapted to environmental conditions.
Prerequisite
BIO 112, and BIO 341 or BIO 355 or BIO 370, and BIO 277 or BIO 477
Offered
Odd Fall

BIO 583 Virology (3:3)
Selected topics in virology. Emphasis upon new trends in the study of animal, plant, and bacterial viruses at both molecular and cellular levels.
Prerequisite
BIO 355 and 392, or permission of instructor
Offered
Even Spring

BIO 584 Immunology (3:3)
Principles of immunology and serology covering both humoral and cellular aspects of immunobiology. Selected topics include: T and B cell, immunoglobulins, tolerance, hypersensitivity.
Prerequisite
BIO 481 or permission of instructor
Offered
Odd Spring

BIO 586 Cell Cycle and Cancer (3:3)
Molecular basis of cell division and cancer examined through lectures and discussions of primary literature. Topics include cell cycle control, genomic stability, carcinogenesis, and cancer genetics.
Prerequisite
BIO 355 and BIO 392, or permission of instructor
Offered
Alt Spring

BIO 587 Epigenetics (3:3)
Study of epigenetic mechanisms involved in chromatin structure, DNA and histone modifications, gene expression, dosage compensation, imprinting, heterochromatin structure, stem cell differentiation, development, human disease and environmental-gene interactions. Alt Fall

Prerequisite
BIO 355 and BIO 392

Offered
Alt Fall

BIO 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

BIO 590 Introduction to Mathematical Models in Biology (3:3)
Exploration of research and methodology at the interface of mathematics and biology, with an overview of relevant fields and in-depth case studies. Focus will be on mathematical models in biology.

Cross Listed Courses
Same as MAT 590.

Prerequisite
B or higher in BIO 112 and either MAT 191 or STA 271; or permission of instructor

BIO 591 Population Genetics and Molecular Evolution (3:3)
Application of population genetic and molecular evolutionary theory to the study of natural history, natural selection, genome variation and organization, human evolution, conservation biology, and forensics.

Prerequisite
BIO 392 or permission of the instructor

Offered
Alt Spring

BIO 593 Genetics of Complex Traits (3:3)
Theory, experimental methods, and analysis related to the genetic basis for variation in complex traits, including quantitative and threshold traits in animals and plants, and complex human diseases.

Prerequisite
BIO 392 or permission of the instructor

Offered
Alt Spring

BIO 595 Advanced Genetics (3:3)
Selected topics in genetics at an advanced level. Emphasis placed on comparative view of molecular mechanisms underlying animal and plant development.

Prerequisite
BIO 392

Offered
Even Spring

BIO 596 Molecular Biological Approaches in Research (1:1)
Use of novel molecular approaches to address current questions in the life sciences will be explored by analyzing recent research reports and learning the principles underlying these approaches.

Prerequisite
BIO 392

Notes
May be repeated for a total of 3 sh credit.
**BIO 597 Workshops in Biotechnology (1:0:3)**
Individual, intensive four-week workshops focused on specific techniques in biotechnology. Provides hands-on experience designing and implementing a focused project utilizing current methods and bioinformatics.  
*Prerequisite*
BIO 494 or permission of instructor  
*Offered*
Fall & Spring  
*Notes*
May be repeated for credit as long as letter suffix of course differs: workshops of a given letter may be taken only once.

**BIO 600 Introduction to Graduate Studies (1:1)**
Training in research ethics and oral-visual communication. Topics include plagiarism, experimental design, statistical interpretation, conflicts of interest, animal safety, authorship, peer review, and scientific presentations.  
*Prerequisite*
Biology graduate student or permission of instructor

**BIO 601 Seminar in Animal Ecology (3:3)**
Literature of animal ecology including both classical and recent papers; using student presentations and class discussions, the ontogeny of some overarching ecological themes explored.  
*Prerequisite*
BIO 301

**BIO 602 Seminar in Animal Physiology (3:3)**
Discussion of recent breakthroughs in topics ranging from the hormonal and neural mechanisms involved in homeostasis to the interactive effects of physiology and behavior.  
*Prerequisite*
BIO 477

**BIO 603 Seminar in Biochemistry (3:3)**
Study of recent progress in biochemical research; reading, discussion, and critical evaluation of current literature.  
*Prerequisite*
At least one previous course in biochemistry

**BIO 604 Seminar in Ecological Physiology (3:3)**
Discussions of primary literature in the physiological ecology of animals.  
*Prerequisite*
BIO 477, BIO 505, or BIO 579

**BIO 605 Seminar in Ecology (3:3)**
Broad view of ecological literature and in-depth studies of selected aspects of population and community ecology.  
*Prerequisite*
Previous course in ecology

**BIO 606 Seminar in Evolutionary Biology (3:3)**
Discussion of fundamental concepts involving the interrelationships of population genetics, ecology, systematics, and neo-Darwinian evolution; review of recent literature.  
*Prerequisite*
BIO 430 or permission of instructor

**BIO 608 Seminar in Microbiology (3:3)**
Study of recent progress in microbiological research; reading, discussion, and evaluation of current literature. 
Prerequisite 
BIO 481

**BIO 609 Seminar in Molecular Cell Biology (3:3)**
Topics in cell and molecular biology will be reviewed through discussion of research journal articles. Emphasis on modern experimental techniques and approaches. 
Prerequisite 
BIO 355

**BIO 610 Seminar in Molecular Genetics (3:3)**
Recent advances in molecular genetics; reinforcing basic concepts underlying these developments and understanding their impact on the life sciences. 
Prerequisite 
BIO 355 and BIO 392

**BIO 612 Seminar in Plant Structure and Evolution (3:3)**
Reading and discussion of current research in plant structure, development and evolution. 
Prerequisite 
BIO 322, BIO 354 or BIO 440

**BIO 613 Seminar in Reproductive Biology (3:3)**
Directed readings and original research on selected topics in reproductive biology, with emphasis on structural, regulatory, behavioral, and evolutionary aspects. 
Prerequisite 
BIO 464

**BIO 614 Prenatal Development: Embryology and Teratology (3:3)**
Human embryological development with emphasis on normal and abnormal development. Issues in teratology and birth defects, clinical problems associated with birth defects and their means of prevention. 
*Cross Listed Courses* 
GEN 614 
Prerequisite 
Enrollment in MS genetic counseling program or permission of instructor

**BIO 616 Human Molecular Genetics (3:3)**
Review and extension of basic principles of molecular genetics and their application for the characterization, understanding, and treatment of genetically based disorders and susceptibilities. 
*Cross Listed Courses* 
GEN 616 
Prerequisite 
Enrollment in MS genetic counseling program or permission of instructor

**BIO 621 General Biology for Teachers I (3:3)**
Topics include scientific method, biochemistry, cells, cellular processes, animal development, and animal physiology. 
Prerequisite 
Enrollment restricted to those seeking the MEd in comprehensive science.

**BIO 622 General Biology for Teachers II (3:3)**
Topics include botany, cell division, genetics, evolution, and ecology.
**Prerequisite**
BIO 621; enrollment restricted to those seeking the MEd in comprehensive science.

**BIO 625 Advanced Animal Behavior (3:3)**
Current research and theories including development and evolution of behavior, sociobiology, behavioral genetics, behavioral ecology, and the use of comparative method.

*Cross Listed Courses*
PSY 726

**Prerequisite**
BIO 435, or BIO 436, or BIO 438, or permission of instructor

**BIO 635 Molecular Toxicology (3:3)**
Molecular mechanisms involved in the toxicant-induced adverse health effects and discussion of molecular pathways altered in cells in response to environmental xenobiotic exposure.

**BIO 636 Ecotoxicology (3:3)**
This course is designed to provide an in-depth understanding of the sources and transport of environmental pollutants, and their adverse ecological impacts.

*Prerequisite*
Introductory undergraduate-level course in Ecology or Environmental Sciences, or equivalent, or by permission of the instructor

**BIO 641 Stream Ecology (3:3)**
Study of ecology and management of flowing water ecosystems. Topics such as community and ecosystem processes, major paradigms, management of point versus non-point pollutants, and restoration addressed.

*Prerequisite*
BIO 301 or equivalent

**BIO 645 Ecoepidemiology of Infectious Diseases (4:3:3)**
Understanding and managing emerging infectious diseases, primarily zoonotic, using an ecologically-based approach. Students learn theory and skills in the epidemiology and ecology of infectious diseases.

*Prerequisite*
Permission of instructor. Registration in both lecture and laboratory is mandatory.

**BIO 658 Molecular Diagnostics (1:0:3)**
A survey of current clinical methods used for the diagnosis of human genetic disorders. Special emphasis given to the molecular principles, interpretations, and limitations of these tests.

*Cross Listed Courses*
GEN 658

*Prerequisite*
Enrollment in MS genetic counseling program or permission of instructor

**BIO 692 Genomics**
An examination of genomic concepts and technologies; their application to understanding genome content, structure, function, and evolution; implications for understanding fundamental biological and health questions; and management of genomic data.

*Prerequisite*
392 or permission of instructor

**BIO 695 Biological Research (1–6:0:3–18)**
Student engages in advanced biological research under the supervision of a member of the Graduate Faculty. Course may be repeated with a maximum of 9 hours credit counting toward the MS degree.

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**BIO 699 Thesis (1–6)**
Individual research for the completion of a thesis. (Graded on an S-U basis)

*Prerequisite*
Successful presentation of thesis proposal to the Biology Department

**BIO 707 Seminar in Environmental Health Science (2:2)**
Development of critical-thinking and writing skills through discussions and critiques of primary literature in environmental health science and through writing assignments.

*Prerequisite*
Biology graduate student or permission of instructor

**BIO 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**BIO 731 Environmental Health Science I: Ecosystems to Individuals (3:3)**
Causes of environmental problems that society faces and the effects on ecosystem and community function and species survival. Implications for environmental and human health are explored.

*Prerequisite*
Biology graduate student or permission of instructor

**BIO 732 Environmental Health Science II: Individuals to Molecules (3:3)**
Introduction to fundamentals of toxicology with a focus on toxicological consequences of environmental perturbations on physiological and cellular processes, genome structure, and gene function.

*Prerequisite*
Biology graduate student or permission of instructor

**BIO 733 Workshops in Environmental Health Science (1:0.5:3)**
Individual six-week workshops focusing on analytical tools and experimental approaches used in freshwater/riparian ecosystem analysis, environmental genomics, environmental forensics, and cellular/physiological research.

*Prerequisite*
Biology graduate student or permission of instructor

**BIO 734 Current Research in Environmental Health Science (1:1)**
Weekly discussion of research journal articles in the area of environmental health science. Students will present and discuss research journal articles.

*Notes*
May be repeated for a total of 2 credit hours.

**BIO 749 Research Lab Rotations (1)**
Optional course providing credit for participation in laboratory meetings and/or the initiation of preliminary research training in the labs of 1 to 3 potential thesis advisors.

*Notes*
Course may be repeated for a total of 3 hours credit. Grade: Satisfactory/Unsatisfactory, S/U

**BIO 790 Directed Study in Environmental Health Science (1–6)**
Advanced research in environmental health science under the direction of a graduate faculty advisor. Preparation of doctoral research proposal and planning for dissertation research. May be repeated for a maximum of 12 hours credit counting towards the PhD degree.

**Prerequisite**
Admitted to PhD in environmental health science and approval of graduate faculty advisor

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

### BIO 791 Independent Doctoral Research (1–6)

Independent research in environmental health science related to the student’s primary area of research specialization leading to dissertation. May be repeated for a maximum of 15 hours credit counting towards the PhD degree.

**Prerequisite**
Admitted to candidacy

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

### BIO 799 Dissertation (1–18)

Individual research for the completion of the doctoral dissertation.

**Prerequisite**
Admitted to candidacy

**Notes**
May be repeated for a maximum of 18 hours credit. Grade: Satisfactory/Unsatisfactory, S/U

### BIO 801 Thesis Extension (1–3)

### BIO 802 Dissertation Extension (1-3)

### BIO 803 Research Extension (1–3)
CHEMISTRY & BIOCHEMISTRY, DEPARTMENT OF
435 Patricia A. Sullivan Science Building • 336-334-5714 • chem.uncg.edu

Administration
Mitchell P. Croatt, Department Head
Jerry L. Walsh, Associate Department Head
Liam M. Duffy, Director of Graduate Study for the MS Program
Norman Chiu, Director of Graduate Study for the PhD Program

About
UNC-Greensboro has a tradition of excellence in advanced training for careers in the chemical and biochemical sciences. Our faculty is committed to providing one-on-one learning opportunities for all our students in the laboratory, and this dedication to quality graduate education translates into very high success rates for our graduates as they pursue careers in science. Our Department has a strong research emphasis on Medicinal Biochemistry, and our students engage in a diverse array of research projects related to that theme. For example, students work to develop or synthesize new drug candidates, identify and study mechanism of action of natural products, or explore the chemical properties of human drug metabolizing systems. In support of these efforts, our department is home to the Natural Products and Drug Discovery Center, directed by Dr. Nicholas Oberlies. The mission of this center is to broaden the impact of natural products and drug discovery research on the UNCG campus, and to facilitate university-industry relationships with local pharmaceutical and biotechnology companies.

The Department has a well-established Master’s level program that offers an M.S. in Chemistry within which a Concentration in Biochemistry can be chosen. These are very well-rounded terminal degree programs. In addition to course-work in core areas of Chemistry or Biochemistry, each program emphasizes training in research by requiring a significant research project with a Master’s thesis under the supervision of a professor. Students also receive experience in professional presentation through the seminar program and attendance at professional meetings to present research results.

Our Ph.D. program in Medicinal Biochemistry is unique in the state of North Carolina. Target-based rational drug design, with its emphasis on biochemical and molecular biological receptors, is now central to the development of new and more effective pharmaceuticals. The Ph.D. program in Medicinal Biochemistry at UNCG offers students an innovative curriculum and research environment that emphasizes fundamental biochemical interactions and mechanisms guiding drug design and development. Students who complete the program will have a strong biochemical perspective on drug design, discovery, and function, and will have specialization in any of several disciplines which connect biochemical interactions with pharmaceutical development: computational chemistry, bioanalytical chemistry, biophysical chemistry, natural product isolation, molecular biology and enzymology, or drug synthesis.

Faculty
Professors

Nadja B. Cech, Analytical chemistry, electrospray ionization mass spectrometry, liquid chromatography, medicinal plant chemistry. (E)
Alice E. Haddy, Biophysical chemistry, electron paramagnetic resonance studies of transition metals in biological systems. (E)
Sherri McFarland, Biochemistry, photochemistry and photophysics, medicinal inorganic chemistry. (E)
Nicholas Oberlies, Isolation and characterization of bioactive natural products. (E)
Patricia H. Reggio, Physical chemistry, computational chemistry, G protein-coupled receptor modeling (cannabinoid CB1 and CB2 receptors). (E)
Ethan Will Taylor, Medicinal biochemistry, molecular modeling and bioinformatics, molecular virology, biochemistry of selenium, nanobiotechnology. (E)
Jerry L. Walsh, Inorganic chemistry, coordination chemistry of transition metal complexes, synthesis, photochemistry, reaction mechanisms, science education (Associate Department Head). (E)

Associate Professors
R. Bruce Banks, Bioorganic chemistry, chemical carcinogenesis, xenobiotic metabolism. (E)
Norman H. L. Chiu, Bioanalytical chemistry, technology development for monitoring biomarkers (Director of Graduate Study, PhD Program). (E)
Mitchell P. Croatt, Organic synthesis, organometallics, new reaction design and development (Head of Department). (E)
Jason J. Reddick, Bioorganic chemistry, biochemistry, bacterial metabolic pathways, antibiotics.
Qibin Zhang, Bioanalytical chemistry, proteomics, lipidomics, biological mass spectrometry, disease biomarkers.

Assistant Professors
Liam M. Duffy, Physical chemistry, gas-phase chemical reaction dynamics probed by millimeter wavelength spectroscopy (Director of Graduate Study, MS Programs).
Kimberly Petersen, Organic synthesis, asymmetric methodology development, novel drug scaffolds. (E)

Graduate Programs
- MS in Chemistry, (30)
- PhD in Medicinal Biochemistry, (56)

Chemistry, MS, (30)
The MS in Chemistry gives students the opportunity to demonstrate and develop their potential for work in biochemistry and attracts individuals who have been out of an academic environment for some time or who wish to bolster their undergraduate science experience. The successful candidate will be prepared for positions of responsibility in industry or government or for further study toward a doctoral degree.

The required 30 semester hours includes courses in the four major areas of chemistry (analytical, inorganic, organic, and physical), courses in other areas, and a research thesis based on original research carried out under the direction of a faculty advisor. In addition, the student gains experience in professional speaking by preparing and presenting two public seminars.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a one-page personal statement by the appropriate deadline to be considered for Fall, Spring, or Summer admission.

Degree Requirements
Required Core Courses (12)
- CHE 553 Advanced Organic Chemistry I (3)
- CHE 632 Advanced Analytical Chemistry (3)
- CHE 641 Advanced Inorganic Chemistry II (3)
- CHE 661 Advanced Physical Chemistry I (3)

Research Techniques (6-13)
Students take CHE 691 before beginning research. Students must carry out a research project under the supervision of a faculty member and write a thesis on the research (CHE 699) (Capstone Experience). Students may take additional research hours of CHE 680 and up to 6 hours of CHE 699 for a total of 12 hours.
- CHE 691 Introduction to Graduate Research (1)
- CHE 680 Research Problems in Chemistry and Biochemistry (1-6)
CHE 699  Thesis (1-6)

Seminars (2)
Students must present two seminars, the first on a literature topic (CHE 601) and the second on their thesis research (CHE 602), normally given during the last semester of study.
- CHE 601  Graduate Seminar I (1)
- CHE 602  Graduate Seminar II (1)

Electives (6 minimum)
Students select 6 hours of electives. Up to 9 hours may be earned in approved (by Department Graduate Studies Committee and student’s research advisor) graduate courses in biology, mathematics or physics.

Comprehensive Examination
The comprehensive examination consists of a research proposal on the student’s thesis research, including a literature review. The proposal must be approved by the student’s thesis committee before the student may enroll in CHE 699 Thesis.

Thesis Defense
Students must defend the completed thesis before the thesis committee.

Biochemistry Concentration
The Concentration in Biochemistry gives MS Chemistry students the opportunity to demonstrate and develop specialization for work in biochemistry. The successful candidate will be prepared for positions of responsibility in industry or government or for further study toward a doctoral or other professional degree.

The required 30 semester hours for this concentration include a specialized core of introductory and advanced biochemistry courses, courses in chemistry and other areas, and a research thesis based on original research carried out under the direction of a faculty advisor. In addition, the student gains experience in professional speaking by preparing and presenting two public seminars.

Required Courses (12)
- CHE 556  Biochemistry I (3)
- CHE 557  Biochemistry II (3)
- CHE 656  Enzyme Mechanisms (3)
- CHE 663  Spectroscopy and Analysis of Biomolecules (3)

Chemistry Core Elective (3)
Students must select one of the chemistry core courses.
- CHE 553  Advanced Organic Chemistry I (3)
- CHE 632  Advanced Analytical Chemistry (3)
- CHE 641  Advanced Inorganic Chemistry II (3)
- CHE 661  Advanced Physical Chemistry I (3)

Electives (3 minimum)
Students must select 3 hours of elective courses in biochemistry or from a list of approved (by the Department Graduate Studies Committee) courses in areas related to biochemistry (cell biology, genetics, microbiology, metabolism, biophysics, or other areas). Additional courses needed to bring the total credit hours up to at least 30 should be chosen from graduate level chemistry and biochemistry courses offered by the Department or from the list of approved biochemistry-related courses.

Students enrolled in the Biochemistry Concentration must also complete the following requirements, which are identical to the counterparts listed above the MS Chemistry.

Research Techniques (6-13)
Students take CHE 691 before beginning research. Students must carry out a research project under the supervision of a faculty member and write a thesis on the research (CHE 699) (Capstone Experience). Students may take additional research hours of CHE 680 and up to 6 hours of CHE 699 for a total of 12 hours.
- CHE 691  Introduction to Graduate Research (1)
CHE 680 Research Problems in Chemistry and Biochemistry (1-6)  
CHE 699* Thesis (1-6)  
*Indicates Capstone Experience

Seminars (2)
Students must present two seminars, the first on a literature topic (CHE 601) and the second on their thesis research (CHE 602), normally given during the last semester of study.

CHE 601 Graduate Seminar I (1)  
CHE 602 Graduate Seminar II (1)

Comprehensive Examination
The comprehensive examination consists of a research proposal on the student’s thesis research, including a literature review. The proposal must be approved by the student’s thesis committee before the student may enroll in CHE 699 Thesis.

Thesis Defense
Students must defend the completed thesis before the thesis committee.

Medicinal Biochemistry, PhD, (56)
The PhD in Medicinal Biochemistry requires 56 semester hours in advanced biochemical and medicinal chemistry course work and a dissertation culminating from extensive laboratory research experience carried out under the direction of a faculty advisor. Additional course work is offered in specialized areas such as synthetic chemistry, bioanalytical chemistry, and computational chemistry. The student gains experience in professional speaking by giving public oral scientific presentations through the departmental seminar program. The successful candidate will be well prepared for careers in biotechnology, pharmaceutical or medical research, or academia.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a one-page personal statement by the appropriate deadline to be considered for Fall or Spring admission. A minimum of a BS in Chemistry, Biochemistry or related field is required.

Degree Requirements

Required Core Courses
Any two of the following (6)
CHE 651 Advanced Medicinal Chemistry (3)  
CHE 656 Enzyme Mechanisms (3)  
CHE 658 Nucleic Acid Biochemistry (3)  
CHE 659 Receptor Biochemistry (3)  
CHE 660 Biochemical Pharmacology and Disease Targets (3)

Research Techniques (25-37)
Students take CHE 691 before beginning research. Students must carry out a research project under the supervision of a faculty member and write a dissertation on the research (CHE 799).

CHE 691 Introduction to Graduate Research (1)  
CHE 780 Research Problems in Medicinal Biochemistry (1-18)  
CHE 799 Dissertation Research in Medicinal Biochemistry (1-18)

Seminars (2)
Students must present two seminars, the first on a literature topic (CHE 751) and the second on their dissertation research (CHE 752), normally given during the last semester of study.

CHE 751 Literature Seminar (1)  
CHE 752 Dissertation Seminar (1)
Electives (12 minimum)
A minimum of 12 hours may be earned in approved (by Department Graduate Studies Committee and student’s research advisor) elective graduate courses in chemistry, biology, mathematics or physics. Students who plan to pursue employment in industry are encouraged to enroll in CHE 790 Medicinal Biochemistry Internship.

Comprehensive Examination
The comprehensive examination consists of a research proposal on the student’s dissertation research, including a literature review and a public oral presentation. The proposal must be presented and orally defended before the student may enroll in CHE 799 Dissertation.

Dissertation Defense
Students must defend the completed dissertation before the dissertation committee.

CHE - Chemistry/Biochemistry Graduate Courses

CHE 531 Instrumental Analysis (3:3)
Theory and practice of advanced analytical techniques with emphasis on instrumental methods of analysis.
Prerequisite
CHE 331, CHE 333, CHE 205 or CHE 352 (either may be taken concurrently), PHY 212 or PHY 292
Offered
Spring

CHE 533 Instrumental Analysis Laboratory (1:0:4)
Laboratory work to accompany CHE 531.
Co-requisite
CHE 531 must be taken concurrently.
Offered
Spring

CHE 536 Computational Chemistry (3:2:3)
Survey of modern computational chemistry methods, including molecular mechanics, molecular dynamics simulations, conformational searching, and computational quantum mechanics.
Prerequisite
CHE 352, MAT 291, PHY 212 or PHY 292, or permission of instructor
Offered
Spring

CHE 553 Advanced Organic Chemistry I (3:3)
Advanced topics in organic chemistry with special emphasis on reaction mechanisms and stereochemistry.
Prerequisite
CHE 352
Offered
Fall

CHE 555 Organometallic Chemistry (2:2)
Theoretical and synthetic aspects of organometallic chemistry and applications to catalysis and synthetic organic chemistry.
Prerequisite
CHE 352, CHE 442
Offered
Spring

CHE 556 Biochemistry I (3:3)
Introductory biochemistry presented from a chemical perspective. Topics include amino acids, proteins and enzymes, carbohydrates, nucleic acids, lipids, membranes, and carbohydrate catabolism.

Prerequisite
CHE 352, BIO 111–BIO 112

Offered
Fall

CHE 557 Biochemistry II (3:3)
Continuation of CHE 556. Enzyme catalytic mechanisms, additional topics in intermediary metabolism, genetic biochemistry, and selected topics in molecular physiology.

Prerequisite
CHE 352, CHE 556, BIO 111–BIO 112, or permission of instructor

Offered
Spring

CHE 558 Biochemistry Laboratory (1:0:4)
Introduction to biochemical techniques, including isolation, purification and characterization of biological molecules.

Prerequisite
CHE 556 or equivalent, CHE 353 or CHE 354, and CHE 333; or permission of instructor

CHE 570 Special Topics in Chemistry (1–3)
Study in special areas of chemistry as listed below. Hours per week and credit to be arranged. May be repeated for a maximum of six credits when topic varies. Areas identified as follows: 570A, Analytical; 570B, Biochemistry; 570C, Inorganic; 570D, Organic; 570E, Physical; 570F, Chemical Education.

Prerequisite
Permission of instructor

Notes
May be repeated for a maximum of 6 when topic varies. Hours per week and credit to be arranged.

CHE 589 Experimental Course
This number is reserved for experimental courses. Refer to the Course Schedule for current offerings.

CHE 601 Graduate Seminar I (1:1)
Oral reports from the current literature of chemistry by the student’s, as well as attendance at presentations by other students, staff, and guest speakers.

Prerequisite
CHE 401 or equivalent

CHE 602 Graduate Seminar II (1:1)
Oral reports from the literature and the student’s thesis research, as well as attendance at presentations by other students, staff, and guest speakers.

Prerequisite
CHE 601

CHE 604 Advanced Polymer Chemistry (3:3)
Modern concepts of addition, ring opening, and condensation polymerization, and the application of physical instrumentation to the characterization of polymers.

Prerequisite

CHE 615 Entrepreneurship for the Sciences (3:3)
Develop knowledge and skills in entrepreneurship to identify and evaluate sciences and technology ideas in chemistry and the life sciences as opportunities to take through the feasibility and business plan.

**Cross Listed Courses**
Cross Listed with ENT 615

**CHE 624 Survey of Natural Products Research (3:3)**
Survey of many different areas of natural products research, including taxonomy, genetics, nomenclature, biosynthesis, and process methods.

*Prerequisites*
Two courses in undergraduate organic chemistry and one course in undergraduate biochemistry.

**CHE 632 Advanced Analytical Chemistry (3:3)**
Current research activities in the analytical area, primarily for first year graduate students. Four areas emphasized: chemical equilibrium, spectroscopy, separations, and electrochemistry.

*Prerequisite*
CHE 462 or CHE 406 or equivalent. One semester of instrumental analysis (CHE 531) recommended

**CHE 633 Bioanalytical Chemistry (3:3)**
Comprehensive study on various analytical methods used to characterize nucleic acid and protein drug targets and their molecular interactions with therapeutic agents.

*Prerequisite*
Permission of instructor

**CHE 641 Advanced Inorganic Chemistry II (3:3)**
Group theory, its applications, and other topics in advanced inorganic chemistry.

*Prerequisite*
CHE 442

**CHE 651 Advanced Medicinal Chemistry (3:3)**
Advanced topics in medicinal chemistry including drug design, chemistry of High Throughput Screening and focused libraries, lead development/optimization.

*Prerequisite*
Two courses in undergraduate organic chemistry and one course in undergraduate biochemistry

**CHE 652 Synthetic Organic Chemistry (3:3)**
Methods and problems in multi-step organic synthesis, including use of transition metal reagents and asymmetric synthesis. Applications in drug synthesis.

*Prerequisite*
Two courses in undergraduate organic chemistry

**CHE 653 Physical Organic Chemistry (3:3)**
Structure and mechanisms of organic chemistry. Topics include bonding theory, stereochemistry, conformational analysis, reactions, reaction mechanisms, reactivity.

*Prerequisite*
Two courses in undergraduate organic chemistry

**CHE 656 Enzyme Mechanisms (3:3)**
Detailed look at how enzymes catalyze a broad range of chemical reactions. Particular emphasis on the role of organic cofactors and metal ions in catalysis.

*Prerequisite*
CHE 352 and either CHE 420 or CHE 556, or permission of instructor
CHE 657 Drug Metabolism and Pharmacogenetics (3:3)
Introduction to the major classes of drug metabolizing enzymes in the body. Chemical mechanisms of action and potential drug interactions related to the induction or inhibition of these systems.
Prerequisite
CHE 556 or permission of instructor

CHE 658 Nucleic Acid Biochemistry (3:3)
Structure and functions of nucleic acid and their biochemical reactions with cellular proteins. Emphasis on the genomic approach to identify and validate drug targets.
Prerequisite
Permission of instructor

CHE 659 Receptor Biochemistry (3:3)
Structure and biochemical properties of the various cell-surface receptors. Emphasis on specific receptors chosen as drug targets for various diseases.
Prerequisite
One course in undergraduate biochemistry

CHE 660 Biochemical Pharmacology and Disease Targets (3:3)
Drug action at the biochemical and molecular level. Focus on the biochemical and cellular mechanisms of action that guide the drug discovery and development process.
Prerequisite
One course in undergraduate biochemistry

CHE 661 Advanced Physical Chemistry I (3:3)
Selected topics in quantum chemistry, spectroscopy, statistical thermodynamics, and chemical kinetics will be developed with attention to methods of application.
Prerequisite
CHE 461 and CHE 462 or equivalent (one year of physical chemistry)

CHE 662 Advanced Physical Chemistry II (3:3)
Advanced topics in quantum chemistry, spectroscopy, statistical thermodynamics, and chemical kinetics.
Prerequisite
CHE 661

CHE 663 Spectroscopy and Analysis of Biomolecules (3:3)
Spectroscopic and structural methods for application to molecules of biochemical relevance. Topics include fluorescence, circular dichroism, chromatography, electrophoresis, mass spectrometry, FTIR, NMR, EPR, X-ray crystallography.
Prerequisite
CHE 406 or CHE 461, CHE 420 or CHE 556, or permission of instructor
Notes
May be repeated for a maximum of six credits when topic varies.

CHE 670 Advanced Special Topics in Chemistry (1–6)
Advanced study in special areas of chemistry as listed below. Hours per week and credit to be arranged. May be repeated for a maximum of six credits when topic varies. Areas identified as follows: CHE 670a Analytical (Pr. CHE 632); CHE 670b Biochemistry (Pr. CHE 556); CHE 670c Inorganic (Pr. CHE 641); CHE 670d Organic (Pr. CHE 553); CHE 670e Physical (Pr. CHE 661).
Notes
May be taken for credit over two or more semesters.

**CHE 680 Research Problems in Chemistry and Biochemistry (1–6)**
Advanced research in specialized areas of chemistry or biochemistry under the direction of a faculty member. Preparation for master’s thesis. May be taken for credit over two or more semesters.
*Prerequisite*
Permission of instructor and department head

**CHE 691 Introduction to Graduate Research (1)**
Guides new students in the selection of a research advisor. Professors present brief summaries of their research projects. Topics relevant to research are also discussed.
*Prerequisite*
Admitted to graduate program in department

**CHE 699 Thesis (1–6)**
*Prerequisite*
Approval of research proposal by thesis committee

**CHE 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**CHE 751 Literature Seminar (1:1)**
A literature-based seminar focusing on scientific literature databases and presentation skills.
*Prerequisite*
CHE 780

**CHE 752 Dissertation Seminar (1:1)**
A research-based seminar focusing on the student’s dissertation research during the semester the student expects to graduate.
*Prerequisite*
CHE 780

**CHE 780 Research Problems in Medicinal Biochemistry (1–18)**
Advanced research in specialized areas of medicinal biochemistry under the direction of a faculty member. Research to be utilized for the preparation of the dissertation.
*Prerequisite*
Permission of instructor
*Notes*
May be repeated for 6 hours.

**CHE 790 Medicinal Biochemistry Internship (3:0:12)**
Practical experience in a local industrial setting. Includes biweekly meetings with departmental internship coordinator. Student must complete a minimum of 12 hours per week at the internship site. May be repeated for 6 hours.
*Prerequisite*
Permission of departmental internship coordinator and department head

**CHE 799 Dissertation Research in Medicinal Biochemistry (1–18)**
*Prerequisite*
Permission of instructor
*Notes*
Grade: Satisfactory/Unsatisfactory, S/U

CHE 801 Thesis Extension (1–3)

CHE 802 Dissertation Extension (1–3)

CHE 803 Research Extension (1–3)
CLASSICAL STUDIES, DEPARTMENT OF
1104 Moore Humanities and Research Administration Building • 336-334-5214 • classics.uncg.edu

Administration
Hugh Parker, Department Head

About
The languages and cultures of ancient Greece and Rome have been a part of the curriculum here since the university’s founding in 1891.

Mission statement
The mission of the Department of Classical Studies is to serve the educational interests of undergraduate and masters level students, the local and statewide community, and the health of the national discipline, by preserving, transmitting and interpreting the achievements of the Classical World, and by adhering to the best practices of our discipline.

Faculty
Professors
Susan Shelmerdine, Homeric and Archaic Greek poetry, Greek tragedy, mythology and religion, Greek and Latin pedagogy.

Associate Professors
Maura Heyn, Art and archaeology of the Roman Empire, archaeological theory and culture change.
Hugh Parker, Latin poetry, Silver Latin literature, Medieval Latin (Head of Department).
David B. Wharton, Linguistics, literary criticism, Greek philosophy.
Jonathan Zarecki, Roman philosophy, oratory and rhetoric, Greek epic.

Assistant Professor
Joanne Murphy, Aegean archaeology, archaeology of religion, archaeological methods and theory.

Graduate Programs
No graduate programs are offered; however, the department of Classical Civilization offers several courses available to graduate students.

CCL – Classical Civilization Graduate Courses
CCI 501 Independent Study (1–3)
Directed program of reading, research, and individual instruction in Classical Studies.
Prerequisite
Permission of instructor
Notes
May be repeated for credit for up to 6 sh

CCI 502 History of Latin Literature (3:3)
A survey of Latin literature in English translation from the third century B.C. to the beginnings of the Middle Ages.
Prerequisite
Permission of instructor

CCI 512 The Archaeology of Roman Daily Life (3:3)
Study of Roman daily life and the evidence from archaeology and ancient literature for daily life.
Prerequisite
Classical Studies major (any concentration), SPLS major, Archaeology concentration, or admission to the M.Ed. in Latin program.
CCI 541 Ancient World: Selected Topics (3:3)
Varying topics in ancient Near Eastern, Greek, and Roman history, including politics and public rituals, patterns of social organization, ancient slavery, and cross-cultural interactions.

Cross Listed Courses
Same as HIS 541

Notes
May be repeated once for credit when topic varies.

CCI 550 Selected Topics in Classical Studies (3:3)
Varying topics in Greek and/or Roman literature, archaeology, or culture, chosen according to the needs of the students. All readings in English translation.

Offered
(Fall or Spring or Summer)

Notes
May be repeated once for credit when topic varies.

CCI 579 Readings in Roman History (3:3)
Survey of major topics in Roman history through primary sources in translation from the founding of the Republic in 509 B.C. to Marcus Aurelius’ death in A.D. 180.

Prerequisite
Permission of instructor

CCI 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CCI 605 Mythology in Art and Literature (3:3)
Study of Greek and Roman mythology as represented in literature and art from the Classical times to the present.

GRK – Greek Graduate Courses

GRK 501 Independent Study (1–3)
Directed program of reading, research, and individual instruction in Greek language and literature.

Prerequisite
Permission of instructor

Notes
May be repeated for up to 6 credits.

GRK 550 Topics in Greek Studies (3:3)
Studies in selected topics in Greek literature or language, e.g., the development of a genre, the nature of a period in literary history, or the treatment of a particular theme.

Prerequisite
Permission of instructor

Notes
May be repeated once for credit when topic varies.

GRK 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
GRK 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

LAT – Latin Graduate Courses

LAT 501 Independent Study (1–3)
Directed program of readings, research, and individual instruction in Latin language.
Prerequisite
Permission of instructor
Notes
May be repeated for up to 6 sh credit.

LAT 531 Latin Grammar and Composition
Intensive study of Latin grammar, syntax, and prose style; includes reading of Latin texts and translation into Latin from English. Required for initial licensure in Latin.
Prerequisites
LAT 204, or permission of instructor

LAT 550 Topics in Latin Studies (3:3)
Studies in selected topics in Latin literature or languages, e.g., the development of a genre, the nature of a period in literary history, or the treatment of a particular theme.
Notes
May be repeated once for credit when topic varies.

LAT 552 Teaching Secondary-Level Latin: Current Trends (3:3)
Trends and issues in teaching Latin at the secondary level. Topics include: review of textbooks, use of technology, research on second language acquisition, reaching diverse learners, and other current issues.
Prerequisite
Admission to the Standard Professional I License or M.Ed. in Latin program, or permission of instructor
Notes
This course does not fulfill Latin language major requirements. May be repeated once for credit when topic varies.

LAT 571 Medieval and Renaissance Latin (3:3)
Selections from Medieval and Renaissance prose and poetry.
Prerequisite
Permission of the instructor

LAT 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

LAT 600 Vergil (3:3)
In-depth survey of Vergil’s work with special attention paid to the literary, political, and philosophical context in which Vergil wrote.

LAT 601 Lyric Poetry (3:3)
Selected readings from Catullus, the Odes of Horace, and Martial.

LAT 602 Ovid (3:3)
Selected readings from the Metamorphoses, Ars Amatoria, and Tristia.

LAT 611 Roman Historians (3:3)
Study of the works of Caesar, Livy, Sallust, and Tacitus.
LAT 612 Cicero (3:3)
Study of the orations, letters, and essays of Cicero.

LAT 623 Roman Comedy (3:3)
Reading of selected plays of Plautus and Terence in their historical and cultural context.

LAT 624 Roman Biography (3:3)
Exploration of the Roman biographical tradition. Attention given to issues of genre, literary history, ancient scholarship as well as close readings of selected texts.

LAT 625 Poetry in the Age of Augustus (3:3)
Study of the poetic genres and major poets in Latin from 40 B.C. to 14 A.D.; selections from Vergil, Horace, Ovid, and the elegists.

LAT 626 Silver Age Survey (3:3)
A survey of the major authors of the first and early second centuries with special emphasis on Petronius, Juvenal, Martial, and Pliny the Younger.

LAT 627 Latin Teacher Leadership and Research
Students will complete projects demonstrating that they have met UNCG graduate teaching standards in teaching leadership, respectful educational environments, content and curriculum expertise, student learning, and reflection.
Prerequisite
LAT 552 or Permission of Instructor

LAT 630 Imperial Propaganda in the Age of Augustus (3:3)
Study of the life and career of Augustus through biographical and autobiographical sources, with attention to social, political, and religious aspects.

LAT 670 Directed Study: Portfolio Development (2:0)
Directed research and portfolio development for students in the MEd program. To be taken at the end of the student’s plan of study.
Prerequisite
Completed at least 30 semester hours in MEd in Latin program
Notes
Grade: Satisfactory/Unsatisfactory, S/U

LAT 693 AP Latin Authors (3:3)
Translation, interpretation, and literary analysis of selected authors from the AP Latin curriculum, with significant attention paid to pedagogical issues. Authors selected will vary from year to year.
Notes
May be repeated for a maximum of 9 credits when authors vary.

LAT 711 Experimental Course
This number is reserved for experimental courses. Refer to the Course Schedule for current offerings.

LAT 803 Research Extension (1-3)
COMPUTER SCIENCE, DEPARTMENT OF
167 Petty Building • 336-256-1112 • www.uncg.edu/cmp

Administration
Stephen Tate, Department Head
Jing Deng, Director of Graduate Study

About
The Master of Science is designed to build computer science depth and research competence, to prepare students for advanced careers in computing fields. Students completing the M.S. degree are also well-prepared for doctoral study in computer science.

Mission statement
The Department of Computer Science supports the university mission of being a student-centered research university by fostering discovery and intellectual growth through the traditional activities of education, research, and service, with stated missions in each of these areas.

- **Education Mission**: To provide excellence in teaching and education, providing rigorous undergraduate and graduate programs that produce graduates who have the theoretical foundation and technical skills to become productive professionals and/or to contribute to research in computer science, and supporting general liberal education through courses for non-majors that promote critical thinking and skills for life in a technical and information-based society.

- **Research Mission**: To contribute to the creation and dissemination of ideas through research and scholarly activities, such as publication of original research, presentations at scholarly meetings, and participation in externally funded research projects, in the context of a program which values the academic freedom of faculty to set their own research directions in basic or applied research.

- **Service Mission**: To support the university and computer science profession through participation in activities, committees, and policy making.

Faculty
**Professors**
Francine Blanchet-Sadri, Combinatorics on words, formal languages, string algorithms. (E)
Fereidoon Sadri, Database systems, XML information integration, modeling and management of inaccurate and uncertain data. (E)
Shan Suthaharan, Digital water-marking, video coding and compression, computer networks and security, wireless communications, image processing. (E)
Stephen R. Tate, Computer security, cryptography, algorithms, data compression (Head of Department).

**Associate Professors**
Jing Deng, Wireless networking and security, information assurance, social networks (Director of Graduate Study). (E)
Lixin Fu, Data mining, databases, algorithms. (E)
Nancy Green, Artificial intelligence, human-computer interaction. (E)

**Assistant Professors**
Prashanti Manda, Bioinformatics, ontologies, data mining, semantic similarity.
Somya Mohanty, Big-data, machine learning, data science, cyber-security, trustworthy computing.

Graduate Programs
- *Accelerated BS to MS Degree Program in Computer Science*
- *Master of Science (MS) in Computer Science, (30)*
Accelerated BS to MS Degree Program in Computer Science

Application and Admission
Qualified UNCG undergraduate students who are pursuing the Bachelor of Science in Computer Science may apply for admission to the Accelerated Degree Program. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants will not be required to take the GRE. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the graduate degree program.

ADP Courses
Admitted students may apply the following 12 credits of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of “B” (3.0) or better in the course and fulfill graduate-level requirements:

- CSC 553 Theory of Computation (3)
- CSC 555 Algorithm Analysis and Design (3)
- CSC 562 Principles of Operating Systems (3)
- CSC 567 Principles of Computer Networks (3)

Degree Requirements
Please consult with an advisor to determine how the course taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the Master of Science in Computer Science remain the same.

Computer Science, MS, (30)
The MS in Computer Science requires 30 semester hours with at least 24 hours in computer science (CSC) courses. Three options for the capstone experience are offered: comprehensive examination, project, or thesis.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Degree Requirements
Core Courses (6-21)
Every student must complete:

- CSC 640 Software Engineering (3)
- CSC 656 Foundations of Computer Science (3)

Advanced Courses
Every student must either present evidence of having completed at least one advanced course in each of the following areas during the undergraduate program or take an advanced course in each of the following areas as part of the graduate program:

- CSC 562 Operating Systems (3)
- CSC 567 Computer Networks (3)
- CSC 553 Theory of Computation (3)
- CSC 555 Algorithm Analysis (3)
- CSC 671 Advanced Database Systems (3)

Electives (9-24)
With prior approval of the Director of Graduate Study, a student will select 9-24 hours of other 500- or 600-level CSC courses. A number of selected courses from other departments are also available. Interested students should contact the Director of Graduate Study.

**Thesis, Project, or Comprehensive Examination (Capstone Experience)**

Each candidate may elect to prepare a thesis, prepare a project, or pass a comprehensive examination on the program of course work.

**Thesis (6)**

The candidate may prepare a thesis based on the investigation of a topic in computer science. A thesis director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. The writing of a thesis requires the scholarly exposition and documentation of a substantial problem. In some cases this may lead to a new solution to the problem and to original results. While writing the thesis, candidates may include up to 6 hours of CSC 699 in the required 30 hour program. An oral examination on the thesis is required.

**Project (3-6)**

The candidate may prepare a project (theoretical or programmed) based on a topic in computer science. The project may be work-related. A project director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. The preparation of a project requires a description of the problem and documentation of any software products or description of theoretical solutions. While preparing the project, candidates may include 3 to 6 hours of CSC 698 in the required 30 hour program. An oral examination on the project is required.

**Comprehensive Examination**

A candidate may elect to pass a written comprehensive examination on the program of study. Please consult with the Director of Graduate Study for information concerning the comprehensive examination.

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**CSC -Computer Science Graduate Courses**

**CSC 510 Big Data and Machine Learning (3:3)**

Big data definitions and characteristics, computing environment for big data management and processing, machine learning models and algorithms, and scaling up machine learning (high dimensionality reduction).

*Prerequisite*

CSC 330, MAT 191, and STA 271

*Corequisite*

CSC 567 and MAT 292

**CSC 521 Computer Graphics (3:3)**

Survey of graphics algorithms, data structures, and techniques.

*Prerequisite*

Grades of at least C (2.0) in CSC 340, CSC 350, and MAT 292, or permission of instructor

**CSC 522 Digital Image Processing (3:3)**

Image representation, enhancement, compression, coding, restoration, and wavelet transforms.

*Prerequisite*

Grades of at least C (2.0) in CSC 330, CSC 350, and MAT 292, or permission of instructor. Successful completion of STA 271 or STA 290 recommended.

**CSC 523 Numerical Analysis and Computing (3:3)**

Number systems and errors, solutions of non-linear and linear systems, eigenvalue problems, interpolation and approximation, numerical differentiation and integration, solution of differential equations.

*Prerequisite*

Grades of at least C (2.0) in CSC 130, CSC 350, and MAT 293, or permission of instructor

**CSC 524 Numerical Analysis and Computing (3:3)**
Continuation of 523 with special topics in numerical analysis, emphasis on applied mathematics.

**Prerequisite**
Grade of at least C (2.0) in CSC 523

**CSC 526 Bioinformatics (3:3)**
Introduction to the problems and methods in Bioinformatics. Problem areas include restriction mapping, map assembly, sequencing, DNA arrays, and sequence comparison.

**Prerequisite**
Permission of instructor

**CSC 529 Artificial Intelligence (3:3)**
Logical foundations, knowledge representation and reasoning, search, and selected topics such as natural language processing and reasoning under uncertainty.

**Prerequisite**
Grade of at least C (2.0) in CSC 330 and CSC 350 or permission of instructor

**CSC 539 Introduction to Compiler Design (3:3)**
Basic techniques of compiler design and implementation: lexical analysis, parsing, code generation. Sizable programming project implementing a compiler for a block-structured language with strong typing.

**Prerequisite**
Grades of at least C (2.0) in CSC 261 and CSC 330 or permission of instructor

**Notes**
Successful completion of CSC 553 helpful.

**CSC 540 Human-Computer Interface Development (3:3)**
Survey of concepts and techniques for human-computer interface development. Topics include user-centered design, user interface programming, and usability evaluation.

**Prerequisite**
Grades of at least C (2.0) in CSC 340 or permission of instructor

**CSC 550 Combinatorics on Words (3:3)**
Introduction to the problems and methods in algorithmic combinatorics on words. Problem areas include periodicity, primitivity, and borderedness.

**Prerequisite**
Permission of instructor

**CSC 553 Theory of Computation (3:3)**
Finite state automata and regular expressions, context-free grammars, push-down automata and their use in parsing, overview of language translation systems, models for programming language semantics, computability and undecidability.

**Prerequisite**
Grade of at least C (2.0) in CSC 350, or permission of instructor

**CSC 555 Algorithm Analysis and Design (3:3)**
Sequential algorithm design and complexity analysis. Dynamic programming. Greedy algorithms. Graph algorithms. Selected advanced topics from NP-completeness; approximation, randomized, parallel, number-theoretic algorithms; Fast Fourier Transform; computational geometry; string matching.

**Prerequisite**
Grade of at least C (2.0) in CSC 330

**CSC 561 Principles of Computer Architecture (3:3)**
Hardware and software components of computer systems, their organization and operations. Topics: comparative instruction set architectures, microprogramming, memory management, processor management, I/O, interrupts, and emulation of processors.

**Prerequisite**
Grades of at least C (2.0) in CSC 261, CSC 330, and CSC 350, or permission of instructor

**CSC 562 Principles of Operating Systems (3:3)**
Techniques and strategies used in operating system design and implementation: managing processes, input/output, memory, scheduling, file systems, and protection.

**Prerequisite**
Grades of at least C (2.0) in CSC 261 and CSC 340 or permission of instructor

**Notes**
Successful completion of CSC 561 helpful.

**CSC 567 Principles of Computer Networks (3:3)**
Hardware and software components of computer networks, their organization and operations. Topics: open system interconnection; local area networks; TCP/IP internetworking, routing, and packet switching; network programming.

**Prerequisite**
Grades of at least C (2.0) in CSC 261 and CSC 330, or permission of instructor

**CSC 568 Principles of Wireless Networks (3:3)**
Digital communications, communication networks, wireless communication technology, wireless networking, wireless LANs, and wireless network programming.

**Prerequisite**
Grades of at least C (2.0) in CSC 330 and CSC 567, or permission of instructor

**CSC 580 Cryptography and Security in Computing (3:3)**

**Prerequisite**
Grades of at least C (2.0) in CSC 330 and one of CSC 471, CSC 561, CSC 562, or CSC 567, or permission of instructor

**CSC 583 Firewall Architecture and Computer Security (3:3)**
Firewall hardware and software technologies. Architectures, protocols and their applications.

**Prerequisite**
Grades of at least C (2.0) in CSC 567 and CSC 580, or permission of instructor

**CSC 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**CSC 593 Directed Study in Computer Science (1–3)**

**CSC 594 Directed Study in Computer Science (1–3)**

**Notes**
Grade: Satisfactory/Unsatisfactory (S/U)

**CSC 621 Advanced Computer Graphics (3:3)**
Advanced computer graphics algorithms, data structures, and techniques.

**Prerequisite**
CSC 521 or permission of instructor
CSC 622 Advanced Digital Image Processing (3:3)
Image restoration, segmentation, coding, representation and description, morphological transforms, object recognition.
Prerequisite
CSC 522 or permission of instructor

CSC 626 Advanced Bioinformatics (3:3)
Advanced topics in bioinformatics related to sequence comparison and database search, fragment assembly of DNA, physical mapping of DNA, phylogenetic trees, genome rearrangements, and molecular structure prediction.
Prerequisite
CSC 526 or permission of instructor

CSC 640 Software Engineering (3:3)
Organization and scheduling of software engineering projects and structured software design. Specification methods, metrics, software engineering tools, design, prototyping, version control, and testing.
Prerequisite
CSC 330, or permission of instructor

CSC 650 Language Theory (3:3)
Important aspects of language theory. Advanced topics such as grammar, codes, L systems, and combinatorics on words.
Prerequisite
CSC 550 or permission of instructor

CSC 653 Advanced Theory of Computation (3:3)
Computability theory: Church-Turing thesis (Turing machines, variants, other models); decidability (decidable and undecidable problems for automata and grammars, the halting problem); reducibility (undecidability of mathematical truth).
Prerequisite
CSC 553, or permission of instructor

CSC 655 Advanced Topics in Algorithms (3:3)
Modern development of algorithm design and analysis for sequential and parallel computers; parallel, number-theoretic, probabilistic, and approximation algorithms, string matching, computational geometry, NP-completeness: worst-case versus average-case.
Prerequisite
Grade of at least C in CSC 555

CSC 656 Foundations of Computer Science (3:3)
Introduces the mathematical foundations that support advanced studies in computer science including computer programming and the analysis of algorithms.
Prerequisite
CSC 350 or permission of instructor

CSC 663 Advanced Topics in Computer Systems (3:3)
Prerequisite
CSC 330 and CSC 567 or CSC 561 or CSC 562, or permission of instructor
Notes
May be repeated for credit when topics vary.

**CSC 665 Advanced Wireless Networks (3:3)**
Wireless technology and architecture, wireless network types, wireless network design approaches, wireless application development and wireless network programming.

*Prerequisite*
CSC 330 or equivalent and one of the following: CSC 561 or CSC 562 or CSC 567 or permission of instructor

**CSC 671 Advanced Database Systems (3:3)**

*Prerequisite*
CSC 330, or permission of instructor

**CSC 672 Database System Architecture (3:3)**
File organization and indexing techniques. Query processing and optimization. Concurrency control and crash recovery. Distributed and heterogeneous database systems. Selected topics of current interest in database and knowledge-base systems.

*Prerequisite*
CSC 570 or CSC 671, or permission of instructor

**CSC 675 Principles of XML Databases (3:3)**
XML from a database point of view, concentrating on information retrieval (querying) and integration.

*Prerequisite*
CSC 671 or permission of instructor

**CSC 676 Topics in Database Systems (3:3)**
Selected topics of current interest such as: deductive databases, modeling and management of uncertain and inaccurate information, multi-database systems, data mining, on-line analytical processing and data warehousing.

*Prerequisite*
CSC 671 or permission of instructor

**CSC 680 Advanced Topics in Computer Security (3:3)**
Topics in cryptography and computer security, including cryptographic protocols, Web server security, Java security, security in the healthcare domain, and experimental quantum cryptography.

*Prerequisite*
CSC 339 and CSC 580

**CSC 693 Advanced Topics in Computer Science (3–6)**
Algorithms, architecture, languages, systems, theory, or other areas of computer science.

*Prerequisite*
Permission of instructor

*Notes*
May be repeated once for credit.

**CSC 695 Current Problems in Computer Science (3:3)**
Topics of current research interest in computer science.

*Prerequisite*
Permission of instructor

**CSC 697 Research Problems in Computer Science (3:3)**
Advanced research in specialized areas of computer science under the direction of a faculty member. Preparation for master’s thesis.

Prerequisite
Permission of instructor

Notes
Grade: Satisfactory/Unsatisfactory, S/U

CSC 698 Project in Computer Science (3–6)

Prerequisite
Permission of instructor

Notes
May be repeated for up to 6 credit hours with permission of instructor. Grade: Satisfactory/Unsatisfactory, S/U

CSC 699 Thesis (1–6)

CSC 711 Experimental Course
This number reserved for experimental courses. Refer to Course Schedule for current offerings.

CSC 801 Thesis Extension (1–3)

CSC 803 Research Extension (1–3)
COMMUNICATION STUDIES, DEPARTMENT OF
102 Ferguson Building • 336-334-5297 • cst.uncg.edu

Administration
Christopher Poulos, Department Head
Loreen Olson, Director of Graduate Study

About
There is nothing on this earth more fascinating than the study of human communication. Meaning making is a complex, continuous, collaborative, dynamic process. Sometimes, we are transported into a world we could hardly imagine as we engage in deep listening and active dialogue with friends, loved ones, and colleagues. Sometimes a great speech will take us to soaring heights of understanding and even epiphany. Sometimes we are like ships passing in the night, hardly even understanding one another. And sometimes, we crash into each other like rams on a hillside, embroiled in conflict, with no apparent exit!

Friends, families, work groups, organizations, communities— we study them all, and all offer endless opportunities for study, sense making, and intervention. All of this action, and more, will confront you as you engage in your studies. And, at the end of it all, you will not only have a lifelong quest ahead of you (as you come to understand and engage in various forms and practices of communication), you will also find yourself equipped to succeed in a wide variety of fields and careers.

Mission statement
We teach and research communication to connect people, create change, and work toward a just world.

The Master of Arts program in Communication Studies prepares students for scholarly or applied communication careers in the social, public, and private sectors, community college teaching, or advancement to a doctoral program. As they master the tools of scholarship, students acquire: 1) a deep, research-based, critical understanding of communication in relation to public and private contexts and issues, and 2) the ability to participate in and contribute to the communication discipline as scholars and practitioners.

Faculty
Professors
Spoma Jovanovic, Community, ethics, civic participation, communication activism, critical service-learning, and social action research methods. (E)
Loreen Olson, Family/interpersonal communication, dark side of communication, gender communication (Director of Graduate Study). (E)
Christopher N. Poulos, Ethnography/Autoethnography, family communication, dialogue, film and relationships, communication ethics (Head of Department). (E)
Roy Schwartzman, Figurative language, rhetoric of science and technology, digital communication, critical theory, Holocaust studies, public argumentation, scholarship of teaching and learning. (E)

Associate Professors
David Carlone, Organizational communication, social and cultural theory, cultural studies of work and organization (Director of Graduate Study).
Cerise Glenn, Organizational communication, communication theory, intercultural communication, cultural identity and negotiation, African American culture and identity, organizational culture, third wave feminism, occupational socialization, identification of diverse groups.
Peter M. Kellett, Narrative inquiry, relational conflict, positive communication, disability. (E)
Etsuko Kinefuchi, Critical intercultural communication, community engagement, language and culture, cultural identity and identity negotiation, qualitative methods.
Marianne E. LeGreco, Public health, organizational policy, nutrition promotion and practice, food policy, research methods.
Elizabeth J. Natalle, Gender and communication theory, interpersonal processes, feminist criticism. (E)

Adjunct Graduate Faculty
Jessica McCall, Communication pedagogy, experimental education, relational communication, small group and team communication.

Graduate Programs
- Accelerated BA to MA Degree Program in Communication Studies
- Master of Arts (MA) in Communication Studies, 30 hours

Accelerated BA to MA Degree Program in Communication Studies

Application and Admission
Qualified UNCG undergraduate students may apply for admission to the Accelerated Degree Program in Communication Studies. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year.

Communication Studies has the following additional requirements:
At least 15 credits of undergraduate Communication Studies courses, with an earned 3.5 GPA in these courses. The 15 credits must include CST 300, with a minimum grade of B. Of the remaining 12 credits, 6 credits must be from among CST 105, 200, 207, and 210. Standard application requirements for the Master of Arts program (i.e., undergraduate transcript(s), GRE scores, three letters of recommendation, personal statement, writing sample, interview).

All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the Communication Studies Master of Arts degree program. Admitted students may apply a maximum of 12 credits of graduate-level coursework toward completion of both the undergraduate and graduate degrees, provided that they earn a grade of "B" (3.0) or better in each graduate course and fulfill graduate-level requirements.

ADP Courses
As with all graduate students in Communication Studies, courses counted toward the Master of Arts (MA) degree need the prior approval of the Director of Graduate Study. Up to, but not more than, 12 hours of graduate courses may be double-counted. For a course to apply toward both degrees, the student must earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements.

The MA degree requires 30 hours of graduate-level coursework. If the maximum of 12 hours is double-counted toward both the undergraduate and graduate degrees, the student must complete an additional 18 hours of graduate-level coursework to complete the MA degree. No more than 9 hours at the 500-level may be counted toward the MA degree. Please see the section below for a full description of the MA degree requirements. The following courses have been identified as those that may be counted toward the BA and MA degrees. These courses have been chosen because they are well suited to ADP students and because they are offered frequently enough to provide students substantial opportunity to enroll in them. All courses that lead to the completion of the MA degree must be approved with the Director of Graduate Study.

The following courses may be counted toward the Bachelor and Master degrees:
CST 502 The Semiotics of Everyday Life (3:3)
CST 506 Speaking Out for Community Change (3:3)
CST 520 African American Culture and Identity (3:3)
CST 555 Relational Communication and the Hollywood Feature Film (3:3)
CST 601 Engaging Communication Theories (3:3)
CST 602 Engaging Communication Research Methodology (3:3)

Substitutions for the above courses require the permission of the Director of Graduate Study in the Department of Communication Studies.

Degree Requirements
Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the Master of Arts in Communication Studies remain the same.

Communication Studies, MA, (30)
The MA in Communication Studies requires 30 semester hours of the mandatory core courses, elective course work, and the capstone experience.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 2-3 page statement describing their educational background, relevant experience, career goals, and purpose for graduate study in the field of communication; an academic writing sample, preferably a research paper written for a prior course in communication studies or a relevant discipline; and a resume or curriculum vitae. Applicants must also complete an interview with the Director of Graduate Study or a member of the graduate faculty.

Procedural Guidelines
Upon admission to the Department, the Director of Graduate Study will advise students on Departmental and Graduate School processes and procedures.

After completing the core requirements, students will be informed by the Director of Graduate Study if they are or are not meeting the academic standards and requirements of the program. At that time, students may be allowed to continue in the program or be asked to leave the program.

In the semester immediately prior to their final semester, students will form an advisory committee to assist with completion of the Final Research Project. The committee, ideally, will consist of two faculty members with whom the student has taken courses toward the degree and/or with whom the student shares common research interests. One of these faculty members will serve as the major guiding professor on the project. The committee will guide the student through the development and execution of a research project appropriate to the culmination of the MA degree. The final product will be a scholarly essay. Satisfactory projects, with revisions, are typically suitable for submission for presentation at a local, regional, or national conference. To allow for adequate planning, the committee should be formed before either fall or spring break in the semester prior to the final semester.

Degree Requirements
Required Core Courses (6)

CST 601 Engaging Communication Theories (3)
CST 602 Engaging Communication Research Methodology (3)
The core courses form the foundation for effective scholarship and inquiry. During their first year in the program, students are required to take CST 601 in the fall semester and CST 602 in the spring semester to introduce students to the theories and methodologies necessary to engage in communication scholarship.

**Elective Course Work (21)**
Satisfactory completion of 21 hours in CST cognate, graded courses is required. All new teaching assistants are required to take CST 599 Communication Pedagogy (3) in the fall of their first semester in the program. CST 599 is included in these 21 hours. Students may elect to take CST 652 Practicum in Communication Research under supervision of a faculty member. CST 652 could also be included in the 21 total electives. Students may take CST 650 Independent Study once certain requirements are met. However, independent study credit hours do not count toward the minimum 30 hours required for the degree. A maximum of 9 semester hours of electives may be taken at the 500-level.

**Course Work outside the Department**
Students are permitted to take course work outside the department when additional course work is required for a student’s plan of study, as determined by the Director of Graduate Study and the student. Up to three hours of course work outside the department may be included in the minimum 30-hours requirement for the MA degree.

**Capstone Experience (Final Research Project) (3)**
CST 698 Capstone Experience in Communication (Final Research Project)
All students must complete a final research project, in consultation with the Graduate Faculty, as a demonstration of mastery of the arts of communication scholarship (see Procedural Guidelines above for more information). All students must enroll for a total of 3 hours in CST 698.

**Exit Questionnaire**
All graduating students complete an exit questionnaire on the MA program.

**SACSCOC 18-Hour Requirement**
Community college instructors interested in earning 18 semester hours in communication to satisfy SACSCOC requirements should consult the Director of Graduate Study for guidance in course selection.

**CST -Communication Studies Graduate Courses**

**CST 502 The Semiotics of Everyday Life (3:3)**
Language, meaning, and sign systems as communication process. Emphasis on projects to apply theoretical concepts from general semantics and semiotics to promote understanding of how humans symbolically construct reality.
Prerequisite
Upper-division undergraduate or graduate student status

**CST 506 Speaking Out for Community Change (3:3)**
Exploration of theory and practice in community advocacy. Focus on public deliberation, moral conflict, and community dialogue in value-laden topics and controversies.
Prerequisite
Upper-division undergraduate or graduate student status; CST 305 recommended for undergraduates
Offered
Fall or Spring

**CST 520 African American Culture and Identity (3:3)**
Examines dynamic ways that African Americans construct, maintain, and negotiate their social identities in a variety of contexts. Explores the connections among race/ethnic identity, communication, and culture.
Prerequisite
Upper-division undergraduate or graduate student status; CST 305 recommended for undergraduates

**CST 540 Social Entrepreneurship: Justice and a Green Environment (3:3)**
Interdisciplinary engagement of social entrepreneurship as model for change on an issue of environmental sustainability. Exploration of models that respond to social, economic, environmental, and justice issues.
Cross Listed Courses
Same as BUS 540, CPS 540, ENT 540, SWK 540, WGS 540

Prerequisite
Upper-division undergraduate or graduate student status

CST 555 Relational Communication and the Hollywood Feature Film (3:2:3)
Analysis and application of images, discourses, and practices concerning human communication and relationships as they are represented in the powerful cultural medium of film.

Prerequisite
Undergraduates: CST 207, CST 300 or CST 305, and upper division standing
Offered
Alt years

CST 562 Organizational Change: Diversity and Identity (3:3)
Contemporary theory and practices of communication applied to changing organizations. Emphasis on the role of diversity and issues of identity driving change.

Prerequisite
Upper-division undergraduate or graduate student status

CST 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CST 599 Communication Pedagogy (3:3)
Seminar focusing on the effect of communication upon learning. For graduate teaching assistants in any discipline, graduates or undergraduates interested in teaching or training. Emphasis on pedagogical principles and instructional materials.

Prerequisite
Upper-division undergraduate or graduate student status

CST 601 Engaging Communication Theories (3:3)
Contemporary theories of communication, including interpretive, critical, rhetorical, and scientific. Emphasis on engaging social and cultural contexts in which to utilize theory.

Prerequisite
Admission to appropriate degree program or permission of instructor

CST 602 Engaging Communication Research Methodology (3:3)
Provides a foundation in communication research methodology. Introduces positivist, interpretivist, and critical research paradigms, and links these to focus groups, in-depth interviewing, participant observation, and document analysis.

CST 605 Communicating for Social Change (3:3)
Theoretical and practical views on how to work inside and outside institutions of power to transform values, assert credibility, and mobilize others. Emphasis on how communication creates social change. Topics and emphasis vary by semester.

CST 612 Seminar in Communication Studies (3:3)
Subject matter varies.

Prerequisite
Admission to appropriate degree program or permission of instructor
Notes
May be repeated for credit.
CST 630 Organization, Democracy, and Community (3:3)
Draws upon critical organizational communication and critical/cultural studies to consider the role of communication in creating and sustaining democratic organizing in micro, meso, and macro contexts.

CST 632 Seminar in Communication Ethics (3:3)
Theory and practice of communication ethics in a free society. Issues and cases ranging from intrapersonal to mass media communication situations.
Prerequisite
Admission to appropriate degree program or permission of instructor

CST 635 Identity, Culture, and Communication (3:3)
Takes critical/cultural studies approaches to examine how culturally significant identity sites such as race, ethnicity, gender, and diaspora are constructed, negotiated, and resisted through communication.

CST 650 Independent Study (1–3)
Topic to be determined by faculty advisor and student.
Prerequisite
Admission to appropriate degree program or permission of instructor and major advisor

CST 652 Research Practicum in Communication (1–3:0:3–9)
Engagement in communication research with the direct supervision of a member of the Graduate Faculty.
Prerequisite
Permission of Graduate Faculty member with whom student wishes to work
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CST 659 Communication and Gendered Communities (3:3)
Ways in which communication process constructs gendered communities. Analysis of gendered language codes, speech communities, and messages that transform community.

CST 663 Seminar in Relational Communication (3:3)
Major interpersonal communication theories and constructs, and methods for investigating them.
Prerequisite
Admission to appropriate degree program or permission of instructor

CST 698 Capstone Experience in Communication (Final Research Project) (1–3)
Synthesis of theories, research methods, and practices of communication that will shape the 21st Century, demonstrated through independent scholarly research (conducted in consultation with faculty committee).
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CST 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CST 803 Research Extension (1–3)
ENGLISH, DEPARTMENT OF
3143 Moore Humanities and Research Administration Building • 336-334-5311 • english.uncg.edu

Administration
Scott Romine, Department Head
Jennifer Feather, Director of Graduate Study
James Clark, Director of Graduate Study for the MFA Program

About
The Department of English offers degree programs leading to the Master of Arts, the Master of Fine Arts, and the Doctor of Philosophy. The department has long published The Greensboro Review, a magazine of poetry and fiction, and since 1986, English Literature in Transition (1880–1920), a scholarly journal, has been published here. In 1988, ELT Press began to publish the 1880–1920 British Authors Series.

Scheduling of MA classes and some PhD classes is intended to meet the needs of students already employed in teaching or other professions.

Faculty
Professors
Denise N. Baker, Middle English literature, Langland, Chaucer, Julian of Norwich, medieval women writers. (E)
Stuart L. Dischell, Poetry writing, poetry and poetics, modern literature, world literature. (E)
Christopher Hodgkins, Renaissance literature, 17th century lyric poetry, George Herbert, British imperial imagination, Sir Francis Drake, religion and literature, Shakespeare. (E)
Jennifer M. Keith, 18th century and Romantic British literature, poetry, satire, gender studies, William Blake. (E)
Karen L. Kilcup, 19th and early 20th century American literature, women’s and Native American literature, romanticism and regionalism, American Studies and Women’s Studies, poetry, humor, critical theory. (E)
Robert Langenfeld, Late 19th–early 20th century British literature. Editor/Publisher ELT and ELT Press(E).
Alexandra Schultheis Moore, Postcolonial literatures and theory, human rights, gender studies, 20th century British and American literature, critical theory (E).
Christian Moraru, Literary and cultural theory, 20th century American literature with emphasis on contemporary narrative, postmodernism, comparative literature. (E)
Craig Nova, Fiction writing. Class of 1949 Excellence Professor. (E)
Michael F. Parker, Fiction writing, contemporary fiction, short story, forms in fiction, novella, personal/familiar essay. (E)
Mark Rifkin, Native American literature, indigenous studies, queer studies, ethnic studies, American studies, 19th-century U.S. writing, postcolonial and critical race theory, law and literature. Associate Head of Department. (E)
Scott Romine, Southern literature, modern American literature, narrative theory, autobiography, Irish literature (Department Head). (E)
Anne D. Wallace, 19th-century British literature and culture, poetry and the novel from the Restoration to the Great War, gender studies, aesthetics, historiography. (E)
Karen A. Weyler, Early and 19th century American literature, women writers, the history and theory of the novel, personal narratives, and the history of the book. (E)
Stephen R. Yarbrough, Literacy; critical and rhetorical theory; history of American literature and discourse, especially 18th and 19th centuries. (E)
Associate Professors

Risa Applegarth, Rhetoric and composition, rhetorical studies of science, genre theory, nature writing, lifewriting, historiography, women’s rhetorics. (E)

Ben Clarke, British literature after 1900, working class writing and culture, cultural studies, Marxism and cultural materialism, western representations of Asia-Pacific, George Orwell, Richard Hoggart. (E)


Jennifer Feather, Early modern British literature; theories of violence and trauma; theories of embodiment, gender, and sexuality; 15th and 16th century British historical writing; early modern anatomies (Director of Graduate Study, PhD Program). (E)

Holly Goddard Jones, Fiction writing, forms in fiction, creative nonfiction, modern and contemporary literature.

Noelle Morrissette, African American literature, gender and sexuality studies, American literature, African literature, black diasporic literatures. (E)

Nancy Myers, Rhetoric and composition theory and pedagogy; history of rhetoric, composition, and English Studies; sociolinguistics; structuralism. (E)

Maria Sanchez, 19th century U.S. literatures, including Mexican American, African American, antebellum, and women’s. (E)

Amy N. Vines, Middle English literature, medieval romance, Chaucer, women’s writing, readership and patronage, paleography, Director of Undergraduate Studies. (E)

Academic Professionals

James Clark, Creative writing-fiction (Director of Graduate Study, MFA Creative Writing Program).

Jeanie Reynolds, Social and cultural aspects of literacy and learning of adolescents (particularly diverse and marginalized students), the role of discourse and identity development in the preservice English teacher education. Director of English Education.

Graduate Programs

- Accelerated BA to MA in English
- Master of Arts (MA) in English, (30-36)
- Master of Fine Arts (MFA) in Creative Writing, (36)
- Doctor of Philosophy (PhD) in English, (42-48)

Accelerated BA to MA in English

The Accelerated BA to MA in English requires 30-36 semester hours and is designed for those planning to pursue a doctorate; to teach in community colleges, technical institutes, or some undergraduate colleges; and to work in non-academic settings. Three plans of study beyond the core requirements are offered: (1) thesis plan, (2) teaching composition plan, and (3) minor field plan.

Application and Admission

Qualified UNCG undergraduate students may apply for admission to the Accelerated Degree Program in English. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year.

English has the following additional requirements for ADP applicants:

At least 15 credits of undergraduate English courses at the 200-level or above, with an earned 3.5 GPA in these courses.

Standard application requirements for the Master of Arts program, excluding GRE scores (i.e., undergraduate transcript(s), three letters of recommendation, statement of purpose, writing sample, and resume or cv).
Accelerated Degree Program applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the English Master of Arts degree program. Students admitted to the ADP program may apply a maximum of 12 credits of graduate-level coursework toward completion of both the undergraduate and graduate degrees, provided that they earn a grade of "B" (3.0) or better in each graduate course and fulfill graduate-level requirements.

**Degree Requirements**

Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the Master of Arts in English will remain the same.

**ADP Courses**

Up to, but not more than, 12 hours of graduate courses may be double-counted. For a course to apply toward both degrees, the student must earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements.

The MA degree requires 30-36 hours of graduate-level coursework. If the maximum of 12 hours is double-counted toward both the undergraduate and graduate degrees, the student must complete a minimum of 18 hours of further graduate-level coursework to complete the MA degree. No more than 9 hours at the 500-level may be counted toward the MA degree. Please see the Graduate Bulletin for a full description of the MA degree requirements.

The following courses have been identified as those that may be counted toward the BA and MA degrees. These courses have been chosen because they are well suited to ADP students and because they are offered frequently enough to provide students substantial opportunity to enroll in them. All courses that lead to the completion of the MA degree must be approved by the Director of Graduate Study.

The following courses may be counted toward both the Bachelor and Master degrees:

- **ENG 601** English Studies: Content, Methods, and Bibliography (3)
- And any three of the following courses:
  - **ENG 549** Critical Canon and Contemporary Issues (3)
  - **ENG 642** Topics in Pre-1800 Literature (3)  
    May be repeated twice for credit when topic or instructor varies.
  - **ENG 664** Topics in Post-1800 Literature (3)  
    May be repeated twice for credit when topic or instructor varies.
  - **ENG 692** Topics in Rhetoric and Composition (3)

Master of Arts (MA) in English, (30-36)

The MA in English requires 30-36 semester hours and is designed for those planning to pursue a doctorate; to teach in community colleges, technical institutes, or some undergraduate colleges; and to work in non-academic settings. Three plans of study beyond the core requirements are offered: (1) thesis plan, (2) teaching composition plan, and (3) minor field plan.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 1-2 page Statement of Purpose, a writing sample (less than 30 pages), and a current CV or resume.

**Degree Requirements**
No more than three courses at the 500-level may be submitted for the degree. All other work must be at the 600-level and above.

**Required Core Courses (24)**

- **ENG 601** English Studies: Content, Methods, and Bibliography (3)
- 3 literature courses including one before 1800 and one after
- 3 electives normally in English or American literature
- 1 critical theory course selected from the following or from special topics courses approved in advance by the Director of Graduate Study:
  - **ENG 531** Feminist Theory and Women Writers (3)
  - **ENG 549** The Critical Canon and Contemporary Issues (3)
  - **ENG 650** Modern Literary and Cultural Theory (3)
  - **ENG 663** Postcolonial Literary and Cultural Theory (3)
  - **ENG 704** Studies in Contemporary Literary and Cultural Theory (3)
  - **ENG 705** Cultural Studies (3)

**Alternative Plans of Study (6-12)**

In the remaining semester hours beyond the core courses, students should elect one of the following alternative plans of study:

**Thesis plan**

- **ENG 699** Thesis

MA students in the thesis plan must demonstrate reading knowledge of a foreign language. A level of proficiency in one foreign language, equivalent to completion of the first semester of an intermediate course (such as 203 at UNCG), must be documented either by previous course work completed during the last five years and approved by the Director of Graduate Study, or by course work while enrolled in the MA program, or by an appropriate score on a written examination. Because of the language requirement, a minimum of 30 hours is required for the degree: 24 core hours and 6 thesis hours. Native speakers of other languages can demonstrate foreign language proficiency through their graduate course work in English. Students in the MA/PhD track will ultimately have to fulfill the foreign language requirement for the PhD.

Students who have been admitted into the PhD program and/or who have the permission of their thesis committee and the Director of Graduate Study may elect to write a two-paper thesis instead of the traditional single-topic thesis. Recommended for those students for whom the MA will not be the terminal degree, the two-paper thesis will consist of two graduate papers expanded and revised to publishable quality.

**Teaching composition plan**

A total of 36 hours is required for the degree, the 24-hour core plus 12 hours distributed as follows:

- **ENG 680** Teaching Internship in English (3)

*Note: ENG 680: (Capstone Experience)*

Plus 3 electives in rhetoric and composition or language and linguistics

Chosen from ENG 510, ENG 513, ENG 660, special topics courses approved in advance by the Director of Graduate Study, or from the following:

- **ENG 522** Teaching Composition: Theories and Applications (3)
- **ENG 590** Literacy, Learning, and Fieldwork (4)
- **ENG 661** Second Language Writing (3)
- **ENG 688** Women’s Rhetoric and Feminist Pedagogy (3)
- **ENG 689** Institutional History of Composition Studies (3)
- **ENG 690** History of Rhetoric: Classical through Renaissance (3)
- **ENG 691** History of Rhetoric: Enlightenment through Contemporary (3)
- **ENG 693** Classical Rhetoric (3)
- **ENG 697** Composing Theories in Reading and Writing (3)
- **ENG 742** Studies in Rhetorical Theory and Practice (3)
- **ENG 744** Seminar in Composition Studies (3)
- **ENG 746** Studies in Contemporary Rhetorical Theory (3)
Plan of study with minor field
A total of 36 hours is required for the degree, the 24-hour core plus 12 hours distributed as follows:

- ENG 680 Teaching Internship in English (3)
  or
- ENG 622 Internship in English (3)
3 courses in a minor or collateral field

Note: ENG 622: with approval in advance from the Director of Graduate Study (Capstone Experience)

Master of Fine Arts (MFA) in Creative Writing, (36)
The MFA in Creative Writing, one of the oldest and most prestigious programs of its kind in the nation, is offered to a limited number of students with superior ability in writing original works of poetry or fiction. The program requires 36 semester hours and permits students to develop particular talents in small classes and in conferences with writers in residence and distinguished visiting writers. The best student work may be published in The Greensboro Review. The most talented students are considered for fellowships as well as research and teaching assistantships. The MFA is a residency program for full-time students.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a writing sample by March 1 to be considered for Fall admission.

Degree Requirements

Required Core Courses (12-18)
- ENG 625 MFA Fiction Workshop (3)
- ENG 626 MFA Fiction Workshop (3)
- ENG 627 MFA Poetry Workshop (3)
- ENG 628 MFA Poetry Workshop (3)
- ENG 671 Graduate Tutorial in Writing: Fiction (3)
- ENG 672 Graduate Tutorial in Writing: Fiction (3)
- ENG 673 Graduate Tutorial in Writing: Poetry (3)
- ENG 674 Graduate Tutorial in Writing: Poetry (3)
- ENG 677 Special Problems in Writing (3)
- ENG 678 Special Problems in Writing (3)

Elective Academic Courses (12-18)
Students are required to take a minimum of four courses in a related academic field, usually in English or American literature, at the 500, 600, or 700 level. Students may, with permission of the Director of the MFA Writing Program, take 500-and 600-level courses offered by other departments in the College of Arts and Sciences, most often in the departments of Romance Languages, Media Studies, and Art.

Students who plan a career in college teaching should take as many courses as possible in literature, criticism, and composition and rhetoric, including ENG 680 Teaching Internship in English.

Students who plan careers in publishing and editing should select courses focusing on contemporary publishing:
- ENG 620 Contemporary Publishing (3)
- ENG 621 Seminar on Publishing (3)
- ENG 622 Internship in English (3)

Comprehensive Examination (Capstone Experience)
Please consult with the Director of the MFA Writing Program about dates for this examination.
Thesis (6)

ENG 699  Thesis

*May be a novel, a collection of short stories, or a volume of poetry.*

Doctor of Philosophy (PhD) in English, (42-48)
The PhD in English requires 42-48 semester hours and is offered to superior applicants who are preparing for careers in teaching and research in colleges and universities. The program permits specialization in literary studies or rhetoric and composition in small classes and a format conducive to individualized instruction. Full-time doctoral students may be appointed as teaching assistants in the department. The most talented students are recommended for fellowships.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a writing sample (less than 30 pages), a 1-2 page statement of purpose, and a current CV or resume.

**MA/PhD track:** Students who enter the doctoral program with a BA are required to complete the MA with a two-paper thesis within five academic years of their initial enrollment. (For the requirements, see MA Alternative Plans of Study above). These students do not need to reapply for doctoral study after finishing the master’s program.

**PhD track:** Students who enter with an MA in English are required to earn a minimum of 27 hours of course credit, to pass the preliminary comprehensive examination, and to defend successfully their dissertations. Students entering with other advanced degrees will have their transcripts individually evaluated by the Director of Graduate Study to establish the minimum course work required.

**Degree Requirements**
No more than three courses at the 500 level may be submitted for the degree. All other work must be at the 600 level and above.

**Required Core Courses (9-12)**
All students have three course requirements in their doctoral program, and all are taken as a part of the 27 hour plan of study. The course requirements are based on the student’s declared primary area of specialization from the following options:

**Area of Specialization**
- Old and Middle English Literature
- Renaissance/Early Modern Literature
- Restoration and Eighteenth-Century Literature
- Nineteenth-Century British Literature
- Post-1900 British and Anglophone Literature
- Postcolonial Literatures and Theory
- American Literature Before 1900
- American Literature After 1900
- African American Literature
- Rhetoric and Composition
- Literary Theory

If a student’s specialization is in literature before 1800, the course requirements are
- 2 courses in literature after 1800
- 1 course in rhetoric and composition or literary theory

If a student’s specialization is in literature after 1800, the course requirements are
2 courses in literature before 1800  
1 course in rhetoric and composition or literary theory  

If a student’s specialization is in rhetoric and composition, the course requirements are  
1 course in literature before 1800  
1 course in literature after 1800  
1 course in literary theory  

If a student’s specialization is in literary theory, the course requirements are  
1 course in literature before 1800  
1 course in literature after 1800  
1 course in rhetoric and composition  

In addition, all graduate teaching assistants are required to take ENG 747 Teaching College Writing. This course does not fulfill a doctoral course requirement but may be included in the plan of study.  

**Electives (15-18)**  
For the remaining hours of electives, students should choose from the graduate offerings that will help them specialize in their primary and secondary areas in English and in supporting fields. These courses, selected in consultation with the Director of Graduate Study and the student’s advisory committee, should form a coherent plan to prepare the student in the areas of specialization.  

**Minor in a Supporting Field**  
With the approval of the students’ advisory/dissertation committee and the Director of Graduate Study, students may use their electives and additional courses toward achieving a minor in certain supporting fields outside of English. A minor consists of at least 12 hours of advanced work in a single cognate subject. All course work applied toward the minor must be approved by the Director of Graduate Study.  

**Foreign Language Requirement**  
PhD students fulfill the foreign language requirement before taking the preliminary examination. A level of proficiency in one foreign language, equivalent to completion of the second semester of an intermediate course (such as 204 at UNCG), must be documented either by previous course work completed during the last five years and approved by the Director of Graduate Study, or by course work while enrolled in the PhD program, or by an appropriate score on a written examination. Native speakers of other languages can demonstrate foreign language proficiency through their graduate course work in English.  

**Preliminary Comprehensive Examination**  
At the end of the course work and after satisfying the foreign language requirement and other conditions or research skill requirements, students must pass the preliminary comprehensive examination. In preparation for the examination, the student prepares reading lists for one primary field and two secondary fields in consultation with the advisory committee.  

**Written Examination**  
The written examination is taken on three days within one week and consists of the following:  
A five-hour examination on the primary field, the specialization chosen from among the following areas: Old and Middle English; Renaissance/Early Modern English; Restoration and Eighteenth-Century British, Nineteenth-Century British, Post-1900 British and Anglophone Literature, Postcolonial Literatures and Theory, American Literature before 1900, American Literature after 1900, African American Literature, Rhetoric and Composition, Literary Theory.  

Two three-hour examinations in secondary fields. One of these fields could be either a different area selected from the list of primary fields or a cross-period/critical problem.  

**Oral Examination**  
The oral examination (two to three) is on the primary and secondary fields and is taken within a month after the written examination.
Further guidelines for the preliminary examination and reading lists may be found at www.uncg.edu/eng/graduate.

**Dissertation (15-21)**

**ENG 799**  Dissertation  
A dissertation demonstrates ability to do original research and to present this investigation in an orderly, exact, and complete manner.

**Final Oral Examination**

The examination administered by the advisory committee is largely related to the dissertation but may cover topics from the entire field of the candidate’s study, including courses taken here and elsewhere.

**ENG – English Graduate Courses**

**ENG 510 Old English (3:3)**

Language and literature of the Anglo-Saxon period (a.d. 600–1100). The language is studied primarily in conjunction with literary texts in the context of their history and culture.

**ENG 513 History of the English Language (3:3)**

Origins and development of the English language, methods of historical language study, and competing theories of linguistic change. Practical emphasis on reading and analysis of texts in Old, Middle, and Early Modern English.

**ENG 522 Teaching Composition: Theories and Applications (3:3)**

Theories of the composing process and of discourse generally as they apply to the problems of teaching composition. Background studies in language and other related areas. Specific approaches to teaching composition, their rationales and their comparative usefulness.

*Notes*  
ENG 321 or ENG 660 recommended.

**ENG 524 Writing—Advanced: Analytical and Technical (3:3)**

Problems of organization and expression in books, articles, and reports. For those writing for publication or whose work in business or government requires a great deal of writing.

**ENG 531 Feminist Theory and Women Writers (3:3)**

Examines gender and creativity, women’s place in literary tradition, and connections among art, gender, race, and class. Focuses on contemporary theory and on literary works from one historical period.

**ENG 535 Entrepreneurship and Independent Press Publishing (3:3)**

Exploration, analysis, and participation in independent press publishing from inception to final product while practicing the entrepreneurial strategies needed to begin a successful venture.

*Cross Listed Courses*  
Same as ENT 535  
*Prerequisite*  
Permission of instructor  
*Offered*  
Spring

**ENG 537 Middle English Literature (3:3)**

Language and literature of the thirteenth-, fourteenth-, and fifteenth-century England.

**ENG 540 Shakespeare (3:3)**

Major comedies, histories, tragedies selected for topical study. Related background readings and criticism.
ENG 541 Milton (3:3)
Milton's major poems and his most important prose works in their seventeenth-century setting.

ENG 545 Nineteenth-Century British Writers (3:3)
Major Romantic and/or Victorian writers. Attention to poetry and prose.

ENG 549 The Critical Canon and Contemporary Issues (3:3)
Important critical writings from ancient Greece through the nineteenth century, emphasizing their influence upon modern theory and practice.

ENG 550 Modern British Writers (3:3)
Major novelists, poets, and playwrights of the modernist period.

ENG 553 Topics in English Studies (3:3)
Studies in selected topics in English or American literature or language.
Notes
May be repeated once for credit when topic varies.

ENG 556 English Drama of the Restoration and Eighteenth Century

ENG 558 American Poetry After 1900 (3:3)
Critical and historical study of major twentieth-century American poets to World War II.

ENG 559 Twentieth-Century British Poetry (3:3)
Critical and historical study of twentieth-century British poetry to World War II.

ENG 561 Eighteenth-Century British Writers (3:3)
Selected major writers, 1660–1800, from among Dryden, Swift, Pope, Johnson, and others.

ENG 563 American Poetry Before 1900 (3:3)
American poetry and related critical theory with special emphasis on Taylor, Poe, Emerson, Whitman, and Dickinson.

ENG 564 American Prose Before 1900 (3:3)
Genres, themes, and movements of American prose, fiction and non-fiction, written before 1900.

ENG 565 American Prose After 1900 (3:3)
American prose written after 1900, with an emphasis on historical context, prose traditions in America, and the development of form, style, and genre.

ENG 582 Modern Drama (3:3)
Drama of late nineteenth century and twentieth century, continental, English, and American.

ENG 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ENG 590 Literacy, Learning, and Fieldwork (4:3:3)
Examines the historical, pedagogical, ideological and theoretical threads of literacy studies, debates and programs. Includes training/tutoring fieldwork in local literacy programs, primarily in the public libraries.

ENG 601 English Studies: Content, Methods, and Bibliography (3:3)
A general consideration of the discipline of English, the most useful materials and approaches, and the objectives, problems, and issues in the study of language and literature.

**Prerequisite**
Admission to MA program in English or permission of the instructor

**ENG 602 Electronic Research, Writing, and Editing (3:3)**
Theory and application of computer technology in the study of language, rhetoric and composition, and literature, including related ethical, social, and philosophical issues.

**ENG 604 Electronic Discourse and User Documentation (3:2:1)**
The study of such user documentation as reference manuals, tutorials, and operating procedures in its traditional, paper-based form and its transformation into electronic form.

**ENG 608 Chaucer (3:3)**
Chaucer’s major works, including The Canterbury Tales and Troilus and Criseyde.

**ENG 616 Restoration and Eighteenth-Century Drama (3:3)**
Critical and historical study of comic and serious plays from the period 1660-1800.

**ENG 617 The Eighteenth-Century British Novel (3:3)**
Historical and critical study of such novelists as Defoe, Richardson, Fielding or Burney.

**ENG 620 Contemporary Publishing (3:3)**
An introduction to current practices in the publishing industry from manuscript preparation to the printed book or magazine.

**ENG 621 Seminar on Publishing (3:3)**
Intensive study of a major area of the publishing industry from manuscript or proposal to final form as magazine or book. Topics to vary.

**Prerequisite**
ENG 620

**ENG 622 Internship in English (3:3)**
Practical experience in writing, editing, or other fields related to English studies. Students work under supervision of professionals.

**Prerequisite**
ENG 620 or permission of instructor

**ENG 623 Writing—Advanced: Nonfiction (3:3)**
Workshop in writing and publishing essays and nonfiction literature (including biography, autobiography, literary and cultural criticism, and extended forms of investigative and analytical reporting).

**ENG 625 MFA Fiction Workshop (3:3)**

**Notes**
This course reserved for full-time MFA candidates

**ENG 626 MFA Fiction Workshop (3:3)**

**Notes**
This course reserved for full-time MFA candidates

**ENG 627 MFA Poetry Workshop (3:3)**
Notes
This course reserved for full-time MFA candidates

ENG 628 MFA Poetry Workshop (3:3)
Notes
This course reserved for full-time MFA candidates

ENG 630 Early American Literature (3:3)
Literature in the New World to 1820. Topics include exploration and contact, Puritanism, the Great Awakening, the Revolution, and the rise of captivity and travel narratives and the novel.

ENG 638 Southern American Writers (3:3)
Principal authors, from colonial times to the present, and literary movements related to the development and influence of the Southern tradition in American literature.

ENG 639 American Literary and Cultural Criticism (3:3)
"Survey of major movements of the criticism of American literature, including the first definers of 'American' literature, the New Criticism, American Studies, Gender Criticism, New Historicism, and Ethno-Criticism."

ENG 640 Studies in Shakespeare

ENG 641 Elizabethan and Jacobean Drama (3:3).
Representative plays of the early modern theatre, especially various comedies and tragedies staged between 1585 and 1625, from Marlowe to Ford. Textural and cultural analysis.

ENG 642 Topics in Pre-1800 Literature (3:3)
Exploration of selected topics in literature in English before 1800.
Notes
Course can be repeated twice for credit if the topic or instructor varies (9 total).

ENG 646 The Nineteenth-Century British Novel (3:3).
Historical and critical study of such novelists as Austen, Dickens, Eliot, and Hardy.

ENG 650 Modern Literary and Cultural Theory (3:3)
Survey of literary theory from the linguistics of Saussure through recent developments such as poststructuralism, feminist theory, reception theory, and cultural studies. Emphasis on relationships among language, culture, and literature.

ENG 653 Modern Irish Literature (3:3)
Irish literature from the Literary Revival to the present, usually emphasizing Yeats, Synge, Joyce, and O’Casey.

ENG 654 Contemporary American and British Poetry (3:3)
Critical and historical study of American and British poetry from World War II to the present.

ENG 657 James Joyce (3:3)
Study of the writings of James Joyce, with emphasis on Ulysses.

ENG 659 Digital Literacies and Online Rhetorics (3:3)
Analysis of online rhetorics, digital literacies, and Internet/multimedia technologies as applicable to research on readers and writers interacting within online environments.

**ENG 660 Modern Language Theory (3:3)**
Linguistic approaches, such as traditional, structural, and transformational-generative, to the study of English structure, American English dialects, and discourse.

**ENG 661 Second Language Writing (3:3)**
Survey of first and second language writing theories and research methods; pedagogical approaches to working with linguistically and culturally diverse writers.

*Distribution
SVL

**ENG 663 Postcolonial Literary and Cultural Theory (3:3)**
Literary and cultural theory that pertains to European colonialism and its aftermath. Topics include orientalism, colonial discourse analysis, critiques of colonialism, resistance theories, nationalism, postcolonial gender studies, globalization.

*Prerequisite
ENG 601 or ENG 650 or permission of instructor

**ENG 664 Topics in Post-1800 Literature (3:3)**
Exploration of selected topics in literature in English after 1800.

*Notes
Course can be repeated twice for credit if the topic or instructor varies (total of 9).

**ENG 668 Women’s Rhetoric and Feminist Pedagogy**

**ENG 670 Directed Master’s Research (3:3)**
Directed research project for students in the MEd program. To be taken at the end of the student’s plan of study.

*Prerequisite
Limited to MEd candidates

**ENG 671 Graduate Tutorial in Writing: Fiction (3:3)**

*Notes
This course reserved for full-time MFA candidates

**ENG 672 Graduate Tutorial in Writing: Fiction (3:3)**

*Notes
This course reserved for full-time MFA candidates

**ENG 673 Graduate Tutorial in Writing: Poetry (3:3)**

*Notes
This course reserved for full-time MFA candidates

**ENG 674 Graduate Tutorial in Writing: Poetry (3:3)**

*Notes
This course reserved for full-time MFA candidates

**ENG 675 Scholarly and Critical Writing for the Profession (3)**
Instruction in scholarly and professional writing for doctoral students in English. Emphasis on writing for presentation and publication in the field. Practice in disciplinary conventions through in and out-of-class exercises.
**Prerequisite**
Enrollment in PhD Program in English or permission of instructor

**ENG 677 Special Problems in Writing (3:3)**

*Notes*
This course reserved for full-time MFA candidates

**ENG 678 Special Problems in Writing (3:3)**

*Notes*
This course reserved for full-time MFA candidates

**ENG 680 Teaching Internship in English (3)**
Practice in planning and conducting college-level classes under guidance of senior faculty member. Research project in conjunction with internship, under guidance of supervisor and assigned faculty.

*Prerequisite*
Admission to graduate degree program

*Notes*
Grade: Satisfactory/Unsatisfactory, S/U

**ENG 682 The Structure of Verse (3:3)**
Verse forms and sound patterns in English and American poetry.

**ENG 683 The Structure of Fiction (3:3)**
Elements of prose fiction, with an emphasis on the theory and art of narrative structure.

*Prerequisite*
Admission to MFA program or permission of instructor

**ENG 688 Women’s Rhetoric and Feminist Pedagogy (3:3)**
Seminar in history and theory of women’s rhetoric and feminist approaches to teaching. Examines women’s writing and teaching in their cultural, social, ethnic, racial contexts.

*Notes*
ENG 522, ENG 531, or ENG 747 recommended.

**ENG 689 Institutional History of Composition Studies (3:3)**
History and politics of composition studies as a discipline both within the Department of English and universities as a whole.

**ENG 690 History of Rhetoric: Classical through Renaissance (3:3)**
Origins, developments, and competing views of rhetoric from classical antiquity into the 17th century; intersections of rhetoric and public discourse, poetics, education, and gender.

**ENG 691 History of Rhetoric: Enlightenment through Contemporary (3:3)**
Developments and competing views of rhetoric from the Enlightenment to the present; intersections of rhetoric and public discourse, poetics, education, and gender.

**ENG 692 Topics in Rhetoric and Composition (3:3)**
Exploration of selected topics in the study of rhetoric and composition.

*Notes*
Course can be repeated twice for credit if the topic or instructor varies (total of 9).

**ENG 693 Classical Rhetoric (3:3)**
Theories of persuasion of the philosophers and teachers of Greece and Rome with an emphasis on the writings of Plato, Aristotle, Cicero, and Quintilian.

**ENG 697 Composing Theories in Reading and Writing (3:3)**
Theories of composition and reading and implications for research and teaching; process of theories of writing, psycholinguistic, transactional and feminist theories of reading and the connections between them.

**ENG 699 Thesis**

**ENG 704 Studies in Contemporary Literary and Cultural Theory (3:3)**
Problems and topics in literary and critical theory studied in conjunction with specific cultural contexts and phenomena.

*Prerequisite*
ENG 601 or ENG 650

*Notes*
May be repeated once for credit when topic varies.

**ENG 705 Cultural Studies (3:3)**
Problems and topics in contemporary cultural studies; recent trends, issues, methods in the study of literature as a site of cultural, social, and political reflection.

*Prerequisite*
ENG 601 or ENG 650

*Notes*
May be repeated once when topic varies.

**ENG 708 Studies in Middle English Literature (3:3)**
Historical and cultural approach to a major work, author, genre, or topic of Middle English literature. Methodology of medieval scholarship.

*Notes*
May be repeated once when topic varies.

**ENG 710 Studies in English Renaissance Literature (3:3)**
Investigation of selected authors or topics.

*Notes*
May be repeated once for credit when topic varies.

**ENG 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**ENG 712 Studies in Sixteenth-Century British Literature (3:3)**
Works of early Renaissance literature and culture, encompassing significant literary modes, major authors, and European and English intellectual concerns.

*Notes*
May be repeated once for credit when topic varies.

**ENG 713 Studies in Seventeenth-Century British Literature (3:3)**
Selected writers, topics, and genres characteristic of the Stuart era in English literature. Topics include 17th century English lyrics and 17th century prose.

*Notes*
May be repeated once for credit when topic varies.
ENG 714 Studies in Shakespeare (3:3)
Problems of text, interpretation, and structural, stylistic, and character analysis of selected plays or poems.

Notes
May be repeated once for credit when topic varies.

ENG 717 Studies in Eighteenth-Century British Literature (3:3)
Study of a major author, movement, or genre, 1660–1800.

Notes
May be repeated once for credit when topic varies.

ENG 719 Studies in British Romanticism (3:3)
Study of one or more British Romantic writers, and of Romanticism as a movement.

Notes
May be repeated once for credit when topic varies.

ENG 721 Studies in Victorian Literature and Culture (3:3)
Topics in Victorian literature, with emphasis on such broad cultural issues as empire, gender, industrialization, or aestheticism.

Notes
May be repeated once for credit when topic varies.

ENG 724 Studies in British Literature after 1900 (3:3)
Selected modern and contemporary writers, such as Conrad, Shaw, Forster, Larkin, Stoppard, and Byatt.

Notes
May be repeated once for credit when topic varies.

ENG 725 Studies in Modernism (3:3)
Study of literary modernism in the period 1890-1940, with particular emphasis on the range of textual and ideological experiment characteristic of the era.

Notes
May be repeated once for credit when topic varies.

ENG 729 Postcolonial Literatures (3:3)
Selected topics in postcolonial literature, culture, and theory.

Notes
May be repeated once for credit when topic varies.

ENG 730 Studies in American Literature (3:3)
Exploration of topics in American literature to connect works from different periods, genres, and communities, uncovering broad patterns and trends.

Notes
May be repeated once for credit when topic varies.

ENG 731 Studies in American Literature before 1900 (3:3)
Selected major literary figures and movements.

Notes
May be repeated once for credit when topic varies.

ENG 733 Studies in American Literature after 1900 (3:3)
Selected major literary figures and movements.

Notes
May be repeated once for credit when topic varies.

**ENG 734 Studies in American Women Writers (3:3)**
Intensive study of a particular area of American women’s writing and affiliated critical work.

*Notes*
May be repeated once for credit when topic varies.

**ENG 735 Studies in African-American Literature (3:3)**
Topics, theories, movements, and authors that comprise the African-American literary tradition.

*Notes*
May be repeated once for credit when topic varies.

**ENG 737 Studies in Multi-Ethnic American Literature (3:3)**
Literatures of American ethnic groups, especially less-taught texts written by Chicano/Latino/Latina-, Asian-, African-, Native-, and Euro-Americans (Jewish, Italian, Irish, German, etc.).

*Notes*
May be repeated once for credit when topic varies.

**ENG 740 Studies in Contemporary and Postmodern American Literature (3:3)**
Topics in contemporary and postmodern American literature, culture, and theory.

*Notes*
May be repeated once for credit when topic varies.

**ENG 742 Studies in Rhetorical Theory and Practice (3:3)**
Themes, eras, and/or theorists in the history of rhetorical theory and practice.

*Notes*
May be repeated once for credit when topic varies.

**ENG 744 Seminar in Composition Studies (3:3)**
Studies in special topics related to literacy, the process of composing, composition pedagogy, and composition research.

*Prerequisite*
ENG 522, ENG 747, or permission of instructor

*Notes*
May be repeated once for credit when topic varies.

**ENG 745 Seminar in Writing Program Administration (3:3)**
Focus on current theories and practices of writing program administration; design and implementation of first-year and writing-intensive program curricular development, assessment and review; and historical studies of the WPA.

**ENG 746 Studies in Contemporary Rhetorical Theory (3:3) (3:3)**
Problems and topics in contemporary rhetorical theory; recent trends, issues, methods of rhetorical theory and related disciplines.

*Notes*
May be repeated once for credit when topic varies.

**ENG 747 Teaching College Writing (3:3)**
The teaching of first-year writing at the college level, including history and theories of writing pedagogy and current best practices.

*Prerequisite*
Teaching assistant appointment in English
Notes
Required for new teaching assistants in English.

ENG 778 Directed Reading (3–6)
Individual conferences. Program of reading formulated to meet the varying needs of each student.
Prerequisite
Admission to PhD program, 18 hours of course work beyond the MA, and permission of the Director of Graduate Study

ENG 780 Independent Doctoral Study (1–6)
Intensive review of literature and criticism in a given field in preparation for preliminary examination or dissertation.
Prerequisite
36 hours of PhD course work and permission of Director of Graduate Study
Notes
May be repeated for up to six hours credit. Grade: Satisfactory/Unsatisfactory, S/U

ENG 799 Dissertation (1–21)

ENG 801 Thesis Extension (1–3)
ENG 802 Dissertation Extension (1–3)

ENG 803 Research Extension (1–3)
GEOGRAPHY, DEPARTMENT OF
237 Graham Building • 336-334-5388 • geo.uncg.edu

Administration
Corey M. Johnson, Department Head
Selima Sultana, Director of Graduate Study

About
The Department of Geography offers the MA in Applied Geography, the PhD in Geography, and Post-Baccalaureate Certificates in Global and Regional Studies Geography, and Urban and Economic Development. The programs focus on the application of theory and methods in geography toward the understanding of problems related to economic development, environmental quality, population change, and social well-being in urban, rural, regional, and international contexts.

Mission statement
The Department of Geography is a student-centered department having a three-fold integrated mission encompassing teaching, scholarship, and service. The Department offers a program presenting an integrative perspective on the relations among social, political, economic, and physical phenomena occurring across space. The Department is committed to teaching the concepts and research methods of the discipline to prepare geography majors for professional careers and/or advanced study. Non-geography majors are presented the geographic knowledge needed to understand the nature of the human and environmental patterns found in the world around them. Graduate student education is focused on preparing our students for advanced professional careers and/or further graduate study. The Department is committed to excellence in both theoretical and applied research. Undergraduate and graduate student involvement in research is encouraged to develop student understanding, reasoning, and technical skills. Through scholarship, teaching, and service, the Department of Geography is dedicated to bettering our community, nation, and planet.

Faculty
Professors
Ricky L. Bunch, Geographic information systems (GIS), spatial cognition, cartography. (E)
Keith G. Debbage, Urban planning, regional development, tourism. (E)
Paul Knapp, Biogeography, climatology, dendroecology. (E)
Jeffrey C. Patton, Cartographic theory, history of cartography, earth science. (E)
Selima Sultana, Urban/transport geography, GIS, quantitative methods, geography of race/ethnicity (Director of Graduate Study). (E)
Susan M. Walcott, Regional economic development (Director of Graduate Study). (E)

Associate Professors
Corey Johnson, Political geography, economic and urban geography, Europe (Head of Department). (E)
Michael E. Lewis, Natural resources, environmental management, applied physical geography. (E)
Zhi-Jun Liu, Environmental geography, GIS, spatial statistics, hydrologic/ecological modeling. (E)
Elisabeth S. Nelson, Cartographic perception and cognition. (E)
Phillip Royall, Geomorphology, drainage basin dynamics, soil science, water resources. (E)
Roy S. Stine, Remote sensing, GIS. (E)

Assistant Professors
Gerald J. Lennartson, Environmental planning, hazards, meteorology.

Emeritus
D. Gordon Bennett, Demographic analysis, world population problems. (E)

Graduate Programs
• Accelerated BA to MA Degree Program in Geography
Post-Baccalaureate Certificate in Global and Regional Studies Geography, (18)
Post-Baccalaureate Certificate in Urban and Economic Development, (18) (jointly with the Department of Political Science)
Master of Arts (MA) in Applied Geography, (34) thesis or internship, or (37) non-thesis with concentrations in Geosciences Education for Teachers, and Urban Planning and Economic Development
Doctor of Philosophy (PhD) in Geography, (48-54)

Accelerated BA to MA Degree Program in Geography

Application and Admission
Qualified UNCG undergraduate students who are pursuing the B.A. in Geography may apply for admission to the Accelerated Degree Program (Applying for Admission). A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants will not be required to take the GRE. All applicants must submit the Request for Accelerated Degree Program to The Graduate School and must simultaneously apply for admission to the graduate degree program.

Admitted students may apply a maximum of 12 credits of graduate-level coursework (each course carries 3 credits) from the following course list toward completion of both the undergraduate and graduate degree, provided they earn a grade of "B" (3.0) or better in each course and fulfill graduate-level requirements:
- GEO 502 Urban Planning (3)
- GEO 504 Political Geography (3)
- GEO 510 Biogeography (3)
- GEO 511 Advanced Weather and Climate -Synoptic Climatology (3)
- GEO 522 Geography of Livable Cities (3)
- GEO 557 Advanced Cartography (3)
- GEO 559 Advanced Remote Sensing–Imaging (3)
- GEO 560 Seminar in Regional Geography (3)
- GEO 570 Applied Physical Geography (3)

Degree Requirements
Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the B.A. and M.A. degree in Geography remain the same.

Global and Regional Studies Geography, PBC, (18)
The Post-Baccalaureate Certificate in Global and Regional Studies Geography emphasizes knowledge and skills needed to prepare students to work in positions in government, international business, and global non-profit organizations. Courses focus on the contemporary political economy of countries in various global regions from East Asia to Europe.

The program requires 18 semester hours of course work (15 hours of core courses and 3 hours of approved electives).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Certificate Requirements
Please consult the department for any prerequisite courses that may be required.

Required Core Courses (15)
- GEO 504 Political Geography (3)
GEO 533  Regional Economic Development (3)
GEO 602  Regional Planning (3)
GEO 633  Advanced Topics in European Geography (3)
GEO 635  Geography of Asia (3)

**Electives (3)**
Select one from the following:
- GEO 560  Seminar in Regional Geography (3)
- HIS 508  Latin America and Caribbean: Selected Topics (3)
- HIS 564  Modern Britain: Selected Topics (3)
- HIS 574  Modern Germany: Selected Topics (3)
- HIS 575  Modern Russian History: Selected Topics (3)
- PSC 610  Public Policy Analysis (3)

Urban and Economic Development, PBC (GEO), (18)
The Post-Baccalaureate Certificate in Urban and Economic Development is offered jointly by the departments of Geography and Political Science. Courses emphasize the knowledge and skills needed to prepare students to work in organizations focusing on urban planning and community economic development activities in government and nonprofit organizations.

The program requires 18 semester hours of course work (12 hours of core courses and 6 hours of approved electives).

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

**Geography (6 hours)**
Choose two of the following courses:
- GEO 502/ENT 502  Urban Planning (3)
- GEO 522  Geography of Livable Cities (3)
- GEO 602  Regional Planning (3)

**Political Science (6 hours)**
Choose two of the following courses:
- PSC 520  Urban Political System (3)
- PSC 620  Urban and Regional Development Policy (3)
- PSC 630  Community and Economic Development Theory and Practice (3)

**Electives (6)**
Select two from the following:
- GEO 502/ENT 502  Urban Planning (3)
- GEO 522  Geography of Livable Cities (3)
- GEO 602  Regional Planning (3)
- GEO 603  Understanding Geographic Information Systems (3)
- GEO 622  GIS Applications in Urban Planning (3)
- GEO 631  Transportation Planning (3)
- PSC 511D  Strategic Planning (1)
- PSC 511G  Grantwriting (1)
- PSC 511P  Program Evaluation (1)
- PSC 520  Urban Political System (3)
- PSC 613  Local Government Administration (3)
PSC 620  Urban and Regional Development Policy (3)
PSC 630  Community and Economic Development Theory and Practice (3)

Applied Geography, MA, (34-37)
The MA in Applied Geography offers three options: a thesis or internship option requiring a minimum of 34 credit hours, including a maximum of 6 hours dedicated to thesis or internship work, or a portfolio option requiring a minimum of 37 credit hours plus completion of a significant project. The two non-thesis options result in a terminal degree.

The program leads to the acquisition of research skills and expertise appropriate to geographic analysis in a range of related fields including: Business site selection, environmental assessment, geographic techniques such as cartography, geographic information systems and remote sensing, transportation planning, as well as urban and regional development. Emphasis is placed in application of theoretical constructs in geography to solve real world problems at a variety of scales from the Triad and state to national and global issues.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 250-500 word Personal Statement concerning your interest in geography.

Degree Requirements
Required Core Courses (4)
- GEO 601  Research Trends in Geography (1)
- GEO 620  Spatial Analysis (3)

Electives (24-33)
The student, in consultation with the advisor, will determine the appropriate courses to be taken in that individual’s program, including any cognate courses.

Research Courses (3-6)
- GEO 695  Internship (1-6)
- GEO 699  Thesis (1-6)

Research courses and comprehensive examination comprise Capstone Experience.

Formal Review and Examinations
- Approval of master’s plan of study.
- *Comprehensive examination (taken after the completion of 24 hours of course work; administered at midterm of the fall and spring terms).
- Approval of thesis or internship proposal.
- Final thesis defense, internship presentation of completion of portfolio.
- Details concerning specific core requirements, the comprehensive examination, admission to candidacy, plans of study, theses, internships, and competency portfolios can be obtained from the Director of Graduate Study.

*Research courses and comprehensive examination comprise Capstone Experience.

Geosciences Education for Teachers Concentration
The Geosciences Education for Teachers concentration is directed towards students and educators interested in expanding their expertise in teaching geosciences. Completing the Master of Arts in Applied Geography with this concentration requires students to combine the core requirements of the M.A. degree with courses emphasizing the knowledge and skills needed to teach geosciences at the middle grades, secondary grades, and community college levels. The required core courses, formal reviews and examinations are the same as for the Master of Arts...
degree in Applied Geography, non-thesis, course-work option-with a competency portfolio. Within this framework, students will complete 38 credit hours by taking the required courses specified below. Note that GEO 560 and GEO 570 will be field course experiences for the GET concentration and students will present their portfolios as part of GEO 560 and GEO 570. (Students’ competency portfolios will be comprised of self-selected geosciences instructional modules designed while students were enrolled in GEO 607, GEO 608, GEO 609, GEO 610, and GEO 611.

**Required Core Courses (38)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GEO 560</td>
<td>Seminar in Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEO 570</td>
<td>Applied Physical Geography</td>
<td>3</td>
</tr>
<tr>
<td>GEO 601</td>
<td>Research Trends in Geography</td>
<td>1</td>
</tr>
<tr>
<td>GEO 607</td>
<td>Earth Science for Educators</td>
<td>5</td>
</tr>
<tr>
<td>GEO 608</td>
<td>Weather and Climate for Educators</td>
<td>5</td>
</tr>
<tr>
<td>GEO 609</td>
<td>Hydrology for Educators</td>
<td>5</td>
</tr>
<tr>
<td>AST 609</td>
<td>Solar System Astronomy for Teachers</td>
<td>3</td>
</tr>
<tr>
<td>GEO 610</td>
<td>Physical Geology for Educators</td>
<td>5</td>
</tr>
<tr>
<td>GEO 611</td>
<td>Natural Hazards and Society for Educators</td>
<td>5</td>
</tr>
<tr>
<td>GEO 620</td>
<td>Spatial Analysis</td>
<td>3</td>
</tr>
<tr>
<td>GEO 560, GEO 570</td>
<td>Field courses</td>
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</tbody>
</table>

**Urban Planning and Economic Development Concentration**

The Urban Planning and Economic Development concentration is directed towards students who have an interest in preserving and enhancing the quality-of-life of urban areas and dealing effectively with growth and development issues. Students completing this concentration will combine the core requirements of the master’s degree in applied geography with courses emphasizing the knowledge and skills required to provide effective leadership in urban and economic development for metropolitan areas. The required core courses, electives, research courses, collateral expertise, and formal reviews and examinations are the same as for the MA degree in applied geography. Within this framework, the following 15 hours must be completed.

**Required Core Courses (12)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 502</td>
<td>Urban Planning</td>
<td>3</td>
</tr>
<tr>
<td>GEO 522</td>
<td>Geography of Livable Cities</td>
<td>3</td>
</tr>
<tr>
<td>GEO 602</td>
<td>Regional Planning</td>
<td>3</td>
</tr>
<tr>
<td>GEO 631</td>
<td>Transportation Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Courses (3)**

Choose one from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 533</td>
<td>Regional Economic Development</td>
<td>3</td>
</tr>
<tr>
<td>GEO 622</td>
<td>GIS Applications in Urban Planning</td>
<td>3</td>
</tr>
<tr>
<td>PSC 620</td>
<td>Urban and Regional Development Policy</td>
<td>3</td>
</tr>
<tr>
<td>PSC 630</td>
<td>Community and Economic Development Theory and Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

**Geography, PhD, (48-54)**

The PhD in Geography is an innovative program centered on the research-oriented application of geographical concepts and theories to the solving of real-world problems. The program requires 48-54 semester hours.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 250-500 word Personal Statement.
Degree Requirements
At least 27 of the 33 hours in required core and cluster courses (excluding dissertation) must be at the 600 level or higher. Up to nine hours of course work may be transferred from another institution on approval of the Department.

Required Core Courses (9)
- GEO 701 History of Geographic Thought (3)
- GEO 702 Research Design (3)
- GEO 720 Advanced Spatial Analysis (3)

Courses Required from Geography Clusters (24)
Clusters of courses from three broad areas of applied geography form the basis of the doctoral program. These three clusters are: geographic information sciences (GIS), urban and regional economic development and planning, and earth science and natural resource management. Students are required to complete two courses in each of the three clusters and an additional two courses related to the dissertation research cluster.

Dissertation (15-21)
- GEO 799 Dissertation (1-21)

Formal Reviews and Examinations
- Diagnostic Exam.
- Approval of doctoral plan of study.
- Comprehensive preliminary examination (taken after the completion of 33 hours of course work).
- Dissertation proposal approval.
- Public dissertation defense.

GEO – Geography Graduate Courses

GEO 502 Urban Planning (3:3)
Fundamental concepts and techniques of urban planning as it relates to enhancing overall quality of life with a primary focus on land use patterns, the environment, business and entrepreneurship.

Cross Listed Courses
ENT-502

GEO 504 Political Geography (3:3)
A systematic overview of relationships among space, place, and politics at multiple geographic scales. Topics include boundaries, geopolitics, nationalism, resource distribution, means of controlling space, and the spatiality of globalization.

Prerequisite
Junior level or permission of instructor

GEO 510 Biogeography (3:3)
Study of the geographic distribution of organisms and the factors/processes accountable. Emphasis on the increasingly important role humans play in influencing biogeographic processes.

Prerequisite
GEO 311 or GEO 314 or BIO 301 or admission to graduate program in geography or permission of instructor

GEO 511 Advanced Weather and Climate—Synoptic Climatology (3:3)
Exploration of atmospheric dynamics and general circulation patterns throughout the world. Emphasis on cyclogenesis, surface-upper atmosphere links, tropospheric waves, vorticity, and forecasting.

Prerequisite
GEO 311 or admission to graduate program in geography or permission of instructor

GEO 522 Geography of Livable Cities (3:3)
Advanced study on the processes of urban population and economic growth from the perspective of urban livability. Emphasis on accessing and interpreting data from public or private sources.

**GEO 530 Researching Opportunities in Entrepreneurship and Economic Development (3:3)**
Students will learn how to conduct research necessary to make informed decisions for an entrepreneurial venture and measure and assess economic development opportunities. No business research experience necessary.

*Cross Listed Courses*
ENT 530, LIS 530, MKT 530

**GEO 533 Regional Economic Development (3:3)**
Theories of location of economic activity; techniques to assess impact of types of economic activity; policy and institutional issues related to local, state, and global economic development.

**GEO 557 Advanced Cartography (3:3)**
Advanced instruction in cartographic production techniques and introduction to cartographic research. Students will learn to evaluate academic literature and to implement research ideas using state-of-the-art technology.

*Prerequisite*
GEO 357 or permission of instructor

**GEO 558 Advanced Geographic Information Systems (3:3)**
Advanced concepts and methods in Geographic Information Systems (GIS). Emphasis is placed on the analysis and modeling of geospatial data using raster and vector data models.

*Prerequisite*
GEO 358 or permission of instructor

**GEO 559 Advanced Remote Sensing—Imaging (3:3)**
Remote sensing of the environment using scientific visualization and digital image processing techniques.

*Prerequisite*
GEO 359 or permission of instructor

*Offered*
Fall

**GEO 560 Seminar in Regional Geography (3:3)**
Case studies of regionalism and the regional method in geography.

*Offered*
(Occ)

*Notes*
May be repeated once for credit when topic changes.

**GEO 570 Applied Physical Geography (3:1:6)**
Applications in physical geography. Topics include field experience in hydrology, dendrochronology, geomorphology, climatology, and mapping.

*Notes*
May be repeated once for credit when topic changes.

**GEO 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**GEO 601 Research Trends in Geography (1:1)**
Overview of major research themes in geography. Student will meet faculty and other professional geographers, facilitating the development of research through field experience, colloquia, and conferences.
Prerequisite
Admission to graduate program in geography

Notes
Grade: Satisfactory/Unsatisfactory, S/U

GEO 602 Regional Planning (3:3)
Regional development and planning processes focused on regional planning techniques and law.

GEO 603 Understanding Geographic Information Systems (3:3)
Study and application of geographic information systems for professional problem-solving, spatial analysis, and mapping.

GEO 605 Seminar in Environmental Studies (3:3)
Selected topics of current interest in environmental studies.
Notes
May be repeated once for credit when topic changes.

GEO 606 Environmental Planning (3:3)
Examination and analysis of environmental concepts and their relationship to various planning and management scenarios, including environmental issues, strategies, and plans.

GEO 607 Earth Science for Educators (5:3:6)
Study of the processes that shape Earth’s lithospheric, hydrospheric, and atmospheric realms. Practicum and course content are synchronized with the NC Standard Course of Study for Earth and Environmental Science.

GEO 608 Weather and Climate for Educators (5:3:6)
Examination of Earth’s physical atmospheric processes as they apply to weather and climate systems. Practicum and course content are synchronized with the NC Standard Course of Study for Earth and Environmental Science.

GEO 609 Hydrology for Educators (5:3:6)
Examination of Earth’s water sphere, including Earth-Atmosphere interactions, and its importance as a resource. Practicum and course content are synchronized with the NC Standard Course of Study for Earth and Environmental Science.

GEO 610 Physical Geology for Educators (5:3:6)
Study of the materials that comprise Earth, and the processes shaping its near-surface environment. Practicum and course content are synchronized with the NC Standard Course of Study for Earth and Environmental Science.

GEO 611 Natural Hazards and Society for Educators (5:3:6)
Study of the Earth’s near-surface natural hazards, with discussion of anthropogenic influences and societal consequences. Practicum and course content are synchronized with the NC Standard Course of Study for Earth and Environmental Science.

GEO 612 Natural Resource Geography (3:3)
Application of geographical theory to natural resource use and distribution. Emphasis on resource use and constraints to development.

GEO 614 GIS Programming and Design Application (3:3)
Theory and practice in the creation of Geographic Information Systems using logic based programming and database construction tools. Emphasis on modeling of spatial information and logic-based approaches to GIS.

Prerequisite
GEO 558
GEO 620 Spatial Analysis (3:3)
Theory and practice in combining Geographic Information Systems software with statistical analysis software. Emphasis will be on the quantitative analysis and visual display of spatial information. 
Prerequisite
GEO 558 and STA 571 or equivalent

GEO 621 Seminar in Geographic Information Science (3:3)
Research in geographic information science. Focus on current research in application of remotely sensed imagery, geographic information systems, and maps in the visualization and analysis of spatial data. 
Prerequisite
GEO 359 and GEO 558 or permission of instructor
Notes
May be repeated once for credit when topic changes.

GEO 622 GIS Applications in Urban Planning (3:3)
Theory and practice integrating Geographic Information Systems with land use planning practice. Emphasis on advanced analysis and display of spatial data and information in support of land use planning decision-making.
Prerequisite
GEO 322 (or equivalent) and GEO 603 or permission of instructor

GEO 631 Transportation Planning (3:3)
Theory and practice of transportation planning with an emphasis on urban transportation systems.
Prerequisite
GEO 502 or permission of instructor

GEO 633 Advanced Topics in European Geography (3:3)
In-depth analysis of select advanced topics related to Europe. Combines systematic and regional traditions within geography. Possible themes include European integration, immigration, urbanization and cities, cultural preservation, tourism, the environment. May be repeated for credit when topic varies.
Notes
May be repeated for credit when topic varies.

GEO 635 Geography of Asia (3:3)
Examines dynamic economic, sociocultural, and political changes in Asia by looking at their roots in physical and human resources influencing rapid modernization within an ancient cultural framework.

GEO 641 Earth Surface Processes and Landforms (3:3)
Advanced systematic study of geomorphology with applications to human responses to natural hazards and environmental management.
Prerequisite
GEO 314/GEO 314L or equivalent advanced undergraduate course in geomorphology

GEO 690 Research Problems in Applied Geography
Independent study on a topic of special interest.
Prerequisites
Graduate course on the topic

GEO 695 Internship (1–6)
Practical experience in a professional setting related to the student’s main topic of interest. Includes written paper linking the topic to the experience.
Prerequisite
18 hours in the M.A. in applied geography program

Notes
May be repeated for a maximum of 6 hours credit.

**GEO 699 Thesis (1–6)**

*Prerequisite*
Permission of Geography Thesis Committee

**GEO 701 History of Geographic Thought (3:3)**
Seminar on the nature of geography and what geographers do. Focus on the history of the discipline, approaches to its study, major paradigms, and application of geographic theory.

*Prerequisites*
Admission to doctoral program in geography or permission of instructor

**GEO 702 Research Design (3:3)**
Design and execution of applied research projects as practiced by professional geographers.

*Prerequisite*
STA 571 or equivalent

**GEO 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**GEO 720 Advanced Spatial Analysis (3:3)**
Theory and practice in spatial analysis with an emphasis on spatial statistics. Spatial pattern analysis, spatial association and interpolation, spatial data mining.

*Prerequisite*
GEO 620

**GEO 730 Seminar in Earth Science/Natural Resources (3:3)**
Directed readings and research proposal development on selected aspects of natural resource policy and management from the perspective of earth science.

*Prerequisite*
GEO 612 or GEO 641 or permission of instructor

*Notes*
May be repeated once for credit when topic changes.

**GEO 740 Seminar in Urban Planning/Economic Development (3:3)**
Directed readings on selected aspects of urban planning/economic development focused on theory and policy issues from a geographic perspective.

*Prerequisite*
GEO 502 or GEO 533 or permission of instructor

*Notes*
May be repeated once for credit when topic changes.

**GEO 741 Seminar in Regional Economic Development (3:3)**
A geographic perspective is applied to analysis of regional economic performance and change in the developed and developing world. Theory is integrated with strategies for development policy and planning.

*Prerequisite*
GEO 533 or permission of instructor
GEO 771 Doctoral Seminar in Geographic Information Science (3:3)
Advanced seminar in the theory, practice, and technical aspects of Geographic Information Science.

Notes
May be repeated once for credit when topic changes

GEO 790 Independent Geographic Research (3:3)
Independent study on topic of interest in theoretical geography.

Prerequisite
Graduate course in topic

Notes
May be repeated for credit for up to 6 semester hours.

GEO 799 Dissertation (1–21)

Prerequisite
Completion of all PhD course requirements and examinations

Notes
Required of all PhD in geography candidates. May be taken in two or more semesters.

GEO 801 Thesis Extension (1–3)

GEO 802 Dissertation Extension

GEO 803 Research Extension (1–3)
HISTORY, DEPARTMENT OF
2129 Moore Humanities and Research Administration Building • 336-334-5992 • his.uncg.edu

Administration
James Anderson, Department Head
Mark Elliott, Director of Graduate Study

About
The Department of History offers degree programs leading to the Master of Arts in History in two concentrations (History and Museum Studies) and the Ph.D. in History. Classes in each of our programs are generally small and, through an intensive mentoring program, faculty-student interaction has become a hallmark of graduate study in the department.

Faculty
Professors
Jodi Bilinkoff, Renaissance and Reformation Europe, early modern Spain, religion, gender. (E)
Charles C. Bolton, Southern history, oral history (Associate Dean, College of Arts and Sciences). (E)
Benjamin Filene, Public history (Director of Public History). (E)
Colleen Kriger, African history, European expansion in Africa, material culture, oral history. (E)
Stephen Ruzicka, Ancient history, Greek, Roman, Persia. (E)

Associate Professors
James A. Anderson, East Asia, China, Vietnam (Head of Department). (E)
Richard E. Barton, Medieval history. (E)
Jill C. Bender, British Empire.
A. Asa Eger, Early Islamic history.
Mark Elliott, 19th century American history (Director of Graduate Study). (E)
Thomas F. Jackson, Recent America, civil rights. (E)
Watson Jennison, African American history, U.S. South. (E)
Jeffrey W. Jones, Russia.
Lisa Levenstein, U.S. women’s history. (E)
Emily J. Levine, German and intellectual history.
Greg O’Brien, 18th-19th century America, American Indian history, environmental history (Associate Head of Department). (E)
Linda M. Rupert, Atlantic world, Caribbean, Latin America. (E)
Lisa C. Tolbert, American cultural history, 19th-century U.S., antebellum South, architectural history, museum studies. (E)
Peter Villella, Latin America and Colonial Mexico (Director of Undergraduate Study).

Assistant Professors
Anne Parsons, Public history, contemporary American, social welfare, gender and sexuality.

Graduate Programs
• Master of Arts (MA) in History, (30), concentration in Museum Studies
• Doctor of Philosophy (PhD) in History, (45-60)

The Department of History offers a Master of Arts in history, a Master of Arts in history with a museum studies concentration, and a PhD in history. The public history program (museum studies) works in partnership with the Department of Interior Architecture, cross-listing many core classes. Classes in each of our programs are generally small and, through an intensive mentoring program, faculty-student interaction has become a hallmark of graduate study in the department.
Historic Preservation, PBC (15)
The Departments of History and Interior Architecture jointly offer a Post-Baccalaureate Certificate in Historic Preservation. The certificate requires 15 semester hours. The Department of Interior Architecture administers the certificate in historic preservation.

Admission and Application
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit an approximately 750-word Personal Statement. A resume is encouraged. A writing sample is optional.

Certificate Requirements

Required Courses (12)
- HIS 543/IAR 543 Historic Preservation: Principles and Practice (3)
- HIS 624/IAR 624 History of American Landscapes and Architecture (3)
- HIS 625/IAR 625 Preservation Planning and Law (3)
- HIS 690/IAR 690 *Internship (3)

3 hours of electives approved by the Director of Public History
*HIS 690: Students with appropriate professional work experience may substitute an elective for the internship requirement with prior approval of the Director of Public History.

Electives (3)
To complete the 15 hours of course work, electives should be selected with the prior approval of the Director of Public History from the following list:
- HIS 505/LIS 505 Introduction to Archival Management (3)
- HIS 536/IAR 536 History of Decorative Arts (3)
- HIS 545/IAR 545 Southern History and Southern Material Culture in a Museum Context (3)
- HIS 547/IAR 547 History Museum Curatorship: Collections Management (3)
- HIS 548/IAR 548 Architectural Conservation (3)
- HIS 552/IAR 552 History and Theories of Material Culture (3)
- HIS 555/IAR 555 Field Methods in Preservation Technology (3)
- HIS 628/IAR 628 Identification and Evaluation of the Historic Built Environment (3)
- HIS 629 Museum Education (3)
- ARH 590 Museum Studies (3)
- ATY 597 Special Problems in Anthropology (3)
- GEO 502/ENT 502 Urban Planning (3)
- PSC 540 Nonprofit Management and Leadership (3)

Because public history requires interdisciplinary work, students may substitute 3 hours of electives from another department with approval of the Director of Public History.

Master of Arts in History, MA, (30)
The Master of Arts in history requires 30 semester hours. Students must pass a language examination or take an extra three hours of course work. Upon entering the program, students will develop an individualized plan of study with prior approval from the Director of Graduate Study. They will develop three fields of study based upon the specializations of their three-member faculty committee. Any of our faculty members with graduate faculty status may serve as the main advisor for a MA committee. Such a framework allows our students maximum flexibility in pursuing research topics of greatest interest and applicability to their future goals.

The MA in history offers excellent preparation for those planning to teach history at community colleges and secondary schools and provides a solid foundation for those who go on to PhD programs or who find employment in government and business. The MA improves analytic, research, and writing skills.
Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement. A resume is encouraged. A writing sample is optional. Qualified applicants must present an approved undergraduate background (though not necessarily a major) in history. At least nine credit hours of advanced undergraduate history is required.

Degree Requirements

Required Courses (12)

- HIS 510  Historiography (3)
- HIS 709  Introductory Research Seminar (3)
- HIS 703  Seminar in History (3)
- HIS 704  Seminar in History (3)

or

- HIS 699  Thesis (6) students will write a Thesis (see below), HIS 699 (6)

Colloquia (9)
Students will complete three courses (9) from the following colloquia:

- HIS 701  Colloquium in American History before 1865 (3)
- HIS 702  Colloquium in American History since 1865 (3)
- HIS 705  Colloquium in European History before 1789 (3)
- HIS 706  Colloquium in European History since 1789 (3)
- HIS 710  Colloquium in the Atlantic World (3)
- HIS 716  Graduate Colloquium in World History (3)

Electives (9)
Students will complete three courses (9) from remaining graduate-level courses in History, including additional colloquia, chosen in consultation with their faculty committee members and the Director of Graduate Study. One elective course (3) may be taken at the graduate level in a related department or program, with the approval of the Director of Graduate Study.

Language Requirement
Many areas of historical research require proficiency in a foreign language. Students who intend to concentrate in such areas are encouraged to pass the written language examination, administered by the Department. In lieu of the language examination, students may substitute an extra 3-hour course. Students who intend to pursue a Ph.D., especially in areas other than U.S. history, are strongly encouraged to pass the language examination. Students may retake a failed language exam.

Comprehensive Examination
Students will develop three fields of study based upon the specializations of their three-member faculty committee. If a student selects a faculty member whose specialization is in United States history as main advisor, then at least one of the committee members must be a specialist in a non-U.S. field. If a student selects a faculty member whose specialization is in European history as main advisor, then at least one of the committee members must be a specialist in a non-European field. Similarly, if a student selects a faculty member whose specialization is outside United States or European history, at least one of the committee members must come from either U.S. or European history. Some faculty members may require that students have completed at least one course with them before agreeing to serve on a committee; students should consult with prospective committee members early in their graduate career. A faculty member from another UNCG department or program who has graduate faculty status can serve on a MA committee and create a field of study.

All students must pass a written comprehensive examination in each of their three fields of study. The exams are usually administered twice a year, during fall and spring. Students may retake a failed comprehensive exam once.
Research Seminars Capstone Experience
Students may take the 703/704 research seminars or they have the option of completing a 6-hour thesis (HIS 699), with the approval of the main faculty advisor and the Director of Graduate Study. Students will present the findings of their research at a History Department Graduate Conference.

History MA with Concentration in Museum Studies (36)
The Master of Arts in History with a Concentration in Museum Studies requires 36 credit hours. The program provides graduate-level preparation in the core history program and grounding in the theory and practice of public history. Through mentorship, significant hands-on training, and an internship program, students are prepared to enter the professional world of public history in museums, historic sites, and other venues.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by the Graduate School, applicants must submit a personal statement (approximately 750 words) and a resume. A writing sample is optional (recommended for students who were not undergraduate history majors). While applicants are not required to have been undergraduate history majors, before enrollment they must have competed at least nine credit hours of advanced undergraduate history - i.e., beyond the level of the first-year undergraduate survey.

Degree Requirements
Required Courses (27)

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<tr>
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<th>Credit Hours</th>
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<tbody>
<tr>
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<td>3</td>
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<tr>
<td>HIS 709</td>
<td>Introductory Research Seminar</td>
<td>3</td>
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<tr>
<td>HIS 626/IAR 626</td>
<td>The Practice of Public History</td>
<td>3</td>
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<tr>
<td>HIS 627/IAR 627</td>
<td>Museum and Historic Site Interpretation: Principles and Practice</td>
<td>3</td>
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<tr>
<td>HIS 633</td>
<td>Community History Practicum</td>
<td>3</td>
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<tr>
<td>HIS 690/IAR 690</td>
<td>Internship</td>
<td>3</td>
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<tr>
<td>HIS 720</td>
<td>Public History Capstone I</td>
<td>3</td>
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<tr>
<td>HIS 721</td>
<td>Public History Capstone II</td>
<td>3</td>
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Electives (9)
By approval of the Directory of Public History, students will complete three courses (9) of electives, chosen from graduate-level courses in History. One elective course (3) may be taken at the graduate level in a related department or program.

Public History Capstone (Capstone Experience)
Students will complete public projects through HIS 720-721. They will present and reflect on the projects at the History Department’s annual Graduate Conference.

Additional Public History Courses

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</tbody>
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History, PhD, (45-60)
The PhD in history prepares students to teach and conduct research in American history and to understand it within an expanded global perspective. Students are required to integrate the major field with a minor field outside of U.S. history. This broader intercontinental perspective enables students to explore themes such as the interaction of political, economic and cultural systems, questions of race and ethnicity, and the transnational dimensions of national experience. This global perspective is encouraged by providing a selection of courses that are cross-national, comparative, and integrative in content and format.

Students are encouraged to enlarge their perspective by understanding and analyzing national history in broader, international contexts. This goal is facilitated in two ways: first, a close integration of the minor into the major area; second, a selection of courses that are cross-national and integrative in format.

In a setting of relatively small classes, individualized research projects, and frequent contact with faculty, students are trained in the arts of scholarly research and writing. No less is the emphasis placed on fostering teaching skills. Through a required teaching seminar, hands-on teaching experience, and careful mentoring, students are prepared for teaching in a college or university environment.

A total of 45-60 semester hours of course work and dissertation credit, including a minimum of 33-39 hours of course work beyond the MA in history and a minimum of 12 hours of dissertation credit, are required to complete the PhD in history. Upon entering the program, all students will develop a Plan of Study with the approval of the Director of Graduate Study.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a writing sample and a personal statement to be considered for admission.

The PhD program admits only a few highly qualified students each year. As a basic requirement, all applicants must hold the BA degree and have completed the MA in history. Students without an MA in history must first complete an MA in history before applying to the PhD program.

Degree Requirements

Required Core Courses (15)

- HIS 701 Colloquium in American History before 1865 (3)
- HIS 702 Colloquium in American History since 1865 (3)
- HIS 714 Varieties of Teaching (3)
- HIS 750 PhD Readings Course (3)
- HIS 751 PhD Dissertation Seminar (3)

Research Hours (0-6)
If the Director of Graduate Study should conclude that an admitted PhD candidate did not perform at least 6 hours of substantive research during the MA degree program or earned an MA in an area of history other than U.S. history, then the student will be required to complete up to 6 hours of additional research. These additional research hours will ordinarily include HIS 703 and HIS 709.

**Electives in U.S. Major (9)**
In addition to the core requirements, students must complete 9 hours of elective courses in their major. HIS 692 may not be counted for PhD credit. Consult with the Director of Graduate Study for course offerings.

**Minor Field (9)**
With the approval of the student’s advisory/dissertation committee and the Director of Graduate Study, doctoral students will choose and define a minor field outside of U.S. history. The minor field will consist of one required course (HIS 716, Graduate Colloquium in World History), at least one course at the 600-level or above with the minor field faculty member of the dissertation committee, and a third course at the 600-level or above on a topic outside of U.S. history, for a total of nine credit hours. All course work applied toward the minor must be approved by the Director of Graduate Study and listed on the student’s Plan of Study. Where appropriate, and with the permission of the Doctoral Advisory/Dissertation Committee and Director of Graduate Study, doctoral students may take a maximum of one course (3) at the 600-level or above outside the Department of History as part of their minor field.

**Language Requirement**
All students are required to pass a written test demonstrating reading knowledge of one foreign language appropriate to their area of specialization prior to taking the qualifying examination.

**Mentor and Doctoral Advisory/Dissertation Committee**
A mentor must be named after 9 hours of course work. Normally, the mentor will be the graduate faculty member in the Department whose research and teaching interests most closely correspond to those of the student. Prospective mentors must agree to serve on the committee. Mentors will be responsible for the pedagogical, scholarly, and professional development of their students during their program of study, will chair their Doctoral Advisory/Dissertation Advisory Committee, and will direct the student’s dissertation.

**Permission to Proceed and Grade Point Average (GPA)**
All students in the PhD program must obtain “permission to proceed” at the end of their first year of courses (normally 18). This permission is granted by a collective decision of the Doctoral Advisory/Dissertation Committee and the departmental Graduate Committee. Students must maintain a 3.5 GPA to proceed to the writing of the dissertation.

**Qualifying Examination**
The qualifying examination, which will come at the end of the 33-39 hours of course work (including a 3 hour PhD readings course and a 3-hour PhD seminar), will include two parts:

- A written examination composed of questions from the major and minor fields.
- An oral examination given no later than one month after the completion of the written examination.

If a student fails only one part of the written examination, he/she may be required to retake only that part. If a student fails all three fields, he/she must retake the entire examination.

**Dissertation (minimum of 12)**
Students will register for a minimum of 12 hours of dissertation credit (HIS 799) while researching and writing the dissertation.

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**HIS – History Graduate Courses**

**HIS 502 African American History: Selected Topics (3)**
Examination of selected topics in black history including African beginnings, slavery, racial attitudes, and civil rights.

**Notes**
May be repeated once for credit.

**HIS 505 Introduction to Archival Management (3:3)**
Principles of archival management, featuring both classroom instruction in archival theory and practical experience in manuscript repositories and public and private archives.

Cross Listed Courses
Same as LIS 505

Prerequisite
Permission of instructor

HIS 508 Latin America and Caribbean: Selected Topics (3:3)
A study of select political and economic developments from a historical perspective. Topics include an examination of Hispanic democracy, the evolution of the military, and land tenure. Seminar format.

Notes
May be repeated once for credit when topic varies.

HIS 510 Historiography (3:3)
Development of the historical profession and perspectives on historical methodology. Selected readings by philosophers of history and practicing historians.

Prerequisite
Admission to a graduate program in history, or permission of instructor.

HIS 511A Seminar in Historical Research and Writing (3:3)
Locating and using historical source materials, written and oral, published and unpublished. 511A: American; 511B: European; and 511C: Wider World.

Prerequisite
For social studies licensure students: HIS 430 and permission of instructor; for all other History majors: HIS 391 and permission of instructor.

Notes
Required of history majors. May be repeated once for credit when topic varies.

HIS 511B Seminar in Historical Research and Writing (3:3)
Locating and using historical source materials, written and oral, published and unpublished. 511A: American; 511B: European; and 511C: Wider World.

Prerequisite
For social studies licensure students: HIS 430 and permission of instructor; for all other History majors: HIS 391 and permission of instructor.

Notes
Required of history majors. May be repeated once for credit when topic varies.

HIS 511C Seminar in Historical Research and Writing (3:3)
Locating and using historical source materials, written and oral, published and unpublished. 511A: American; 511B: European; and 511C: Wider World.

Prerequisite
For social studies licensure students: HIS 430 and permission of instructor; for all other History majors: HIS 391 and permission of instructor.

Notes
Required of history majors. May be repeated once for credit when topic varies.

HIS 512 Public History (3:3)
A history of America's past through museums (indoor and outdoor); collections and their interpretation; exhibitions and park and wilderness areas.

HIS 514 Topics in World History (3:3)
Selected topics in world history such as migration, religions, human/environmental interaction, imperialism, trade, urbanism, frontiers, and global networks.

Notes
Course may be repeated once for credit when topic varies.

**HIS 515 American Diplomatic History: The Twentieth Century (3:3)**
Emphasis on most important crises and making of basic policy decisions from Spanish American war to present.

**HIS 518 American Economic History (3:3)**
Evolution of the American economy with emphasis on economic performance through time measured against goals of full employment, price stability, and rapid growth. Course taught as Writing Intensive (WI) and Speaking Intensive (SI).

*Cross Listed Courses*
Same as ECO 518

*Prerequisite*
ECO 201 or permission of instructor

*Offered*
Spring

**HIS 520 Southern History: Selected Topics (3:3)**
Selected topics in the history of the American South from the colonial origins to our time. Examples include politics, education, economic development, reform, race, and gender.

*Notes*
May be repeated once for credit when topic varies.

**HIS 522 Early American History: Selected Topics (3:3)**
Varying topics in early American history including settlement, economic development, Puritanism, the Great Awakening, slavery, ethnicity, and pre-Revolutionary politics.

*Notes*
May be repeated once for credit when topic varies.

**HIS 524 Twentieth-Century U.S. History: Selected Topics (3:3)**
Varying topics in twentieth-century U.S. history including Progressive Era, World War I, the 1920s, the Great Depression and New Deal, World War II, McCarthyism, Civil Rights Movement, Vietnam War, the 1960s.

*Notes*
May be repeated once for credit when topic varies.

**HIS 526 The Civil War and Reconstruction: Selected Topics (3:3)**

*Notes*
May be repeated once for credit when topic varies.

**HIS 530 History of Sexuality: Selected Topics (3:3)**
Intensive exploration of critical themes in the history of sexuality, including such issues as fertility control, sexual identity, and sexual politics.

*Prerequisite*
For undergraduates, HIS 359 or the permission of the instructor.

*Notes*
May be repeated once for credit when topic varies.

**HIS 534 The American Revolution (3:3)**
Politics of Empire, colonial political culture, War for Independence, constitutionalism, race, partisanship from the 1750s to 1800.

**Prerequisite**
None; HIS 211 recommended

**HIS 536 History of Decorative Arts (3:3)**
Study of stylistic and cultural developments in the decorative arts with special concentration on America.

*Cross Listed Courses*
Same as IAR 536

**HIS 541 Ancient World: Selected Topics (3:3)**
Varying topics in ancient Near Eastern, Greek, and Roman history, including politics and public rituals, patterns of social organization, ancient slavery, cross-cultural interactions.

*Cross Listed Courses*
Same as CCI 541

*Notes*
May be repeated once for credit when topic varies.

**HIS 542 Middle Ages: Selected Topics (3:3)**
Varying topics in medieval culture and society chosen from the broad categories of political, social, economic, intellectual, or religious history.

*Notes*
May be repeated once for credit when topic varies.

**HIS 543 Historic Preservation: Principles and Practice (3:3)**
Study of change in historic preservation theory and practice since the 1800s with emphasis on preservation of built environment. Development of philosophical approach for designers to contemporary preservation projects.

*Cross Listed Courses*
Same as IAR 543

*Prerequisite*
Admission to a graduate program in History or Interior Architecture or permission of instructor

**HIS 544 Early Modern Europe: Selected Topics (3:3)**
Varying topics in early modern European history, including Renaissance cities, Protestant Reformation, Catholic Reformation, court cultures, impact of printing, gender and identity and the Age of Discovery.

*Notes*
May be repeated once for credit when topic varies.

**HIS 545 Southern History and Southern Material Culture in a Museum Context (3)**
Combined southern history and material culture with a museum practicum. Students selected by individual application.

*Cross Listed Courses*
Same as IAR 545

*Prerequisite*
Permission of instructor; students must submit written application.

*Offered*
Summer

*Notes*
May be repeated for credit when topic varies, with permission of instructor.

**HIS 546 American Cultural History: Selected Topics (3:3)**
Varying topics in the creation and development of American culture including the role of technology, environment, ethnic diversity, and the history of ideas.

*Offered*
Spring

*Notes*
May be repeated once for credit when topic varies.

**HIS 547 History Museum Curatorship: Collections Management (3:3)**
Professional practices in the care and management of historic site and history museum collections, including principles of collection development, object registration, cataloging, and preservation.

*Cross Listed Courses*
Same as IAR 547

*Prerequisite*
Admission to a graduate program in history or interior architecture, or permission of instructor

*Offered*
Alt Spring

**HIS 548 Architectural Conservation (3:3)**
Overview of contemporary architectural conservation principles, practice and technology. A series of field exercises, group projects and investigation of an individual research topic expand upon lectures and readings.

*Cross Listed Courses*
Same as IAR 548

*Prerequisite*
Admission to a graduate program in History or Interior Architecture or permission of instructor

**HIS 549 American Social History: Family and Religion (3:3)**
American social history from the eve of colonization to Reconstruction, the family and communal organization of early American society, and the assumptions about human nature and destiny underlying culture and change.

**HIS 551 Gender and History: Selected Topics (3:3)**
Varying topics in Gender and History including Gender and Popular Culture; Gender, Labor, Race, and Class; History of Masculinity.

*Notes*
May be repeated once for credit when topic varies.

**HIS 552 History and Theories of Material Culture (3:3)**
Material culture as it has been defined and interpreted in the past by scholars from the disciplines of History, Anthropology, Geography, Art History, Psychology, Linguistics, and Archaeology.

*Cross Listed Courses*
Same as IAR 552

*Prerequisite*
Admission to a graduate program in history or interior architecture, or permission of instructor

*Offered*
Spring

**HIS 555 Field Methods in Preservation Technology (3:1:6)**
Intensive on-site fieldwork experience addressing issues of architectural conservation and historic building technology. Includes methods, techniques, and theories of preservation technology and accepted conservation practices.

*Cross Listed Courses*
Same as IAR 555
Prerequisite
Admission to a graduate program in history or interior architecture, or permission of instructor

Offered
Summer

HIS 559 Doing Visual History (3:3)
Explores the interstices of history, documentary production, and personal narratives.

Cross Listed Courses
Same as MST 559

HIS 560 Nineteenth-Century Europe: Selected Topics (3:3)
Selected topics address comparative political, social, and economic development of major European states and changing power relationships from the defeat of Napoleon to the end of the First World War.

Notes
May be repeated once for credit when topic varies.

HIS 562 Twentieth-Century Europe: Selected Topics (3:3)
Topics in 20th-century European history including World War I, its impact on European thought and culture, the origins of World War II, the movement for European Unity, the Cold War.

Notes
May be repeated once for credit when topic varies.

HIS 563 Early Modern England: Selected Topics (3:3)
Varying topics in early modern British history, including the Protestant Reformation, political revolutions and economic and social change.

Notes
May be repeated once for credit when topic varies.

HIS 564 Modern Britain: Selected Topics (3:3)
Varying topics in modern British history such as the industrial revolution, parliamentary reform, loss of one empire and the creation of a second, World War I and II.

Notes
May be repeated once for credit when topic varies.

HIS 567 French History: Selected Topics (3:3)
Study of specific themes and/or problem areas in French History.

Notes
May be repeated once for credit when topic varies.

HIS 568 African History and Cultures Through Film (3:3)
Examines how Africans are portrayed in a variety of film genres, focusing on representations of race, gender, class, and sexuality in world cinema and legacies of colonialism.

Cross Listed Courses
LLC 568

HIS 571 Modern European Thought: Selected Topics (3:3)
Study of selected themes and/or problems in European intellectual and cultural history.

Notes
May be repeated once for credit when topic varies.

HIS 574 Modern Germany: Selected Topics (3:3)
Varying topics in modern German history including the Third Reich, Germany during World War I, Bismarckian Germany, ideology in Germany.

Notes
May be repeated once for credit when topic varies.

**HIS 575 Modern Russian History: Selected Topics (3:3)**
Varying topics in modern Russian history, including "Great Reforms," industrialization, revolutionary movement, Marxism–Leninism, tsarist and Soviet foreign policy, Soviet politics, post-World War II changes, Gorbachev era, and end of Soviet Union. May be repeated once for credit when topic varies.

Notes
May be repeated once for credit when topic varies.

**HIS 578 Research Methods in Historical Archaeology (3:3)**
Advanced training in research methods in Historic Archaeology, involving on-site training in field, laboratory, and library components of Historic Archaeology.

Cross Listed Courses
Same as ATY 578, IAR 578

Prerequisite
Junior, senior, or graduate status

**HIS 581 African History: Selected Topics (3:3)**
Varying topics in African history including Central African Kingdoms, Pre-colonial West African Kingdoms, "Stateless" Societies of Africa.

Notes
May be repeated once for credit when topic varies.

**HIS 587 Southern African History (3:3)**
The rise and decline of African nations in nineteenth-century southern Africa: economic and social change; the creation of the Union of South Africa and the roots of apartheid.

**HIS 588 East Asian History: Selected Topics (3:3)**
Varying history in East Asian history: a detailed examination of specific social, economic, political and intellectual facets of Chinese, Korean and Japanese history.

Notes
May be repeated once for credit when topic varies.

**HIS 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**HIS 624 History of American Landscapes and Architecture (3:3)**
Examination of the social and cultural forces affecting the design and use of landscapes and buildings in North America from the colonial period through the mid-twentieth century.

Cross Listed Courses
IAR 624

Prerequisite
Admission to a graduate program in history or interior architecture, or permission of instructor

**HIS 625 Preservation Planning and Law (3:3)**
Examination and analysis of the relationship of government programs and policies, community and regional planning strategies, and legal case precedents to the field of historic preservation.

Cross Listed Courses
IAR 625

Prerequisite
Admission to a graduate program in history or interior architecture, or permission of instructor

**HIS 626 The Practice of Public History (3:3)**
Basic principles in the administration of museums, historic sites, and other cultural resources. Subjects include fundraising, personnel and volunteer management, working with board members, and museum law and ethics.

*Cross Listed Courses*
IAR 626

*Prerequisite*
Admission to a graduate program in history or interior architecture, or permission of instructor

**HIS 627 Museum and Historic Site Interpretation: Principles and Practice (3:3)**
Theory and practice of interpreting history to the public in the context of museums and historic sites. Topics include exhibit planning and technologies, living history, research methods, and audience evaluation.

*Cross Listed Courses*
IAR 627

*Prerequisite*
Admission to a graduate program in history or interior architecture, or permission of instructor

**HIS 628 Identification and Evaluation of the Historic Built Environment (3:2:2)**
Methods, techniques, and theories of researching, analyzing, documenting, and evaluating the historic built environment. Includes architectural survey field methods, documentation techniques, archival research, and approaches to evaluating historic significance. (Same as IAR 628)

*Cross Listed Courses*
IAR 628

*Prerequisite*
Admission to a graduate program in history or interior architecture, or permission of instructor

**HIS 629 Museum Education (3:3)**
Survey of the principles and practices of museum education. Explores the kinds of learning that occur in museums and how educational programming can engage diverse audiences.

*Prerequisite*
Admission to graduate study in history or interior architecture, or permission of instructor

**HIS 630a Historical Conceptualization (3:3)**
Historical developments: urbanism, the family, material consumption, deviance, revolution, science and technology, warfare, and other topics through the use of comparative history, social and political theory, and analytical tools from other disciplines.

*Notes*
May be repeated when topic varies.

**HIS 630b Historical Conceptualization (3:3)**
Historical developments: urbanism, the family, material consumption, deviance, revolution, science and technology, warfare, and other topics through the use of comparative history, social and political theory, and analytical tools from other disciplines.

*Notes*
May be repeated when topic varies.

**HIS 630c Historical Conceptualization (3:3)**
Historical developments: urbanism, the family, material consumption, deviance, revolution, science and technology, warfare, and other topics through the use of comparative history, social and political theory, and analytical tools from other disciplines.
Notes
May be repeated when topic varies.

HIS 631 Digital History (3:3)
This seminar explores the possibilities and challenges of doing history in digital spaces. Students will gain hands-on training in tools and practices and will design original digital public history projects.
Prerequisite
Restricted to graduate students in the History/Museum Studies or PhD Program, unless by written permission of the instructor.

HIS 633 Community History Practicum (3:3)
Hands-on course, students work corroboratively and engage community partners as they research, design, and complete public projects that engage audiences in local/regional history.
Prerequisite
HIS and IAR graduate students who have completed HIS 626/IAR 626, or permission of instructor

HIS 690 Internship (3)
Supervised professional experience in selected museum, historic site, or other professional setting in accordance with the major course of study of the student.
Cross Listed Courses
IAR 690
Prerequisite
At least 12 hours in history MA or interior architecture MS program and permission of Director of Graduate Study
Notes
Grade: Satisfactory/Unsatisfactory, S/U

HIS 692 Advanced Topics in History (3:3)
Topics in history and thematic topics not otherwise covered at the graduate level.
Prerequisite
Admission to graduate study in history and permission of instructor
Notes
For details, see the Director of Graduate Study.

HIS 697 Directed Reading (1–4)
A directed program of reading and research, available to the qualified student upon the recommendation of an instructor and the department head.
Prerequisite
Admission to graduate study in history and permission of instructor and Director of Graduate Study

HIS 699 Thesis (1–6)

HIS 701 Colloquium in American History before 1865 (3:3)
Issues of historical interpretation from the Colonial era through the Civil War.
Prerequisite
Admission to graduate study in history

HIS 702 Colloquium in American History since 1865 (3:3)
Issues of historical interpretation from Reconstruction to the present.
Prerequisite
Admission to graduate study in history
HIS 703 Seminar in History (3:3)
Research and writing on selected topics in history.
Prerequisite
Admission to graduate study in history

HIS 704 Seminar in History (3:3)
Research and writing on selected topics in history.
Prerequisite
Admission to graduate study in history

HIS 705 Colloquium in European History before 1789 (3:3)
Topics in European social, economic, political and intellectual history from the Middle Ages to the French Revolution. Methodology and the diversity of historical approaches.
Prerequisite
Admission to graduate study in history

HIS 706 Colloquium in European History since 1789 (3:3)
Interpretations of selected historical problems from the French Revolution to the present.
Prerequisite
Admission to graduate study in history

HIS 707 Seminar in European History (3:3)
Research and writing on selected topics in European history.
Prerequisite
Admission to graduate study in history

HIS 708 Seminar in European History (3:3)
Research and writing on selected topics in European history.
Prerequisite
Admission to graduate study in history

HIS 709 Introductory Research Seminar (3:3)
Will focus on methods, sources, and writing; research paper based on primary and contextualized in secondary sources.
Prerequisite
Admission to graduate study in history
Notes
May be repeated once for credit when topic varies.

HIS 710 Colloquium in the Atlantic World (3:3)
Introduction to the history of the Atlantic trading system, the historiography of Atlantic World studies, and comparative, cross-cultural approaches to historical research.
Prerequisite
Admission to graduate study in history or permission of instructor

HIS 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

HIS 712 Slavery in the Americas (3:3)
Comparative analysis of slavery and race relations in South and Central America, the Caribbean, British North America, and the United States, 1501-1888.
Prerequisite
Admission to graduate study in history or permission of instructor

HIS 713 African Americans after Slavery (3:3)
African American history during the Civil War, Reconstruction, the era of Jim Crow, the civil rights and post-civil rights eras.
Prerequisite
Admission to graduate study in history or permission of instructor

HIS 714 Varieties of Teaching (3:3)
Introduction to college level teaching in history with attention to syllabi, lecturing, examinations, discussions, grading, and responding to student input. Students participate in teaching actual courses.
Prerequisite
MA in history
Notes
Grade: Satisfactory/Unsatisfactory, S/U

HIS 715 Atlantic World: Selected Topics (3:3)
Topics include European migration, comparative colonization, African diaspora, and "underdevelopment" in Latin America and Africa.
Prerequisite
Admission to graduate study in history or permission of instructor
Notes
May be repeated once for credit when topic varies.

HIS 716 Graduate Colloquium in World History (3:3)
Introduction to World history, the historiography of World studies, and comparative, cross-cultural approaches to historical research.

HIS 720 Public History Capstone I (3:1:6)
Conceiving, researching, planning, and creating an original public history project, the first part of a two-semester sequence.
Prerequisite
Students must have completed 15 hours of graduate level course credits.

HIS 721 Public History Capstone II (3:1:6)
Conceiving, researching, planning, and creating an original public history project, the second part of a two-semester sequence.
Prerequisite
HIS 720

HIS 722 Early America: Selected Topics (3:3)
Topics in early American history from New World encounters, popular culture, race, gender, religion, or politics to 1800.
Prerequisite
Admission to graduate study in history or permission of instructor
Notes
May be repeated once for credit when topic varies.

HIS 723 Selected Topics in Nineteenth-Century United States History (3:3)
Varying topics that explore political, social, economics, intellectual, cultural, or religious history of nineteenth-century U.S. History.

**Prerequisite**
Admission to graduate study in history or permission of instructor

**Notes**
May be repeated once for credit when topic varies.

**HIS 724 Selected Topics in Twentieth-Century American History (3:3)**
Major developments in the political, social, and cultural history of the United States since 1900.

**Prerequisite**
Admission to graduate study in history or permission of instructor

**Notes**
May be repeated once for credit when topic varies.

**HIS 740 Selected Topics in European History (3:3)**
Varying topics that explore political, social, economic, intellectual, cultural, or religious history of European History.

**Prerequisite**
Admission to graduate study in history or permission of instructor

**Notes**
May be repeated once for credit when topic varies.

**HIS 750 PhD Readings Course (3)**
Designed to provide doctoral students with a program of focused readings in the student’s field of study.

**Prerequisite**
Permission of Director of Graduate Study

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**HIS 751 PhD Dissertation Seminar (3:3)**
Students will develop a doctoral dissertation topic.

**Prerequisite**
Completion of all course requirements and qualifying examination

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**HIS 799 Dissertation (1–12)**

**HIS 801 Thesis Extension (1–3)**

**HIS 802 Dissertation Extension (1–3)**

**HIS 803 Research Extension (1–3)**
INTERIOR ARCHITECTURE, DEPARTMENT OF
102 Gatewood Studio Arts Building • 336-334-5320 • www.uncg.edu/iar

Administration
Khoi Vo, Department Head
Jo Ramsay Leimenstoll, Director of Graduate Study

About
We have elected to call our department “Interior Architecture” as a statement of our belief that design education is a holistic and multidisciplinary activity. We believe that learning to be a designer is a complex and rigorous task, requiring devotion and passion.

We share with interior design a fundamental interest in human and environmental relationships. Yet because these relationships are affected by objects as well as the architectural context, we also study the design of building forms and systems and provide facilities, tools, and equipment for students to build what they design – an approach to design education that is more typical of schools of design or architecture. Thus in our department we address Interior Architecture as a broad based discipline, both informing and defined by the arts of the built environment – product design, architecture, historic preservation, and engineering; connected to the allied disciplines of interior design, art, theater, dance, film making, graphic design, fashion design, industrial design, and the design of materials; and interwoven with the human experience expressed in psychology, sociology, anthropology, philosophy, history, and religion. The focus on the design and development of interior space depends upon knowledge of materials, finishes, furnishings, manufactured objects and products, buildings, context, human behavior, and human development. Instruction in these areas converges with general education requirements at UNCG to reinforce and expand the multidisciplinary nature of design.

Mission statement
Students and faculty engage in regional, national, and international design discourses, practices, and processes to unite interior spaces with enclosing architecture and the objects contained within them.

Faculty

Professors
Jo Ramsay Leimenstoll, Historic preservation theory and practice, architectural conservation, design review (Director of Graduate Study). (E)
Anna Marshall-Baker, Design for special populations, interdisciplinary study, ecological design. (E)
Khoi Vo, Interdisciplinary studies and multi-disciplinary collaboration, industry and academia, aging in place (Department Head).

Associate Professors
Travis Hicks, Design process and communication, Sustainability through integrated design, design research in professional practice, evidence-based design.
Thomas Lambeth, Place theory, environmental design, communication graphics, interior product design. (E)
Tina Sarawgi, Interior lighting design; design, simulation, representation, and collaboration using digital media; design education. (E)

Assistant Professors
Amanda Gale, Environmental education, sustainable design credentialing, emerging professional career preparation, indoor environmental quality in educational settings, interior lighting design, environmental psychology.

Senior Academic Professional
Stoel Burrowes, Design and product theory, furniture design and production, design graphics, craft, interior products.
Academic Professional
Felicia Dean, Sculptural furniture / textiles / process driven design / analog + digital fabrication / experimental materials / contemporary craft.

Graduate Programs
- Post-Baccalaureate Certificate in Historic Preservation (jointly with the Department of History) (15)
- Master of Fine Arts in Interior Architecture (60)

BFA to MFA Accelerated Program in Interior Architecture

Application and Admission
Qualified undergraduate IARc majors may apply for admission at the end of the fall semester of the 3rd year in the BFA program in Interior Architecture. A cumulative GPA of at least 3.5 in the BFA program is required. Additionally, standard application requirements for the MFA in Interior Architecture include undergraduate transcripts, GRE scores, portfolio review, TOEFL scores for international students, recommendations, a personal statement and a personal interview (optional).

All applicants should submit the admission application form to The Graduate School and to the Department of Interior Architecture simultaneously.

BFA to MFA Courses
Courses to be counted for the MFA program must receive prior approval of the IARc Director of Graduate Study. Admitted students may apply a maximum of 19 credits of graduate level coursework toward completion of both the BFA and MFA, provided a grade of “B” or better is earned in each graduate course and that graduate level requirements are fulfilled.

The MFA degree requires 60 credits of graduate-level coursework, and the BFA, 127 credits. Assuming 19 credits is double-counted for both degrees, students would need to complete an additional 41 credits of graduate courses to complete the MFA degree. Refer to the Graduate Bulletin for a full description of MFA degree requirements.

The following courses (19 credits) may be counted toward both the BFA and MFA degrees:
- IAR 501  Advanced Interior Architecture I (6 credits)
- IAR 600  Internship (4 credits)
- IAR 631  Environmental Design Research (3 credits)
- IAR 645  Seminar in Interior Architecture (3 credits)
- IAR Elective at 500 level (3 credits)

Substitutes for the above courses require permission of the IARc Director of Graduate Study.

Interior Architecture, MFA, (60)
The MFA program in Interior Architecture requires 60 semester hours and is a post-professional degree program intended to provide opportunities for students to achieve a high level of excellence in the design of architectural interiors, to develop specialization in fields of study that match with current IAR faculty’s area of research, and to complete their graduate work with a terminal degree. The design studio is taken with courses in design and research methods, courses that expand the base of knowledge relating to both user needs and environments that serve those needs, seminars devoted to pertinent issues of environmental design, and internship or supervised professional practice. Special attention may be directed toward design for special populations, digital design and simulation, community formation and transformation, architectural conservation, design graphics, design research in professional practice, ecological design, environmental ethics and socio-spatial justice, evidence-based design, feminist design theory and pedagogy, furniture design and production, historic preservation theory and practice, industrial manufacturing and digital fabrication, interdisciplinary study, interior product design, lighting design, material culture, place theory, and sustainability. For curricular sequence based on current IAR faculty’s area of research, prospective students are advised to contact the Department.
Admission and Application
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit the following items directly to the department:

- One to two page personal statement including the reason for applying to the MFA program in Interior Architecture at UNCG, how it relates to the candidate’s career goals, and what s/he may want to specialize in and why, if admitted.
- Portfolio of design work: Representative examples of design work including short written descriptions of the projects to provide an overview of the candidate’s design skills and design experience. Examples of 2-D or 3-D art work could be included, if applicable.
- Selected candidates would be invited for a personal interview face-to-face or online after all the documents for admission are submitted.

An undergraduate professional degree in interior design or interior architecture is preferred. Candidates who do not hold a professional undergraduate degree in interior design or interior architecture but are graduates of a related environmental design program, such as architecture, industrial design, etc., may be required to complete specific undergraduate prerequisite courses in interior architecture as a part of their graduate studies. Such decisions would be based upon an individual evaluation of credentials, portfolio, and design experience.

Admission to Candidacy
Students will need to be formally admitted to candidacy for the MFA degree. Students must have successfully completed two semesters of full-time graduate work, possess a B (3.0) average in all courses taken during the first two semesters, and have an overall grade record consistent with the regulations stated in The Graduate School Bulletin. In addition, the application to candidacy must be approved by IAR graduate faculty. The faculty will meet with students to review work and sign candidacy forms early in the fall semester of the second year of graduate work. Students are limited to two candidacy reviews. If a student is not admitted to candidacy during the first review, the review team will issue written recommendations for further studies. The second review will take place within a year of the first. Failure to pass candidacy for the second time will prohibit the student from continuing in the program.

Degree Requirements

Required Studio Courses (18)
All students take the following three studios:
- IAR 501 Advanced Interior Architecture I (6)
- IAR 502 Advanced Interior Architecture II (6)
- IAR 602 Advanced Interior Architecture III (6)

Required Core Courses (6)
All students take the following 6 hours:
- IAR 631 Environmental Design Research (3)
- IAR 645 Seminar in Interior Architecture (3)

Thesis (6) (Capstone Experience)
The student will complete a 6-hour thesis and will participate in a public discussion of the thesis with other students and faculty members. The student’s thesis committee will be responsible for reviewing and approving successful completion of the thesis. Credit may be divided over two or more semesters. Students can opt to defend their thesis in the spring or summer semester of their second year or fall semester of third year.
- IAR 699 Thesis (1-6)

Electives in Area of Specialization (27-33)
With prior approval by the Director of Graduate Study or the student’s thesis chair, a student will select a minimum of 27 hours in this area from any of the IAR courses listed below or from other 500 and 600 level courses taught in related areas in other departments.

IAR 527 Problems in Interior Architecture (2-6)
IAR 531 Design Seminar (2)
IAR 535 Architectural Lighting Design (2)
IAR 536 History of Decorative Arts (3)
IAR 540 Evolution of Furniture (3)
IAR 541 Contemporary Trends in Interior Product Design (3)
IAR 543 Historic Preservation: Principles and Practice (3)
IAR 545 Southern History and Southern Material Culture in a Museum Context (3)
IAR 547 History Museum Curatorship: Collections Management (3)
IAR 548 Architectural Conservation (3)
IAR 552 History and Theories of Material Culture (3)
IAR 555 Field Methods in Preservation Technology (3)
IAR 560 Advanced Computer-Aided Design and Research Seminar (3)
IAR 565 Materials and Methodologies Seminar (3)
IAR 578 Research Methods in Historical Archaeology (3)
IAR 601 Directed Self-Study in Interior Architecture (1-6)
IAR 611 Graduate Seminar (0)
IAR 624 History of American Landscapes and Architecture (3)
IAR 625 Preservation Planning and Law (3)
IAR 626 The Practice of Public History (3)
IAR 627 Museum and Historic Site Interpretation: Principles and Practice (3)
IAR 628 Identification and Evaluation of the Historic Built Environment (3)
IAR 665 Problems in Interior Architecture (2-4)

**Internship/Professional Experience (3-12)**

With prior approval by the student’s thesis chair and the Director of Graduate Study, a student will select a minimum of 3 hours in this area. Both courses can be taken twice for credit.

IAR 600 Supervised Professional Experience (1-4)
IAR 690 Internship (3)

**Historic Preservation, PBC (IAR), (15)**

The Departments of History and Interior Architecture jointly offer a 15-hour Post-Baccalaureate Certificate in Historic Preservation. The certificate provides graduate students in history, interior architecture, and related fields training and credentials to pursue careers in historic preservation, management of historic sites, and related public history professions.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by the Graduate School, applicants must submit a 750 word Personal Statement.

**Certificate Requirements**

**Required Courses (12)**

IAR 543 Historic Preservation: Principles and Practice (3)
IAR 624 History of American Landscapes and Architecture (3)
IAR 625 Preservation Planning and Law (3)
IAR 690 Internship (3)
3 hours of electives approved by the Director of Graduate Study
IAR 690: Students with appropriate professional work experience may substitute an elective for the internship requirement with prior approval of the Director of Graduate Study.

**Electives (3)**
To complete the 15 hours of course work, electives should be selected with the prior approval of the Director of Graduate Study from the following list:

- HIS 505/LIS 505  Introduction to Archival Management (3)
- IAR 536/HIS 536  History of Decorative Arts (3)
- IAR 545/HIS 545  Southern History and Southern Material Culture in a Museum Context (3)
- IAR 547/HIS 547  History Museum Curatorship: Collections Management (3)
- IAR 548/HIS 548  Architectural Conservation (3)
- IAR 552/HIS 552  History and Theories of Material Culture (3)
- IAR 555/HIS 555  Field Methods in Preservation Technology (3)
- IAR 628/HIS 628  Identification and Evaluation of the Historic Built Environment (3)
- ARH 590  Museum Studies (3)
- ATY 597  Special Problems in Anthropology (3)
- GEO 502/ENT 502  Urban Planning (3)
- PSC 540  Nonprofit Management and Leadership (3)

**IAR -Interior Architecture Graduate Courses**

**IAR 501 Advanced Interior Architecture I (6:0:12)**
Advanced design problems having complex functional, social, and economic implications, with emphasis on problem identification, formulation, and design development. IAR 501 taught as Writing Intensive (WI).

**Prerequisite**
IAR 412 for undergraduates

**IAR 502 Advanced Interior Architecture II (6:0:12)**
Advanced design problems having complex functional, social, and economic implications, with emphasis on problem identification, formulation, and design development. IAR 501 taught as Writing Intensive (WI).

**IAR 527 Problems in Interior Architecture (2–6)**
Individual study.

**Prerequisite**
Permission of instructor

**IAR 530 Introduction to Public Interest Design (3:3)**
Introduction to social, economic, and environmental theories and practices that define Public Interest Design using literature review and case studies in interior design, architecture, city planning, product design, and related disciplines.

**IAR 531 Design Seminar (2:2)**
Investigation of current research and subjects of topical interest in environmental design.

**Prerequisite**
Permission of instructor

**Notes**
May be repeated for a total of 4 hours credit.

**IAR 532 Interior Architecture Laboratory (1:3:0:3-9)**
Laboratory study with faculty to complete final phases of projects begun in previous semesters including the fabrication or prototyping of studio projects, preparation for design competition, or extended work with community partners.
Prerequisite
IAR 101, major, minor, or graduate standing or permission of instructor

Notes
Similarly to independent study courses and the internship requirement in Interior Architecture, students may be positioned to earn Interior Architecture Laboratory hours on more than one occasion for more than one continuing project. Course credit will vary from 1-3 hours depending on the scope of the project and the time involved in its fabrication or completion, and students would be allowed to repeat the proposed Interior Architecture Laboratory course for up to 6 hours of course credit.

IAR 535 Architectural Lighting Design (2:2)
Study of architectural lighting design: uses and control of light, lighting fixtures, and lighting installation for desired effect.

IAR 536 History of Decorative Arts (3:3)
Study of stylistic and cultural developments in the decorative arts with special concentration on America.

Cross Listed Courses
Same as HIS 536

IAR 540 Evolution of Furniture (3:3)
A study of basic furniture forms—chairs, stools, tables, beds, chests—that follows a chronological route from Ancient Egypt to 21st-century Minimalism and examines changes in each historic period.

Prerequisite
ART 100 or ART 101 or IAR 222 or permission of instructor

Offered
Fall or Spring

IAR 541 Contemporary Trends in Interior Product Design (3:3)
Focusing on furniture, lighting, and textiles, the course studies trade events, showrooms, retailers, designers, and trade and consumer media all as forces shaping 21st-century trends.

Prerequisite
ART 100 or ART 101 or IAR 222 or permission of instructor; IAR 540 recommended

Offered
Fall

IAR 543 Historic Preservation: Principles and Practice (3:3)
Change in historic preservation theory and practice since the 1800s with emphasis on preservation of built environment, and development of philosophical approach for designers to contemporary preservation projects.

Cross Listed Courses
Same as HIS 543

Prerequisite
Admission to a graduate program in Interior Architecture or History or permission of instructor

IAR 545 Southern History and Southern Material Culture in a Museum Context (3)
Combined southern history and material culture with a museum practicum. Students selected by individual application.

Cross Listed Courses
Same as HIS 545

Prerequisite
Permission of instructor and students must submit written application

Offered
Summer
Notes
May be repeated for credit when topic varies, with permission of instructor.

IAR 547 History Museum Curatorship: Collections Management (3:3)
Professional practices in the care and management of historic site and history museum collections, including principles of collection development, object registration, cataloging, and preservation.
Cross Listed Courses
Same as HIS 547
Prerequisite
Admission to a graduate program in history or interior architecture or permission of instructor
Offered
Alt Spring

IAR 548 Architectural Conservation (3:3)
Overview of contemporary architectural conservation principles, practice and technology. Field exercises, group projects and investigation of an individual research topic expand upon lectures and readings.
Cross Listed Courses
Same as HIS 548
Prerequisite
Admission to a graduate program in Interior Architecture or History or permission of instructor

IAR 552 History and Theories of Material Culture (3:3)
Material culture as it has been defined and interpreted in the past by scholars from the disciplines of History, Anthropology, Geography, Art History, Psychology, Linguistics, and Archaeology.
Cross Listed Courses
Same as HIS 552
Prerequisite
Admission to a graduate program in history or interior architecture or permission of instructor
Offered
Spring

IAR 555 Field Methods in Preservation Technology (3:1:6)
Intensive on-site fieldwork experience addressing issues of architectural conservation and historic building technology. Includes methods, techniques, and theories of preservation technology and accepted conservation practices.
Cross Listed Courses
Same as HIS 555
Prerequisite
Admission to a graduate program in history or interior architecture or permission of instructor
Offered
Summer

IAR 560 Advanced Computer-Aided Design and Research Seminar (3:3)
With specific attention to how computational tools affect interior architectural design decision-making processes, rigorous examination of their origins, evolution, applications, and significance will be undertaken.
Prerequisite
IAR 202, IAR 212, IAR 222 or graduate standing or permission of the instructor
Offered
Fall

IAR 565 Materials and Methodologies Seminar (3:3)
Investigation of materials, methods, and technologies for the design, fabrication, manufacturing, and production of products and components of interior architecture.

**Prerequisite**
IAR 333 or graduate standing or permission of instructor

**Offered**
Alt Fall

**IAR 578 Research Methods in Historical Archaeology (3:3)**
Training in research methods in Historic Archaeology. Involves on-site training in field, laboratory and library components of Historic Archaeology.

**Cross Listed Courses**
Same as ATY 578, HIS 578

**Prerequisite**
Junior, senior or graduate status

**IAR 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**IAR 600 Supervised Professional Experience (1–4:0:3–12)**
Supervised professional experience in selected commercial or industrial organizations, public or private agencies in accordance with the major course of study of the student. May be repeated for a maximum of 8 credits.

**IAR 601 Directed Self-Study in Interior Architecture (1–6)**

**Prerequisite**
Permission of instructor

**IAR 602 Advanced Interior Architecture III (6)**
Design issues or problems relevant to the individual student’s concentration or area of specialization are explored in real or simulated studio projects.

**Prerequisite**
IAR 501 or IAR 502

**IAR 611 Graduate Seminar (0)**

**IAR 624 History of American Landscapes and Architecture (3:3)**
Examination of the social and cultural forces affecting the design and use of landscapes and buildings in North America from the colonial period through the mid-twentieth century.

**Cross Listed Courses**
HIS 624

**Prerequisite**
Admission to a graduate program in history or interior architecture or permission of instructor

**IAR 625 Preservation Planning and Law (3:3)**
Examination and analysis of the relationship of government programs and policies, community and regional planning strategies, and legal case precedents to the field of historic preservation.

**Cross Listed Courses**
HIS 625

**Prerequisite**
Admission to a graduate program in history or interior architecture or permission of instructor

**IAR 626 The Practice of Public History (3:3)**
Basic principles in the administration of museums, historic sites, and other cultural resources. Subjects include fundraising, personnel and volunteer management, working with board members, and museum law and ethics.

**Cross Listed Courses**

**HIS 626**  
**Prerequisite**  
Admission to a graduate program in history or interior architecture or permission of instructor

**IAR 627 Museum and Historic Site Interpretation: Principles and Practice (3:3)**  
Theory and practice of interpreting history to the public in the context of museums and historic sites. Topics include exhibit planning and technologies, living history, research methods, and audience evaluation.

**Cross Listed Courses**

**HIS 627**  
**Prerequisite**  
Admission to a graduate program in history or interior architecture or permission of instructor

**IAR 628 Identification and Evaluation of the Historic Built Environment (3:2:2)**  
Methods, techniques, and theories of researching, analyzing, documenting, and evaluating the historic built environment. Includes architectural survey field methods, documentation techniques, archival research, and approaches to evaluating historic significance. (Same as HIS 628)

**Cross Listed Courses**

**HIS 628**  
**Prerequisite**  
IAR 624, admission to a graduate program in history or interior architecture or permission of instructor

**IAR 631 Environmental Design Research (3:3)**  
Advanced skills for identifying research questions and methods for accomplishing research in the environmental design field. Design research project is planned. Emphasis on research process including problem identification, literature review, data collection, and analysis.

**IAR 645 Seminar in Interior Architecture (3:3)**  
Introduction to basic research methodologies and examination of contemporary research questions and issues in interior architecture and related fields.

**IAR 665 Problems in Interior Architecture (2–4)**  
May be repeated for a maximum of 8 credits.

**IAR 690 Internship (3)**  
Supervised professional experience in selected museum, historic site, or other professional setting in accordance with the major course of study of the student. May be repeated for a maximum of 6 credits.

**Cross Listed Courses**

**HIS 690**  
**Prerequisite**  
At least 12 hours in history MA or interior architecture MS program and permission of Director of Graduate Study  
**Notes**  
Grade: Satisfactory/Unsatisfactory, S/U

**IAR 699 Thesis (1–6)**  
Required of all candidates for the Master of Science in interior architecture.  
**Notes**  
Credit may be divided over two or more semesters.
IAR 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

IAR 801 Thesis Extension (1–3)

IAR 803 Research Extension (1–3)
LANGUAGES, LITERATURES, AND CULTURES, DEPARTMENT OF
2321 Moore Humanities and Research Administration Building • 336-334-5655 • llc.uncg.edu

Administration
Amy Williamsen, Department Head
Claudia Cabello Hutt, Director of Graduate Study

About
The Department of Languages, Literatures, and Cultures, as part of its commitment to further the study of foreign languages and literatures both regionally and nationally, offers the Master of Arts in Languages, Literatures, and Cultures with a concentration in French and Francophone Studies or Spanish. Students may choose from a broad spectrum of courses and possibilities, whether they are interested in perfecting their knowledge of French or Spanish or pursuing doctoral studies. Each program is balanced and comprehensive while allowing for electives in French, Spanish, or a related field. A Masters of Arts in Teaching (MAT) and a Masters in Curriculum and Instruction (MEd) with a concentration in French Education or Spanish Education are also offered. Most graduate classes are offered in the late afternoon, evening, or online to accommodate working professionals.

Mission statement
Through engaged teaching, innovative research, diverse creative activity, and dedicated service, the Department strives to:

- Communicate an understanding of languages, literatures, and cultures within the context of a humanistic liberal education;
- Connect with individuals and communities within the department, across the campus, the state, the nation, and the world to foster a culture of meaningful intellectual inquiry, participatory and life-long learning that promotes respect for all;
- Contribute to the University’s strategic goal of internationalizing the campus as we prepare our students to excel in a variety of professions and graduate studies.

Faculty

Professors

- Roberto Campo, 16th century French literature, poetic and aesthetic theory of antiquity and the Renaissance, laughter theory, orientalism. (E)
- Carmen T. Sotomayor, Contemporary Spanish literature, film and culture, contemporary Spanish women writers, literature and visual arts of the Spanish Civil War. (E)
- Amy R. Williamsen, 16th and 17th century Spanish prose and theater, women writers of 16th and 17th century Spain, contemporary literary theory (Head of Department). (E)

Associate Professors

- Laura A. Chesak, Contemporary Spanish American literature, Spanish American women writers. (E)
- Mariche G. Bayonas, Second language acquisition, phonology, phonetics, applied linguistics, sociolinguistics.
- Veronica Grossi, Spanish American Colonial literature, critical and feminist theory, Spanish American women writers, Spanish American poetry and 20th century Mexican literature. (E)
- Ana Hontanilla, 18th and 19th century Spanish literature and cultural studies.
- Claudia Cabello Hutt, 19th and 20th century Spanish American literature and culture; 19th and 20th intellectual history, women writers and visual culture; feminist theory; literature and culture of the Southern Cone (Director of Graduate Study).
- Ignacio López Alemany, Spanish medieval literature, Spanish Golden Age literature and art, Cervantes, courtly culture.
- Kathleen M. Macfie, Slavic literatures, Russian literary criticism and cultural history, 20th century Russian poetry, Russian and African American literary ties.
Cybelle McFadden, Contemporary French and Francophone file, video, visual art and literature; 20th century French women’s film and literature; feminist theory; film theory; French and Francophone culture; 19th century French literature.

Susanne Rinner, Twentieth century and contemporary German literature, film, and culture, memory studies, feminist theory and criticism.

Assistant Professors

Kelly Lowther Pereira, Second language acquisition and teaching, Hispanic sociolinguistics, heritage language education, bilingualism, languages in contact.

Pauli Tashima, Chinese Modern and Premodern literature and culture, ancient Chinese historical narratives, early medieval China.

Graduate Programs

- Post-Baccalaureate Certificate in Advanced Spanish Language and Hispanic Cultural Studies, (15)
- Master of Arts (MA) in Languages, Literatures, and Culture; French and Francophone Studies or Spanish concentration, 30 hours
- Master of Education (MEd) in Teacher Education and Higher Education, French Education or Spanish Education concentration, 36 hours
- Master of Arts in Teaching, French Education or Spanish Education concentration, 39 hours

Advanced Spanish Language and Hispanic Cultural Studies, PBC, (15)

The Post-Baccalaureate Certificate in Advanced Spanish Language and Hispanic Cultural Studies requires 15 semester hours and is designed for professionals who may have a bachelor’s degree in a field other than Spanish but who are able to demonstrate linguistic and analytical skills in Spanish equivalent to having completed a minimum of 21 undergraduate semester hours above the 204 level.

Programs goals are 1) to increase student’s language skills in Spanish to a high level; 2) to prepare qualified candidates for cross-cultural professions; and 3) to help prepare instructors who must have at least 18 hours of graduate credit in order to teach Spanish at an accredited community college, four-year college or university. Students may choose to continue with an additional 3-hour course or apply for admission as MA candidates.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants to the Post-Baccalaureate Certificate in Advanced Spanish Language and Hispanic Cultural Studies must provide the following:

- 500-word essay in Spanish describing their professional goals and motivation for pursuing graduate work in the certificate.
- 3-to 5-minute unscripted tape, audio CD (in standard format), or digital audio file in Spanish to introduce themselves and describe their academic or equivalent preparation to pursue advanced proficiency in Spanish.
- 5-to 10-page sample of professional or academic analytical writing in English or Spanish.
- Applicants to the certificate program are expected to demonstrate at a minimum an “intermediate high” proficiency in Spanish by appropriate course work, by a personal interview with the faculty, or by an officially recognized testing procedure such as that of the American Council on the Teaching of Foreign Languages.

Certificate Requirements

Fifteen hours are selected from the following:

- SPA 516  Introduction to Spanish Syntax (3)
SPA 532  Topics in Spanish Culture and Civilization (3)
SPA 534  Topics in Spanish-American Culture and Civilization (3)
SPA 535  U.S. Latino/Latina Cultural Studies (3)
SPA 562  Studies in Film Genre (3)
SPA 605  Seminar in Hispanic Linguistics (3)
SPA 610  History of the Spanish Language (3)
SPA 693  Special Topics in Spanish Language and/or Literature (3)
SPA 695  Directed Study (3)
SPA 697  Internship in Spanish (3:1:9)
LLC 519  Second Language Acquisition (3)
LLC 600  Methods of Teaching Modern Languages (3)

NOTES: SPA 605: may be repeated for credit when topic varies
SPA 693: Not accepted for transfer to the MA in Languages, Literatures, and Cultures with a concentration in Spanish or the MEd in Teacher Education with a concentration in Spanish
LLC 600: Required for students who enroll in the certificate as a credential for college-level teaching
Upon completion of the certificate, the graduate faculty will conduct an interview in Spanish with the student.

Additional Information
Upon completion of the certificate, the graduate faculty will conduct an interview in Spanish with the student.

Master of Arts in Teaching with a concentration in French Education or Spanish Education, (39)
The Master of Arts in Teaching with a concentration in French Education or Spanish Education culminates with the development of an Initial Competencies Portfolio, providing eligibility for candidates to apply for "A" licensure from the North Carolina Department of Public Instruction. The Master of Arts in Teaching is designed for candidates who have a bachelor’s degree but did not pursue teacher education or licensure as undergraduates. It requires 39 semester hours with 18 semester hours in the content area. All students are required to demonstrate proficiency in Phonetics.

Admission and Application
A minimum of 24 semester hours in French/Spanish above the 204 level in the undergraduate program.
A minimum of Advanced Low Proficiency (according to ACTFL guidelines). The department may request an Oral Proficiency Interview. An interview with the Director of Graduate Study may be required.
Applicants who have not taken Phonetics will be required to take a remedial prerequisite or co-requisite course such as FRE 311 or SPA 416 (not included in hours required for the degree).

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants to the Master of Arts in Teaching with a concentration in French Education or Spanish Education must provide the following:
- 500-word Statement of Purpose in French or Spanish, highlighting prior experiences and explaining reasons for applying and expectations for the program.
- 3-to 5-minute unscripted digital recording demonstrating speaking ability in French or Spanish. The sample should discuss a topic related to the program of study as well as experiences and motivation.
- An analytical paper in French, Spanish, or English written for a prior course in the humanities or a comparable writing sample.

Degree Requirements-(39)
Courses in Pedagogy (18)
LLC 512  Teaching Second Languages in K–12 (3)
LLC 519  Second Language Acquisition (3)
LLC 600  Methods of Teaching Modern Languages (3)
TED 545  Diverse Learners (3)
TED 669  Educational Implications of Learning and Developmental Theory (3)
ERM 605  Educational Measurement and Evaluation (3)

Courses in the Content Area (18)
In consultation with the Director of Graduate Study in French or Spanish, the student must select courses in French/Francophone or Hispanic linguistics, literature, and culture and demonstrate appropriate oral and written communication skills.

Capstone Experience: Teaching/Technology Portfolio (TaskStream)
The portfolio will be aligned with the North Carolina Standards for Second Language Learners and the ISTE/National Educational Technology Standards for Teachers (NETS-T).

Clinical Experience in Teaching (3)
LLC 665  Clinical Practice/Seminar in Teaching World Languages (3)
May be based on an on-going teaching experience, a teaching assistantship in the Department of Languages, Literatures, and Cultures, or a student-teaching experience in a public school. Includes completion of the Teaching/Technology Portfolio.

Languages, Literatures, and Cultures, MA

French and Francophone Studies or Spanish Concentration
The MA in Languages, Literatures, and Cultures with a concentration in French and Francophone Studies or Spanish offers two options: a thesis option requiring 30 hours of graduate study (24 hours course work and 6 hours thesis) and a comprehensive examination (if the degree is in French and Francophone Studies) and a non-thesis option requiring 30 hours of course work and a comprehensive examination.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Admission to MA in Languages, Literatures, and Cultures assumes completion of an undergraduate program with a minimum of 24 hours in French or Spanish, as appropriate, above the 204 level. Candidates lacking the prior academic language training may be admitted provisionally (contact relevant Director of Graduate Study for details).

In addition to the application materials required by The Graduate School, applicants to the MA in Languages, Literatures, and Cultures must provide the following to the Director of Graduate Study:

- 500-word Statement of Purpose in French or Spanish, highlighting prior experiences and explaining reasons for applying and expectations for the program.
- 3-to 5-minute unscripted tape, audio CD (in standard format), or digital audio file in French or Spanish demonstrating speaking ability through discussion of topics related to the program of study.
- an analytical paper in French, Spanish, or English written for a prior course in the humanities or a comparable writing sample.

French and Francophone Studies Concentration

Required Course
The student must complete the following with a grade of B (3.0) or better:

LLC 601  Research Methods and Critical Analysis (3)

Core Courses in French and Francophone Studies (18)
In consultation with the Director of French Graduate Study, the student must select:
The remaining courses at the 500-level or above with at least 50% at the 600 level or above as indicated:

**Thesis option:** 18-24 semester hours, +6 hours of thesis

**Non-thesis option:** (24-30)
Electives Related Area (0-6)
With prior approval from the Director of French Graduate Study, the student may select up to 6 hours in a related area.

Additional Language Requirement
The student will demonstrate a reading knowledge of a language other than French and English by one of the following methods:
- Passing a reading or translation examination
- Completing intermediate-low level (equivalent to UNCG’s 204 level) or higher course work in the additional language with a grade of B (3.0) or better documented by an official transcript
- Obtaining a score of 400 or higher on the department’s Computerized Adaptive Placement Exam

Contact the Director of Graduate Study in French for details.

Comprehensive Examination (Capstone Experience)
The student must pass a written comprehensive examination based on the reading list and course work taken. Please consult with your graduate advisor for more information on formats and test dates.

Reading List
The student will read a prescribed list of major works of French literature.

Thesis (thesis option only-6)
FRE 699  Thesis (1-6)

The student selecting this option must write a thesis under the guidance of a committee consisting of a chair and two other members of the graduate faculty. An oral examination on the thesis is required. Please consult with your graduate advisor for further information.

Spanish Concentration

Required Course
The student must select one of these two courses as a required course:
- LLC 600  Methods of Teaching Modern Languages (3)
- LLC 601  Research Methods and Critical Analysis (3)

Core Courses in Spanish and Romance Languages (18)
In consultation with the Director of Spanish Graduate Study, the student must select courses at the 500-level or above with at least 50% at the 600 level or above as indicated: 6 semester hours must be taken in Latin American Literature/Culture, 6 semester hours must be taken in Spanish Peninsular Literature/Culture, and 6 semester hours must be taken in Linguistics, the three major areas of the program.

Thesis option: Students who opt to write a thesis must develop a proposal and have it approved by the thesis chair and graduate director by the end of their first year in the program. Students selecting this option must write a thesis under the guidance of a committee consisting of a chair and two other members of the Graduate Faculty. An oral examination on the thesis is required. Please consult with your graduate advisor for further information. Students who opt to write a thesis are exempt from comprehensive exams.

Non-Thesis option: Students in the Non-thesis option must pass a written comprehensive examination based on the reading list.

Electives (3-9)
- Thesis Option: 3 hours
- Non-Thesis Option: 9 hours

Additional Language Requirement
The student will demonstrate a reading knowledge of a language other than Spanish and English by one of the following methods:
- Passing a reading or translation examination
- Completing intermediate-low level (equivalent to UNCG’s 204 level) or higher course work in the additional language with a grade of B (3.0) or better documented by an official transcript
- Obtaining a score of 400 or higher on the department’s Computerized Adaptive Placement Exam

Contact the Director of Graduate Study in Spanish for details.

Reading List
Students will read a prescribed list that includes major works on Spanish and Spanish American literature as well as works on Spanish and Spanish American culture and civilization, and Hispanic linguistics. Students should consult regularly with the graduate advisor, and with faculty specializing in the various areas, while working to complete preparation of the reading list.

**Capstone Experience**

Students will complete one of the following two options as their capstone experience:

- **Comprehensive Examination**
  Students must pass a written comprehensive examination based on the reading list. The examination is scheduled once a semester in the fall and spring. Please consult with your graduate advisor for the dates of these examinations.

- **Thesis (6)**
  SPA 699 Thesis (1-6)
  Students selecting this option must write a thesis under the guidance of a committee consisting of a chair and two other members of the Graduate Faculty. An oral examination on the thesis is required. Please consult with the graduate advisor for further information.

Teacher Education, MEd (College of Arts and Sciences), with a concentration in French Education or Spanish Education, (36)

The MEd in Teacher Education offered through the Department of Languages, Literatures and Cultures (with concentrations in French or Spanish Education) culminates with the development of an Advanced Competencies Portfolio, providing eligibility for candidates to apply for “M” licensure from the North Carolina Department of Public Instruction. Field experiences (school-based activities) are required. The Master of Education in Teacher Education with a concentration in French Education or Spanish Education is designed for applicants who already hold "A" licensure and requires 36 semester hours with 18 semester hours in the content area. All students are required to demonstrate proficiency in Phonetics.

**Admission Requirements**

A minimum of 24 semester hours in French/Spanish above the 204 level in the undergraduate program.

A minimum of Advanced Low Proficiency (according to ACTFL guidelines). The department may request an Oral Proficiency Interview. An interview with the Director of Graduate Study may be required.

Applicants who have not taken Phonetics will be required to take a remedial prerequisite or co-requisite course such as FRE 311 or SPA 416 (not included in hours required for the degree).

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants to the MEd in Teacher Education with a concentration in French Education or Spanish Education must provide the following:

- 500-word Statement of Purpose in French or Spanish, highlighting prior experiences and explaining reasons for applying and expectations for the program.
- 3-to 5-minute unscripted digital recording demonstrating speaking ability in French or Spanish. The sample should discuss a topic related to the program of study as well as experiences and motivation.
- An analytical paper in French, Spanish, or English written for a prior course in the humanities or a comparable writing sample.

**Degree Requirements**

In consultation with the appropriate Director of Graduate Study, the student must select courses with at least 50% at the 600 level or above.

**Capstone Experience: Teaching/Technology Portfolio (TaskStream)**

The portfolio will be aligned with the North Carolina Standards for Second Language Teachers and the ISTE/National Educational Technology Standards for Teachers (NETS-T).
Required Courses in Pedagogy (15)

- LLC 519  Second Language Acquisition (3)
- LLC 600  Methods of Teaching Modern Languages (3)
- TED 669  Educational Implications of Learning and Developmental Theory (3)
- TED 676  Teacher as Researcher and Leader I (3)
- TED 677  Teacher as Researcher and Leader II (3)

Clinical Experience in Teaching (3)
May be based on an on-going teaching experience, a teaching assistantship in the Department of Languages, Literatures, and Cultures or in a community college, or a student-teaching experience in a public school. Includes completion of the Teaching/Technology Portfolio.

- LLC 665  Clinical Practice/Seminar in Teaching World Languages (3)

All students will be required to complete a clinical experience, such as:
- On-going teaching experience
- Teaching assistantship in the department
- Teaching assistantship in a community college
- Student teaching in public schools

The course will include completion of their Capstone Experience, the Teaching/Technology Portfolio - TaskStream. The portfolio will be aligned with the North Carolina Standards for Second Language Teachers and the ISTE/NETS Standards.

Courses in the Content Area (18)
In consultation with the graduate advisor in French or Spanish, the student must select courses in French/Francophone or Hispanic linguistics, literature, and culture and demonstrate appropriate oral and written communication skills.

LLC - Languages Literatures and Cultures Graduate Courses

LLC 512 Teaching Second Languages in K–12 (3:3:2)
Study of second language teaching approaches applicable to the K–12 school classroom. Students learn to develop and evaluate materials applicable to effective second language programs in the K–12 schools.
Prerequisite
TED 445 or TED 545 or departmental permission

LLC 519 Second Language Acquisition (3:3)
Introduction to scientific research of the various processes of how people learn a second or foreign language.
Prerequisite
FRE 415 or SPA 408 or SPA 415 or SPA 416 or permission of department

LLC 568 African History and Cultures Through Film (3:3)
Examines how Africans are portrayed in a variety of film genres, focusing on representations of race, gender, class, and sexuality in world cinema and legacies of colonialism.
Cross Listed
HIS 568

LLC 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

LLC 600 Methods of Teaching Modern Languages (3:3)
Methods and techniques for teaching modern languages at the college level.
Prerequisite
Admission to MA in Languages, Literatures, and Cultures or departmental permission

LLC 601 Research Methods and Critical Analysis (3:3)
Research and analysis in literary and cultural criticism. Designed especially for entering MA students.

**Prerequisite**
Admission to MA in Languages, Literatures, and Cultures or departmental permission

**LLC 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**FRE – French Graduate Courses**

**FRE 507 Teaching French through French Literature (3:3)**
Strategies for teaching the French language through its literature. All major genres represented.

**Prerequisite**
FRE 353 or departmental permission

**Notes**
For upper-level majors and graduate students who plan to teach French.

**FRE 511 The Theory and Practice of French Translation (3:3)**
An exploration of the theory and practice of translation from and into French.

**Prerequisite**
FRE 315 or permission of instructor

**FRE 532 French and Francophone Civilization and Culture (3:3)**
Study of the vast heritage of French civilization. Discovery of the historical, geographical, sociological, political, cultural, and artistic life of France and the Francophone world.

**Prerequisite**
FRE 331, FRE 332, or FRE 496, or permission of instructor

**FRE 553 Topics in French Literary Movements (3:3)**
In-depth study of a major literary trend: mannerism, classicism, realism, naturalism, and others.

**Prerequisite**
FRE 353 or departmental permission

**Notes**
May be repeated for credit when topic varies.

**FRE 554 Topics in French Prose Fiction (3:3)**
Studies in prose fiction—roman, conte, nouvelle, etc.—through a variety of critical and historical approaches, each topic focusing on one such approach.

**Prerequisite**
FRE 353 or departmental permission

**Notes**
May be repeated for credit when topic varies.

**FRE 555 Topics in French Poetry (3:3)**
Studies in French poetry through a variety of critical and historical approaches.

**Prerequisite**
FRE 353 or departmental permission

**Notes**
May be repeated for credit when topic varies.

**FRE 556 Topics in French Theatre (3:3)**
Studies in French theatre through a variety of critical and historical approaches.

**Prerequisite**
FRE 353 or departmental permission

Notes
May be repeated for credit when topic varies.

FRE 557 Advanced Topics in French Literature (3:3)
Nontraditional perspectives on literature in the French language: thematic topics, and others.

Prerequisite
FRE 353 or departmental permission

Notes
May be repeated for credit when topic varies.

FRE 558 Topics in Francophone Literature (3:3)
Studies in Francophone literature through a variety of aspects or genres, each topic focusing on one such aspect or genre.

Prerequisite
FRE 353 or departmental permission

Notes
May be repeated for credit when topic varies.

FRE 561 The Auteur Director (3:3:2)
Works of an individual film director. Subject differs from offering to offering.

Cross Listed Courses
Same as ITA 517, SPA 561

Prerequisite
Permission of department

Notes
May be repeated for credit when topic varies.

FRE 562 Studies in Film Genre (3:3:2)
Technical, dramatic, social, and rhetorical dimensions of a film genre or genres. Subject differs from offering to offering.

Cross Listed Courses
Same as ITA 518, SPA 562

Prerequisite
Permission of department

Notes
May be repeated for credit when topic varies.

FRE 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

FRE 599 Community-Based Service Learning in Francophone Studies (3:2:8)
Field experience for French graduate students, French majors and minors, and advanced French undergraduates requiring interaction/active language use with Francophone immigrant families in the community.

Prerequisite
15 sh of course work in French at the 300 level or above; minimum 3.0 GPA (overall and in major); and permission of the instructor

Offered
Fall or Spring

FRE 615 Advanced Composition for Graduate Students (3:3)
French syntax; principles of expository and analytical writing. Training in written French for the preparation of papers, examinations, and theses.

**FRE 653 Seminar in French Literature (3:3)**
Advanced study and investigation of current scholarship on a topic of French literature.
*Notes*
May be repeated for credit when topic varies.

**FRE 671 French Literary Criticism (3:3)**
Developments in French literary criticism from Saint-Beuve to the present; issues of contemporary criticism and theory in France.

**FRE 693 Special Problems in French Language and Literature (3:3)**
Problems and areas of French and Francophone civilization, language, and literature.
*Notes*
May be repeated for credit when topic varies, but no more than two (2) FRE 693 courses may be applied toward graduate credit without permission of the Director of French Graduate Study.

**FRE 695 Independent Study (3:3)**
Directed program of reading or research in an area of special interest in French studies.
*Prerequisite*
Permission of instructor and Director of French Graduate Study

**FRE 699 Thesis (1–6)**

**FRE 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**FRE 801 Thesis Extension (1–3)**

**FRE 803 Research Extension (1–3)**

**RUS – Russian Graduate Courses**

**RUS 511 The Russian Novel in Translation (3:3)**
Survey of the Russian novel from the nineteenth (Pushkin, Gogol, Turgenev, Goncharov, Dostoevsky, Tolstoy), to the twentieth century (Belyj, Sologub, Pasternak, and Solzhenitsyn). Analysis of artistic structure and ideas within the context of Russian literary history, philosophy, and religious thought.

**RUS 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**RUS 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**SPA – Spanish Graduate Courses**

**SPA 502 Topics in Spanish Literature (3:3)**
In-depth studies, through a variety of critical and historical approaches, based on themes, geographical areas, outstanding figures, genres, or periods.
*Prerequisite*
One 400-level course in Hispanic literature or departmental permission
*Notes*
May be repeated for credit when topic varies.

SPA 504 Topics in Spanish American Literature (3:3)
In-depth studies, through a variety of critical and historical approaches, based on geographical areas, outstanding figures, genres, or periods.
**Prerequisite**
One 400-level course in Hispanic literature or departmental permission

**Notes**
May be repeated for credit when topic varies.

SPA 516 Introduction to Spanish Syntax (3:3)
Introduction to Spanish syntax. Analysis of Spanish grammar; syntactic categories and phrase structure.
**Prerequisite**
SPA 415 or departmental permission

SPA 532 Topics in Spanish Culture and Civilization (3:3)
Major topics in Spanish culture, history, and civilization. Special emphasis on the development of customs, national traits, cultural movements, and institutions.
**Prerequisite**
One 400-level course in Hispanic literature or departmental permission

**Notes**
Course may be repeated for credit when topic varies. Maximum of 6 hours.

SPA 534 Topics in Spanish-American Culture and Civilization (3:3)
Major topics in Spanish-American culture, history, and civilization. Special emphasis on the development of customs, national traits, cultural movements, and institutions.
**Prerequisite**
One 400-level course in Hispanic literature or departmental permission

**Notes**
May be repeated once when topic varies for no more than 6 credits.

SPA 535 U.S. Latino/Latina Cultural Studies (3:3)
An examination of issues relating to U.S. Latino/Latina ethnic identity as defined in literature, performance, art, music, and film. Special emphasis given to the dialogue with the English-speaking community.
**Prerequisite**
One 400-level Hispanic literature course or departmental permission

SPA 561 The Auteur Director (3:3:2)
Works of an individual film director. Subject differs from offering to offering.
**Cross Listed Courses**
Same as FRE 561, ITA 517

**Prerequisite**
Permission of department

**Notes**
May be repeated for credit when the topic varies.

SPA 562 Studies in Film Genre (3:3:2)
Technical, dramatic, social, and rhetorical dimensions of a film genre or genres. Subject differs from offering to offering.
**Prerequisite**
Permission of department
Notes
May be repeated for credit when the topic varies.

SPA 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SPA 603 Seminar in Spanish Literature (3:3)
Advanced study and investigation of current scholarship on a topic of Spanish literature.
Prerequisite
LLC 601 or permission of department
Notes
May be repeated for credit when topic varies.

SPA 604 Seminar in Spanish American Literature (3:3)
Advanced study and investigation of current scholarship on a topic of Spanish American literature.
Prerequisite
LLC 601 or permission of department
Notes
May be repeated for credit when topic varies.

SPA 605 Seminar in Hispanic Linguistics (3:3)
Advanced study and investigation of current scholarship on a topic of Hispanic linguistics.
Prerequisite
Permission of department
Notes
May be repeated for credit when topic varies.

SPA 610 History of the Spanish Language (3:3)
Phonological and morphological development of Spanish, with readings in the external history of the language.

SPA 693 Special Topics in Spanish Language and/or Literature (3:3)
Study of Hispanic language and literature.
Prerequisite
Permission of instructor and Director of Spanish Graduate Study

SPA 695 Directed Study (3)
Directed program of reading or research in an area of special interest in Hispanic studies. Regular conferences with the instructor will be scheduled.
Prerequisite
Permission of instructor and Director of Spanish Graduate Study

SPA 697 Internship in Spanish (3:1:9)
Field experience at public or nonprofit agencies or other professional settings that require interaction with native speakers. Academic instruction and supervision by faculty coordinator; field direction by site supervisor(s).
Prerequisite
Admission to MA or post-baccalaureate certificate in Spanish; minimum of 6 semester hours completed and minimum 3.0 GPA; must be planned and requested one semester prior to placement; permission of instructor
Distribution
SVL

SPA 699 Thesis (1–6)
SPA 711 Experimental Course  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SPA 801 Thesis Extension (1–3)

SPA 803 Research Extension (1-3)
MATHEMATICS AND STATISTICS, DEPARTMENT OF
116 Petty Building • 336-334-5836 • www.uncg.edu/mat

Administration
Ratnasingham Shivaji, Department Head
Maya Chhetri, Director of Graduate Study

About
The department offers a variety of outstanding graduate programs. Our faculty and staff serve nearly 4,000 students every year. The faculty consists of nationally and internationally recognized researchers in diverse areas of mathematics, statistics and mathematics education. They are also outstanding professionals committed to teaching excellence, and they take great pride in guiding our students to enjoy the beauty of mathematics.

The department has also been hosting various professional conferences and special events, lecture series, colloquia and seminars. These activities have greatly enhanced our students’ learning experience at UNCG. Most of our graduate students are supported via attractive graduate assistantships.

Mission statement
The mission of the Department of Mathematics and Statistics at the University of North Carolina at Greensboro is to provide intellectual leadership in the mathematical sciences that is of direct benefit to the State of North Carolina and that commands national and international respect for the quality of its educational programs and for its depth of scholarship.

Faculty

Professors
Maya Chhetri, Nonlinear elliptic PDE’s, nonlinear functional analysis, applied mathematics (Director of Graduate Study). (E)
Richard H. Fabiano, Analysis, applied mathematics, differential equations, and control theory. (E)
Sat N. Gupta, Sampling designs, time series forecasting, biostatistics (Associate Head). (E)
Scott J. Richter, Nonparametric methods, equivalence testing, statistical consulting. (E)
Jan Rychtar, Functional analysis, game theory. (E)
Ratnasingham Shivaji, Partial differential equations (Head of the Department). (E)
Jerry E. Vaughan, General topology and set theory. (E)

Associate Professors
Gregory Bell, Geometric group theory, geometric topology, asymptotic invariants of groups. (E)
Igor Erovenko, Combinatorial properties of linear groups, bounded generation of S-arithmetic groups.
Talia Fernos, Group theory.
Xiaoli Gao, Statistics.
Sebastian Pauli, Computational number theory, algebraic number theory, computer algebra. (E)
Filip Saidak, Analytic and probabilistic number theory, mathematical biology.
Carol Seaman, Undergraduate mathematics education.
Clifford Smyth, Combinatorics. (E)
Brett A. Tangedal, Number theory. (E)
Dan Yasaki, Number Theory.
Haimeng Zhang, Spatial statistics, survival analysis, computational statistics, applied probability. (E)

Assistant Professors
Thomas Lewis, Computational mathematics, applied math.
Jonathan Rowell, Mathematical biology, applied math.
Dohyoung Ryang, Mathematics education, efficacy beliefs, learning community, lesson study, geometric group theory.
Graduate Programs

- Post-Baccalaureate Certificate in Statistics, (12)
- Master of Arts (MA) in Mathematics, Mathematics, Applied Statistics, Actuarial Mathematics, and Data Analytics concentrations, (30-33)
- Doctor of Philosophy (PhD) in Computational Mathematics, (60 hours minimum)
- Doctoral Minor in Statistics, (18)

Statistics, PBC, (12)
The purpose of the 12-hour Post-Baccalaureate Certificate in Statistics is to provide statistical training for persons who wish to enhance their knowledge of statistics but do not wish to pursue a formal degree and for professionals whose interests require a knowledge of statistics beyond the undergraduate level. The objective of the certificate is to offer a structured introduction to the basic ideas of graduate level statistical analysis.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Degree Requirements
Required Courses (6)

- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
- STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)

Electives (6)
Students must complete two additional three-hour STA courses at the 500 level or above, excluding:

- STA 571 Statistical Methods for Research I (3)
- STA 572 Statistical Methods for Research II (3)
- STA 580 Biostatistical Methods (3)

Mathematics, MA, (30-33)
The MA in Mathematics is offered in four areas of concentration: mathematics (30-33), applied statistics (33), actuarial mathematics (30), and data analytics (30). Course work must be approved by the Department of Mathematics and Statistics and must include certain courses as explained in the discussion of the concentrations.

Students who plan to continue to the PhD program in computational mathematics are urged to elect the concentration in mathematics. They may then use the doctoral qualifying examinations to satisfy the comprehensive examination requirement in the non-thesis option for the MA degree.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 500-700 word Personal Statement to be considered for admission.

Mathematics Concentration (30-33)
The mathematics concentration offers a 30-hour thesis or project option and a 33-hour coursework option. At least half the work credited towards the degree must be in 600-level courses: 15 hours for the 30-hour program, and 18 hours for the 33-hour program.

Algebra or Analysis (3)
Each candidate must complete any one of the following courses:

- MAT 517  Theory of Groups (3)
- MAT 545  Differential Equations and Orthogonal Systems (3)
- MAT 591  Advanced Abstract Algebra (3)
- MAT 592  Advanced Abstract Algebra (3)
- MAT 595  Mathematical Analysis (3)
- MAT 596  Mathematical Analysis (3)

Note: Students who have had appropriate algebra or analysis courses as undergraduates may be exempted from this requirement upon approval by the Director of Graduate Study. In this case, these 3 hours must be replaced by 3 hours chosen in consultation with the Director of Graduate Study.

Core Courses (9)

At least 9 hours of course work must be chosen from the following list. At least 6 of these hours must constitute a complete year-long sequence.

- MAT 723  Numerical Mathematics (3)
- MAT 724  Numerical Mathematics (3)
- MAT 731  Combinatorics (3)
- MAT 732  Graph Theory (3)
- MAT 727  Linear Algebra and Matrix Theory (3)
- MAT 728  Linear Algebra and Matrix Theory (3)
- CSC 653  Advanced Theory of Computation (3)
- CSC 656  Foundations of Computer Science (3)
- MAT 688  Mathematical Logic and Axiomatic Set Theory (3)
- MAT 689  Mathematical Logic and Axiomatic Set Theory (3)
- MAT 741  Modern Abstract Algebra (3)
- MAT 742  Modern Abstract Algebra (3)
- MAT 743  Complex Analysis (3)
- MAT 744  Complex Analysis (3)
- MAT 745  Real Analysis (3)
- MAT 746  Real Analysis (3)
- MAT 737  General Topology (3)
- MAT 738  General Topology (3)
- MAT 645  Approximation Theory (3)
- MAT 646  Approximation Theory (3)
- STA 651  Mathematical Statistics (3)
- STA 652  Mathematical Statistics (3)

Electives (12-21)

With prior approval of the Director of Graduate Study a student will select 12-21 hours of other 500-or 600-level mathematical sciences courses.

Thesis, Project, or Comprehensive Examination (Capstone Experience)

Each candidate may elect to prepare a thesis or project, or pass a written comprehensive examination on his/her program of course work. The thesis or project option is a 30 hour program; the coursework option with a comprehensive exam is a 33 hour program.

Thesis (6)

The candidate may prepare a thesis based on the investigation of a topic in mathematics. A thesis director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. Candidates may include up to 6 hours of thesis (MAT 699) in the required 30 hours. An oral examination on the thesis is required.

Project in Mathematics (3)
The candidate may prepare a project in mathematics based on in-depth investigation of a topic in mathematics. A project director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. Candidates may include 3 hours of project (MAT 698) in the required 30 hours. A written report and an oral examination on the project are required.

Comprehensive Examination
A candidate who does not prepare a thesis must take 33 hours of course work and pass a written comprehensive examination of his/her program. Please consult with the Director of Graduate Study for information concerning the comprehensive examination.

Applied Statistics Concentration (33)
Undergraduate prerequisites: Baccalaureate degree and the following courses or their equivalents: STA 290, 291; MAT 191, 292; and CSC 130 or 230 or 231.

Foundation Courses (7)
- STA 551 Introduction to Probability (3)
- STA 552 Introduction to Mathematical Statistics (3)
- STA 581 SAS System for Statistical Analysis (1)
Students who have completed these courses as part of another degree prior to being accepted in the master’s program will choose replacement courses.

Core Courses (8)
- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
- STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)
- STA 668 Consulting Experience (1)
- STA 690 Graduate Seminar (1)

Statistics Electives (6-9)
At least two courses chosen from the following:
- STA 670 Categorical Data Analysis (3)
- STA 671 Multivariate Analysis (3)
- STA 673 Statistical Linear Models I (3)
- STA 674 Statistical Linear Models II (3)
- STA 675 Advanced Experimental Design (3)
- STA 676 Sample Survey Methods (3)
- STA 677 Advanced Topics in Data Analysis and Quantitative Methods (3)
- STA 711 Experimental Course

Interdisciplinary Electives (3-6)
Student can earn the remaining credits required for the degree either by taking any STA courses at the 500 level or above (except STA 571) or by taking a maximum of six (6) hours of approved graduate courses outside of statistics.
Pre-approved interdisciplinary electives are:
- CSC 523 Numerical Analysis and Computing (3)
- CSC 524 Numerical Analysis and Computing (3)
- CSC 526 Bioinformatics (3)
- ECO 663 Predictive Data Mining (3)
- ECO 664 Time Series and Forecasting (3)
- ERM 669 Item Response Theory (3)
- ERM 728 Exploratory and Confirmatory Factor Analytic Methods for Scale Construction (3)
- ERM 729 Advanced Item Response Theory (3)
- ERM 731 Structural Equation Modeling in Education (3)
- HEA 602 Epidemiology (3)
- MAT 531 Combinatorial Analysis (3)
- MAT 541 Stochastic Processes (3)
- MAT 542 Stochastic Processes (3)
Thesis or Project (Capstone Experience)
Each candidate must elect to prepare a thesis or project. Both options require 33 hours.

**Thesis (6)**
The candidate may prepare a thesis based on the investigation of a topic in statistics. A thesis director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. Candidates will include 6 hours of thesis (STA 699) or 3 hours of STA 698 and 3 hours of STA 699 in the required 33 hours. An oral examination on the thesis is required.

**Project (3)**
A candidate who does not prepare a thesis must complete a project under the direction of an advisor chosen by the Director of Graduate Study in consultation with the student. Three hours of STA 698 will be included in the 33 hour program.

**Actuarial Mathematics Concentration (30)**
The MA in Mathematics with concentration in Actuarial Mathematics provides students wishing to pursue a career in actuarial science a solid foundation in Applied Probability and Statistical Models and their applications in the area of actuarial science. It is designed to help students pass the preliminary actuarial exams while providing educational experiences related to the actuarial field. Students will be encouraged to seek internship opportunities during the summer. The concentration requires 30 credit hours and is offered with an optional project. At least 15 hours must be at the 600-level or above.

The target student population for this program will be students with a bachelor's degree in mathematics, statistics, economics, finance, or a related field who want to pursue an actuarial industry who want to advance their career.

**Required Foundations and Methods (12)**
- STA 551 Introduction to Probability (3)
- STA 552 Introduction to Mathematical Statistics (3)
- STA 655 Applied Probability Models (3)
- MAT 586 Financial Mathematics for Actuaries (3)

**Elective Courses (15-18)**
Actuarial exam and Applied Statistics models (at least 9 credits)
- STA 686 Actuarial Models I (3)
- STA 687 Actuarial Models II (3)
- STA 591 Actuarial Exam Preparation Seminar (1)
- STA 573 Theory of Linear Regression (3)
- STA 682 Theory of Time Series (3)
- STA 565 Analysis of Survival Data (3)

**Other Applied Statistics Courses (at most 6 credits)**
Any other STA 600 level courses, excluding those listed above and STA 651, STA 652, STA 667, STA 668, STA 690, STA 699 Actuarial Educational Experiences Courses (at most 6 credits)
- ECO 641 Microeconomics I (3)
- ECO 646 Macroeconomics (3)
- ISM 671 Data Management (3)
- ISM 675 Models and Methods in Business Analytics (3)
- MBA 702 Financial and Managerial Accounting (3)
- MBA 707 Financial Management (3)

**Capstone Course (at most 3 credits)**
- STA 698 Project in Statistics (3)

**Data Analytics Concentration (30)**
The concentration in Data Analytics provides students with advanced analytical training to develop their ability to draw insights from big data, including: data collection, preparation and integration, statistical methods and modeling, and other techniques for analyzing complex data. The program is highly applied in nature, integrating
project-based learning, simulations, case studies, and specific electives addressing the analytical needs of various industry sectors. The concentration requires a minimum of 30 hours including either a project (3) or thesis (6) option.

**Analytics Methods and Foundations (15)**
- STA 551 Introduction to Probability (3)
- STA 552 Introduction to Mathematical Statistics (3)
- STA 562 Statistical Computing (3)
- STA 673 Statistical Linear Models I (3)
- STA 703 Topics in High Dimensional Data Analysis (3)

**Analytics Applications (9-12)**
At least two courses chosen from
- STA 565 Analysis of Survival Data (3)
- STA 575 Nonparametric Statistics (3)
- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
- STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)
- STA 670 Categorical Data Analysis (3)
- STA 671 Multivariate Analysis (3)
- STA 674 Statistical Linear Models II (3)
- STA 677 Advanced Topics in Data Analysis and Quantitative Methods (3)

**At most two courses chosen from**
- ECO 663 Predictive Data Mining (3)
- ECO 664 Time Series and Forecasting (3)
- ECO 725 Data Methods in Economics (3)
- CSC 510 Big Data and Machine Learning (3)
- CSC 655 Advanced Topics in Algorithms (3)
- CSC 671 Advanced Database Systems (3)
- CSC 676 Topics in Database Systems (3)
- ISM 671 Data Management (3)
- ISM 675 Models and Methods in Business Analytics (3)
- ISM 685 Business Analytics for Competitive Advantage (3)

**Analytics Capstone (3-6)**
- STA 698 Project in Statistics (3)
  or
- STA 699 Thesis (1-6)

Computational Mathematics, PhD, (60 hours minimum)
The PhD in Computational Mathematics requires a minimum of 60 semester hours, including 39-42 hours of course work in mathematics or related area and 18-21 hours of dissertation.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 500-700 word Personal Statement to be considered for Fall admission. Students with a master’s degree in mathematics, computer science or statistics may apply directly to the PhD program. In exceptional cases well-qualified applicants will be considered for admission directly after completing an undergraduate degree in mathematics, computer science or statistics.

**Degree Requirements**

**Course Work (39-42)**
The student selects 39-42 hours of course work in mathematics and related areas with the approval of the Director of Graduate Study. With the approval of the Director of Graduate Study, up to 18 of the 39-42 hours may be accepted from UNCG’s MA in mathematics program or from a comparable master’s program.

**Qualifying Examinations**

Qualifying examinations, covering a student’s chosen field of research and related advanced course work, must be taken after the student has removed any provisions or special conditions attached to admission; three exams should be passed prior to the beginning of the fifth semester. These examinations each cover the material of two courses. Each student must pass at least one exam from Group I.

**GROUP I**

*Algebra*
- MAT 591 Advanced Abstract Algebra (3)
- MAT 592 Advanced Abstract Algebra (3)

*Analysis*
- MAT 595 Mathematical Analysis (3)
- MAT 596 Mathematical Analysis (3)

*Linear Algebra*
- MAT 727 Linear Algebra and Matrix Theory (3)
- MAT 728 Linear Algebra and Matrix Theory (3)

**GROUP II**

*Combinatorics*
- MAT 731 Combinatorics (3)
- MAT 732 Graph Theory (3)

*Differential Equations*
- MAT 545 Differential Equations and Orthogonal Systems (3)
- MAT 546 Partial Differential Equations with Applications (3)

*Mathematical Statistics*
- STA 651 Mathematical Statistics (3)
- STA 652 Mathematical Statistics (3)

*Numerical Mathematics*
- MAT 723 Numerical Mathematics (3)
- MAT 724 Numerical Mathematics (3)

*Topology*
- MAT 737 General Topology (3)
- MAT 738 General Topology (3)

**Programming Project**

The student must complete a programming project of such quality that it can become part of a computer algebra system, could be distributed as a package for a computer algebra system, or yields new mathematical data.

**Dissertation (18-21)**
- MAT 799 Dissertation (1-12)

**Other Reviews and Examinations**

After the student has passed three qualifying examinations, the student chooses a dissertation advisor and forms a dissertation committee. With the help of the advisor, the student proposes a dissertation topic in a public oral presentation. In this presentation, the student explains his or her dissertation topic in sufficient detail to demonstrate capability to begin research.

At the conclusion of the presentation, the dissertation committee will administer an oral exam to determine the student’s competence to begin work on the dissertation. A part of the exam is the computational/programming project. This project should clearly demonstrate that the student is fully capable of handling computational aspects of the intended dissertation topic. After passing this examination, the student may then make a formal application to the Graduate School for admission to candidacy. The dissertation proposal and oral exam can be attempted at most twice.

**Schedule for Examinations and Projects**
Semester Examination or Project
1-4 3 written comprehensive examinations
4-7 Dissertation proposal, computational/programming project, (oral examination)
6-14 Dissertation work and defense (oral examination)

Statistics, Doctoral Minor, (18)
Students pursuing a doctorate from other departments may obtain a statistics minor by completing 18 semester hours of graduate level statistics courses.

Requirements
Required Courses (6)
STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)

Electives (12)
Four additional three-hour STA courses, excluding:
STA 571 Statistical Methods for Research I (3)
STA 572 Statistical Methods for Research II (3)
STA 580 Biostatistical Methods (3)

MAT – Mathematics Graduate Courses

MAT 503 Problem Solving in Mathematics (3:3)
Investigates the nature of problem solving, covers procedures involved in problem solving, develops individual problem solving skills, and collects a set of appropriate problems. Required for middle grades mathematics concentration.
Prerequisite
Grade of at least C in MAT 191 and MAT 303 or permission of instructor
Notes
Hours do not count toward degree requirements for Mathematics majors. This course cannot be applied toward the requirements for the M.A. degree in Mathematics.

MAT 504 Foundations of Geometry for Teachers (3:3)
Primarily for students seeking teacher certification. Includes logic and axiom systems, history, plane and solid Euclidean geometry, proof strategies, introduction to non-Euclidean geometries, and transformational geometry.
Prerequisite
Grade of at least C in MAT 292 or permission of instructor
Offered
Fall
Notes
Hours do not count toward degree requirements for Mathematics majors. This course cannot be applied toward the requirements for the M.A. degree in Mathematics.

MAT 505 Foundations of Mathematics for Teachers (3:3)
Primarily for students seeking teacher certification. Includes properties and algebra of real numbers; analytic geometry; polynomial, rational, exponential, logarithmic, and trigonometric functions; complex numbers; concept of limits of functions.
Prerequisite
Grade of at least C in MAT 292 or MAT 303 or permission of instructor
Offered
Spring
Notes
Hours do not count toward degree requirements for Mathematics majors. This course cannot be applied toward the requirements for the M.A. degree in Mathematics.

MAT 513 Historical Development of Mathematics (3:3)
Study of the historical development of mathematics, not a history of persons involved in development.
Prerequisite
Grade of at least C in MAT 292
Offered
Fall
Notes
Hours do not count toward degree requirements for a mathematics major. This course cannot be applied toward the requirements for the M.A. degree in Mathematics.

MAT 514 Theory of Numbers (3:3)
An introductory course to both multiplicative and additive number theory. Divisibility, prime numbers, congruencies, linear and nonlinear Diophantine equations (including Pell's equation), quadratic residues, number-theoretic functions, and other topics.
Prerequisite
Grade of at least C in MAT 311

MAT 515 Mathematical Logic (3:3)
Prerequisite
Grade of at least C in MAT 311 or MAT 353

MAT 516 Intermediate Abstract Algebra (3:3)
Rings, integral domains, fields, division algorithm, factorization theorems, zeros of polynomials, greatest common divisor, formal derivatives, prime polynomials, Euclidean domains, the fundamental theorem of algebra.
Prerequisite
Grade of at least C in MAT 311

MAT 517 Theory of Groups (3:3)
Elementary properties of groups and homomorphisms, quotients and products of groups, the Sylow theorems, structure theory for finitely generated abelian groups.
Prerequisite
Grade of at least C in MAT 311

MAT 518 Set Theory and Transfinite Arithmetic (3:3)
The axioms of set theory, operations on sets, relations and function, ordinal and cardinal numbers.
Prerequisite
Grade of at least C in MAT 311 or MAT 395

MAT 519 Intuitive Concepts in Topology (3:3)
Basic concepts, vector fields, the Jordan curve theorem, surfaces, homology of complexes, continuity.
Prerequisite
Grade of at least C in MAT 311 or MAT 395

MAT 520 Non-Euclidean Geometry (3:3)
Fifth postulate, hyperbolic geometries, elliptic geometries, consistency of non-Euclidean geometries, models for geometries, elements of inversion.
**Prerequisite**
Grade of at least C in MAT 311 or MAT 395

**MAT 521 Projective Geometry (3:3)**
Transformation groups and projective, affine and metric geometries of the line, plane, and space. Homogeneous coordinates, principles of duality, inversions, cross-ratio, collineations, fixed points, conics, models, and Euclidean specifications.

**Prerequisite**
Permission of instructor

**MAT 522 Introductory Functional Analysis (3:3)**
Basic concepts in Banach spaces, Hilbert spaces, linear operators, and their applications.

**Prerequisite**
Grade of at least C in MAT 395

**MAT 525 Intermediate Mathematical Analysis (3:3)**
Integration, infinite series, sequences and series of functions.

**Prerequisite**
Grade of at least C in MAT 395

**MAT 531 Combinatorial Analysis (3:3)**
The pigeon-hole principle, permutations, combinations, generating functions, principle of inclusion and exclusion, distributions, partitions, recurrence relations.

**Prerequisite**
Grade of at least C in MAT 253 or MAT 295 or MAT 311 or MAT 395, or permission of instructor

**MAT 532 Introductory Graph Theory (3:3)**
Basic concepts, graph coloring, trees, planar graphs, networks.

**Prerequisite**
Grade of at least C in MAT 310 and any one of the courses MAT 253, MAT 295, MAT 311, MAT 395, MAT 531

**MAT 540 Introductory Complex Analysis (3:3)**
The complex number system, holomorphic functions, power series, complex integration, representation theorems, the calculus of residues.

**Prerequisite**
Grade of at least C in MAT 394; grade of at least C in MAT 395 for Mathematics majors

**MAT 541 Stochastic Processes (3:3)**
Markov processes, Markov reward processes, queuing, decision making, graphs, and networks. Applications to performance, reliability, and availability modeling.

**Prerequisite**
Grade of at least C in MAT 394 and either MAT 353 or STA 351, or equivalents

**MAT 542 Stochastic Processes (3:3)**
Markov processes, Markov reward processes, queuing, decision making, graphs, and networks. Applications to performance, reliability, and availability modeling.

**Prerequisite**
Grade of at least C in MAT 394 and either MAT 353 or STA 351, or equivalents

**MAT 545 Differential Equations and Orthogonal Systems (3:3)**
An introduction to Fourier series and orthogonal sets of functions, with applications to boundary value problems.
Prerequisite
Grade of at least C in MAT 293 and MAT 390 or permission of instructor

MAT 546 Partial Differential Equations with Applications (3:3)
Fourier integrals, Bessel functions, Legendre polynomials and their applications. Existence and uniqueness of solutions to boundary value problems.
Prerequisite
Grade of at least C in MAT 545

MAT 549 Topics in Applied Mathematics (3:3)
Selected topics of current interest in applied mathematics.
Prerequisite
Grade of at least C in MAT 293 and MAT 390 or permission of instructor
Notes
May be repeated for credit with approval of the Department Head.

MAT 556 Topics in Discrete Mathematics (3:3)
Selected topics of current interest in discrete mathematics.
Prerequisite
Grade of at least C in MAT 353

MAT 586 Financial Mathematics for Actuaries (3:3)
Measurement of interest, present and accumulated value, amortization, sinking funds, bonds, duration, immunization, and an introductory analysis of financial derivatives. Intended to help prepare for the FM/2 actuarial exam.
Prerequisite
Grade of at least C in MAT 394, or permission of instructor

MAT 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MAT 590 Mathematical Models in Biology (3:3)
Exploration of research and methodology at the interface of mathematics and biology, with an overview of relevant fields and in-depth case studies. Focus will be on mathematical models in biology.
Cross Listed Courses
Same as BIO 590.
Prerequisite
B or higher in BIO 112 and either MAT 191 or STA 271; or instructor’s permission

MAT 591 Advanced Abstract Algebra (3:3)
Groups: homomorphisms, quotient groups, Sylow theorems, finitely generated abelian groups. Rings: homomorphisms, ideals, quotient rings, integral domains, Euclidean domains, factorization. Fields: algebraic extensions of fields, Galois theory.
Prerequisite
Grade of at least C in MAT 516

MAT 592 Advanced Abstract Algebra (3:3)
Groups: homomorphisms, quotient groups, Sylow theorems, finitely generated abelian groups. Rings: homomorphisms, ideals, quotient rings, integral domains, Euclidean domains, factorization. Fields: algebraic extensions of fields, Galois theory.
Prerequisite
Grade of at least C in MAT 516

**MAT 593 Directed Study in Mathematics (1–3)**
*Offered*
Fall & Spring

**MAT 594 Directed Study in Mathematics (1–3)**
*Offered*
Fall & Spring

**MAT 595 Mathematical Analysis (3:3)**
Real number axioms, metric spaces, sequences, series, continuity, differentiation, the Riemann-Stieltjes integral.
*Prerequisite*
MAT 395 or permission of instructor

**MAT 596 Mathematical Analysis (3:3)**
Real number axioms, metric spaces, sequences, series, continuity, differentiation, the Riemann-Stieltjes integral.
*Prerequisite*
MAT 395 or permission of instructor

**MAT 601 Seminar in the Teaching of Mathematics I (1:1)**
Seminar on practices and principles of undergraduate teaching in mathematics and statistics.
*Notes*
Required for all teaching assistants. Grade: Satisfactory/Unsatisfactory, S/U

**MAT 603 Practicum in the Teaching of Mathematics (2:0:6)**
Practicum in teaching mathematics at the college/university level. Topics include course design, class materials, exams, grading, syllabus, choosing textbooks, dealing with difficult matters, and mathematical typesetting.
*Corequisite*
MAT-601

**MAT 602 Seminar on Mathematical Software (3:3)**
Variety of issues in the design of mathematical software, i.e., type systems, user interfaces, and memory management. Each student investigates one computer algebra system more closely.
*Prerequisite*
Knowledge of a programming language

**MAT 606 Calculus for Middle Grade Teachers (3:3)**
History, developments, major concepts, and applications of differential and integral calculus covering functions of several variables.
*Prerequisite*
MAT 505 or permission of instructor
*Notes*
No credit toward mathematics degrees.

**MAT 607 Abstract Algebra for Middle Grade Teachers (3:3)**
Development and major concepts of abstract algebraic structures including groups, rings, fields, vector spaces, and matrix algebra.
*Prerequisite*
MAT 303 and MAT 505; or permission of instructor
Notes
No credit toward mathematics degrees.

**MAT 645 Approximation Theory (3:3)**
*Prerequisite*
MAT 390, MAT 595, MAT 596

**MAT 646 Approximation Theory (3:3)**
*Prerequisite*
MAT 390, MAT 595, MAT 596

**MAT 649 Topics in Operations Research (3:3)**
Advanced linear programming. Integer programming, nonlinear programming, inventory models and queueing models. Application of these optimization techniques in the general area of administration are demonstrated through examples via the digital computer.
*Prerequisite*
Permission of instructor

**MAT 650 Management Decision-Making Under Uncertainty (3:3)**
Models and techniques to be used in making decisions under uncertainty. Markov Chains, Linear Programming Under Uncertainty, and Chance-Constrained programming.
*Prerequisite*
Permission of instructor

**MAT 659 Advanced Topics in Mathematics (3:3)**
Topics vary according to interest and demand, and include algebra, applied mathematics, combinatorics, dynamics, mathematical logic, topology, and other topics.
*Prerequisite*
Permission of instructor
*Notes*
May be repeated for credit when topic varies.

**MAT 688 Mathematical Logic and Axiomatic Set Theory (3:3)**
Quantification theory, completeness theorems, prenex normal forms, categoricity. The characterization problem, consistency, the theory of models, isomorphisms and substructures, cardinality of models, joint consistency. Incompleteness and undecidability, recursive functions, Church's thesis, Recursion theory, Set theory, the axiom of constructibility, forcing, the independence proofs.
*Prerequisite*
MAT 311, MAT 394, or equivalents

**MAT 689 Mathematical Logic and Axiomatic Set Theory (3:3)**
Quantification theory, completeness theorems, prenex normal forms, categoricity. The characterization problem, consistency, the theory of models, isomorphisms and substructures, cardinality of models, joint consistency.
Incompleteness and undecidability, recursive functions, Church’s thesis, Recursion theory, Set theory, the axiom of constructibility, forcing, the independence proofs.

Prerequisite
MAT 311, MAT 394, or equivalents

MAT 690 Mathematics Seminar (2:2)
Topics in mathematics suitable for development into a master’s thesis. Current mathematical literature.

Prerequisite
Admission to candidacy for master’s degree

MAT 698 Project in Mathematics (3:0)
Directed research projects in Mathematics.

MAT 699 Thesis (1–6)

MAT 701 Graduate Seminar in Computational Mathematics (3:3)
Readings from the literature of computational mathematics.

Prerequisite
MAT 671 or permission of instructor

Notes
May be repeated for credit when topic varies.

MAT 709 Topics in Computational Mathematics (3:3)
Advanced study in special topics in computational mathematics.

Prerequisite
MAT 671 or permission of instructor

Notes
May be repeated for credit when topic varies.

MAT 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MAT 721 Mathematical Cryptography (3:3)
Mathematics of cryptography with emphasis on public key systems. Applications of elliptic and hyperelliptic curves and lattice theory in attacking and evaluating the security of cryptographic systems.

Prerequisite
MAT 671 or permission of instructor

MAT 723 Numerical Mathematics (3:3)

Prerequisite
MAT 390, MAT 595, MAT 596, or equivalents

MAT 724 Numerical Mathematics (3:3)

Prerequisite
MAT 390, MAT 595, MAT 596, or equivalents
MAT 727 Linear Algebra and Matrix Theory (3:3)
Prerequisite
MAT 310, MAT 311 or permission of instructor

MAT 728 Linear Algebra and Matrix Theory (3:3)
Prerequisite
MAT 310, MAT 311 or permission of instructor

MAT 731 Combinatorics (3:3)
Topics include selections, arrangements, theory of generating functions, inclusion-exclusion principle, recurrences, Polya's theory, block designs, stirling numbers, coding theory.
Prerequisite
MAT 311 or permission of instructor

MAT 732 Graph Theory (3:3)
Topics include graphs, paths, trees, directed trees, networks, cycles and circuits, planarity, matching theory, independence, chromatic polynomials, Ramsey theory, extremal theory, the vector spaces associated with a graph.
Prerequisite
MAT 631 or permission of instructor

MAT 735 Ordinary Differential Equations (3:3)
Existence and uniqueness theorems for initial value problems, theory of linear equations, nonlinear equations, stability theory, boundary value problems.
Prerequisite
MAT 390 and MAT 595 or permission of instructor

MAT 736 Partial Differential Equations (3:3)
Derivation of partial differential equations (PDE) models and applications, linear first order PDE's, elliptic equations and Green's function, PDE's of parabolic and hyperbolic type.
Prerequisite
MAT 735 or permission of instructor

MAT 737 General Topology (3:3)
Topological spaces, point set topology, product and quotient spaces, embedding and metrization, uniform spaces, function spaces, homotopy theory, simplicial complexes and homology, more algebraic topology, general homology theories.
Prerequisite
Bachelor's degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

MAT 738 General Topology (3:3)
Topological spaces, point set topology, product and quotient spaces, embedding and metrization, uniform spaces, function spaces, homotopy theory, simplicial complexes and homology, more algebraic topology, general homology theories.
**Prerequisite**
Bachelor’s degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

**MAT 741 Modern Abstract Algebra (3:3)**
Real and complex number fields; rings, integral domains and fields; polynomial rings; extensions of rings and fields; elementary factorization theory; ideals; topics in linear algebra.

**Prerequisite**
Bachelor’s degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

**MAT 742 Computational Number Theory (3:3)**
Main algorithms used to compute basic information about algebraic number fields, including integral bases, ideal factorization, system of fundamental units, and class group structure.

**Prerequisite**
MAT 671 or permission of instructor

**MAT 743 Complex Analysis (3:3)**
The complex number system, holomorphic functions, power series, complex integration, representation theorems, the calculus of residues.

**Prerequisite**
Bachelor’s degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

**MAT 744 Complex Analysis (3:3)**
The complex number system, holomorphic functions, power series, complex integration, representation theorems, the calculus of residues.

**Prerequisite**
Bachelor’s degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

**MAT 745 Real Analysis (3:3)**
Lebesque measure; the Lebesque integral; differentiation and integration, the classical Banach spaces; metric spaces, topological spaces, compact spaces; Banach spaces, measure and integration, measure and outer measure; the Daniell integral; mappings of measure spaces.

**Prerequisite**
Bachelor’s degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

**MAT 746 Real Analysis (3:3)**
Lebesque measure; the Lebesque integral; differentiation and integration, the classical Banach spaces; metric spaces, topological spaces, compact spaces; Banach spaces, measure and integration, measure and outer measure; the Daniell integral; mappings of measure spaces.

**Prerequisite**
Bachelor’s degree with a major in mathematics. Credits equivalent to credits for mathematics MAT 310, MAT 311, MAT 595, and MAT 596, or permission of instructor and department head

**MAT 747 Computational Topology (3:3)**
Triangulations and WRAP. Computing homology algorithmically. Morse theory and persistent homology.

**Prerequisite**
Computations on knots, braids, and links.
MAT 671 or permission of instructor

**MAT 748 Computational Algebra (3:3)**
Variety of basic subjects in computational algebra: fast arithmetic, algorithms for finite fields, matrix normal forms over rings, polynomial factorization, and Groebner bases.

*Prerequisite*
MAT 591, MAT 592, and knowledge of a programming language. or permission of instructor

**MAT 790 Directed Doctoral Research (1–6:1–6)**
Individual work on a dissertation research problem, which could also include original research or a review of current literature leading to a dissertation proposal.

*Prerequisite*
Permission of Director of Graduate Study

**MAT 799 Dissertation (1–12)**

**MAT 801 Thesis Extension (1–3)**

**MAT 802 Dissertation Extension (1–3)**

**MAT 803 Research Extension (1–3)**

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**STA – Statistics Graduate Courses**

**STA 551 Introduction to Probability (3:3)**
Events and probabilities (sample spaces), dependent and independent events, random variables and probability distribution, expectation, moment generating functions, multivariate normal distribution, sampling distributions.

*Prerequisite*
Grade of at least C in STA 290 and MAT 293 or permission of instructor

*Offered*
Fall

**STA 552 Introduction to Mathematical Statistics (3:3)**
Point estimation, hypothesis testing, confidence intervals, correlation and regression, small sample distributions.

*Prerequisite*
Grade of at least C in STA 551 or permission of instructor

*Offered*
Spring

**STA 562 Statistical Computing (3:3)**
Statistical methods requiring significant computing or specialized software. Simulation, randomization, bootstrap, Monte Carlo techniques; numerical optimization. Extensive computer programming involved. Extensive computer programming involved. This course does not cover the use of statistical software packages.

*Prerequisite*
Grade of at least a C in STA 291 or STA 580 and knowledge of a scientific programming language

*Offered*
Alt Fall

**STA 565 Analysis of Survival Data (3:3)**
Methods for comparing time-to-event data, including parametric and nonparametric procedures for censored or truncated data, regression model diagnostics, group comparisons, and the use of relevant statistical computing packages.
Prerequisite
STA 291 or STA 352 or permission of instructor

STA 571 Statistical Methods for Research I (3:3)
Introduction to statistical concepts. Basic probability, random variables, the binomial, normal and Student’s t distributions, hypothesis tests, confidence intervals, chi-square tests, introduction to regression, and analysis of variance.
Notes
Hours do not count toward degree requirements for a mathematics major.

STA 572 Statistical Methods for Research II (3:3)
Statistical methodology in research and use of statistical software. Regression, confidence intervals, hypothesis testing, design and analysis of experiments, one-and two-factor analysis of variance, multiple comparisons, hypothesis tests.
Prerequisite
STA 571 or permission of instructor
Offered
Spring

STA 573 Theory of Linear Regression (3:3)
Linear regression, least squares, inference, hypothesis testing, matrix approach to multiple regression. Estimation, Gauss-Markov Theorem, confidence bounds, model testing, analysis of residuals, polynomial regression, indicator variables.
Prerequisite
Grade of at least C in STA 352 and MAT 310, or MAT 662, or permission of instructor
Offered
Fall

STA 574 Theory of the Analysis of Variance (3:3)
Multivariate normal distribution, one-way analysis of variance, balanced and unbalanced two-way analysis of variance, empty cells, multiple comparisons, special designs, selected topics from random effects models.
Prerequisite
Grade of at least C in STA 573 or permission of instructor
Offered
Spring

STA 575 Nonparametric Statistics (3:3)
Introduction to nonparametric statistical methods for the analysis of qualitative and rank data. Binomial test, sign test, tests based on ranks, nonparametric analysis of variance, nonparametric correlation and measures of association.
Prerequisite
Grade of at least C in STA 352 or STA 572 or STA 662, or permission of instructor
Offered
Fall

STA 580 Biostatistical Methods (3:3)
Statistical methods for biological research including: descriptive statistics; probability distributions; parametric and nonparametric tests; ANOVA; regression; correlation; contingency table analysis.
Prerequisite
Grade of at least C in STA 271 or STA 290 or permission of instructor
Offered
Fall

**STA 581 SAS System for Statistical Analysis (1:1)**
Creating, importing, and working with SAS data sets. Using SAS procedures for elementary statistical analysis, graphical displays, and report generation.

*Prerequisite*
STA 271, STA 290, or similar introductory statistics course

*Offered*
Fall & Spring

**STA 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**STA 591 Actuarial Exam Preparation Seminar (1:0)**
Topics vary according to interest and demand. Intended to help prepare for the P/1, FM/2, or MLC exam.

*Prerequisite*
STA 551, MAT 586, or STA 687, or permission of instructor

*Notes*
The course can be repeated. Students can only earn one credit for the first enrollment, after which no credit hour will be given.

**STA 593 Directed Study in Statistics (1–3)**

*Offered*
Fall & Spring

**STA 594 Directed Study in Statistics (1–3)**

*Offered*
Fall & Spring

**STA 651 Mathematical Statistics (3:3)**

*Prerequisite*
STA 352 and either MAT 394 or MAT 395 or MAT 595

**STA 652 Mathematical Statistics (3:3)**

*Prerequisite*
STA 352 and either MAT 394 or MAT 395 or MAT 595

**STA 655 Applied Probability Models (3:3)**
An introduction to Markov chains, Poisson processes, renewal processes, Brownian motion, and survival models. Examples drawn from applied fields such as engineering, management, finance, and sciences.

*Prerequisite*
STA 551, or consent of instructor

**STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3:3)**
Statistical techniques and design considerations for controlled experiments and observational studies. Exploratory data analysis, elementary probability theory, principles of statistical inference, contingency tables, one-way ANOVA, bivariate regression and correlation.

**Prerequisite**
STA 271 or an equivalent introductory statistics course

**STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3:3)**
Continuation of STA 661. Multiple regression and correlation, analysis of covariance, factorial ANOVAs, randomized block designs, multiple comparisons, split-plot designs, repeated measures.

**Prerequisite**
STA 661 or permission of instructor

**STA 667 Statistical Consulting (1:1)**
Statistical consultation on doctoral or master’s research. Access to the Statistical Consulting Center. Students are required to attend the initial class meeting during the beginning of the semester.

**Prerequisite**
Permission of instructor

**Notes**
Credit is not applicable to a graduate plan of study. Grade: Satisfactory/Unsatisfactory, S/U

**STA 668 Consulting Experience (1:0:1)**
Development of consulting skills through reading and discussion of literature on statistical consulting and participation in statistical consulting sessions.

**Prerequisite**
STA 662 or permission of instructor

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**STA 670 Categorical Data Analysis (3:3)**
Methods for analyzing dichotomous, multinomial and ordinal responses. Measures of association; inference for proportions and contingency tables; generalized linear models including logistic regression and loglinear models.

**Prerequisite**
STA 662 or permission of instructor

**STA 671 Multivariate Analysis (3:3)**
Multivariate normal distribution. Cluster analysis, discriminant analysis, canonical correlation, principal component analysis, factor analysis, multivariate analysis of variance. Use and interpretation of relevant statistical software.

**Prerequisite**
STA 573 or STA 662 or permission of instructor

**STA 672 Applied Statistical Computing (3:3)**
Limitations and advantages of statistical packages (SAS, SPSSX, BMDP, Minitab). Evaluation in terms of statistical methods, utility, availability, sophistication, data base manipulation, and programming capabilities. Applications from various disciplines.

**Prerequisite**
STA 572 or STA 662

**STA 673 Statistical Linear Models I (3:3)**
Abstract vector spaces, inner product spaces, projections, the Spectral Theorem, least squares, multiple regression, ANOVA, multiple comparisons, data analysis.

**Prerequisite**
STA 352 and MAT 310 or permission of instructor

**STA 674 Statistical Linear Models II (3:3)**
Abstract vector spaces, inner product spaces, projections, the Spectral Theorem, least squares, multiple regression, ANOVA, multiple comparisons, data analysis.
*Prerequisite*
STA 352 and MAT 310 or permission of instructor

**STA 675 Advanced Experimental Design (3:3)**
Topics include factorials and fractional factorials, incomplete block designs, split-plot and repeated measures, random and mixed effects models, crossover designs, response surface designs, power analysis.
*Prerequisite*
STA 662 or permission of instructor

**STA 676 Sample Survey Methods (3:3)**
Survey methods for students from any discipline. Random, stratified, cluster, multi-stage and other sampling schemes. Estimation of population means, variances, and proportions. Questionnaire design and analysis.
*Prerequisite*
STA 352 or STA 572 or STA 662 or permission of instructor

**STA 677 Advanced Topics in Data Analysis and Quantitative Methods (3:3)**
Topics vary according to interest and demand. Quantitative methods not normally covered in detail in other statistics courses. Topics may be selected from psychometrics, econometrics, biometrics, sociometrics, quantitative epidemiology.
*Prerequisite*
STA 662

**STA 682 Theory of Time Series (3:3)**
Examples of time series; objectives in time series modeling; theory and applications of linear and non-linear time series models; ARMA/ARIMA/ARCH/GARCH models; time series modeling using computer packages.
*Prerequisite*
STA 551 or STA 651, or permission of instructor

**STA 686 Actuarial Models I (3:3)**
Actuarial models for life contingencies; single and multiple lives models, present values, premium, reserves, pension plans, and retirement benefits. Intended for the MLC actuarial exam.
*Prerequisite*
STA 551 and MAT 586, or consent of instructor

**STA 687 Actuarial Models II (3:3)**
Actuarial models for life contingencies; single and multiple lives models, present values, premium, reserves, pension plans and retirement benefits. Intended for the MLC actuarial exam.
*Prerequisite*
STA 686, or consent of instructor

**STA 690 Graduate Seminar (1:0:1)**
Development of presentation skills through reading, discussions, and presentation of current research topics in applied statistics.
*Prerequisite*
STA 662 or permission of instructor

*Notes*
Grade: Satisfactory/Unsatisfactory, S/U

**STA 698 Project in Statistics (3)**
Directed research project in statistics.
*Prerequisite*
Permission of instructor
*Notes*
Grade: Satisfactory/Unsatisfactory, S/U

**STA 699 Thesis (1–6)**

**STA 701 Seminar in Computational Statistics (3:3)**
Readings from the literature in Computational Statistics.
*Prerequisite*
Either STA 651 and STA 652; or STA 676; or permission of instructor
*Notes*
May be repeated up to 9 hours as topics vary.

**STA 703 Topics in High Dimensional Data Analysis (3:3)**
Advanced study in special topics in statistical data analysis with large scale data sets. The course may be repeated up to 9 hours as topics vary.
*Prerequisite*
STA 562, STA 673, or permission of instructor
*Corequisite*
STA 674

**STA 709 Topics in Computational Statistics (3:3)**
Advanced study in special topics in Computational Statistics.
*Prerequisite*
STA 552 or STA 652 or permission of instructor
*Notes*
May be repeated for credit.

**STA 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**STA 801 Thesis Extension (1–3)**

**STA 803 Research Extension (1–3)**
MEDIA STUDIES, DEPARTMENT OF
205 Brown Building • 336-334-5360 • mediastudies.uncg.edu

Administration
Kimberlianne Podlas, Department Head

About
The Department of Media Studies focuses on the creative production and critical consumption of a range of moving-image media. The faculty is composed of award-winning artists, scholars, and practitioners who employ a broad range of instructional methodologies.

The Department enhances the curriculum with opportunities to learn outside of the traditional classroom setting and participate in variety of media productions. These include the Department’s internship program, the student-run radio station (WUAG), the student-run campus television station, and its client-based production clinic.

Faculty

Professors
Matthew Barr, Screenwriting, documentary production, aesthetics. (E)
David A. Cook, Film history and industrial practice; Soviet, post-Soviet, and Eastern European cinema. (E)
Emily D. Edwards, Video production, media writing, gender and media culture. (E)
Anthony N. Fragola, Scriptwriting, the auteur director, literature and film, film production, development of cinema. (E)
Michael Frierson, Animation history and methods, film history and theory, film and video production. (E)

Associate Professors
Brett R. Ingram, Documentary filmmaking, cinematography, film and video production, editing.
Kimberlianne Podlas, Constitutional and media law, pop-culture representations of law (Head of Department).

Assistant Professor
Seung-Hyun Lee, Digital, mobile, and multi-media, online journalism, and Web design. (E)

Graduate Programs

• Master of Fine Arts in Drama, Film and Video Production Concentration, (48) (On Moratorium)

Drama, Film and Video Production concentration, MFA (48) (On Moratorium)
The MFA in Drama is currently not accepting applications.

The Department of Media Studies in cooperation with the Department of Theatre offers an MFA in Drama with a concentration in film and video production. We aim to develop informed, enlightened artists whose media production skills are matched by their understanding of media history and theory. The Department offers a wide-ranging curriculum that combines three principal areas: 1) the intellectual study of media history and theory, 2) the practical development of media screenwriting and production, 3) the enrichment of the student’s interdisciplinary interests.

The program does not impose a formal agenda on a student’s interest. We encourage students to explore a range of media forms: narrative, documentary, experimental, and animation. We guide our graduate students to formulate their own creative and research plan, and when necessary, to seek coursework outside the department that will support this plan.

The Department’s faculty is composed of talented artists and scholars with excellent reputations as teachers. A co-curricular program that includes opportunities to participate in external film and video productions, internships, and the Carolina Film and Video Festival matches the curricular offerings. The festival is a competitive showcase for
both student and professional, national and international independent films and videos. The Department is housed in the Brown Building and in the Carmichael Radio and Television Center.

In addition to the information contained in The Graduate School Bulletin, students are also required to be familiar with the policies and procedures contained in the Departmental graduate handbook, which is available from the Director of Graduate Study.

VISIONS students are restricted from taking any 500-level course without the permission of the Department Head and course instructor. Only officially admitted MFA students can register for 600-level courses.

The MFA in Drama, Film and Video Production Concentration is a 48-hour degree. The program requires four regular semesters (excluding summer sessions) to complete (two years).

Admission to the MFA is competitive. The program is designed to develop individual artistry in media informed by a rich understanding of media history, theory, and aesthetics. Over the course of study, students will explore this intellectual understanding of media hand in hand with their practical skills in media screenwriting and production.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a portfolio consisting of a personal statement, a resume, and samples of their creative work. The faculty interviews candidates selected from the applicant pool before admission. Students without previous course work and/or experience in film and video production may be expected to complete additional course work as prerequisites in addition to the normal degree requirements, extending the amount of time it would take to complete the degree.

**Degree Requirements**

**Major Studies (36)**

- MST 515  Film Theory (3)
- MST 528  Topics in Media: Nonfiction Forms (3)
- MST 610  Introduction to Graduate Study (3)
- MST 611  Image and Sound Acquisition for Media (3)
- MST 612  Advanced Media Editing (3)
- MST 618  Writing Short Scripts (3)
- MST 619  Production Law and Responsibility (3)
- MST 620  Seminar in Media Analysis (3) or MST 528 Topics in Media (3)
- MST 625  Seminar in Media (3) or MST 528 Topics in Media (3)
- MST 698  Graduate Practicum in Film and Video (3)
- MST 699a  Master Production in Film and Video I (3)
- MST 699b  Master Production in Film and Video II (3)

**Academic Studies (12)**

- MST 524  Media Financing and Distribution (3)
- MST 525  Media Organization and Management (3)
- MST 528  Topics in Media (3) (excluding MST 528 Topics in Media: Non Fiction Forms in Major Studies above)
- MST 550  Feature Film Script Analysis (3)
- MST 551  Writing the Feature Film I (3)
- MST 552  Writing the Feature Film II (3)
- MST 553  Advanced Media Writing (3)
- MST 559  Doing Visual History (3)
- MST 580  Directing for Television (3)
MST 581  Dance on Video (3)
MST 585  Advanced Media Production (3)
MST 587  Animation Production (3)
MST 588  Documentary Production (3)
MST 613  Advanced Media Lighting (3)
MST 614  Advanced Media Sound Production (3)
MST 616  Directing for the Camera (3)
MST 617  Creating Visual Narratives (3)
MST 684  Advanced Image Acquisition (3)
MST 690  Independent Study (3)
MST 691  Advanced Experimentation (3)
MST 695  Client Based Media (3)
MST 696  Graduate Internship (3)

Or additional course from other disciplines, such as
ART 500  Traditions of Art Criticism (3)
ART 501  Topics in the History of Art (3)
ART 540  Digital Visualization and Methods (3)
ART 545  Interactive Web Design (3)
ART 685  Photography (6)
MUP 644  Digital Music I (3)
THR 506  Non-Western Theatre and/or Film (3)
THR 534  Acting for the Camera (3)
THR 670  Production Design for Film (3)

Required Sequence of Courses (48)
Courses must be taken in the semesters as listed below:

Year One (24)

Fall Semester
MST 610  Introduction to Graduate Study (3)
MST 611  Image and Sound Acquisition for Media (3)
MST 612  Advanced Media Editing (3)
MST 528  Topics in Media (3)

Spring Semester
MST 625  Seminar in Media (3) or MST 528 Topics in Media (3)
MST 618  Writing Short Scripts (3)
MST Academic Studies elective one (3)
MST 698  Graduate Practicum in Film and Video (3)

Year Two (24)

Fall Semester
MST 619  Production Law and Responsibility (3)
MST 515  Film Theory
MST Academic Studies elective two (3)
MST 699a  Master Production in Film and Video* (3)

Spring Semester
MST 620  Seminar in Media Analysis (3) or MST 528 Topics in Media (3)
MST Academic Studies elective three (3)
MST Academic Studies elective four (3)
MST 699b  Master Production in Film and Video* (3)

*Courses comprise Capstone Experience Reviews

At the end of each semester, the faculty reviews each candidate for continuance in the program. Reviews assess the candidate’s academic success, artistic development, and professional development. Student who appears to
be having academic difficulty or whose creative potential is questionable may be placed on probation or dismissed from the program.

**Plan of Study**

Prior to completing 24 hours of the program, students must meet with the MST Director of Graduate Study and agree upon a plan of study for completion of the MFA. See “Plan of Study” in the The Graduate School Bulletin.

**Degree Candidates**

Degree candidates must adhere to the graduate timetable as listed in the University Schedule of Courses for the semester in which they intend to graduate. Additionally, degree candidates must schedule and have a public screening of the Master Production by the deadline for complete clearance of candidates for degrees. Failure to meet these Graduate School deadlines will make a candidate ineligible for graduation that semester.

**MST - Media Studies Graduate Courses**

**MST 515 Film Theory (3:3)**

Study of the principal theories of film through the writings of critics, theorists, and directors.

*Prerequisite*

Junior, senior, or graduate standing, or permission of instructor

**MST 520 History of Film to 1938 (3:3)**

Advanced study of world cinema from its prehistory in the late 19th century to the beginning of World War II in Europe, emphasizing significant movements, genres, and filmmakers.

*Prerequisite*

MST 225, Junior, senior, or graduate standing, or permission of instructor

*Offered*

Fall

**MST 521 History of Film since 1938 (3:3)**

Advanced study of world cinema from the beginning of World War II in Europe through the present, emphasizing significant movements, genres, and filmmakers.

*Prerequisite*

MST 225, Junior, senior, or graduate standing, or permission of instructor

*Offered*

Spring

**MST 524 Media Financing and Distribution (3:3)**

The processes of raising and budgeting funds and distributing film and videos for theatrical release, direct DVD/video release, or television broadcast.

*Prerequisite*

Junior, senior, or graduate standing, or permission of instructor

**MST 525 Media Organization and Management (3:3)**

Principles and practices of the organization and management of electronic media and motion pictures.

*Prerequisite*

Junior, senior, or graduate standing; or permission of instructor

*Notes*

Formerly BCN 525

**MST 528 Topics in Film Studies (3:2:3)**

Study of selected topics in fictive or nonfictive films, including genres, works of an individual director, or other emphasis.

*Prerequisite*

MST 225
Notes
May be repeated for credit when topic changes. Formerly BCN 528.

MST 550 Media Script Analysis (3:3)
Analysis of the key structural and thematic elements of narrative screenplays.
Prerequisite
Junior, senior, or graduate standing, or permission of instructor
Notes
Formerly BCN 550

MST 551 Writing the Feature Film I (3:3)
Advanced study of screenwriting with emphasis on the creation of a step outline for a feature length screenplay.
Prerequisite
MST 350, or graduate standing, or permission of instructor
Offered
Fall

MST 552 Writing the Feature Film II (3:3)
A writing workshop in which students complete the first draft and a polish of a feature-length screenplay, based on the outline from MST 551.
Prerequisite
MST 551
Offered
Spring

MST 553 Advanced Media Writing (3:3)
Practice in television script writing with emphasis given to development of concepts and proposals for episodic television. Practice in analyzing and writing for existing television series and/or development of new programs.
Prerequisite
Junior, senior, or graduate standing, or permission of instructor

MST 559 Doing Visual History (3:3)
Explores the interstices of history, documentary production, and personal narratives.
Cross Listed Courses
Same as HIS559
Offered
Alt Fall

MST 580 Directing for Television (3:2:3)
Fundamental principles of directing for television. Laboratory directing experience.
Prerequisite
Graduate standing, or permission of instructor

MST 581 Dance on Video (3:3)
Introduction to working with dance and video, including composing for the camera, recording dancers in action, and editing footage to create original work.
Prerequisite
MST 271, or graduate standing, or permission of instructor
Notes
Formerly BCN 581
MST 585 Advanced Media Production (3:2:3)
Advanced application of principles and techniques of media production.
Prerequisite
Junior, senior, or graduate standing, or permission of instructor

MST 587 Animation Production (3:3)
Study and practice of techniques of animation.
Prerequisite
MST 370 and MST 375, or graduate standing, or permission of instructor
Notes
Formerly BCN 587

MST 588 Documentary Production (3:3)
Documentary construction, research, planning, and production techniques. Further development of video production skills in supervised laboratory project.
Prerequisite
MST 370 and MST 375, or graduate standing, or permission of instructor
Notes
Formerly BCN 588

MST 589 Experimental Course
This number reserved for experimental courses. Refer to the Schedule of Courses for current offerings.

MST 610 Introduction to Graduate Study (3:3)
Development of research and writing skills, introduction to grant writing, and professional presentations. Consideration of issues in teaching. Required of MFA degree candidates.
Prerequisite
Admission to appropriate degree program

MST 611 Image and Sound Acquisition for Media (3:3)
Theory and practice of single camera and audio production for media.
Prerequisite
Admission to appropriate degree program or permission of instructor

MST 612 Advanced Media Editing (3:2:3)
Study of techniques and aesthetics of media editing.
Prerequisite
Admission to appropriate degree program or permission of instructor

MST 613 Advanced Media Lighting (3:2:3)
Physical properties of light, lighting theories, aesthetics of lighting, and advanced practical experience in lighting for media.
Prerequisite
Admission to appropriate degree program or permission of instructor

MST 614 Advanced Media Sound Production (3:2:3)
Exploration of equipment and technique of sound design for media.
Prerequisite
Admission to appropriate degree program or permission of instructor

MST 616 Directing for the Camera (3:3)
Development of skills required for directing media.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**MST 617 Creating Visual Narratives (3:3)**
Students are guided through a series of step-by-step innovative methodologies that result in visually dynamic scripts that prepare them to take MST 618, Writing Short Scripts.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**MST 618 Writing Short Scripts (3:3)**
Theory and practice of writing short scripts for media production.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**MST 619 Production Law and Responsibility (3:3)**
Legal, ethical, and civic responsibilities of media producers with emphasis on creation of independent works in media.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**Notes**
May be repeated once for credit.

**MST 620 Seminar in Media Analysis (3:3)**
Analysis of media works using existing principles and theories.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**Notes**
May be repeated for credit.

**MST 625 Seminar in Media (3:3)**
Subject matter varies.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**Notes**
May be repeated for credit.

**MST 684 Advanced Media Production (3:3)**
Advanced theory and practice of image and sound production for media.

**Prerequisite**
Admission to appropriate degree program or permission of instructor

**MST 690 Independent Study (1–3)**

**Prerequisite**
Admission to appropriate degree program, permission of instructor and Director of Graduate Study

**MST 691 Advanced Experimentation (3:1:4)**
Practical experimentation in the creative processes of media. Analysis, documentation, and critical evaluation of the specific experience.

**Prerequisite**
Admission to appropriate degree program and permission of instructor and Director of Graduate Study

**MST 695 Client Based Media (3:0:6)**
Complete production of a client sponsored program. Emphasis on client collaboration, application of technical skills and aesthetic abilities in an environment in which students may not have complete creative control.

Prerequisite
Admission to appropriate degree program and permission of instructor and Director of Graduate Study

MST 696 Graduate Internship (3)
Field experience in film or video production companies, postproduction houses, or television stations. Academic supervision provided by faculty and directed activity in the field provided by site supervisor.

Prerequisite
Second or third year standing in the graduate program

MST 698 Graduate Practicum in Media (3:0:9)
Guided practice in carrying out major responsibilities in sponsored or independent media productions.

Prerequisite
Admission to appropriate degree program and permission of instructor and Director of Graduate Study

MST 699a Master Production in Media I (3)
Research, development, and execution of a major media work.

Prerequisite
Second year in MFA film/video degree concentration

Notes
Grade: Satisfactory/Unsatisfactory, S/U

MST 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MST 803 Research Extension (1–3)
PHILOSOPHY, DEPARTMENT OF
239 Curry • 336-334-5059 • philosophy.uncg.edu

Administration
Gary Rosenkrantz, Department Head

Faculty

Professors
Jarrett Leplin, Philosophy of science, epistemology. (E)
Gary Rosenkrantz, Metaphysics, epistemology, philosophy of mind, philosophy of religion (Head of Department). (E)
Michael Zimmerman, Ethics, action theory. (E)

Associate Professors
Heather Gert, Ethics, Wittgenstein. (E)
Janine Jones, Philosophy of mind, philosophy of language. (E)
Bas van der Vossen, Political theory, applied ethics and philosophy of law.

Graduate Programs
No graduate degree program offered; see Master in Applied Arts and Sciences

PHI – Philosophy Graduate Courses

PHI 520 Advanced Topics in Biomedical Ethics (3:3)
Detailed examination of a particular issue in biomedical ethics, such as research ethics, assisted suicide and euthanasia, and the acquisition and allocation of organs for transplantation.
Prerequisite
PHI 220

PHI 523 Philosophy of Social and Behavioral Science (3:3)
Issues in philosophy of social and behavioral science from Hume to the present: explanation, theory construction, methodology of the social sciences, the status of the sociology of knowledge.
Prerequisite
Permission of instructor

PHI 525 Philosophy of Physical Science (3:3)
Study of a major current issue in the philosophy of science such as scientific progress and change, scientific methods, experiment and theory, scientific explanation, rationality, scientific realism, relations between philosophy of science and history of science. Examples drawn from modern history of physical science.
Prerequisite
PHI 325

PHI 527 Philosophy of Biological Science (3:3)
Examination of concepts of law, theory, explanation, evidence, classification, and reduction using examples drawn from biology. Investigation of problems related to alternative conceptual systems and conceptual change in biology, the nature of the biological subject matter, and the place of biology among the natural sciences.
Prerequisite
PHI 325
Notes
One course in biology recommended.

PHI 545 Social Philosophy (3:3)
Topics from social, political, and legal philosophy, such as property, justice, punishment, liberalism, conservatism, and a study of such major figures as Hobbes, Rousseau, Locke, Mill, and Rawls.

Prerequisite

PHI 321 or PHI 331 or PHI 335

PHI 555 Epistemology (3:3)
Skepticism, the analysis of knowledge, confirmation and induction, apriori knowledge, naturalized epistemology.
Prerequisite

PHI 319 or permission of instructor

PHI 559 Philosophy of Mind (3:3)
The mind-body problem, identity theories, functionalism, reductive and eliminative materialism, behavioral and causal theories of mind.
Prerequisite

PHI 111 or PHI 251 or PHI 252

PHI 565 Philosophy of Language (3:3)
Theories of truth, meaning, and reference. Origin and nature of human language and its relations to animal and machine language.
Prerequisite

PHI 111 or PHI 251 or PHI 252

PHI 575 Advanced Logic (3:3)
Axiomatic first order quantification theory with completeness theorems. Numbers and sets. Paradoxes and type theory. Introduction to modal logic.
Prerequisite

PHI 311 or permission of instructor

PHI 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

PHI 590 Aesthetics (3:3)
Readings in the major philosophies of art, analysis of evaluative judgment and argument, the nature of aesthetic concepts, artistic truth, the art object, and the aesthetic experience.
Prerequisite

PHI 322 or permission of instructor

PHI 601 Advanced Topics in Philosophy (3:3)
Topics may include relativism, legal ethics, and artificial intelligence.
Prerequisite

Permission of instructor

Notes
May be repeated for credit when topic varies.

PHI 620 Ethics and Genetics (3:3)
Ethical issues in the acquisition and application of knowledge about the human genome. Topics include genetic testing and abortion, predictive testing, testing for minors, confidentiality, gene therapy, and human cloning.
Prerequisite

Matriculation to third semester of MS genetic counseling program or permission of instructor

PHI 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
PHYSICS AND ASTRONOMY, DEPARTMENT OF
321 Petty Building • 336-334-5844 • physics.uncg.edu

Administration
Edward Hellen, Department Head

About
Graduate level physics and astronomy courses prepare students for graduate study or for careers in industry, government, or teaching and may be used by teachers in elementary, middle, and secondary schools for licensure renewal.

Faculty

Professors
William J. Gerace, Theoretical nuclear physics, science education research and science teacher professional development, modeling cognition and learning (Helena Gabriel Houston Distinguished Professor of Science Education).

Associate Professors
Ian Beatty, Science education research, instructional technologies and methods, teacher education and teacher change research, cognitive modeling of knowledge and learning.
Edward H. Hellen, Nonlinear dynamics, excitable systems, biophysics, fluorescence techniques (Head of Department). (E)
Anatoly Miroshnichenko, Observational astrophysics, interstellar and circumstellar matter. (E)
Promod Pratap, Biophysics of biological membranes, biological energetics, thermodynamics of biochemical reactions. (E)

Graduate Programs
No graduate degree program offered. The Department of Physics and Astronomy offers several courses available to graduate students.

PHY – Physics Graduate Courses

PHY 501 Conceptual Physics for Teachers (3:3)
The basic laws of physics are introduced by extensive use of demonstrations. Concepts are emphasized and mathematical manipulation is minimal. Teaching materials and strategies are developed.

PHY 502 Conceptual Physics for Teachers (3:3)
The basic laws of physics are introduced by extensive use of demonstrations. Concepts are emphasized and mathematical manipulation is minimal. Teaching materials and strategies are developed.

PHY 543 Biophysics (3:3)
Introduction to cellular biophysics, with emphasis on the physical properties of membranes, including membrane transport mechanisms and electrical properties of membranes.

Cross Listed Courses
Same as BIO 543

Prerequisite
PHY 211/PHY 212 or PHY 291/PHY 292; MAT 191; BIO 355; CHE 111/CHE 114; or permission of instructor

Offered
Alt Fall

PHY 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
PHY 601 Teaching Concepts in Physics and Astronomy (3:3)
Research in physics education, implications for instruction.
Prerequisite
Permission of instructor

PHY 603 General Physics for Teachers (3:3)
Concepts and theories, with some performance of demonstration and laboratory experiments. Develop basic knowledge of mechanics, properties of matter, heat, waves, electromagnetic fields, atomic structure and spectra, particle and wave theories.
Prerequisite
One year of college physics, one year of college mathematics, or permission of instructor

PHY 604 General Physics for Teachers (3:3)
Concepts and theories, with some performance of demonstration and laboratory experiments. Develop basic knowledge of mechanics, properties of matter, heat, waves, electromagnetic fields, atomic structure and spectra, particle and wave theories.
Prerequisite
One year of college physics, one year of college mathematics, or permission of instructor

PHY 605 Advanced-Placement Physics for Teachers (3:3)
Concepts of mechanics, heat and wave motion presented in terms of the calculus.
Prerequisite
Permission of the instructor

PHY 606 Advanced-Placement Physics for Teachers (3:3)
Concepts of electricity and magnetism, optics and modern physics presented in terms of the calculus.
Prerequisite
Permission of the instructor

PHY 607 Modern Physics for Teachers (3:3)
Recent developments in physics.
Prerequisite
Permission of instructor

PHY 608 Modern Physics for Teachers (3:3)
Recent developments in physics.
Prerequisite
Permission of instructor

PHY 612 Experimental Physics for Teachers (1–3)
Laboratory study of basic experiments. Principles of experimentation, laboratory techniques, laboratory safety, and techniques of data analysis.
Prerequisite
One year college physics, one year college mathematics, and permission of instructor
Notes
With permission of instructor, may be repeated for credit.

PHY 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
AST – Astronomy Graduate Courses

AST 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

AST 609 Solar System Astronomy for Teachers (3:3)
Basic concepts of planetary astronomy are introduced, including atmospheres, geology, and observing. High school mathematics is utilized. Teaching materials and strategies are developed.

AST 635 Stars and Galaxies for Teachers (3:3)
Basic concepts of stellar and galactic astronomy are introduced, including stellar evolution, galaxies, and cosmology. High school mathematics is utilized. Teaching materials and strategies are developed.

AST 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
POLITICAL SCIENCE, DEPARTMENT OF
324 Curry Building • 336-334-5989 • psc.uncg.edu

Administration
William Crowther, Department Head
Ruth DeHoog, Director of the MPA Program

Faculty

Professors
Linda P. Brady, American foreign policy, international negotiation, and arms control (Former Chancellor). (E)
William Crowther, Comparative politics, political economy, Eastern Europe, inter-ethnic relations (Head of Department). (E)
Ruth Hoogland DeHoog, Public administration, urban management, privatization, organization theory and behavior (Director of Graduate Study). (E)
Franklin D. Gilliam, Jr., Strategic communications, public policy, electoral politics, and racial and ethnic politics. (Chancellor)
Fabrice Lehoucq, Comparative politics, Latin American politics, political economy of development. (E)
Gregory E. McAvoy, Public policy, research methods, environmental policy, program evaluation. (E)
Charles L. Prysby, Research methods, elections, voting behavior, political parties, southern politics, contextual analysis. (E)
Jerry Pubantz, International politics, Middle East politics, the United Nations, American foreign policy, and globalization. (E)

Associate Professors
Robert J. Griffiths, Comparative and international politics, African politics, civil-military relations, politics of development. (E)
David Holian, The presidency, legislative politics, mass media, public opinion, and political methodology. (E)
Susan W. Johnson, American politics, judicial politics, Supreme Court decision making, Canadian Supreme Court.
Kenneth A. Klase, Public administration, public budgeting and finance, public financial management. (E)

Assistant Professors
Allison Bramwell, Comparative urban politics and governance, urban and regional development policy.
Tamaki Onishi, Nonprofit management, social entrepreneurship, venture philanthropy.

Lecturer
J. Alan Boyette, State politics, federalism and intergovernmental relations, public policy (environment, education, campaign finance) (Senior Vice Provost).

Graduate Programs
• Post-Baccalaureate Certificate in Nonprofit Management, (15)
• Post-Baccalaureate Certificate in Urban and Economic Development, (18) (offered jointly with the Department of Geography)
• Master of Arts (MA) in Political Science, (30)
• Master of Public Affairs (MPA), Community and Economic Development, Local Government Management, or Nonprofit Management optional concentration, (40-43)

Nonprofit Management, PBC, (15)
The Post-Baccalaureate Certificate in Nonprofit Management requires 15 semester hours and is designed to meet the training needs of nonprofit professionals. Certificate graduates will be prepared for management positions in the nonprofit sector, including positions in human service agencies, foundations, or professional associations. The
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Certificate Program

A certificate program may be useful to government and business professionals who have significant voluntary or nonprofit agency responsibilities.

The program combines core courses and electives that allow a student some tailoring to specific interests with courses available online and/or on campus. At least 12 hours must be taken in the MPA curriculum. A portfolio demonstrating skills and competencies acquired through course work in the program must be submitted and approved for completion of the certificate. If the portfolio is judged unacceptable, no more than one additional attempt to satisfy the requirement is permitted. If the student fails to meet the department’s minimum criteria for the portfolio on the second attempt, The Graduate School will be notified and will send the student a letter of dismissal.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement and a resume.

Certificate Requirements

Core Requirements (9)

- PSC 540 Nonprofit Management and Leadership (3)
- PSC 645 Nonprofit Financial Management and Budgeting (3)
- PSC 650 Philanthropy and Resource Development (3)

Choice Requirements (3)

Students choose three of the following:

- PSC 511B Topics in Public Affairs: Marketing for Public and Nonprofit Agencies (1)
- PSC 511D Topics in Public Affairs: Strategic Planning (1)
- PSC 511G Topics in Public Affairs: Grant Writing (1)
- PSC 511N Topics in Public Affairs: Nonprofit Law (1)
- PSC 511V Topics in Public Affairs: Volunteer Management (1)

Electives (3)

Students must take 3 hours in a combination of one-hour courses (PSC 511): strategic planning, marketing, legislative relations, volunteer management, media relations, oral communication skills, grant writing, nonprofit law; and/or a 3-hour course from the MPA curriculum or approved courses outside the department in human development and family studies, social work, public health, business administration, and/or counseling, etc.

Urban and Economic Development, PBC (PSC), (18)

The Post-Baccalaureate Certificate in Urban and Economic Development requires 18 semester hours and is offered jointly by the departments of Political Science and Geography. It is designed to meet the training needs of those currently working in or planning to work in urban planning or community and economic development.

This certificate requires courses emphasizing the knowledge and skills to prepare students to work in organizations focusing on urban planning and community economic development activities in government and nonprofit organizations.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
In addition to the application materials required by The Graduate School, applicants must submit a personal statement.

**Certificate Requirements**

**Required Core Courses (12)**
- GEO 502 Urban Planning (3)
- GEO 533 Regional Economic Development (3)
- PSC 520 Urban Political System (3)
- PSC 630 Community and Economic Development Theory and Practice (3)

**Electives (6)**
Select two from the following:
- GEO 602 Regional Planning (3)
- GEO 603 Understanding Geographic Information Systems (3)
- GEO 622 GIS Applications in Urban Planning (3)
- GEO 631 Transportation Planning (3)
- PSC 613 Local Government Administration (3)
- PSC 620 Urban and Regional Development Policy (3)

Political Science, MA, (30)
The MA in Political Science requires 30 semester hours and is for persons who wish to teach in community colleges and secondary schools or continue graduate study in a doctoral program or a professional school.

Course offerings and the thesis focus on public administration and policy.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement.

**Degree Requirements**

**Required Courses (6)**
Two courses must be taken in the first 18 hours:
- PSC 601 Politics of Public Policy (3)
- PSC 602 Quantitative Analysis and Program Evaluation (3)

**Electives (24)**
Students select from departmental offerings. Up to 6 hours may be taken as independent study courses.

**Thesis**
See the Director of Graduate Study for details.

**Comprehensive Examination (Capstone Experience)**
A written comprehensive examination is required when 18 hours of course work have been completed.

Master of Public Affairs (MPA), (40-43)
Community and Economic Development, Local Government Management, and Nonprofit Management Concentrations

The Master of Public Affairs requires 40 semester hours and is intended for persons interested in public service careers in local, state, and federal agencies; private, nonprofit agencies and voluntary organizations; public affairs
offices in private businesses; and legislative staff positions. It provides professional training designed to meet current demands in public service positions and build the foundation for long-term development and advancement in a public service career. The MPA program is accredited by the Network of Schools of Public Policy, Affairs and Administration (NASPAA).

The program provides a foundation in the major substantive areas of public affairs: policy-making and policy analysis; administration, management and organizational behavior; quantitative analysis and evaluation; and the political context of public administration. Beyond these areas, students can declare a concentration or take a mix of electives in the department and up to 9 hours in other departments (e.g., geography, conflict and peace studies, public health education).

Students with no work experience in public or nonprofit agencies must complete an additional 3 hour supervised internship, along with a field research project.

The MPA degree is linked to the Bachelor of Arts in economics and the Bachelor of Arts in political science so that a student may earn both degrees in approximately five years. Undergraduates must be formally admitted to one of these programs. Please see the appropriate departmental listing in the Undergraduate Bulletin for the details of these accelerated programs of study.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement. See www.uncg.edu/psc/mpa/ for the form.

**Degree Requirements**

**Prerequisite (3)**
The program requires students to have completed an undergraduate course in American government, politics, or public policy.

**Core Courses (23)**
The eight required courses are to be taken in approximately the following order, when possible. Consult an advisor for specific sections of 511.

- PSC 600  Public Administration and Management (3)
- PSC 601  Politics of Public Policy (3)
- PSC 602  Quantitative Analysis and Program Evaluation (3)
- PSC 603  Budgeting and Fiscal Administration (3)
  and
- PSC 603L  Budget Analysis Laboratory (1)
- PSC 604  Public Personnel Management (3)
- PSC 612  Organizational Behavior and Leadership (3)
- PSC 511J  Topics in Public Affairs: Legal Issues in Public Administration (1)

One applied research tools course, choose one from:

- PSC 503  Survey Methods for Policy Research (3)
- PSC 504  Public Management Information Systems (3)
- PSC 610  Public Policy Analysis (3)
- PSC 611  Program and Policy Evaluation (3)

**Electives (17)**

Regularly offered courses:

- PSC 504  Public Management Information Systems (3)
PSC 510  Topics in Public Policy (3)
PSC 511  Topics in Public Affairs (1)
PSC 512  Federalism and Intergovernmental Relations (3)
PSC 516  Administrative Law (3)
PSC 520  Urban Political System (3)
PSC 530  Administrative and Elected Leadership (3)
PSC 540  Nonprofit Management and Leadership (3)
PSC 560  Special Topics in Public Administration (1-3)
PSC 613  Local Government Administration (3)
PSC 615  Human Resource Development and Performance Management (3)
PSC 620  Urban and Regional Development Policy (3)
PSC 630  Community and Economic Development Theory and Practice (3)
PSC 645  Nonprofit Financial Management and Budgeting (3)
PSC 650  Philanthropy and Resource Development (3)

Students may take up to 9 hours from approved graduate courses in other departments.

**Experiential Component**
Students not having approved prior work experience will complete a supervised internship (PSC 695) in a public or nonprofit agency for 3–6 hours credit, depending on the duration of the placement, together with a directed field study (PSC 696). Students with prior work who desire experience in a new area of public affairs may choose to complete an internship as well.

**Comprehensive Examination (Capstone Experience)**
The required exam consists of two parts: (1) a written essay examination (based on core courses) when halfway through the graduate program, and (2) a summary of learning paper completed near the end of graduate work.

**Community and Economic Development Concentration**
This concentration combines the MPA core requirements with courses emphasizing the knowledge and skills to prepare students to work in organizations focusing on community and economic development activities. The prerequisite, comprehensive exam, and the experiential component are the same as for the MPA.

**Required Courses (35)**
Students must complete all of the MPA core courses including the required research tools course. Students will need to consult with an advisor for specific section of 511. They must also complete 15 hours of course work related to community and economic development skills and knowledge. Required courses are:

- PSC 511  Topics in Public Affairs: Legal Issues in Public Administration (1)
- PSC 520  Urban Political System (3)
- PSC 620  Urban and Regional Development Policy (3)
- PSC 630  Community and Economic Development Theory and Practice (3)

Plus one of the following courses:

- GEO 502  Urban Planning (3)
- GEO 533  Regional Economic Development (3)

**Electives (5)**
With the approval of the Director of Graduate Study, students may select additional course work from political science or other departments, such as geography, sociology, business administration, or economics.

**Internship (3)**
An internship (PSC 695) is required for students who have no prior experience in a professional or management position in community and economic development.

**Local Government Management Concentration**
This concentration combines the MPA core requirements with courses emphasizing the knowledge and skills to prepare students to work as local government managers. The prerequisite, comprehensive exam, and experiential component are the same as for the MPA.
Required Courses (29)
Students must complete all of the MPA core courses including the required research tools course (23). For the concentration, they must complete 6 hours of required course work related to local government management skills and knowledge.

PSC 520 Urban Political System
PSC 613 Local Government Administration

Electives (11)
Students complete an additional 11 hours of elective course work. Nine of these elective hours together with the 6 hours of required concentration courses listed above complete a 15 hour concentration in local government management.

Recommended courses include:
- PSC 510K Topics in Public Policy: Ethics (3)
- PSC 511 Topics in Public Affairs (1)
- PSC 560 Special Topics in Public Administration (1-3)
- PSC 512 Federalism and Intergovernmental Relations (3)
- PSC 530 Administrative and Elected Leadership (3)
- PSC 630 Community and Economic Development Theory and Practice (3)
- GEO 502 Urban Planning (3)

With the approval of the Director of Graduate Study, students may select additional course work from political science or other departments, such as geography, sociology, business administration, or economics. Students will need to consult with an advisor on specific sections of 510, 511 and 560.

Internship (3)
An internship (PSC 695) is required for students who have no prior experience in a professional or management position in a government agency.

Nonprofit Management Concentration
This concentration combines the MPA core requirements with courses emphasizing the knowledge and skills to prepare students to work in or with the nonprofit sector. The prerequisite, comprehensive exam, and the experiential component are the same as for the MPA.

Required Courses (31)
Students must complete all but one of the MPA core courses. The research tools requirement in the MPA core will be met by PSC 611. They must also complete 15 hours of course work related to nonprofit management skills and knowledge. Required courses are:

- PSC 540 Nonprofit Management and Leadership (3)
- PSC 650 Philanthropy and Resource Development (3)

Plus three of the following four one-hour Topics in Public Affairs:
- PSC 511B Topics in Public Affairs: Marketing for Public and Nonprofit Agencies (1)
- PSC 511D Topics in Public Affairs: Strategic Planning (1)
- PSC 511G Topics in Public Affairs: Grant Writing (1)
- PSC 511V Topics in Public Affairs: Volunteer Management (1)

Electives (9)
With the approval of the Director of Graduate Study, students may select courses from political science or up to 9 hours in other departments, such as social work; gerontology; or sociology.

Internship (3)
An internship (PSC 695) is required for students who have no prior experience in a professional or management position in a nonprofit agency.

MPA with Post-Baccalaureate Certificate in Gerontology
Students with an interest in public service work related to the elderly and meeting the needs of an aging society may complete elective course work in the MPA degree by jointly completing the Post-Baccalaureate Certificate in Gerontology.
PSC - Political Science Graduate Courses

PSC 501 Selected Topics in Political Science
Opportunity for advanced students to study in depth a topic of special interest.
Prerequisite
Major in political science or permission of instructor
Notes
May be repeated for credit when topics vary.

PSC 503 Survey Methods for Policy Research (3:3)
Theoretical and practical issues involved in designing and using sample surveys for political and policy research. Emphasis on survey methods used by the government and others in public sector.

PSC 504 Public Management Information Systems (3:3)
Overview of management information systems in public and nonprofit organizations, covering broad questions of design, management, training, utilization, and impact on decision making.

PSC 505 Problems in Politics (3:3)
Seminar in research and study in political science. Attention also on problems of methodology and alternative conceptions of field of political science as a scholarly discipline.

PSC 510 Topics in Public Policy (3:3)
Intensive analysis of a major area of public policy. Examination of the sources of policy making, the policy-making process and the impact of policy. Students may repeat the course but not the same topic. 510a, Politics of Education; 510b, Criminal Justice; 510c, Labor Relations; 510d, Foreign and Defense Policy; 510e, Environmental Policy; 510f, Urban Development Policy; 510g, Health and Social Policy; 510h, Global Challenges; 510i, Press and Politics; 510j, Industrial Policy; 510k, Ethics in Public Policy.
Notes
May be repeated for credit when topic varies.

PSC 511 Topics in Public Affairs (1)
Examination of a current topic in the management of public and nonprofit agencies. Regularly offered courses include: 511A-Oral Communication; 511B-Marketing for Public and Nonprofit Agencies; 511C-Information Technology and Management; 511D-Strategic Planning; 511E-Lobbying and Advocacy; 511G-Grantwriting; 511J-Legal Issues in Public Administration; 511M-Media Relations; 511N-Nonprofit Law; 511P-Program Evaluation; 511R-Diversity and Culture; 511S-Social Entrepreneurship; 511V-Volunteer Management.
Prerequisite/Corequisite
Graduate standing or PSC seniors who have taken PSC 310 or 311 or permission of the Graduate Director
Notes
May be repeated when topics vary up to a limit of six (6) semester hours.

PSC 512 Federalism and Intergovernmental Relations (3:3)
Focuses on changing relationships of local-state-federal agencies, expanding role of regional cooperation, and recent developments in sub-national governments.
Prerequisite
Graduate Standing or permission of instructor

PSC 516 Administrative Law (3:3)
The law, practice, and procedure in federal administrative agencies: agency rulemaking; administrative adjudication; judicial review; informal process and administrative discretion.
PSC 520 Urban Political System (3:3)
Examination of major topics in the study of urban government and policy. Systems approach to provide an analytic framework for interrelating specific topics such as citizen participation, interest groups, parties, types of elections, forms of government, community power, and racial politics.

PSC 530 Administrative and Elected Leadership (3:3)
Recruitment, selection, and roles of executives and legislators; organization and activities of the offices; relationships among executive offices, administrative offices, and legislative bodies.

PSC 535 Citizen Participation in Policy-Making (3:3)
Political participation and citizen involvement in governmental policy-making. Both citizen initiated and government sponsored efforts to increase popular input analyzed. Assessment of impact of citizen participation on policy-making in specific areas of policy and on the performance of government in general.

PSC 540 Nonprofit Management and Leadership (3:3)
Overview of major concepts and concerns of nonprofit organizations, including tax-exempt status, incorporation, nonprofit-government relations, board-director-staff relations, volunteers, services and program planning, implementation, resource development.

Prerequisite
Senior or graduate standing

PSC 560 Special Topics in Public Administration (1–3)
Students may repeat three-semester-hour courses when topics vary, but one-semester-hour courses when topics vary only for a maximum of three semester hours. Specific topic identified by extension to basic title, e.g., Special Topics in Public Administration.

Prerequisite
Permission of M.P.A. Program Director or instructor

PSC 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

PSC 600 Public Administration and Management (3:3)
Political environment, structure and process of public bureaucracies; organizational theory; professional ethics; and administrative functions including management, budgeting, and personnel.

Prerequisite
Admission to the MPA program or permission of instructor

PSC 601 Politics of Public Policy (3:3)
Public policy process from agenda-setting to policy formation, legitimation, and implementation.

Prerequisite
Admission to the MPA program or permission of instructor

PSC 602 Quantitative Analysis and Program Evaluation (3:3)
Basic principles of research design, measurement, data analysis, and computer usage for research in politics and public policy.

Prerequisite
Admission to the MPA program or permission of instructor

PSC 603 Budgeting and Fiscal Administration (3:3)
Purposes of budgets. The political and economic environment that surrounds the budgetary process in government. Budget preparation, enactment, execution, and decision making at the federal, state, and local levels.
Prerequisite
Admission to the MPA program or permission of instructor.

Corequisite
PSC 603 and SC 603L.

PSC 603L Budget Analysis Laboratory (1:1)
Problems and exercises designed to assist students in understanding public budgeting. Emphasis on analyzing and communicating budget data.

Prerequisite
Admission to the MPA program or permission of instructor.

Corequisite
PSC 603 and SC 603L.

PSC 604 Public Personnel Management (3:3)
Employment practices as applied in the public sector; merit and merit systems, position management, equal employment opportunity and affirmative action, unionization, employee rights, and representative bureaucracy.

Prerequisite
PSC 600 or permission of instructor

PSC 610 Public Policy Analysis (3:3)
Approaches to analyzing public policy; cost-benefit analysis, decision-analysis, and other analytical methods used in policy development and evaluation.

Prerequisite
PSC 602

PSC 611 Program and Policy Evaluation (3:3)
Structure of program evaluation; identification and measurement of program outcomes; use of experiments and quasi-experiments in evaluation; development of performance measures; analysis of program evaluation data.

Prerequisite
PSC 602 or permission of instructor

PSC 612 Organizational Behavior and Leadership (3:3)
Behavior of public and nonprofit organizations. Problems of leadership, group dynamics, conflict resolution, and organizational change.

Prerequisite
PSC 600 or permission of instructor

PSC 613 Local Government Administration (3:3)
Administrative process, management, personnel, budget and finance, and intergovernmental relations in local government.

Prerequisite
Graduate standing or permission of MPA program director.

PSC 615 Human Resource Development and Performance Management (3:3)
Public and nonprofit employee performance evaluation and development: theories of motivation, workforce trends, training techniques and trends, career development, employee performance and evaluation techniques. Workshop format with group exercises.

PSC 620 Urban and Regional Development Policy (3:3)
Adapted each year, according to the interests of the class, this course examines 21st century urban and regional development policy, focusing on innovations emerging at the intersection of economy, equity, and the environment in the US and elsewhere.

**PSC 630 Community and Economic Development Theory and Practice (3:3)**
Critical analysis of community and economic development theory and practice and its historical and theoretical roots, methods, strategies, and tactics.
*Prerequisite*
Permission of MPA program director or graduate standing

**PSC 645 Nonprofit Financial Management and Budgeting (3:3)**
Nonprofit financial management and budgeting concepts, techniques and practices, including management control, budgeting, cost accounting, long-term financing, nonprofit accounting and financial reporting, financial analysis, cash management, and accountability and control.
*Prerequisite*
Graduate standing or permission of instructor

**PSC 650 Philanthropy and Resource Development (3:3)**
Major concepts, strategies, issues, and approaches to resource development and philanthropy in nonprofit and educational organizations.
*Prerequisite*
PSC 540 or permission of instructor

**PSC 690 Public Affairs Seminar (3:3)**
Role of the public official in organizations and policy making. Analysis of position and responsibilities in the context of literature on organizations, administration, management, and policy making. Open to advanced students in public affairs who have had work experience or internships in public agencies.

**PSC 695 Public Affairs Internship (3–6)**
A full-time work and learning experience in a public or nonprofit agency of approximately three months duration designed to provide the graduate student with practical experience in the ongoing operations of an agency of government or an organization engaged in public affairs activities.
*Prerequisite*
PSC 600, PSC 601, PSC 602, at least three other graduate level courses in political science, and permission of instructor

**PSC 696 Directed Field Research (3–6)**
Field research on selected problems and issues in public policy, including research design, data collection, data analysis, and interpretation of results. Open to advanced graduate students in the Master of Public Affairs program.
*Prerequisite*
PSC 600, PSC 601, PSC 602, three other graduate level courses, and permission of instructor

**PSC 697 Special Problems in Political Science (1–3)**
Independent study or research in political science. *Prior consent of faculty member with whom student wishes to work.*

**PSC 698 Special Problems in Political Science (1–3)**
Independent study or research in political science. *Prior consent of faculty member with whom student wishes to work.*
PSC 699 Thesis (1–6)

PSC 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

PSC 801 Thesis Extension (1–3)

PSC 803 Research Extension (1–3)
PSYCHOLOGY, DEPARTMENT OF
296 Eberhart Building • 336-334-5014 • psy.uncg.edu

Administration
Stuart Marcovitch, Department Head
Michael J. Kane, Director of Graduate Study

Faculty

Professors
- Robert Guttentag, Cognitive development, children's learning and remembering. (E)
- Timothy Johnston, Comparative studies of behavioral development and evolution, and the history of developmental theories in psychology and biology. (E)
- Michael J. Kane, Attention and memory, particularly where they interact in the “working memory” system and how they contribute to intelligence and higher-order cognitive processes (Director of Graduate Study). (E)
- Susan P. Keane, Social and emotional development in children and adolescents, peer relations, friendship, developmental psychopathology. (E)
- Stuart Marcovitch, Cognitive development, particularly conscious and unconscious influences on behavior (Head of Department). (E)
- Julia Mendez, Parenting and social competence among ethnic minority children, school readiness, early care and education with low-income Hispanic children and families. (E)
- George F. Michel, Developmental psychobiology, sensorimotor development during infancy, neuroendocrine processes in mammalian parental care. (E)
- Rosemery Nelson-Gray, Adult depression and personality disorders; theory and techniques of behavioral assessment. (E)
- Terri L. Shelton, Developmental psychopathology, assessment and treatment of young children (Vice Chancellor for Research and Engagement). (E)
- Paul Silvia, Creativity and the arts, experience sampling, self-regulation and effort. (E)
- Dayna R. Touron, Cognitive aging, skill acquisition, strategy use, metacognition (Associate Dean, College of Arts and Sciences). (E)

Associate Professors
- Janet J. Boseovski, Social cognition in early to late childhood, including personality understanding, social learning, and stereotyping and prejudice. (E)
- Peter Delaney, Memory and learning, forgetting, daydreaming, expertise, and thinking. (E)
- Kari Eddington, Cognitive, motivational, and neurobiological processes in depression; mechanisms of change in psychosocial treatments for depression (Director of Undergraduate Studies). (E)
- Douglas W. Levine, Areas of quantitative research includes power analysis, classification problems, categorical data analysis, and using re-sampling methodologies in factor analysis. (E)
- Gabriela Stein, Cultural risk and resilience in the prediction of psychopathology in ethnic minority youth and the development culturally based treatment. (E)
- Ethan Zell, Self-evaluation, social comparison, and accuracy of social perception. (E)

Assistant Professors
- Levi R. Baker, Close relationships, including relationship maintenance and problem solving; self beliefs, including self-esteem, shyness, and social anxiety.
- Suzanne Vrshek-Schallhorn, Genetic, neuroendocrine, and cognitive mechanisms of life stress on depression.
- Chris Wahlheim, Memory, metacognition, category learning, and cognitive aging.
- Blair Wisco, Cognitive biases and emotion regulation processes in emotional disorders, particularly depression and PTSD.
Graduate Programs

- Master of Arts (MA) in Psychology, General Experimental Psychology concentration, (36)
- Master of Arts/Doctor of Philosophy (MA/PhD) in Psychology, Clinical Psychology concentration, (108)
- Doctor of Philosophy (PhD) in Psychology, Cognitive Psychology, Developmental Psychology, General Experimental Psychology, or Social Psychology concentrations, (71)

The Psychology Department offers two graduate training tracks—a terminal MA in general experimental psychology and a PhD with specializations in clinical, cognitive, developmental, and social psychology. Students may apply to either or both tracks. The clinical program is fully accredited by the American Psychological Association.

At both levels, the objective is to provide the combination of a sound scholarly foundation with methodological and practical skills that will enable the student to function in a variety of academic, research, and service settings. The program has an experimental orientation, with four major areas of concentration:

- Clinical (Eddington, Keane, Mendez Smith, Nelson-Gray, Stein, Vrshek-Schallhorn, and Wisco)—includes research training and clinical training in a variety of service settings.
- Cognitive (Delaney, Guttentag, Kane, Marcovitch, Touron and Wahlheim)—includes basic research in human memory, attention, cognition, and language.
- Developmental (Boseovski, Guttentag, Johnston, Keane, Marcovitch, Touron and Wahlheim)—includes basic research in behavioral, cognitive, language, and social development in infant, child, adolescent, and adult humans and in animals.
- Social (Baker, Boseovski, Silvia, and Zell)—includes basic research in social phenomena, e.g., aggression, attitudes, communication, gender relations, intergroup comparison, and social competence.

The goal of the terminal MA is the Master of Arts degree. Those who successfully complete the terminal MA, however, may apply to the PhD program. In addition, students with master’s degrees from other institutions are welcome to apply to the PhD program. Their past work is evaluated to determine which requirements of our program have been satisfied.

The Psychology Department has additional policies and procedures that are described in the Psychology Graduate Student Handbook, which is accessible electronically at http://www.uncg.edu/psy/grad/index.html.

Psychology, MA, (36)

**General Experimental Psychology Concentration**

The terminal MA in Psychology with a concentration in general experimental psychology requires 36 semester hours—9 hours in three core courses, 11 hours of statistics and research methods, 10 hours of electives and 6 hours of thesis.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a Psychology Department Application form (which includes two brief essays), which is available at http://www.uncg.edu/psy/grad/applying.html.
Degree Requirements

Degree requirements for students in the Terminal MA program in Psychology with a concentration in general experimental psychology are identical to those for students in the MA portion of the MA/PhD program in Psychology with a Cognitive, Developmental, Social, or General Experimental concentration, with one exception: For students in the MA/PhD programs, only courses with grades of B or better may count toward the MA degree. Grades below B in courses to be counted toward the MA degree must be replaced either by re-taking the same course or by earning a grade of B or better in another course that the Department Head formally determines to be an equivalent course (upon consultation with the instructor(s) of the course in the Psychology department).

Core Courses (9)
Each student must take at least one core course from three of five core areas: only core courses in which a grade of B or better is earned will count toward the core course requirement.

- Clinical
- Cognitive
- Developmental
- Biological
- Social

PSY 704 Advanced Social Psychology (3)

Statistics and Methodology (11)
PSY 609 Statistical Methods in Psychology I (4)
PSY 610 Statistical Methods in Psychology II (4)
PSY 624 Research Methods in Psychology (3)

Additional Courses (10 hours, plus 6 hours of thesis)
In addition to 6 hours of PSY 699 Thesis, additional courses are to be selected from 600-level psychology courses or, with the permission of the Director of Graduate Study, graduate level courses in other departments.

PSY 699: Capstone Experience

Psychology, MA/PhD, (108)

Clinical Psychology Concentration
Clinical students in the MA/PhD track are required to satisfy all requirements for the MA degree in clinical psychology as part of their PhD requirement. A minimum of 57 semester hours is required for the MA component of the PhD. The PhD in Clinical Psychology requires 108 semester hours including internship hours (2 credits). All credits taken to satisfy the MA component may be applied toward the PhD requirements.

Students who receive an MA in Clinical Psychology from another institution will submit syllabi, thesis document, and other materials for review. The students will work closely with their advisor and the Director of Clinical Training to develop their doctoral plan of study. Typically, students who come to UNCG with a MA degree from another institution receive credit for 28-32 credit hours (approximately 1 year). In addition, the thesis is reviewed by a committee of three faculty, and, if viewed as comparable in scope and theoretical focus to the UNCG thesis requirement, no additional thesis work will be required.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by the Graduate School, applicants must submit a Psychology Department Application Form, which is available at http://www.uncg.edu/psy/grad/applying.html. It is important to note that the department does not accept students who seek a terminal MA degree in clinical psychology, only those seeking a PhD.
For clinical program students, course grades lower than a B cannot count toward either the MA or PhD degree; these courses must be re-taken, or substitute courses taken. Course equivalents are decided in consultation with the advisor, the student's planning committee and the Director of Clinical Training.

**MA General Core Courses (10)**

To satisfy the requirement that students must obtain foundational knowledge in the breadth of Psychology as a science, at the MA level, students must earn 10 credit hours. Nine hours are chosen from the following core courses (or their equivalents, decided in consultation with the student's planning committee):

- Cognitive
- Developmental
- Biological
- Social

PSY 704 Advanced Social Psychology (3)

In addition to the 9 credits above:

PSY 601 Historical Perspectives on Psychology as a Science (1)

**Clinical Core Courses (3)**

Satisfactory completion of the core courses above (with grades of B or better) satisfy the MA Comprehensive Examination.

**Additional Clinical Courses (18)**

- PSY 724 Ethical Responsibilities of Clinical Psychologists (3)
- MA Research Tools Courses (17)
- PSY 609 Statistical Methods in Psychology I (4)
- PSY 610 Statistical Methods in Psychology II (4)
- PSY 624 Research Methods in Psychology (3)
- PSY 699 Thesis (1-6)

*Note: PSY 699: Capstone Experience*

**MA Clinical Practicum Training (9)**

(Taken over three semesters: 1 credit in year 1; 4 credits in fall and spring of year 2)

**PhD Requirements**

In addition to the MA requirements (57 credits), students must complete the following:

**Core Courses**

1 course not taken in the MA program from among the menu of courses listed:

- PSY 704 Advanced Social Psychology (3)

**PhD Seminars (12)**

Two advanced clinical courses (6 credits):

One of these must be PSY 745 Multicultural Psychology; the other must be a Topical Seminar in Clinical Psychology (PSY 735J)

Two advanced seminars outside the clinical area, approved in advance by the student’s doctoral committee (6 credits)

One may be from another area in psychology (e.g. PSY 735D) or an approved course from another department or an approved advanced Stat/Research course.

One course MUST address research design/statistical issues.

**PhD Research Tools Courses (18 hours minimum)**

In addition to MA requirements, students must complete the following:

- PSY 751 Independent Doctoral Research (6)
- PSY 799 Doctoral Dissertation Research (12-24)

**PhD Clinical Practicum Training (18)**

In addition to the 9 hours of PSY 642 taken to satisfy the MA requirements, students must complete the following:

- PSY 642 Practicum in Clinical Intervention (10) (2 of these are concurrent with PSY 762)
- PSY 762 Advanced Practicum in Clinical Psychology (6)
- PSY 763 Internship in Clinical Psychology (2) (Taken over two semesters for clinical internship year)

**Preliminary Examination**
This examination is scheduled in consultation with the doctoral advisory committee. It should be taken during the second semester following successful defense of the MA thesis for students continuously enrolled in the program.

Psychology, PhD, (71)

**Cognitive, Developmental, Social, or General Experimental Psychology Concentration**

Entry into the PhD program requires an MA in Psychology from UNCG, or from another institution. For students continuing from the MA program at UNCG, only courses with grades of B or better may count toward the PhD degree; grades below B in courses that were counted toward the MA degree must be replaced by either re-taking the same course or by earning a grade of B or better in another course that the Psychology Director of Graduate Study or Psychology Department Head formally determines to be an equivalent course (upon consultation with the instructor(s) of the course in the Psychology Department). A minimum of 71 semester hours is required for the PhD degree.

Students who receive an MA from another institution will submit syllabi, thesis document, and other materials for review to determine the portability of their MA degree. Typically, students earn credit for the MA degree and must complete remaining PhD requirements and a minimum of 35 hours at UNCG.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by the Graduate School, applicants must submit a Psychology Department Application Form, which is available at http://www.uncg.edu/psy/grad/applying.html.

**Degree Requirements**

**Core Courses and Electives (47 hours minimum, including hours acquired in MA)**

In addition to core courses and electives taken to satisfy the MA requirements, students complete 18-30 semester hours in their area of concentration (cognitive, developmental, or social) and 18-30 hours outside their area of concentration. Of these hours, only 6 hours of independent study courses (PSY 601) can be counted; at least an additional 3 hours of research tools courses beyond the MA statistics requirements must be taken; and at least four psychology seminars (PSY 735) must be taken.

**Research (24 hours minimum, including hours acquired in MA)**

In addition to the thesis completed to satisfy the MA requirements, all students complete the following:

- PSY 751 Independent Doctoral Research (1-6)
- PSY 799 Doctoral Dissertation Research (1-24)
- PSY 624 Research Methods in Psychology (3)

**Preliminary Examination**

This examination is scheduled in consultation with the doctoral advisory committee.

**PSY – Psychology Graduate Courses**

**PSY 515 History and Systems of Psychology (3:3)**

Discussion of prescientific thinking on psychological problems, origin of systems of psychology, and ways systems are reflected in contemporary psychology.

**Prerequisite**

Graduate standing in UNCG Psychology programs, or permission of instructor

**PSY 519 Special Topics in Psychology (3:3)**

Intensive examination of current theories and research in a specific area of biopsychology, learning, development, cognition, social psychology or clinical psychology. Check with department for offerings.

**Prerequisite**

Graduate standing in UNCG Psychology programs, or permission of instructor
Notes
May be repeated for credit when topics vary.

**PSY 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**PSY 601 Graduate Problems in Psychology (1–3)**
Work individually or in small groups in psychological problems of special interest. Work may represent either a survey of a given field or an intensive investigation of a particular problem.

*Notes*
For students with a strong background in psychology; students should consult instructor before registering. Grade: Satisfactory/Unsatisfactory, S/U

**PSY 602 Seminar in Systematic Issues (3:3)**
Contemporary state of knowledge with regard to the logic and language of psychology.

**PSY 609 Statistical Methods in Psychology I (4:3:1)**
Summarizing and comparing distributions. Thorough review of statistical estimation and hypothesis testing for linear models, e.g., t-test, one-way ANOVA, multiple comparisons.

*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 610 Statistical Methods in Psychology II (4:3:1)**
Statistical estimation and hypothesis testing for linear models, e.g., ANOVA for crossed, nested, incomplete, and repeated measures designs, ANCOVA; multiple regression and correlation; general linear model.

*Prerequisite*
PSY 609, graduate standing in UNCG psychology programs, or permission of instructor

**PSY 624 Research Methods in Psychology (3:3)**
Broad-based philosophical and methodological perspectives on conducting and interpreting psychological research; considers basic, applied, and translational research, laboratory-and field-based research, and experimental, quasi-experimental, correlational, and longitudinal research designs.

*Prerequisite OR Corequisite*
PSY 609 and graduate standing in UNCG psychology programs or permission of instructor

**PSY 646 Social Bases of Personality (3:3)**
Major personality theories; social bases of individual differences. Research methodologies and specific areas of research.

**PSY 699 Thesis (1–6)**

**PSY 703 Developmental Psychology (3:3)**
Systematic survey of theories and content of developmental psychology. Developmental issues and research examined in areas including attention, memory, language, socialization, sex roles, and aggression.

*Prerequisite*
graduate standing in UNCG psychology programs, or permission of instructor

**PSY 704 Advanced Social Psychology (3:3)**
Theoretical concepts, research methodologies, and empirical findings; aggression, attitude change, attribution, and exchange theory.

*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 705 Physiology of Sensory and Behavioral Processes (3:3)**
Neural substrates of motivation, emotion, sleep, motor acts and coordination, learning, language, complex processes, and psychopathology.
*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 705L Physiological Psychology Laboratory (3:3)**
Fundamental neuroanatomy with guided dissections, experiments, demonstrations, and training in surgical and other techniques useful in understanding and executing research in physiological psychology.
*Prerequisite*
Enrollment in or completion of PSY 705

**PSY 706 Cognitive Processes (3:3)**
Human intellectual functioning including pattern recognition, attention, memory, comprehension, reasoning, and problem solving.
*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 707 Psychological Disorders in Children (3:3)**
Empirical approach to etiology, assessment, and treatment of psychological problems of children, emphasis on development factors. Not intended for students without a strong background in abnormal psychology, child development, and developmental theory.
*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 708 Psychological Disorders in Adults (3:3)**
*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**PSY 714 Behavior of Individuals in Work Organizations (3:3)**
Factors determining the behavior of individuals in work organizations including personal attributes such as motivation, attitude, personality, interest, skills, and knowledge; and organizational attributes such as formal structure, technology and work flow, leadership, role taking, and reward systems.
*Prerequisite*
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 715 Personality and Social Development (3:3)**
Integrates theory and research focusing on dimensions of typical personal-social growth across the lifespan. Importance of peer and family relations in the development of personality, social and emotional competence, prosocial behaviors, and moral reasoning.
*Cross Listed Courses*
HDF 713
*Prerequisite*
HDF 651 and HDF 652, graduate standing in UNCG psychology programs, or permission of instructor
PSY 716 Experimental Design in the Behavioral Sciences (3:3)
Development of strategy, from generation of hypotheses through data analysis and interpretation. Consideration of choice of designs and statistical procedures, including covariance and multivariate analysis.
Prerequisite
Graduate standing in UNCG psychology programs, or permission of instructor.

PSY 717 Psychological Perspectives on Language (3:3)
Traditional psychological perspectives as they relate to language phenomena. Empirical questions and findings in comprehension and memory for language. Relationship between language and thought.
Prerequisite
Graduate standing in UNCG psychology programs, or permission of instructor

PSY 718 Matrix Algebra Useful for Statistics (3:3)
Matrix manipulation and understanding the language of matrix algebra rather than formal mathematics.
Prerequisite
One basic graduate statistics course.

PSY 719 Child Language: The Psychological Perspective (3:3)
In-depth analyses of children’s language acquisition and its role in development of cognitive functioning. Methodologies, findings, and issues as they relate to more general psychological questions.
Prerequisite
Graduate standing in UNCG psychology programs, or permission of instructor

PSY 720 Behavior Theory (3:3)
Theories of behavior and learning, from 1900 to present.
Prerequisite
Graduate standing in UNCG psychology programs, or permission of instructor

PSY 721 Teaching of Psychology (3:3)
Introduction to pedagogical theories, research, styles, and strategies related to the college teaching of psychology. Considers the presentation of course material, learning assessment tools, test construction, and grading.
Prerequisite
Admission to the graduate program in psychology, or graduate standing in UNCG psychology programs, or permission of instructor

PSY 723 Theory and Methods of Psychotherapy (3:3)
Psychotherapy concepts and research from interpersonal, behavioral, humanistic, and cognitive perspectives. Supervised introductory practicum experience in therapeutic methods.
Prerequisite OR Corequisite
PSY 707, PSY 708, and graduate standing in UNCG psychology programs or permission of instructor

PSY 724 Ethical Responsibilities of Clinical Psychologists (3:3)
In-depth coverage of professional ethics as they pertain to the many different settings in which clinical psychologists often work, including clinical practice, research, teaching, consultation, and other professional activities.
Prerequisite
Admission to graduate program in clinical psychology, graduate standing in UNCG psychology programs, or permission of instructor

PSY 725 Theory and Methods of Personality Assessment (3:3)
Construction, evaluation, and interpretation of objective and projective measures of personality as used with normal and clinical groups. Laboratory practice in personality assessment and in diagnosis.

**Prerequisite OR Corequisite**
PSY 724, malpractice insurance, and graduate standing in UNCG psychology programs or permission of instructor

**PSY 726 Advanced Animal Behavior (3:3)**
Current research and theories including development and evolution of behavior, sociobiology, behavioral genetics, behavioral ecology, and the use of comparative method.

**Cross Listed Courses**
BIO 625

**Prerequisite**
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 727 Theory and Methods of Behavioral Assessment and Therapy (3:3)**
Evaluation of research and theory underlying behavioral assessment and behavior therapy. Supervised introductory experiences in the use of behavioral assessment and therapy techniques.

**Prerequisite**
PSY 724 and graduate standing in UNCG psychology programs or permission of instructor

**PSY 728 Theory and Methods of Intellectual Assessment (3:3)**
Research and theory underlying intellectual assessment. Supervised introductory experience in the use of standardized intelligence tests, including evaluation and communication of test results.

**Prerequisite**
PSY 707, PSY 708, malpractice insurance, and graduate standing in UNCG psychology programs or permission of instructor,

**PSY 729 Human Behavioral Development (3:3)**
Theory and research on the biological-behavioral analysis of pre-and postnatal development; learning and perception, including biological factors in infancy through childhood.

**Prerequisite**
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 730 Cognitive Development (3:3)**
Theory and research in relation to attention, memory, problem solving and language. Emphases on Piagetian and information-processing approaches.

**Prerequisite**
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 731 Social Bases of Personality (3:3)**
Major personality theories; social bases of individual differences. Research methodologies and specific areas of research.

**PSY 732 Experimental Analysis of Operant Behavior (3:2:3)**
Research methods used in the study of operant behavior; current status of research and theory relevant to basic processes in operant behavior.

**Prerequisite**
Graduate standing in UNCG psychology programs, or permission of instructor

**PSY 733 Sensation and Perception (3:3)**
Sensory/perceptual processes emphasizing visual and auditory systems from stimulus transduction to higher order information processing.
Prerequisite
Graduate standing in UNCG psychology programs, or permission of instructor

PSY 734 Family-Centered Interdisciplinary Practice: System of Care (3:3)
System of Care has core values/principles, infuses service planning/delivery. Students develop competencies: 1) family-centered; 2) client partnerships; 3) community services; 4) cultural competency; 5) interagency collaboration. Participatory research with families included. (Same as SWK 681)
Cross Listed Courses
SWK 681
Prerequisite
Exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, graduate standing in UNCG psychology programs, or permission of instructor

PSY 735 Contemporary Problems (3:3)
Specific course title identified each semester by subscript, e.g., Contemporary Problems: Advanced Research Methods in Developmental Psychology.
Prerequisite
600-level course in appropriate content areas
Notes
May be repeated for credit when topic varies.

PSY 742 Practicum in Clinical Intervention (1:6)
Supervised application of psychological principles to the assessment and therapeutic change of individual or group behavior, generally with clients in the UNCG Psychology Clinic. Course is taken over four semesters with 1 credit in year 1; 4 credits in each semester of year 2.
Prerequisite
PSY 724, PSY 707, PSY 708, and malpractice insurance

PSY 743 Advanced Clinical Topics in Couple and Family Counseling/Therapy (3:3)
Advanced seminar in the scientific foundations for practice of couple and family counseling/therapy.
Prerequisite
PSY 724

PSY 745 Multicultural Issues in Clinical Psychology (3:3)
Examination of psychological research, theory, and clinical practice using a multicultural perspective so as to increase awareness, knowledge, and skills involved in the development of cultural competence.
Prerequisite
Admission to graduate program in clinical psychology, graduate standing in UNCG psychology programs, or permission of instructor

PSY 751 Independent Doctoral Research (1–6)
Individual work on psychological problems of special interest culminating in an intensive, critical review of literature in a given field or scientific investigation of problem.
Notes
Before registering, student should obtain the approval of graduate faculty member who agrees to monitor and evaluate the proposed research. Grade: Satisfactory/Unsatisfactory, S/U

PSY 762 Advanced Practicum in Clinical Psychology (1–12)
Supervised application of psychological principles to the assessment and therapeutic change of individual and group behavior, generally with clients in the UNCG Psychology Clinic.
Prerequisite
PSY 642, malpractice insurance

*Notes*
Open only to clinical psychology graduate students. Grade: Satisfactory/Unsatisfactory, S/U

**PSY 763 Internship in Clinical Psychology (1:0:40)**
Application of psychological principles to the assessment and therapeutic change of individual or group behavior in an APA-accredited off-campus setting. Students are individually supervised by appropriate agency staff.

*Prerequisite*
PSY 642, PSY 762, malpractice insurance

*Notes*
Must be repeated once for credit. Open only to clinical psychology graduate students. Grade: Satisfactory/Unsatisfactory, S/U

**PSY 799 Doctoral Dissertation Research (1–24)**

**PSY 801 Thesis Extension (1–3)**

**PSY 802 Dissertation Extension (1–3)**

**PSY 803 Research Extension (1–3)**
RELIGIOUS STUDIES, DEPARTMENT OF
109 Foust Building • 336-334-5762 • rel.uncg.edu

Administration
Gregory Grieve, Department Head

Faculty

Professors
Marc Bregman, Jewish studies, Rabbinics, Biblical interpretation (Bernard Distinguished Professor of Jewish Studies). (E)
Derek Krueger, Religions of late antiquity, history of Christianity, Byzantine studies (Joe Rosenthal Excellence Professor). (E)
Eugene F. Rogers, Jr., Modern and medieval Christian thought, gender studies. (E)

Associate Professors
Gregory P. Grieve, South Asian religion with an emphasis in Himalayan traditions, digital religion (Head of Department).
Ellen D. Haskell, Jewish studies, Jewish mysticism, gender studies, Rabbinics, metaphor theory and religious imagery.
Bennett H. Ramsey, Western religious thought (ethics, philosophy of religion, theology), religion in the Americas, feminist and African-American religious thought. (E)

Assistant Professor
Alyssa Gabbay, Gender and Islam, Shi’ism, Pre-modern Sufism, Indo-Persian Culture, religious pluralism.

Graduate Programs
No graduate degree program offered; see Master of Applied Arts and Sciences.

REL – Religious Studies Graduate Courses

REL 503 Topics in Religious Studies (3:3)
Study of role, nature, and function of selected social forms of religious life through cross-cultural comparison or intensive study of one religious tradition.

Notes
May be repeated once for credit.

REL 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

REL 695 Independent Study (1–3)
Directed program of reading, research, and individual instruction.

Prerequisite
Permission of department head and instructor

REL 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
SOCIOLGY, DEPARTMENT OF
337 Graham Building • 336-334-5609 • soc.uncg.edu

Administration
David Kauzlarich, Department Head
Sarah Daynes, Director of Graduate Study

Faculty
Professors
David Kauzlarich, Criminology, criminal justice, social inequality (Department Head).
Steve Kroll-Smith, Social psychology, environment, health. (E)
Saundra D. Westervelt, Sociology of law, crime and deviance, miscarriages of justice. (E)

Associate Professors
Shelly L. Brown-Jeffy, Sociology of education, race and ethnicity, research methods.
Steven R. Cureton, Criminology and the family. (E)
Sarah Daynes, Cultural sociology, theory, ethnography (Director of Graduate Study).
Gwen Hunnicutt, Gender and crime, violence and society.
Arielle T. Kuperberg, Quantitative data analysis, family, demography, gender and work, sexuality (Director of Undergraduate Studies).
Stephen J. Sills, Globalization, international migration, visual sociology, evaluation research.

Assistant Professors
Cindy Dollar, Crime, deviance and social control, criminological theory, and gender and race-ethnic inequality.
Daniel R. Huebner, Social theory, history of the social sciences, sociology of knowledge/science.

Graduate Programs
- Post-Baccalaureate Certificate in Teaching Sociology, (18)
- Master of Arts (MA) in Sociology, Criminology optional concentration, (33)

Teaching Sociology PBC, (18)
The Sociology department offers a program of study leading to a Post-Baccalaureate Certificate in Teaching Sociology that prepares graduates for teaching sociology courses at the college level. The program combines core courses, elective courses, and a major course in teaching sociology.

Certificate requirements must be successfully completed during five academic years to earn the certificate. Courses fulfilling the certificate program may be used to meet the requirements in a degree program in accordance with the policies of The Graduate School.

Curriculum requirements:
Core Courses (12 credit)
SOC 614 Contemporary Sociological Theory (3)
SOC 616 Advanced Research Methods (3)
SOC 618 Advanced Data Analysis (3)
SOC 646 Teaching and Learning Sociological Concepts (3)

Electives (6)
selected from the following Sociology Seminars:
SOC 651 Criminology (3)
SOC 653 Social Control (3)
SOC 601 Seminar in Sociological or Criminological Analysis (3)
MA in Sociology, (33)
The MA in Sociology offers a thesis and a non-thesis option. The thesis option requires 33 semester hours, including 6 hours of thesis. The non-thesis option requires 33 semester hours, including a 6-hour internship.

The program prepares students for further study, for research and administrative positions in public or private organizations, and for teaching sociology in a variety of settings. All of the students in the program acquire a general foundation in sociology, and some elect to complete a concentration in criminology. Other special interests may be pursued in particular substantive, applied, or cognate courses and extended in the writing of a thesis or completion of an internship.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Degree Requirements
Required Core Courses (12)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SOC 593</td>
<td>Thesis Seminar (Thesis Option) (3)</td>
</tr>
<tr>
<td>SOC 599</td>
<td>Internship in Sociology (non-Thesis Option) (3)</td>
</tr>
<tr>
<td>SOC 616</td>
<td>Advanced Research Methods (3)</td>
</tr>
<tr>
<td>SOC 618</td>
<td>Advanced Data Analysis (3)</td>
</tr>
<tr>
<td>SOC 614</td>
<td>Contemporary Sociological Theory (3)</td>
</tr>
</tbody>
</table>

Area Courses (9)
Nine hours are selected from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SOC 571</td>
<td>Advanced Topics in Social Psychology (3)</td>
</tr>
<tr>
<td>SOC 636</td>
<td>Seminar in Social Inequalities: Theory and Research (3)</td>
</tr>
<tr>
<td>SOC 640</td>
<td>Cultural Sociology (3)</td>
</tr>
<tr>
<td>SOC 644</td>
<td>Sociology of Globalization (3)</td>
</tr>
</tbody>
</table>

Electives (6)
With prior approval of the advisor, a student will select 6 hours from other 500- or 600-level sociology or social science courses in other departments.

Comprehensive Examination
Successful completion of a thesis proposal or internship proposal defense satisfies the comprehensive examination requirement.

Capstone Experience

Thesis Option (6)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SOC 699</td>
<td>Thesis (1-6)</td>
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</table>

Non-thesis Option (6)

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>SOC 695</td>
<td>Internship (3-6)</td>
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</tbody>
</table>

Criminology Concentration
Required Core Courses (21)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>SOC 593</td>
<td>Thesis Seminar (Thesis Option) (3)</td>
</tr>
<tr>
<td>SOC 599</td>
<td>Internship in Sociology (non-Thesis Option) (3)</td>
</tr>
<tr>
<td>SOC 616</td>
<td>Advanced Research Methods (3)</td>
</tr>
</tbody>
</table>
SOC 618 Advanced Data Analysis (3)
SOC 651 Criminology (3)
SOC 653 Social Control (3)
SOC 601 Seminar in Sociological or Criminological Analysis (3)
SOC 614 Contemporary Sociological Theory (3)

Electives (6)
With prior approval of the advisor, a student will select 6 hours from other 500-or 600-level sociology courses or social science courses in other departments.

Comprehensive Examination
Successful completion of a thesis-proposal or internship-proposal defense satisfies the comprehensive examination requirement.

Capstone Experience
Thesis Option (6)
SOC 699 Thesis (1-6)
Non-thesis Option (6)
SOC 695 Internship (3-6)

SOC – Sociology Graduate Courses
SOC 501 Selected Topics in Sociology (3:3)
Opportunity for advanced student to study in-depth topic or issue of special interest.
Prerequisites
Permission of instructor

SOC 502 Selected Topics in Sociology (3:3)
Opportunity for advanced student to study in-depth topic or issue of special interest.
Prerequisites
Permission of instructor

SOC 522 Seminar in Population and Urban Studies (3:3)
Advanced study of population processes and urban concepts from an interdisciplinary viewpoint. Emphasis on accessing and interpreting data from the U.S. census and other sources.
Prerequisites
Permission of instructor

SOC 526 Comparative Minority Relations (3:3)
Comparative study of ethnic, class, and cultural conflict in developing and developed societies. Attention is given to the impact of ethnicity and class conflict upon societal development and change in the international setting.
Prerequisites
6 hours in sociology or permission of instructor

SOC 552 Sociology of Science and Technology (3:3)
Nature and origins of modern science; relations of science and technology; science in democratic and authoritarian societies; images of scientists; origins and recruitment of scientists; career patterns; the organizational setting.
Prerequisites
6 sh of sociology at 300 level or above or permission of instructor

SOC 553 Sociology of Occupations and Professions (3:3)
Nature and significance of work; culture perspectives on work; occupational choice; socialization into work endeavors; career patterns; control of occupations and professions; labor and leisure; relationships to community and society.
Prerequisites
3 sh of sociology or permission of instructor
SOC 555 Sociology of the Family (3:3)
Critical examination of various ways of studying family, with consideration given to methodology, statistical treatment of data, and substantive findings.
Prerequisites
SOC 301, SOC 302, SOC 335, or permission of instructor

SOC 562 Sociology of Education (3:3)
Education as a dynamic and changing social system. Internal processes and structure of educational institutions and their interdependent relations with the enviroring society.
Prerequisites
6 sh of sociology at 300 level or above or permission of instructor

SOC 571 Advanced Topics in Social Psychology (3:3)
Social impact, exchange, equity, and attribution theories intensively examined as basic in understanding specific substantive problems of reciprocal influences of groups and individuals in socio-cultural context.
Prerequisites
3 sh in sociology and 3 hours in psychology, or permission of instructor

SOC 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SOC 593 Thesis Seminar (3:3)
Overview of sociological theory, epistemological issues, and research design; leads to a written thesis proposal.
Prerequisites
Graduate standing, senior in disciplinary honors, or permission of instructor

SOC 599 Internship in Sociology (3:3)
Undergraduate students will complete at least 120 internship hours (graduate students, at least 300 hours) with a local public sector agency, and through the application of sociological concepts, will examine interpersonal, organizational, and public policy issues.
Prerequisites
Graduate standing; junior or senior standing; Sociology major; minimum 2.80 GPA; 3 letters of recommendation (at least one must be from the Sociology faculty).

SOC 601 Seminar in Sociological or Criminological Analysis (3:3)
Intensive work at an advanced level on a selected topic in sociology or criminology.
Prerequisites
SOC 618 or permission of instructor

SOC 605 Sociology of Organizations (3:3)
Organization theory and structure. Construction of organizational models.
Prerequisites
Permission of instructor

SOC 614 Contemporary Sociological Theory (3:3)
Selected major theoretical perspectives: functionalism, conflict, and alternative models.
Prerequisites
SOC 490 or permission of the instructor

SOC 615 The Logic of Social Inquiry (3:3)
Logical bases of conceptualization and theory formulation. Both sociological theory and methods of research will be considered from the perspectives of philosophies of sciences.

**SOC 616 Advanced Research Methods (3:3)**
The function of theory in research, concept formation, study design, data collection and analysis.

**SOC 617 Ethnography (3:3)**
Provides students with the tools necessary to use ethnographic methods, including practical training, epistemological and ethical issues, and the history of ethnography in sociology.

*Notes*
Graduate standing

**SOC 618 Advanced Data Analysis (3:2:2)**
Application of advanced statistical concepts and procedures in multivariate analyses of discrete and continuous data.

*Prerequisites*
SOC 302 or permission of instructor

**SOC 619 Practicum in Evaluative Research (3:1:6)**
Organizations and social action programs. Students prepare, organize, and carry out evaluative research of their own interest under the guidance of the instructor.

*Prerequisites*
Permission of the instructor and one course in statistics and research methods

**SOC 620 Seminar in Sociology (3:3)**
Fundamental theory in three substantive areas with application to specific research problems.

*Prerequisites*
12 hours of sociology at the undergraduate level

**SOC 621 Advanced Topics in Juvenile Delinquency (3:3)**
Social dimensions of juvenile delinquency; causation, prevalence, current trends. Legal processing of delinquents by police, courts, and correctional agencies, including diversion from the courts and alternatives to incarceration.

**SOC 628 Social Movements (3.3)**
Sociological approaches to social movements and social conflict emphasizing their genesis, structure, resources, and consequences for simple and complex societies.

*Prerequisites*
One course in large-scale organization or permission of instructor

**SOC 632 Advanced Study of Gender, Crime, and Deviance (3:3)**
Explore key questions in scholarly literature on gender, crime, and deviance. Primarily concerned with how gender socialization, gender roles, and institutions affect males’ and females’ offending, deviant behavior and victimization.

**SOC 636 Seminar in Social Inequalities: Theory and Research (3:3)**
Basic systems of social inequality, including social class, race, and gender. Trends in theory and research.

*Prerequisites*
Six hours of sociology at the undergraduate or graduate level.

**SOC 640 Cultural Sociology (3:3)**
Graduate seminar in cultural sociology; an exploration of cultural products and practices, the relationship between
culture and society, theories of culture, and issues pertaining to meaning, interpretation, and representation.

**SOC 643 Urban Sociology (3:3)**
Contemporary theory and research on urban social structure, conflict, and change.
*Prerequisites*
Graduate standing and background in sociology or other social or behavior science.

**SOC 644 Sociology of Globalization (3:3)**

**SOC 646 Teaching and Learning Sociological Concepts (3:3)**
Goals, methods, and evaluation in teaching and learning sociology at the college level. Students prepare course objectives and outlines, select instructional materials, and present demonstration lectures and discussions.
*Prerequisites*
Admission to graduate program in sociology

**SOC 651 Criminology (3:3)**
Critical examination of central sociological formulations of criminal behavior and victimization, and societal responses to each; integration of theories of criminal behavior with appropriate research strategies for theory advancement.
*Prerequisites*
Six hours of sociology at 300-level or permission of instructor

**SOC 653 Social Control (3:3)**
Comparative examination of societal responses to deviance. Theoretical and empirical analysis of institutions of social control.
*Prerequisites*
Six hours of sociology at 300-level or permission of instructor

**SOC 655 The Sociology of Law (3:3)**
Social influences on the legal system are analyzed. Attention given to: social organization of law; legal and extra-legal considerations; and law as a means of social control and change.

**SOC 661 Sociology of Health (3:3)**
American Health Care System. Organization, utilization, effectiveness, cost; roles of providers, consumers; the context of care and the place of government.
*Prerequisites*
SOC 101 or permission of instructor

**SOC 686 Social Aspects of Aging (3:3)**
Structural and social psychological theories of aging. Substantive topics determined by students. Focus on critical review of current research.
*Prerequisites*
3 hours in sociology or permission of instructor

**SOC 695 Internship (3-6)**
Directed practical experience in a professional setting in the student’s area of interest. Includes written paper(s) applying sociological theories and methodologies to analysis of the setting.
*Prerequisites*
21 hours in sociology at 500-level or above
**SOC 697 Special Problems in Sociology (3:3)**
Independent study or research.
*Prerequisites*
Permission of faculty member with whom students wish to work

**SOC 698 Special Problems in Sociology (3:3)**
Independent study or research.
*Prerequisites*
Permission of faculty member with whom students wish to work

**SOC 699 Thesis (1-6)**

**SOC 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**SOC 801 Thesis Extension (1-3)**

**SOC 803 Research Extension (1-3)**
WOMEN’S AND GENDER STUDIES PROGRAM
336 Curry Building • 336-334-5673 • wgs.uncg.edu

Administration
Mark Rifkin, Program Director
Elizabeth L. Keathley, Director of Graduate Study

Mission statement
The central focus of the Women’s and Gender Studies Program is to explain how gender is produced within social institutions and how these institutions affect individual lives and to analyze the mutual constitution of gender, race, ethnicity, class, sexuality, nationality, and religion. The Program addresses issues of neglect, omission, and bias in curricula while honing critical thinking skills vital to a liberal education. With the assistance of the community-based Friends of Women’s and Gender Studies, the program sponsors visiting scholars, lectures, films, and conferences devoted to the advancement of women’s and gender studies.

Faculty

Professors
Emily Edwards, Department of Media Studies
Tara Green, Department of African American and African Diaspora Studies, Linda Arnold Carlisle
Distinguished Excellence Professor in Women’s and Gender Studies
Karen Kilcup, Department of English, Elizabeth Rosenthal Excellence Professor of English
Derek Krueger, Department of Religious Studies, Joe Rosenthal Excellence Professor
Mark Rifkin, Professor, Department of English (Director of Program)
Eugene Rogers, Department of Religious Studies
Paige Hall Smith, Department of Public Health Education, Director of the Center for Women’s Health and Wellness
Amy Williamsen, Department of Languages, Literatures, and Cultures

Associate Professors
Risa Applegarth, Department of English
Silvia Bettez, Department of Educational Leadership and Cultural Foundations
Danielle Bouchard, Women’s and Gender Studies Program
Sarah Cervenak, Women’s and Gender Studies Program, African American and African Diaspora Studies Program
Ben Clarke, Department of English
Jennifer Feather, Department of English
Gwen Hunnicutt, Department of Sociology
Elizabeth L. Keathley, School of Music (Director of Graduate Study)
Lisa Levenstein, Department of History
Cybelle McFadden, Department of Languages, Literatures, and Cultures
Noelle Morissette, Department of English
Nancy Myers, Department of English
Loreen Olson, Department of Communication Studies
Susanne Rinner, Department of Languages, Literatures, and Cultures
Amy Vetter, Department of Teacher Education and Higher Education
Amy Vines, Department of English

Graduate Programs
• Post-Baccalaureate Certificate in Women’s and Gender Studies, (18)
• Accelerated BA to MA program in Women’s and Gender Studies, (36)
• MA in Women’s and Gender Studies, (36)
Post-Baccalaureate Certificate in Women’s and Gender Studies, (18)
The Post-Baccalaureate Certificate in Women’s and Gender Studies requires 18 semester hours and prepares graduates for interdisciplinary teaching; careers in nonprofit, governmental, and corporate venues; and entry into professional degree programs in such fields as law, child development, and public health. The program combines core courses, elective courses, independent study, and/or internship integrating theory and practice.

Certificate requirements must be completed during five academic years to earn the certificate. At least 9 hours of course work must be at the 600 level or above. Courses fulfilling the certificate program may be used to meet the requirements in a degree program in accordance with the policies of The Graduate School.

Curriculum requirements consist of two core courses, WGS 650 (3) and WGS 651 (3), or its equivalent, and 12 hours of electives. Students enrolled in a graduate degree program must take at least 3 hours of course work outside the degree-granting department.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants submit a statement of purpose explaining how the certificate program aligns with their personal, academic, and/or professional experience and goals. No standardized tests (GRE, MAT) are required; certificate program applicants who are also applying to a graduate program (e.g. a MA or PhD) should consult the degree granting department for admission test requirements. Certificate applicants may hold a baccalaureate degree in any field.

Certificate Requirements
Required Core Courses (6)
- WGS 650 Feminist Theory: Intersections of Gender, Race and Class (3)
- WGS 651 Feminist Research Analysis (3)

The following courses may be taken in substitution for WGS 650 with prior permission of the WGS graduate advisor (Director of Graduate Study). These courses may also serve as electives.
- CST 659 Communication and Gendered Communities (3)
- ELC 678 Feminist Theories and Education (3)
- ELC 680 Transnational and Postcolonial Feminist Perspectives (3)
- ENG 531 Feminist Theory and Women Writers (3)
- ENG 688 Women’s Rhetoric and Feminist Pedagogy (3)
- HDF 624 Feminist Theory and Research Methodologies (3)

Electives (12)
Minimum of 12 hours chosen from WGS courses or courses with WGS markers offered by other departments. Each semester the WGS program lists the WGS-approved courses offered the next semester on its website. Substitutions require prior approval by the WGS graduate advisor (Director of Graduate Study). All courses for the WGS graduate certificate must satisfy WGS learning goals. Some course that typically carry WGS markers are:
- ADS 650 Topics in African American Gender Studies (3)
- WGS 600 Independent Study (3-6)
- WGS 601 Women’s and Gender Studies Internship (3)
- CED 574a Contemporary Topics in Counseling: Counseling Women (3)
- CST 659 Communication and Gendered Communities (3)
- ELC 609 Epistemology and Education (3)
- ELC 664 Foundations of Interpretive Inquiry (3)
- ELC 698 Gender, Art, Politics, and Pedagogy (3)
The Graduate School Bulletin 2017-18

HDF 673 Cross-cultural Perspectives on Families (3)
HEA 662 Gender and Health (3)
HEA 665 Violence and Public Health (3)
HIS 530 History of Sexuality: Selected Topics (3)
HIS 551 Gender and History: Selected Topics (3)
KIN 532 Women in Sport and Physical Activity (3)
KIN 630 Sport and Society: Social Inequalities (3)
MLS 610 Culture and Ideas (3)
MLS 620 Human Nature and Society (3)
TED 555 Multicultural Education (3)
WGS 600, WGS 601, CST 659, MLS 610, MLS 620: when focus is on gender

Accelerated BA to MA program in Women’s and Gender Studies, (36)

Application and Admission
Undergraduate students at UNCG may apply for admission to the Accelerated Degree Program in Women’s and Gender Studies. A cumulative undergraduate GPA of at least 3.5, based on at least 30 credit hours earned at UNCG, is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year.

All applicants submit the Request for Accelerated Degree Program to the Graduate School as part of the application for admission to the MA program.

Standardized entrance exams (GRE or MAT) are optional for ADP students, although they may be useful in future applications for graduate fellowships.

Applications to the Women’s and Gender Studies program require the following additional items: a statement of purpose; an academic writing sample; and a resume or CV (curriculum vitae). See MA in Women’s and Gender Studies for details.

ADP Courses
The MA degree requires 36 hours of graduate-level coursework. ADP students may apply a maximum of 12 credits of graduate-level coursework toward completion of both the undergraduate and the graduate degrees, provided that they earn a grade of B (3.0) or better in each graduate course and fulfill graduate-level requirements. No more than 9 credit hours at the 500 level may be counted toward the MA degree. Please see the Graduate Bulletin for a full description of the MA degree requirements.

The following courses may be counted toward both the BA and the MA degrees. All courses leading to the completion of the MA degree must be approved by the WGS Director of Graduate Study.

Each student takes the following two courses:
  WGS 650 Feminist Theory: Intersections of Gender, Race and Class (3)
  WGS 651 Feminist Research Analysis (3)
In addition, each student may select up to two of the following courses in consultation with the Graduate Advisor:
  WGS 530 Critical Sexuality Studies and Queer Theory (3)
  CST 520 African American Identity and Culture (3)
  HIS 551 Topics in Gender and History (3)
  ENG 688 Women’s Rhetoric and Feminist Pedagogy (3)

Women’s and Gender Studies, MA, (36)
The interdisciplinary MA in Women’s and Gender Studies requires 36 credit hours and prepares graduates for professional employment and for further study. All students take the common core and capstone experience (15-
18) plus 21 or more additional hours. Course options may include a component of professional skills development to prepare students for immediate employment in non-faculty positions in education, in non-profit organizations, government, or business. Students may also develop a plan of study leading to the pursuit of doctoral degrees in women’s and gender studies or other professional degrees for employment in such diverse areas as counseling, university teaching, the arts, and business.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Students are admitted to the MA degree program on the basis of academic achievement without regard to undergraduate major. In addition to the application materials required by The Graduate School, applicants must submit a statement of purpose explaining how the WGS MA program aligns with their personal, academic, and/or professional experience and goals and an academic writing sample such as a research paper from an academic course. If applying for an assistantship or other funding, applicants must also submit an academic and professional resume or CV (curriculum vitae).

Degree Requirements

Required Core Courses (9)

- WGS 650 Feminist Theory: Intersections of Gender, Race and Class (3)
- WGS 651 Feminist Research Analysis (3)

And one of the following theory courses:

- CST 659 Communication and Gendered Communities (3)
- ELC 678 Feminist Theories and Education (3)
- ELC 680 Transnational and Postcolonial Feminist Perspectives (3)
- ENG 531 Feminist Theory and Women Writers (3)
- ENG 688 Women’s Rhetoric and Feminist Pedagogy (3)
- HDF 624 Feminist Theory and Research Methodologies (3)

Capstone Experience (6)

Students select either the thesis option or the internship option at the end of their course work.

- WGS 699 Thesis (1-6)
  or
- WGS 601 Women’s and Gender Studies Internship (3)
  and
- WGS 602 Internship Seminar (3)

Note: WGS 601 and WGS 602 must be taken in the same semester

Individualized Plan of Study (21)

Students select a minimum of 9 credit hours of course work constituting a concentrated area of study that reflects their goals and interests. The proposed plan of study must be approved by the WGS Graduate Advisor (Director of Graduate Study). These courses may be selected from those carrying a WGS marker or appropriate courses in relevant fields. In addition, students take 12 additional hours chosen from courses approved for WGS credit, or from other graduate offerings consistent with their plan of study.

Representative Courses Approved for WGS Credit

Consult advisor for additional options. Students may not double-count courses taken to fulfill requirements.

- WGS 600 Independent Study (3-6)
- WGS 601 Women’s and Gender Studies Internship (3)
- WGS 602 Internship Seminar (3)
- ADS 650 Topics in African American Gender Studies (3)
- CED 574a Contemporary Topics in Counseling: Counseling Women (3)
- CST 659 Communication and Gendered Communities (3)
- ELC 609 Epistemology and Education (3)
ELC 662  Power, Politics, and Schools (3)  
ELC 664  Foundations of Interpretive Inquiry (3)  
ELC 670  Leadership for Teaching and Learning (3)  
ELC 688  Contemporary Problems Seminar (1-3)  
ELC 700  Critical Perspectives in Education, Leadership, and Culture (3)  
ENG 531  Feminist Theory and Women Writers (3)  
ERM 604  Methods of Educational Research (3)  
HDF 624  Feminist Theory and Research Methodologies (3)  
HDF 731  Cross-cultural Perspectives on Families (3)  
HEA 662  Gender and Health (3)  
HEA 665  Violence and Public Health (3)  
HIS 530  History of Sexuality: Selected Topics (3)  
HIS 551  Gender and History: Selected Topics (3)  
KIN 532  Women in Sport and Physical Activity (3)  
KIN 630  Sport and Society: Social Inequalities (3)  
MLS 610  Culture and Ideas (3)  
MLS 620  Human Nature and Society (3)  
TED 555  Multicultural Education (3)  

Possible Additional Courses, Depending on Plan of Study (9)  
Business Administration: MBA 701, 702, 703, 704, 706, 710  
Communication Studies: CST 506, 562, 605, 630  
Dance: DCE 560, The Dancer's Body  
Educational Research Methodology: ERM 517, 604  
History: HIS 626/IAR 626 (Public History); HIS 502, 713 (African American History)  
Human Development & Family Studies: HDF 502, 658, 673  
Kinesiology: KIN 710, Sport and Feminisms  
Library and Information Studies: LIS 636, Website Production for Librarians  
Peace and Conflict Studies: PCS 600, 601, 610  
Philosophy: PHI 620, Ethics and Genetics  
Political Science: PSC 540, Nonprofit Management and Leadership  
Psychology: PSY 647, Advanced Social Psychology  
Public Health: HEA 601, 602, 603, 612, 617, 640, 645, 676  
Social Work: SWK 550, Social Services in Healthcare  
Teacher Education: TED 555, Multicultural Education  

WGS – Women’s and Gender Studies Graduate Courses  

WGS 530 Critical Sexuality Studies and Queer Theory (3:3)  
Examines sexuality as an identity and an object of knowledge in connection to race, class, and gender. Includes exploration of the history of, and new developments in, queer theory.  
Prerequisite  
WGS 350 or permission of instructor  

WGS 540 Social Entrepreneurship: Justice and a Green Environment (3:3)  
Interdisciplinary engagement of social entrepreneurship as model for change on an issue of environmental sustainability. Exploration of models that respond to social, economic, environmental, and justice issues.  
Cross Listed Courses  
Same as BUS 540, CPS 540, CST 540, ENT 540, SWK 540  
Prerequisite  
Upper-division undergraduate or graduate student status
WGS 589 Experimental Course
This number is reserved for experimental courses. Refer to the Course Schedule for current offerings.

WGS 600 Independent Study (3–6)
A research or creative project related to women’s and gender studies supervised by a WGS faculty member.
Prerequisite
At least 9 hours with a B (3.0) average or better

WGS 601 Women’s and Gender Studies Internship (3:3)
Supervised experience related to women’s and gender studies; may include teaching internship, service learning opportunity, applied research experience, or internship in organizations and agencies that work on women’s concerns or serving women in the community.
Prerequisite
For master’s students, at least 15 semester hours of graduate level course work including WGS 650 and WGS 651

WGS 602 Internship Seminar (3:3)
Prerequisite
At least 15 credit hours of graduate level course work including WGS 650 and WGS 651
Corequisite
WGS 601

WGS 650 Feminist Theory: Intersections of Gender, Race and Class (3:3)
Introduces feminist social movements across historical and global contexts. Relies on interdisciplinary lenses and epistemologies, particularly as contested identity politics intersect with other systems of power and relationships.

WGS 651 Feminist Research Analysis (3:3)
Feminist approaches to philosophical and practical inquiries: data collection, analysis, and presentation. Prepares students to critically read research to understand the place of gender in lived experiences and institutional spaces.
Prerequisite
WGS 650

WGS 699 Thesis (1–6)

WGS 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

WGS 801 Thesis Extension (1–3)

WGS 803 Research Extension (1–3)
BRYAN SCHOOL OF BUSINESS AND ECONOMICS
516 Stirling Street • 336-334-5338 • bryan.uncg.edu

About
The Bryan School is preparing you to be a new kind of leader, the exceptional problem solver that our organizations and businesses need. We want to make sure that as you expand your leadership ability, you take advantage of everything the Bryan School has developed to support and engage you too take you to the next level of success and impact. Our graduate programs have been carefully crafted to offer you a combination of cutting-edge theory and practice that will enable you to make an immediate and lasting impact where you work, live and lead.

Departments and Programs
- Accounting & Finance
- Consumer, Apparel, & Retail Studies
- Economics
- Information Systems & Supply Chain Management
- Management
- Marketing, Entrepreneurship, Hospitality & Tourism
- The UNCG MBA

Mission statement
In the Bryan School of Business & Economics, we create and disseminate knowledge about the theory and practice of business. In addition to our courses and research, we accomplish this through hands-on projects, global experiences, and outreach to the community. Our work produces principled leaders and exceptional problem solvers who have a global perspective, an innovative mindset, a broad understanding of sustainability, and a commitment to improve the organizations in which they work and the communities in which they live.

Accreditation(s)
The Bryan School is one of only 183 business schools in the world that is accredited in both business and accounting by AACSB, the premier accrediting body for business schools in the world.

Master’s Programs
- The UNCG MBA
- Master of Science in Information Technology and Management
- Master of Science in Consumer, Apparel, and Retail Studies
- Master of Arts in Applied Economics
- Bryan Prelude™

Post-graduate Certificates
- Post-Baccalaureate Certificate in Business Foundations
- Post-Baccalaureate Certificate in Global Apparel Supply Chain Management
- Graduate Certificate in Business Analytics
- Graduate Certificate in Information Assurance, Security and Privacy
- Graduate Certificate in Information Technology
- Graduate Certificate in Supply Chain, Logistics, and Transportation Management
- Post-Master’s Certificate in Information Technology

PhD Programs
- PhD in Consumer, Apparel and Retail Studies
- PhD in Economics
- PhD in Information Systems
ACCOUNTING AND FINANCE, DEPARTMENT OF
383 Bryan Building • 336-334-5647 • bryan.uncg.edu/acc

Administration
Daniel Winkler, Department Head
Amanda Cromartie, Director of Graduate Study

About
Accounting is the only discipline within business for which separate accreditation is given, and we are one of only 196 programs worldwide to have separate accounting accreditation from the AACSB. Our finance programs, like all other business programs, are not separately accredited, but are accredited under the umbrella of AACSB business accreditation, the premier accrediting agency for business programs worldwide. We work very hard to maintain the quality and continuous improvement expected from programs which have achieved AACSB business and accounting accreditation.

Mission statement
The mission of the Department of Accounting and Finance of the Joseph M. Bryan School of Business and Economics is (1) to provide high quality programs of education for accounting and finance majors at the undergraduate and graduate levels, (2) to provide high quality courses to support the UNCG and Bryan School educational missions as they relate accounting and finance to global processes, sustainable enterprise, innovation and ethical awareness, (3) to stimulate and support high quality research, scholarship, and publication, (4) to provide service, largely through committee representation to the University, the Bryan School, the Department, the academic accounting and finance communities, and the accounting profession, and (5) to foster faculty interaction with the public in ways which enhance the common good.

Accreditation(s)
AACSB business and accounting accreditation

Faculty
Professors
William O. Brown, Financial management, financial markets, investments. (E)
Venkataraman M. Iyer, Accounting information systems and auditing, behavioral and empirical issues related to audit firms and audit market. (E)
Daniel T. Winkler, Corporate finance, investments, market efficiency, financial education (Head of Department). (E)

Associate Professors
J. William Harden, Federal income taxation, multijurisdictional tax issues. (E)
Dayong Huang, Investments, asset pricing, international finance.
Ambrose Jones III, Auditing, accounting behavior, corporate social responsibility reporting, and international financial reporting standards.
Ayalew Lulseged, Auditing and financial accounting.

Lecturers
Amanda L. Cromartie, Financial accounting and reporting, financial statement analysis, auditing (Director of Graduate Study).
Melissa J. Hershberger, Corporate finance, financial analysis, market efficiency, financial education, financial evaluation.

Graduate Programs
- Accelerated BS to MS Degree Program in Accounting, (30)
- Accounting, MS (MSA), (30)
Accelerated BS to MS Degree Program in Accounting, (30)

Application and Admission
Qualified UNCG undergraduate students who are pursuing the Bachelor of Science in Accounting may apply for admission to the Accelerated Degree Program. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. The Department of Accounting and Finance also requires an Accounting GPA of 3.5 based on at least 9 hours of Accounting classes earned at UNCG. Students must have completed accounting courses through ACC 318 with a minimum grade of "B" or better. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the senior year. Applicants will not be required to take the GMAT. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the graduate degree program.

Admitted students may apply the following 3 courses of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements:

- ACC 642 Specialized Accounting Entities (3)
- ACC 655 Taxation of Corporations and Shareholders (3)
- ACC 656 Taxation of Flow-Through Business Entities (3)

Degree Requirements
Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the Master of Science in Accounting remain the same.

Accounting, MS, (30)
The MS in Accounting has a successful tradition as one of the longest running programs in graduate-level accounting education in North Carolina, and it is one of only 196 programs worldwide to have separate accounting accreditation from the Association to Advance Collegiate Schools of Business (AASCSB International). The program requires 30 semester hours of graduate coursework with a flexible structure designed to be full-time for the intensive student or part-time for the working professional. The program satisfies the 150-hour educational requirement adopted by most states, including North Carolina, for certification and licensure as a CPA. The program has a strong reputation for internships and job placement as well as an excellent record of preparing students to pass the CPA examination. An undergraduate degree in business is not required for successful completion of the program. Students with an undergraduate degree in a non-business field can complete the undergraduate prerequisite accounting courses at UNCG through this graduate program.

For full-time students, the required graduate-level accounting courses are offered primarily during the day; students with the requisite undergraduate accounting background can complete the program in one year. Part-time students complete one required graduate accounting course a semester on a weeknight; graduate elective courses are also offered on weeknights or online. Students with the requisite undergraduate accounting background can complete the program in the evening in three years. The length of time necessary to complete the program will depend on the accounting and business administration background possessed by the student as well as the course load chosen by the student.

Application and Admission
The MS in Accounting program is designed for qualified students from any academic background. Students admitted without the necessary accounting and/or business background will be required to take prerequisite courses in those areas based on the UNCG Bachelor of Science in accounting curriculum before enrolling in
graduate accounting courses. Individual prerequisite needs are assessed by the program director when admission decisions are made.

In addition to the applicant materials required by The Graduate School, applicants must submit a personal statement indicating the reasons for pursuing the MS in Accounting degree and a resume.

Applicants who earned membership in Beta Gamma Sigma as undergraduates may request a GMAT/GRE waiver. An applicant with a professional certification (e.g., CPA) in North Carolina OR an advanced degree (MA, MSc, etc. or higher) may request to waive the GMAT/GRE. For advanced degree waiver, the following criteria must be met:

- Advanced degree from at least a regionally accredited institution which required a standardized test (such as the GMAT or equivalent) as an entrance requirement; AND
- A graduate GPA of at least 3.3 out of 4.0; AND
- At least five years of relevant professional work experience; AND
- A demonstration of adequate quantitative ability in the form of a statistics or algebra course at the college-level with a grade of C or better.

For further admissions information and application deadlines, please see the Guide to Graduate Admissions.

**Degree Requirements**

**Accounting Courses (21-24)**

Students are required to take the following courses, which comprise the capstone experience (students with equivalent course work may seek a waiver of any of these required courses):

- ACC 630 Seminar in Contemporary Accounting Issues (3)
- ACC 642 Specialized Accounting Entities (3)
- ACC 655 Taxation of Corporations and Shareholders (3)
- ACC 656 Taxation of Flow-Through Business Entities (3)

and one of the following:

- ACC 631 Advanced Auditing (3)
- ACC 638 Information Systems Auditing (3)

The remaining 6 to 9 hours are selected from the following:

- ACC 561 Governmental and Nonprofit Accounting (3)
- ACC 613 Directed Studies in Accounting (1-3)
- ACC 621 Accounting Internship (3)
- ACC 631 Advanced Auditing (3)
- ACC 638 Information Systems Auditing (3)
- ACC 646 Advanced Study in Business, Environment and Concepts (1)
- ACC 647 Advanced Study in Financial Accounting and Reporting (1)
- ACC 648 Guided Study in Taxation and Business Law (1)
- ACC 649 Advanced Study in Auditing and Attestation (1)
- ACC 652 Taxation of Estates, Gifts and Trusts (3)
- ACC 688 Advanced Business Law (3)

**Electives (6 to 9)**

Students select 6 to 9 hours of graduate courses outside accounting with prior approval of the program director.

**ACC – Accounting Graduate Courses**

**ACC 561 Governmental and Nonprofit Accounting (3:3)**

This course will introduce students to accounting and financial reporting for nonprofit organizations and governmental entities.

**Prerequisite**

ACC 319, or equivalent, with a grade of C or better
ACC 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ACC 613 Directed Studies in Accounting (1–3)
Individual study of an issue or problem of interest. Student must arrange topic and course requirements with instructor prior to registration.
Prerequisite
12 sh of graduate level accounting courses or permission of instructor

ACC 621 Accounting Internship (3)
Combined academic and work components allow students to gain experience in the professional field of accounting. Course supervised by a graduate faculty member and appropriate personnel of the approved organization.
Prerequisite
Grade of C or better in ACC 318 and permission of instructor
Notes
Graded on Satisfactory- Unsatisfactory basis.

ACC 628 Accounting Information Systems (3:3)
Accounting information systems and the role of the accountant in the selection and management of accounting information systems; ethical implications.
Prerequisite
Grade of C or better in ACC 325

ACC 630 Seminar in Contemporary Accounting Issues (3:3)
Analysis, research, and presentation of current topics and issues relevant to professional accountants.
Prerequisite
Grade of B- or better in ACC 319

ACC 631 Advanced Auditing (3:3)
Ethics, reporting, law, statistics, and audit software; directed towards professional external and internal auditing.
Prerequisite
Grade of B- or better in ACC 440

ACC 638 Information Systems Auditing (3:3)
Theory and practice of information systems auditing; role of information systems auditor in systems development; computer based system controls.
Prerequisite
Grade of B- or better in ACC 440

ACC 642 Specialized Accounting Entities (3:3)
Theory and practice associated with business combinations, consolidated financial statements, partnerships, international operations, bankruptcy and other accounting topics related to specialized accounting entities.
Prerequisite
Grade of B- or better in ACC 319

ACC 645 Seminar in Financial Accounting Theory (3:3)
Normative analysis in theory development and recent transition to empirical analysis; informational and positive theory paradigms; role of regulation.
Prerequisite
Grade of C or better in ACC 319
ACC 646 Advanced Study in Business Environment and Concepts (1:1)
An in-depth study and review of the underlying reasons for, and accounting implications of, business transactions. This course is only offered online.
Prerequisite
Grade of C or better in ACC 330 and permission of Instructor or Program Director

ACC 647 Advanced Study in Financial Accounting and Reporting (1:1)
An in-depth study and review of the accounting and reporting represented on the four major financial statements. This course is only offered online.
Prerequisite
ACC 642 and Permission of Instructor or Program Director

ACC 648 Guided Study in Taxation & Business Law (1:1)
An in-depth study and review of specialized current topics in tax and business law. This course is only offered online.
Prerequisite
ACC 655 and Permission of Instructor or Program Director

ACC 649 Advanced Study in Auditing and Attestation (1:1)
This course provides an in-depth study and review of advanced specialized current topics in auditing and attestation. This course is only offered online.
Prerequisite
ACC 631 or ACC 638 and Permission of Instructor or Program Director

ACC 652 Taxation of Estates, Gifts and Trusts (3:3)
Principles and procedures involved in determining federal estate tax; tax planning using gifts and trusts.
Prerequisite
Grade of B- or better in ACC 420

ACC 655 Taxation of Corporations and Shareholders (3:3)
Federal taxation of business transactions affecting corporations and shareholders.
Prerequisite
Grade of B- or better in ACC 420

ACC 656 Taxation of Flow-Through Business Entities (3:3)
Federal taxation of business transactions affecting flow-through business entities, including partnerships, S corporations, limited liability companies and their owners.
Prerequisite
Grade of B- or better in ACC 420

ACC 688 Advanced Business Law (3:3)
Explores legal issues in contract and sales law, negotiable instruments, agency, and business associations and at the same time considers ethical and managerial issues involved when these legal issues arise.
Prerequisite
MGT 330 or permission of Program Director

ACC 699 Thesis (1–3)

ACC 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
ACC 801 Thesis Extension (1–3)

ACC 803 Research Extension (1–3)

FIN – Finance Graduate Courses

FIN 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

FIN 613 Directed Studies (3)
Individual study of problems in the field of finance. Regular conferences with instructor required.
Prerequisite
MBA 630 and permission of Director of MBA program and instructor who will supervise study

FIN 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
CONSUMER, APPAREL, AND RETAIL STUDIES, DEPARTMENT OF
210 Stone Building • 336-334-5250 • bae.uncg.edu/cars/

Administration
Nancy Hodges, Department Chair
Kittichai Watchravesringkan, Director of Graduate Study

About
The Department of Consumer, Apparel, and Retail Studies offers graduate programs leading to a Post-Baccalaureate Certificate and the Master of Science and Doctor of Philosophy degrees. Course work and research focus on primary concepts in the study of consumer, apparel, and retailing, integrating perspectives from the social sciences, business, economics, and humanities.

Graduate courses focus on consumer, apparel, and retail issues with emphasis on consumer behavior and marketing. Students are encouraged to select supporting course work in related disciplines such as business, economics, sociology, psychology, anthropology, statistics, and information science.

Faculty
Professors
Nancy Hodges, Social psychological issues of dress, identity, and consumer behavior; epistemological and methodological components of apparel consumer research; qualitative and interpretive inquiry; gender, education, and apparel industry employment (Chair of Department). (E)
Byoungho Jin, International apparel merchandising, cross-cultural consumer and retail studies, supply chain management issues in apparel industry, competitiveness of the apparel industry in global markets. (E)

Associate Professors
Melanie Carrico, Wearable arts, textile design, computer-aided apparel and textile design, digital textile printing for use in wearable art and historical reproductions, analysis of 3-D body scanning data in relation to apparel sizing systems. (E)
Jin Su, Dynamics in the global textile, apparel, fashion, and retail industries, global supply chain management and global sourcing strategies in the textile and apparel industries, brand marketing and consumer-brand relationships, sustainability, and sustainable consumption and decision making.
Kittichai Watchravesringkan, Cross-cultural consumer and retail studies (inter-country and intra-country analysis), internet retailing, marketing communications, service quality and customer satisfaction, adolescents, consumer complaint behavior, measurement issues (Director of Graduate Study). (E)

Assistant Professors
Seoha Min, Apparel design processes, cultural aspects of design, and sustainable design practices.

Graduate Programs
- Accelerated BS to MS Degree Program in Consumer, Apparel, and Retail Studies
- Post-Baccalaureate Certificate in Global Apparel Supply Chain Management, (15)
- Master of Science (MS) in Consumer, Apparel, and Retail Studies, thesis option, (30 hours minimum)
- Master of Science (MS) in Global Apparel Management, (online, non-thesis option), (30)
- Doctor of Philosophy (PhD) in Consumer, Apparel, and Retail Studies, (60)

Accelerated BS to MS Degree Program in Consumer, Apparel, and Retail Studies

Application and Admission
Qualified UNCG undergraduate students who are pursuing the Bachelor of Science in Consumer, Apparel and Retail Studies may apply for admission to the Accelerated Degree Program (ADP). A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60
semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants are not required to take the Graduate Record Examination. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the graduate degree program.

Admitted students may apply up to, but not more than, 12 credit hours of graduate-level coursework towards completion of both the undergraduate and the graduate degrees, provided that they earn a grade of B (3.0) or better in the course and fulfill graduate-level requirements.

The following courses may be counted towards both the BS and the MS degrees:
- CRS 620 Analysis of Apparel and Related Industries (3)
- RCS 560 Advanced Retail Buying and Planning (3)
- RCS 584 Advanced Retail Analysis (3)
- RCS 662 Behavior of Soft Lines Consumers (3)
- CRS 605 Research Methodology in Consumer, Apparel, and Retail Studies (3)

**Degree Requirements**
Please consult with an advisor to determine how courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the Master of Science in Consumer, Apparel and Retail Studies remain the same.

Global Apparel Supply Chain Management, PBC, (15)

**Certificate Requirements**
The online graduate certificate in Global Apparel Supply Chain Management consists of a minimum of 15 semester hours of coursework. It is intended for professionals with a bachelor’s degree from an accredited institution working in any field who are interested in gaining state-of-the-art, product-specific knowledge to address issues and problems within the global industry supply chain.

**Required Core Courses (9)**
- CRS 620 Analysis of Apparel and Related Industries (3)
- RCS 662 Behavior of Soft Lines Consumers (3)
- RCS 584 Advanced Retail Analysis (3)
  - or
- RCS 560 Advanced Retail Buying and Planning (3)

**Electives (6)**
- SCM 650 Supply Chain Management Concepts and Principles (3)
- SCM 651 Transportation, Logistics and Distribution in Supply Chain Management (3)
- SCM 652 Strategic Cost, Design, Procurement and Contracts (3)
- SCM 655 Global Supply Operations Strategy (3)

Consumer, Apparel, and Retail Studies, MS, (30)

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume and a one to two-page goals statement. Statements should clearly outline career goals, relevant work experience, and reasons for pursuing a graduate degree; address why the Consumer, Apparel and Retail Studies program is of
interest; and include specific areas of research interest related to the department's graduate program emphasis. Of the three letters of reference, one should be written by a former instructor or academic contact.

**Thesis Option**
The MS in Consumer, Apparel, and Retail Studies, thesis option, requires a minimum of 30 semester hours and focuses on research issues in consumer, apparel, and retailing. It is designed to provide students with the necessary knowledge and skills to pursue careers in academics and business.

**Required Core Courses (12)**
- RCS 662  Behavior of Soft Lines Consumers (3)
- CRS 620  Analysis of Apparel and Related Industries (3)
- CRS 630  Economic Dynamics of the Retail Complex (3)
- CRS 682  Graduate Seminar in Consumer, Apparel, and Retail Studies (3)

**Required Research Techniques (9-11)**
CRS 605  Research Methodology in Consumer, Apparel, and Retail Studies (3)
and one of the following options:
- **Option 1**
  - STA 571  Statistical Methods for Research I (3)
  - STA 572  Statistical Methods for Research II (3)
- **Option 2**
  - ERM 680  Intermediate Statistical Methods in Education (3)
  - ERM 681  Design and Analysis of Educational Experiments (3)
- **Option 3**
  - MBA 701  Quantitative Analysis for Decision Making (3)
  - ERM 681  Design and Analysis of Educational Experiments (3)

**Electives (3)**
The student will select 3 hours, as approved by the student's chair in consultation with the committee, from available CRS 600- and 700-level courses.

**Thesis (6) (Capstone Experience)**
CRS 699  Thesis (1-6)

**Thesis Advisory Committee**
The student will select a graduate advisor and two other graduate faculty members to serve as a Thesis Advisory Committee. The graduate advisor must be from the Department of Consumer, Apparel, and Retail Studies. The committee must be chosen and a program of study approved no later than the second semester enrolled in graduate courses.

**Global Apparel Management Concentration (30)**
The concentration in Global Apparel Management requires 30 semester hours of online coursework and provides state-of-the-art skills for decision making in global apparel management with a consumer focus. Additionally, the concentration requires an applied industry practicum which serves as a capstone experience.

**Required Core Courses (15)**
- CRS 620  Analysis of Apparel and Related Industries (3)
- CRS 682  Graduate Seminar in Consumer, Apparel, and Retail Studies (3)
- RCS 560  Advanced Retail Buying and Planning (3)
- RCS 584  Advanced Retail Analysis (3)
- RCS 662  Behavior of Soft Lines Consumers (3)

**Applied Research Techniques (3)**
CRS 605  Research Methodology in Consumer, Apparel, and Retail Studies (3)

**Elective Courses (6)**
- SCM 650  Supply Chain Management Concepts and Principles (3)
- SCM 651  Transportation, Logistics and Distribution in Supply Chain Management (3)
SCM 652 Strategic Cost, Design, Procurement and Contracts (3)
SCM 655 Global Supply Operations Strategy (3)
CRS 664 International Retailing: Theory and Practice (3)
CRS 570 Apparel Brand Management (3)
CRS 614 Global Luxury Products Market Analysis (3)
MBA 706 Marketing Management (3)
MBA 716 Leadership and Sustainable Business (3)

Capstone (6)
CRS 632 Supervised Industry Practicum in Consumer, Apparel, and Retail Studies (3)

Students must demonstrate a broad knowledge of the material covered in the curriculum by undertaking an approved industry practicum. A formal contract will be established between the CARS graduate program committee and each student to clearly define the scope and requirements for the project. The student will be permitted to enroll in CRS 632 once the Required Core Courses are complete.

Consumer, Apparel, and Retail Studies, PhD, (60)

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume and a one to two-page goals statement. Statements should clearly outline career goals, relevant work experience, and reason for pursuing a graduate degree; address why the Consumer, Apparel and Retail Studies program is of interest; and include specific areas of research interest related to the department’s graduate program emphasis. Of the three letters of reference, one should be written by a former instructor or academic contact.

Degree Requirements
The PhD requires minimum of 60 hours (minimum of 90 hours beyond the BS).

Required Core Courses (21)
CRS 682 Graduate Seminar in Consumer, Apparel, and Retail Studies (3)
CRS 701 Literature and Thought in Consumer, Apparel, and Retail Studies (3)
CRS 712 Theory Development in Consumer, Apparel, and Retail Studies (3)
CRS 713 Qualitative Methodology in Consumer, Apparel, and Retail Studies (3)
CRS 714 Advanced Quantitative Methods in Consumer, Apparel, and Retail Studies (3)
CRS 721 Consumer Behavior in Apparel and Retailing (3)
RCS 662 Behavior of Soft Lines Consumers (3)

Research Techniques (9)
STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)
STA 671 Multivariate Analysis (3)

Cognate Area (9)
In consultation with the student’s chair and Advisory/Dissertation Committee, the student will identify a supporting area that will enrich and expand his or her research interest. The student will take a minimum of 9 hours within this area.

Electives (3)
The student will select 3 hours, as approved by the student’s chair in consultation with the Advisory/Dissertation Committee, from available CRS 600-and 700-level courses.

Research and Dissertation (15)
CRS 790 Independent Doctoral Research (1-6)
CRS 799 Dissertation (1-12)

Teaching (3)
CRS 765 College Teaching Practicum in Consumer, Apparel, and Retail Studies (3)

Preliminary and Final Oral Examination
Advisory/Dissertation Committee
The student should consult the Advisory/Dissertation Committee section of The Graduate School Bulletin. The graduate advisor must be from the Department of Consumer, Apparel, and Retail Studies and one member must be from outside the CARS Department. The committee must be chosen no later than upon the completion of the first 18 semester hours.

CRS -Consumer Apparel Retail Studies Graduate Courses

CRS 513 Apparel and Related Consumer Products Analysis and Standards (3:3)
Process of developing and analyzing product standards as they relate to consumers, industry, and international trade. Analysis of products in relation to existing or proposed standards.
Prerequisite
Grade of C (2.0) or better in CRS 312 or graduate standing

CRS 530 Economics of the Textile and Apparel Complex (3:3)
Economics and social aspects of production, distribution, and utilization of apparel and textiles.
Prerequisite
Grade of C or better in ECO 201 or its equivalent as determined by the instructor or graduate standing

CRS 570 Apparel Brand Management (3:3)
All aspects of managing an apparel brand portfolio, including creating and positioning the brand, establishing brand equity and differentiation, and providing a brand experience for global apparel customers.
Prerequisite
CRS 321 for undergraduates; Graduate student standing

CRS 582 Problems in Consumer, Apparel, and Retail Studies (2–6)
Individual study.

CRS 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CRS 605 Research Methodology in Consumer, Apparel, and Retail Studies (3:3)
Beginning graduate course in research methodology within the domains of consumer, apparel, and retailing. Concepts, frameworks, and relationships of theory and research. Epistemological issues, types of analysis, methods.

CRS 614 Global Luxury Products Market Analysis (3:3)
Analysis of global markets for luxury apparel products. Employ information sources and techniques for market, competitor, and company analysis to support strategic marketing decisions.

CRS 615 Advanced Textiles and Experimental Methods (3:2:3)
Analysis of structure and functional performance of advanced textiles (geotextiles, biomedical, nonwovens) using experimental methods such as Kawabata Hand Evaluation System, Differential Scanning Calorimeter, Thermal Gravimetric Analysis.
Prerequisite
CRS 614, CHE 205 or CHE 351, or permission of instructor

CRS 620 Analysis of Apparel and Related Industries (3:3)
Analysis of apparel and related industries from raw materials through consumption. Examination of production and marketing of products, technological developments, and domestic and global market strategies.
CRS 630 Economic Dynamics of the Retail Complex (3:3)
Application of economic concepts to consumption behaviors in the retail industry with special emphasis on apparel and related products. Impact of history, trends, brands, and demographics explored.
Prerequisite
CRS 530 and MBA 603 or permission of instructor

CRS 632 Supervised Industry Practicum in Consumer, Apparel, and Retail Studies (3-6:0:9-18)
Supervised industry practicum combining practical and academic elements. Course supervised by DGS or designated faculty member. Six hours of this course may be taken in one semester or three hours may be taken in two consecutive semesters.
Prerequisite
Permission of Director of Graduate Study

CRS 660 International Textile Products Marketing (3:3)
International textile products marketing environment; global markets, marketing programs and organizations.
Prerequisite
CRS 560 or permission of instructor

CRS 663 Experience in Consumer, Apparel, and Retail Issues Abroad (3:3)
Cultural, political, business, and consumer issues within the apparel and retail industries of a specific country. May be repeated for credit with different country.
Prerequisite
CRS 560 or permission of instructor

CRS 664 International Retailing: Theory and Practice (3:3)
Prerequisite
CRS 484 and CRS 560 or permission of instructor

CRS 671 Issues in Apparel and Related Industries Entrepreneurship Research (3:3)
Current state of research on entrepreneurship studies in general and particularly within the apparel and related products industry.
Cross Listed Courses
ENT 671

CRS 682 Graduate Seminar in Consumer, Apparel, and Retail Studies (3:3)
Fundamentals of graduate studies in Consumer, Apparel, and Retail Studies, including guidelines for development and evaluation of research.

CRS 685 Problems in Retail and Consumer Studies (1–3)

CRS 688 Readings in Retail and Consumer Studies (1–3)

CRS 690 Minor Research (2–6)

CRS 699 Thesis (1–6)

CRS 700 Seminar in Consumer, Apparel, and Retail Studies (1:1)
Study, reporting, and discussion of current research.
Notes
May be repeated for credit when topic varies.

**CRS 701 Literature and Thought in Consumer, Apparel, and Retail Studies (3:3)**
Overview of concepts, frameworks, theory, thought, and empirical research within the domains of consumer, apparel, and retailing. Emphasis on contemporary thinking and identifying opportunities and directions for future research streams.

*Prerequisite*
Admission to PhD in consumer, apparel, and retail studies and permission of instructor

**CRS 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**CRS 712 Theory Development in Consumer, Apparel, and Retail Studies (3:3)**
Examination of business related marketing theories to consumer, apparel, and retail studies. Analysis of marketing theories, models, and conceptual frameworks. Includes business-to-business, consumer, customer relationship, and economic theories.

*Prerequisite*
CRS 630, CRS 660, CRS 662, or permission of instructor

**CRS 713 Qualitative Methodology in Consumer, Apparel, and Retail Studies (3:3)**
Exploration of development and use of qualitative research methodology in consumer, apparel, and retail studies. Focus on application of qualitative methodology to diverse research problems, data collection procedures, and analysis approaches.

**CRS 714 Advanced Quantitative Methods in Consumer, Apparel, and Retail Studies (3:3)**
Concepts, frameworks, theory, and empirical research methods and models within the consumer, apparel, and retailing domains. Emphasis on application of research methods and multivariate statistical models of consumer and retail research issues.

*Prerequisite*
STA 671 or ERM 682 or equivalent and admission to PhD in consumer, apparel, and retail studies, or permission of instructor

**CRS 720 Social Psychology of Consumption (3:3)**
Investigation of approaches to research on consumption within social psychology. Focus on the study of apparel and related consumer products.

**CRS 721 Consumer Behavior in Apparel and Retailing (3:3)**
Current theories and research in consumer behavior. Application of consumer behavior models to apparel, apparel-related products, and retailing through individualized research products.

*Prerequisite*
CRS 562 or permission of instructor

**CRS 731 Special Topics in Consumer, Apparel, and Retail Studies (3:3)**
Investigation of select topics specific to consumer, apparel, and retail studies.

*Notes*
May be repeated once for credit when topic varies.

**CRS 765 College Teaching Practicum in Consumer, Apparel, and Retail Studies (3)**
Supervised, structured experiences in planning, teaching, and evaluating a college level course. Professors provide guidance and mentoring of graduate students during the experience.
**Prerequisite**
Admission to PhD program in consumer, apparel, and retail studies and permission of instructor

**CRS 781 Directed Independent Study in Consumer, Apparel, and Retail Studies (1–6)**

**CRS 783 Problems in Apparel (1–3)**

**CRS 784 Problems in Retail Marketing (1–3)**

**CRS 786 Readings in Apparel (1–3)**

**CRS 787 Readings in Retail Marketing (1–3)**

**CRS 790 Independent Doctoral Research (1–6)**
Individual work on research problem(s) related to student’s primary area(s) of specialization. Research conducted with faculty guidance and direction. Objective: develop one or more publishable manuscript(s).

**Prerequisite**
STA 661, STA 662

**CRS 799 Dissertation (1–12)**

**Notes**
Required of all candidates for the Doctor of Philosophy degree. Credit may be divided over two or more semesters.

**CRS 801 Thesis Extension (1–3)**

**CRS 802 Dissertation Extension (1–3)**

**CRS 803 Research Extension (1–3)**

**APD - Apparel Product Design Graduate Courses**

**APD 545 Experimental Product Design (3:2:3)**
Experimentation with a variety of materials to create apparel using both traditional and innovative methods. Emphasis on design development and originality. Investigation of various specialty markets for apparel design.

**Prerequisite**
Grade of C (2.0) or better in APD 444

**RCS - Retailing and Consumer Studies Graduate Courses**

**RCS 560 Advanced Retail Buying and Planning (3:3)**
An intensive analysis of marketing principles applied to the textile products industry.

**Prerequisite**
Grade of C (2.0) or better in RCS 261, RCS 361, RCS 362, or graduate standing

**RCS 584 Advanced Retail Analysis (3:3)**
Investigation of retailing from a strategic perspective. Concepts are analyzed and integrated into applied problem-solving scenarios focused on consumer needs.

**Prerequisite**
RCS 464 for undergraduates

**RCS 662 Behavior of Soft Lines Consumers (3:3)**
Study of environmental, individual, and psychological influences on behavior of consumers in the soft lines consumption process.
ECONOMICS, DEPARTMENT OF
462 Bryan Building • 336-334-5463 • bryan.uncg.edu/econ

Administration
Jeremy W. Bray, Department Head
Dennis P. Leyden, Director of Graduate Study

About
The faculty of the Department of Economics has an established national reputation for scholarship in applied microeconomic research. The department’s graduate programs are specially focused on developing the theoretical and econometric tools required to formulate and interpret quality empirical research and the data handling and communication skills required to conduct and disseminate the outcomes of that research.

Mission statement
The Department of Economics supports the teaching, research, and service missions of the University and the Bryan School of Business and Economics. The Department’s undergraduate courses and programs prepare students for the competitive global marketplace, career and professional development, and graduate education. Its innovative graduate programs, the MA in Applied Economics and the PhD in Economics with a focus on applied microeconomics, provide students with a mastery of advanced empirical and analytical methods so they can conduct high-quality research and contribute to the knowledge base in business, government, non-profit, and research settings. The Department conducts high-quality nationally-recognized research that supports its academic programs, promotes economic understanding, and fosters economic development in the Triad and the state.

Faculty
Professors
Jeremy W. Bray, Health economics, labor economics, applied microeconomics. (Department Head). (E)
Stephen P. Holland, Natural resources and environmental economics, industrial organization. (E)
Albert N. Link, R&D, innovation and science policy, productivity analysis. (E)
John L. Neufeld, Energy economics, microeconomics, economic history. (E)
Kenneth A. Snowden, Jr., Economic history, financial economics, macroeconomics. (E)

Associate Professors
Stephen Layson, Microeconomic theory. (E)
Dennis P. Leyden, Public-and private-sector entrepreneurship, innovation, technology transfer (Director of Graduate Study). (E)
Christopher Swann, Labor economics, applied economics. (E)

Assistant Professors
Martin Andersen, Health economics, health policy, applied microeconomics.
Berrak Bahadir, Macroeconomics, open-economy macroeconomics, credit and housing, international finance.
Dora Gicheva, Labor economics, economics of education, personnel economics.
Marie Hull, Applied microeconomics, labor economics, economics of education.
Martijn van Hasselt, Econometrics.

Graduate Programs
- Accelerated BA or BS in Economics to MA in Applied Economics
- Master of Arts (MA) in Applied Economics, (30)
- Master of Arts/Doctor of Philosophy (MA/PhD) in Economics, (75)
- Doctor of Philosophy (PhD) in Economics, (60)
Accelerated BA or BS in Economics to MA in Applied Economics

Application and Admission
Qualified UNCG undergraduate students who are pursuing the B.A. or B.S. in Economics may apply for admission to the Accelerated Degree Program and the M.A. in Applied Economics program. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. At the time of the application the student should have also completed or be currently enrolled in Intermediate Microeconomics (ECO 301), Quantitative Analysis I (ECO 319), Intermediate Macroeconomics (ECO 302) and Economic and Business Statistics II (ECO 350). Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants are also required to take the Graduate Record Examination. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the M.A. program in Applied Economics.

Admitted students may apply 12 credits of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements. The graduate courses the student will take within the Accelerated Degree Program in Economics must be approved by the Director of Graduate Study, must be specified on the Request for Accelerated Degree Program, and must be chosen from among the following required courses in the M.A. in Applied Economics curriculum:

- ECO 619 Mathematical Economics (3)
- ECO 641 Microeconomics I (3)
- ECO 642 Microeconomics II (3)
- ECO 643 Econometric Methods (3)
- ECO 644 Econometric Theory (3)
- ECO 646 Macroeconomics (3)
- ECO 731 Applied Policy Methods I (3)

Degree Requirements
Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the M.A. in Applied Economics remain the same.

Applied Economics, MA, (30)
The MA in Applied Economics is designed for students who seek careers in business, finance, or government as economists, forecasters, policy analysts, economic researchers, or managers with strong quantitative skills. The program is structured to develop the theoretical, quantitative, and statistical skills that are required to perform and interpret economic analyses on a wide range of policy-oriented issues. Excellent training is also provided for students who wish to enter the PhD program at UNCG or to pursue additional graduate education at other institutions.

Course work for the 30-hour degree combines core knowledge of economic theory and econometrics, specialized applied research methods, advanced electives, and a capstone seminar focused on the development of applied empirical research skills based on the integration of microeconomic theory and econometrics.

Students pursuing the MA in Applied Economics may select one of two optional areas of concentration: data analytics and policy analysis. Course work must be approved by the Director of Graduate Study and must include certain courses as explained in the discussion of the concentrations.

Application and Admission
Admission to the program requires a completed baccalaureate degree and completion of undergraduate courses in Intermediate Microeconomics (ECO 301 at UNCG), Mathematical Economics (ECO 319 at UNCG), and Economics and Business Statistics II (ECO 350 at UNCG). Equivalent coursework in mathematics and statistics may substitute
for the latter two. For information regarding deadlines and other requirements for admission, please see the Guide to Graduate Admissions.

**Degree Requirements (30)**

**Core Knowledge Requirement (12)**
- ECO 619 Mathematical Economics (3)
- ECO 641 Microeconomics I (3)
- ECO 643 Econometric Methods (3)
- ECO 731 Applied Policy Methods (3)

**Advanced Theory Requirements (9)**
- ECO 642 Microeconomics II (3) or ECO 646 Macroeconomics (3)
- ECO 644 Econometric Theory (3)
- ECO 725 Data Methods in Economics (3)

**Electives (6)**
Six hours of electives may be earned with 600- or 700-level economics courses or with graduate courses taken outside the department. Electives not listed below must be approved by the Director of Graduate Study. Electives in economics include:
- ECO 642 Microeconomics II (3)
- ECO 646 Macroeconomics (3)
- ECO 663 Predictive Data Mining (3)
- ECO 664 Time Series and Forecasting (3)
- ECO 734 Public Policies Toward innovation and Sustainability (3)
- ECO 735 Labor Economics (3)
- ECO 736 Public Economics (3)
- ECO 737 Health Economics (3)
- ECO 738 Topics in Economics (3)
- ECO 741 Advanced Mathematical Economics (3)
- ECO 742 Advanced Microeconomic Theory (3)
- ECO 745 Advanced Econometric Theory (3)

**Research Seminar (3) (Capstone Experience)**
- ECO 721 Empirical Microeconomics (3)

**Comprehensive Examinations**
As a requirement for graduation, each student must successfully complete two comprehensive examinations—one in economic theory and one in econometrics. Both examinations are administered during the first two weeks of the spring semester. Students must pass each with a minimum grade of B-(2.7). Students who do not pass either or both examination(s) may retake the examination(s) one time.

**Data Analytics Concentration (30)**
The Data Analytics concentration combines the MA core knowledge, advanced theory, research seminar, and comprehensive examination requirements with courses emphasizing the combination of skills, technologies, applications, and processes used by organizations to perform advanced data analysis.

**Core Knowledge Requirement (12)**
- ECO 619 Mathematical Economics (3)
- ECO 641 Microeconomics I (3)
- ECO 643 Econometric Methods (3)
- ECO 731 Applied Policy Methods (3)

**Advanced Theory Requirements (9)**
- ECO 644 Econometric Theory (3)
- ECO 646 Macroeconomics (3)
- ECO 725 Data Methods in Economics (3)
Electives (6)
ECO 663 Predictive Data Mining (3) or ECO 664 Time Series and Forecasting (3)
A graduate economics course or other graduate level course chosen in consultation with the Director of Graduate Study

Research Seminar (3) (Capstone Experience)
ECO 721 Empirical Microeconomics (3)

Comprehensive Examinations
As a requirement for graduation, each student must successfully complete two comprehensive examinations—one in economic theory and one in econometrics. Both examinations are administered during the first two weeks of the spring semester. Students must pass each with a minimum grade of B-(2.7). Students who do not pass either or both examination(s) may retake the examination(s) one time.

Policy Analysis Concentration (30)
The Policy Analysis Concentration combines the MA core knowledge, advanced theory, research seminar, and comprehensive examination requirements with courses emphasizing policy evaluations skills and knowledge.

Core Knowledge Requirement (12)
ECO 619 Mathematical Economics (3)
ECO 641 Microeconomics I (3)
ECO 643 Econometric Methods (3)
ECO 731 Applied Policy Methods (3)

Advanced Theory Requirements (9)
ECO 642 Microeconomics II (3)
ECO 644 Econometric Theory (3)
ECO 725 Data Methods in Economics (3)

Electives (6)
ECO 734 Public Policies Toward Innovation and Sustainability (3)
and one of the following economics field courses:
ECO 735 Labor Economics (3)
ECO 736 Public Economics (3)
ECO 737 Health Economics (3)
ECO 738 Topics in Economics (3) (topics vary)

Research Seminar (Capstone Experience) (3)
ECO 721 Empirical Microeconomics (3)

Comprehensive Examinations
As a requirement for graduation, each student must successfully complete two comprehensive examinations—one in economic theory and one in econometrics. Both examinations are administered during the first two weeks of the spring semester. Students must pass each with a minimum grade of B-(2.7). Students who do not pass either or both examination(s) may retake the examination(s) one time.

Economics, MA/PhD, (75)
The MA/PhD program is offered to superior applicants who have completed a baccalaureate degree and who seek careers in academic departments that focus on public policy and applied microeconomics, in nonacademic research organizations, in business and financial institutions, and in agencies of federal, state and local governments. The program is structured to develop the theoretical, quantitative, and statistical skills that are required to perform and interpret economic analyses on a wide range of policy-oriented issues. Our MA/PhD program is specifically designed to train students in the fields of labor, health, and public economics (including the economics of education, science and technology policy, urban economics, and resource and environmental economics).
The MA/PhD requires 75 semester hours and results in students earning both an MA and a PhD.

**Application and Admission**

Admission to the program requires a completed baccalaureate degree and completion of undergraduate courses in Intermediate Microeconomics (ECO 301 at UNCG), Intermediate Macroeconomics (ECO 302 at UNCG), Mathematical Economics (ECO 319 at UNCG), and Economics and Business Statistics II (ECO 350 at UNCG). Equivalent coursework in mathematics and statistics may substitute for the latter two. For information regarding deadlines and other requirements for admission, please see the Guide to Graduate Admissions.

**Degree Requirements (75)**

**Economic Theory and Mathematical Economics Requirements (18)**
- ECO 619 Mathematical Economics (3)
- ECO 641 Microeconomics I (3)
- ECO 642 Microeconomics II (3)
- ECO 646 Macroeconomics (3)
- ECO 741 Advanced Mathematical Economics (3)
- ECO 742 Advanced Microeconomic Theory (3)

**Applied Research Methods (9)**
- ECO 721 Empirical Microeconomics (3)
- ECO 725 Data Methods in Economics (3)
- ECO 731 Applied Policy Methods (3)

**Econometrics Requirements (12)**
- ECO 643 Econometric Methods (3)
- ECO 644 Econometric Theory (3)
- ECO 745 Advanced Econometric Theory (3)
- ECO 746 Advanced Econometric Theory II (3)

**Empirical Field Courses (9)**

Students must complete at least 9 hours chosen from the following:
- ECO 735 Labor Economics (3)
- ECO 736 Public Economics (3)
- ECO 737 Health Economics (3)
- ECO 738 Topics in Economics (3)
- ECO 739 Independent Field Course (1-4)

**Research Seminar (3) (Capstone Experience)**
- ECO 734 Public Policies Toward innovation and Sustainability (3)

**Supervised Independent Field Research (12)**
- ECO 797 Seminar in Empirical Economics (6)
- ECO 798 Seminar in Economic Research (6)

**Comprehensive Examinations**

In addition to course requirements, students must pass two MA comprehensive examinations (one in economic theory and one in econometrics) and two PhD comprehensive examinations (one in economic theory and one in econometrics). Students must pass each MA comprehensive examination with a minimum grade of B-(2.7). Students who do not pass one or more (MA or PhD) examination(s) may retake the examination(s) one time.

**Dissertation Research (12)**

Before registering for dissertation credit (ECO 799), PhD students must pass a written and oral preliminary examination administered by their dissertation committee before being admitted to candidacy for the doctoral degree. The preliminary examination is coordinated by the student’s dissertation committee chair and administered after the student has completed the required independent field research courses. After being admitted to candidacy for the doctoral degree, the candidate must prepare and present a dissertation that
reflects an independent investigation of an economic topic that is acceptable in form and content to the student’s advisory/dissertation committee and The Graduate School.

Economics, PhD, (60)
The PhD in Economics is offered to superior applicants who hold a master’s degree in economics and seek careers in academic departments that focus on public policy and applied microeconomics, in nonacademic research organizations, in business and financial institutions, and in agencies of federal, state and local governments. The program is structured to develop the theoretical, quantitative, and statistical skills that are required to perform and interpret economic analyses on a wide range of policy-oriented issues. Our doctoral program is specifically designed to train students in the fields of labor, health, and public economics (including the economics of education, science and technology policy, urban economics, and resource and environmental economics).

The degree requires a minimum of 60 semester hours.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Admission to the PhD program requires a completed master’s degree in economics. Students who enter the program with a master’s degree in economics from another institution may be required to take additional courses if their prior degree does not adequately cover the required material in the core requirements of the UNCG MA in Applied Economics program. Students interested in earning a PhD in economics who do not have a master’s degree in economics or who have a master’s degree in economics that is significantly different from the UNCG MA in Applied Economics program should apply to the combined MA/PhD in Economics.

**Degree Requirements**

**Economic Theory and Econometric Theory (15)**
- ECO 642 Microeconomics II (3)
- ECO 741 Advanced Mathematical Economics (3)
- ECO 742 Advanced Microeconomic Theory (3)
- ECO 745 Advanced Econometric Theory (3)
- ECO 746 Advanced Econometric Theory II (3)

**Applied Research Methods (9)**
- ECO 721 Empirical Microeconomics (3)
- ECO 725 Data Methods in Economics (3)
- ECO 731 Applied Policy Methods (3)

**Empirical Field Courses (12)**
Students must complete at least 12 hours from the following courses, which may be repeated for credit:
- ECO 734 Public Policies Toward Innovation and Sustainability (3)
- ECO 735 Labor Economics (3)
- ECO 736 Public Economics (3)
- ECO 737 Health Economics (3)
- ECO 738 Topics in Economics (3)
- ECO 739 Independent Field Course (1-4)

**Supervised Independent Field Research (12)**
- ECO 797 Seminar in Empirical Economics (3-6)
- ECO 798 Seminar in Economic Research (3-6)

**Comprehensive Examinations**
In addition to course requirements, students must pass two PhD comprehensive examinations (one in economic theory and one in econometrics). Students who do not pass either or both examination(s) make retake the examinations(s) one time.

Dissertation Research (12)
Before registering for dissertation credit (ECO 799), PhD students must pass a written and oral preliminary examination administered by their dissertation committee before being admitted to candidacy for the doctoral degree. The preliminary examination is coordinated by the student’s dissertation committee chair and administered after the student has completed the required independent field research courses. After being admitted to candidacy for the doctoral degree, the candidate must prepare and present a dissertation that reflects an independent investigation of an economic topic that is acceptable in form and content to the student’s advisory/dissertation committee and The Graduate School.

ECO – Economics Graduate Courses

ECO 513 Directed Studies in Economics I (1–3)
Individual study of economic problems of special interest to the student. Regular conferences with instructor required.
Prerequisite
21hrs of economics and permission of instructor

ECO 518 American Economic History (3:3)
Evolution of the American economy with emphasis on economic performance through time measured against goals of full employment, price stability, and rapid growth. Course taught as Writing Intensive (WI) and Speaking Intensive (SI).
Cross Listed Courses
Same as HIS 518
Prerequisite
ECO 201

ECO 523 Topics in Public Policy (3:3)
Examination of market failure, public goods, economic efficiency, and income incidence, allocative effects, and public policy.
Prerequisite
ECO 301
Notes
Taught as Writing Intensive and Speaking Intensive

ECO 555 History of Economic Thought (3:3)
Main currents in evolution of economic thought with emphasis on classical and neoclassical schools and developments in economic ideas during twentieth century.
Prerequisite
ECO 202
Notes
Course taught as Writing Intensive (WI) and Speaking Intensive (SI)

ECO 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ECO 613 Directed Studies in Economics II (1–3)
Individual study of an advanced topic in economics. Regular conferences with the instructor are required.
Prerequisite
Graduate admission and permission of the Director of Graduate Study in economics and the professor who will supervise the study

**ECO 619 Mathematical Economics (3:3)**
Reviews statistics and probability, matrix algebra and optimization and introduces theory and applications in integral calculus and differential equations.
*Prerequisite*
ECO 301, ECO 319 or equivalent

**ECO 641 Microeconomics I (3:3)**
Theory of consumer and firm behavior under certainty and uncertainty including exchange, production, income distribution, market structure and welfare economics.
*Prerequisite*
ECO 301, ECO 619, or permission of instructor

**ECO 642 Microeconomics II (3:3)**
Examination of market failures that can occur within competitive, decentralized market systems. Topics include market power, uncertainty, asymmetric information, externalities, and public goods.
*Prerequisite*
ECO 641 or permission of instructor

**ECO 643 Econometric Methods (3:3)**
Introduction to advanced econometric applications. Topics may include seemingly unrelated regressions, simultaneous equations, identification, two-stage least squares, and sample selection models. Application to economic data using statistical software emphasized.
*Prerequisite*
ECO 351, ECO 619, or permission of instructor

**ECO 644 Econometric Theory (3:3)**
Foundations of mathematical statistics and linear econometric models. Topics include discrete and continuous probability distributions, random sampling and asymptotic analysis, the linear regression model, hypothesis testing, and statistical programming and simulation using SAS or other statistical software.
*Prerequisite*
ECO 643 or permission of instructor

**ECO 646 Macroeconomics (3:3)**
Advanced theory of aggregate economic activity. Economic models developed to explain economic growth, activity, and fluctuations based on classical, Keynesian, monetarist, and new classical schools of thought.
*Prerequisite*
ECO 619, ECO 641, or permission of instructor

**ECO 652 Advanced Economic and Business Statistics I (1.5–3)**
Topics will include regression analysis, analysis of variance, and nonparametric tests. SAS is employed.
*Prerequisite*
MBA 600, MBA 610, or permission of instructor

**ECO 663 Predictive Data Mining 3:3**
Provides a working knowledge of statistical tools important to the emerging and practically relevant field of predictive data mining and the discovery of patterns in big data sets.
*Prerequisite*
ECO 643 and ECO 644 or permission of instructor
ECO 664 Time Series and Forecasting 3:3
Students learn to analyze and forecast time series data. Topics include stochastic linear difference equations, tests for trends and stationarity, and ARIMA modeling. Application to economic data emphasized.
Prerequisite
ECO 643, ECO 644, or permission of instructor

ECO 691 Economics Internship (1–3)
Individual course of study consisting of an applied economics and/or data analysis component and written work that complements the program’s academic work. Supervised by faculty and an appropriate manager.
Prerequisite
Permission of the Director of Graduate Study
Notes
May be repeated. Maximum of 3 credit hours may apply toward the MA degree. This course cannot be applied toward the PhD degree.

ECO 694 Literature Review Seminar (2:2)
Students present their proposed research project, write a literature review, and present their on-going research.
Prerequisite
ECO 644, ECO 646, or permission of instructor

ECO 695 Seminar and Research in Economics II (4:4)
Supervised independent research culminating in the completion of an economic research paper or project.
Prerequisite
Permission of Director of Graduate Study
Notes
Grade: Satisfactory/Unsatisfactory, S/U

ECO 699 Thesis (1–6)

ECO 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ECO 712 Directed Studies in Economics III (1-3)
Individual study of an advanced topic in economics. Regular conferences with the instructor are required.
Prerequisite
Permission of Director of Graduate Study
Notes
May be repeated for credit.

ECO 721 Empirical Microeconomics 3:3
Examines empirical investigations of advanced microeconomic theory including experimental and nonexperimental designs and natural experiments. Applications vary by semester but are typically drawn from labor, health, public and financial economics.
Prerequisite
ECO 641, ECO 643, ECO 644, or permission of instructor
Notes
May be repeated for credit.

ECO 725 Data Methods in Economics (3:3)
Advanced techniques in data preparation; topics include data formats, error checking, merging data, large data sets, and missing observations. Students work extensively with SAS.

**Prerequisite**
ECO 643 or permission of instructor.

**ECO 726 Data Project in Economics (3:3)**
A supervised empirical project. Students identify research questions, develop empirical models and assemble data, test models and their predictions, and present results and interpretations orally and in writing.

**Corequisite**
ECO 725 or permission of instructor

**ECO 731 Applied Policy Methods (3:3)**
Provides applied foundation for policy study with emphasis on an economic efficiency perspective including history of policy analysis, market and government failure, and alternative methods for policy analysis.

**Prerequisite/Corequisite**
ECO 641 or permission of instructor.

**ECO 732 Appraising Economics (2:2)**
Examines historical and methodological issues in applied economics research. Topics include the limitations of theoretical and empirical analysis, the question of progress in economics, and alternative approaches to economic analysis.

**Prerequisite**
ECO 642 and ECO 644 or permission of instructor

**Notes**
May be repeated for credit when topic varies.

**ECO 733 Special Topics in Applied Public Policy (2:2)**
Application of economic theory and policy evaluation tools to a specific public policy issue.

**Prerequisite**
ECO 731 or permission of instructor

**Notes**
May be repeated for credit when topic varies.

**ECO 734 Public Policies Toward innovation and Sustainability (3:3)**
Examines public-sector innovation and sustainability policies from a domestic and global perspective.

**Prerequisite**
ECO 731 or permission of instructor

**ECO 735 Labor Economics 3:3**
Examines the operation of the labor market, its institutions, and labor market policies. Topics include labor supply and demand, returns to education, family and household economics, wage inequality, and unions.

**Prerequisite**
ECO 641 and ECO 642, or permission of instructor

**Notes**
May be repeated for credit.

**ECO 736 Public Economics 3:3**
Examines governmental expenditures and taxes and the constraints imposed on them within a federal, multi-tiered governmental structure. Topics include education, public health, housing and community development, infrastructure, and environmental regulation. May be repeated for credit.

**Prerequisite**
ECO 641 and ECO 642, or permission of instructor

**Notes**
May be repeated for credit.

**ECO 737 Health Economics 3:3**
Examines the market for health services and the production of health. Topics include the demand and supply for health care professionals, health insurance and financing, and regulation of medical markets.
*Prerequisite*
ECO 641 and ECO 642, or permission of instructor
*Notes*
May be repeated for credit.

**ECO 738 Topics in Economics 3:3**
Application of economic theory and econometrics to a specific topic in public, labor, or health.
*Prerequisite*
ECO 641 and ECO 643 or permission of instructor
*Notes*
May be repeated for credit.

**ECO 739 Independent Field Course (1–4)**
A faculty-directed, independent study of a research area that is particularly related to a student’s primary field of interest.
*Prerequisite*
ECO 641, ECO 642, and permission of Director of Graduate Study
*Notes*
May be repeated for credit. May serve as one required major field course.

**ECO 741 Advanced Mathematical Economics (3:3)**
Mathematical concepts and techniques that are used in advanced economic theory. Material includes sets and functions, constrained and unconstrained programming, and difference and differential equations.
*Prerequisite*
ECO 619, ECO 641, or permission of instructor

**ECO 742 Advanced Microeconomic Theory (3:3)**
Examines decision making by households and firms with an emphasis on the meaning and empirical interpretation of theoretical models. Topics include duality theory, general equilibrium, and welfare economics.
*Prerequisite/Corequisite*
ECO 741 or permission of instructor

**ECO 743 Advanced Microeconomic Theory II (3:3)**
Examines decision making under uncertainty and in strategic environments, covering probability and risk, expected utility, a brief discussion of complete information games, and more intensively, incomplete information games.
*Prerequisite*
ECO 742 or permission of instructor

**ECO 745 Advanced Econometric Theory (3:3)**
 Presents fundamental concepts in statistics and least squares estimation and inference within single-equation linear models, instrumental variable approaches, and multivariate regression contexts. Concludes with introduction to nonlinear regression. Includes lab.
*Prerequisite/Corequisite*
ECO 741 or permission of instructor

**ECO 746 Advanced Econometric Theory II (3:3)**

*Prerequisite*
ECO 745 or permission of instructor

**ECO 754 Applied Theory I: Game Theory (2:2)**
Examines decision making under uncertainty and in strategic environments, covering probability and risk, expected utility, complete information games, and, more intensively, dynamic games and games of incomplete information.

*Prerequisite*
ECO 742 or permission of instructor

**ECO 755 Applied Theory II: Economics of Information (2:2)**
An examination of adverse selection and moral hazard in labor, insurance, and credit markets. Students learn the impact of information imperfections on individual choice, equilibrium, welfare, and regulation.

*Prerequisite*
ECO 742 or permission of instructor

**ECO 756 Applied Theory III: Intertemporal Economics (2:2)**
Examines concepts and tools required to build and understand dynamic economic models; theory is applied to topics including job search, human capital formation, savings decisions, and related policy issues.

*Prerequisite*
ECO 742 or permission of instructor

**ECO 757 Applied Theory IV: Public Goods (2:2)**
Analysis of public goods, non-market decision-making, and the implications for public policy. Emphasis on constraints imposed by such decision-making on policy and evaluation of policies under alternative normative criteria.

*Prerequisite*
ECO 742 or permission of instructor

**ECO 758 Applied Theory V: Directed Study (2:2)**
A faculty-directed, independent study of applied theory for a topic particularly related to a student’s primary field of interest.

*Prerequisite*
ECO 742 and permission of Director of Graduate Study

*Notes*
May replace ECO 755, ECO 756, or ECO 757.

**ECO 761 Advanced Econometrics I (2:2)**

*Prerequisite*
ECO 745 or permission of instructor

**ECO 762 Advanced Econometrics II (2:2)**
Advanced methods in microeconometric analysis. Covers linear models for panel data with unobserved heterogeneity, count data, and duration analysis.

*Prerequisite*
ECO 745 or permission of instructor
ECO 763 Applied Econometrics (1–4)
Advanced methods in microeconometric policy evaluation. Issues include sample attrition, stratified sampling, and weighting procedures. Applications include estimating treatment effects, dealing with self-selection, and using duration analysis. Includes lab. May be repeated for credit.
Prerequisite
ECO 745 or permission of instructor
Notes
May be repeated for credit.

ECO 797 Seminar in Empirical Economics (3–6)
A supervised seminar in which students formulate a major empirical research project and identify, collect, and assemble the data required to pursue that research.
Prerequisite
Permission of Director of Graduate Study
Notes
May be repeated for credit.

ECO 798 Seminar in Economic Research (3–6)
A supervised research seminar in which students complete an extensive review of the literature in their chosen area of research specialization.
Prerequisite
Permission of Director of Graduate Study
Notes
May be repeated for credit.

ECO 799 Dissertation (1–12)

ECO 801 Thesis Extension (1–3)

ECO 802 Dissertation Extension (1–3)

ECO 803 Research Extension (1–3)
INFORMATION SYSTEMS AND SUPPLY CHAIN MANAGEMENT, DEPARTMENT OF
479 Bryan Building • 336-334-5666 • bryan.uncg.edu/isscm/

Administration
Gurpreet Dhillon, Department Head

Faculty

Professors
Gurpreet Dhillon, Cyber security, technology planning, decision making (Department Head). (E)
Kwasi Amoako-Gyampah, Management of advanced technology, systems implementation, supply chain management, global manufacturing practices, manufacturing strategy. (E)
Vidyaranya B. Gargeya, Global operations strategy, supply chain management, total quality management and continuous improvement systems, service operations management, performance measurement, customer relationship management. (E)
Prashant C. Palvia, Global information technology management, electronic commerce, IT in healthcare, security and privacy, technology diffusion. (E)

Associate Professors
Hamid R. Nemati, Data flow management, strategic use of information technologies, decision support, knowledge management, information privacy. (E)
Al Farooq N. Salam, Electronic commerce, enterprise resource planning, telecommunications, systems analysis and design, e-business models and implementation, emerging technologies, semantic e-business, ontology and e-business processes. (E)
Rahul Singh, Intelligent systems, semantic e-business, systems development, data communications and computer networks, electronic commerce, security and privacy. (E)
Larry R. Taube, Material and logistics planning and control, just-in-time implementations, total quality management, supply chain management. (E)
Xia Zhao, Digital advertising, social media and social networks, business analytics, electronic commerce, information security and IT governance. (E)

Assistant Professor
Indika Dissanayake, Crowdsourcing, social media and social networks, virtual communities.
Nikhil Mehta, IS project management, digital transformation of businesses, strategic IT outsourcing partnerships, knowledge management.
Aaron Ratcliffe, Healthcare operations management, service operations management, retail operations, sustainable operations, humanitarian operations, operations strategy, queueing theory.

Graduate Programs
- Accelerated BS to MS Degree Program in Information Technology and Management
- Post-Baccalaureate Certificate in Business Analytics, (12-15)
- Post-Baccalaureate Certificate in Information Assurance, Security, and Privacy, (12-15)
- Post-Baccalaureate Certificate in Information Technology, (12-15)
- Post-Baccalaureate Certificate in Supply Chain, Logistics, and Transportation Management, (12-15)
- Master of Science (MS) in Information Technology and Management, (30-36) (Online and Face-to-Face)-Face-to-Face with Business Analytics concentration
- Online Post-Master’s Certificate in Information Technology, (12-15)
- Doctor of Philosophy (PhD) in Information Systems, (71)
- Doctoral Minor in Information Systems, (12)

Accelerated BS to MS Degree Program in Information Technology and Management

Application and Admission
Qualified UNCG undergraduate students who are pursuing the B.S. in Information Systems and Supply Chain Management may apply for admission to the Accelerated Degree Program and the M.S. in Information Technology and Management. A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants will not be required to take the GRE or GMAT entrance exam. All applicants must submit the Request for Accelerated Degree Program to the Graduate School and must simultaneously apply for admission to the M.S. in Information Technology and Management.

Admitted students may apply the following (a maximum of 12) credits of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of "B" (3.0) or better in the course and fulfill graduate-level requirements of the M.S. in Information Technology and Management:

- ISM 671 Data Management (3)
- ISM 672 Web Programming (3)
- ISM 673 Telecommunication and Network (3)
- ISM 674 Systems Analysis and Design (3)
- SCM 650 Supply Chain Management Concepts (3)
- SCM 651 Transportation, Logistics & Distribution Management (3)

*Note: Only four of the above six courses will be specified on a student’s ADP application after consultation with the Director of Graduate Study.*

**Degree Requirements**

Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the M.S. degree in Information Technology and Management remain the same.

**Business Analytics, PBC, (12-15)**

The Department of Information Systems and Supply Chain Management offers an online Post-Baccalaureate Certificate in Business Analytics. The certificate program consists of a minimum of 12 semester hours but may not exceed 15 semester hours. It delivers state-of-the-art knowledge and skills in models, methods, tools, and techniques in Business Analytics.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

**Certificate Requirements**

**Electives (3)**
- ECO 643 Econometric Methods (3)
- CSC 671 Advanced Database Systems (3)
- CSC 676 Topics in Database Systems (3)
- LIS 643 Metadata (3)

**Required Courses (12)**
- ISM 671 Data Management (3)
- ISM 675 Models and Methods in Business Analytics (3)
- ISM 685 Business Analytics for Competitive Advantage (3)
- ISM 688 Projects in Business Analytics (3)

**Information Assurance, Security, and Privacy, PBC, (12-15)**

The online Post-Baccalaureate Certificate in Information Assurance, Security, and Privacy consists of a minimum of 12 semester hours but may not exceed 15 semester hours. It is intended for professionals with a bachelor’s degree
in any field from an accredited institution who are interested in gaining state-of-the-art knowledge and skills in the application of information security and privacy to solve organizational problems. The program offers an innovative and relevant educational opportunity that reflects the changing information security and privacy environment of the 21st Century by incorporating the latest thinking and best practices in the field with a solid foundation in theory and proven principles. Additionally, the program provides knowledge and skills on all aspects of information security and privacy technologies, tools, methodologies, and management.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

**Certificate Requirements**

**Required Courses (9)**
- ISM 671 Data Management (3)
- ISM 673 Telecommunications and Distributed Networks (3)
- ISM 676 Information Security and Privacy (3)

**Electives (3-6)**
Select from the following or other approved courses:
- ISM 675 Models and Methods in Business Analytics (3)
- ISM 685 Business Analytics for Competitive Advantage (3)

Information Technology, PBC, (12-15)
The online Post-Baccalaureate Certificate in Information Technology consists of a minimum of 12 semester hours but may not exceed 15 semester hours. It is intended for professionals who have a bachelor’s degree in any field from an accredited institution and are interested in gaining state-of-the-art knowledge and skills in the application of information technology to solve organizational problems.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

**Certificate Requirements**

**Required Courses (9)**
- ISM 671 Data Management (3)
- ISM 672/ENT 672 Web Programming (3)
- ISM 673 Telecommunications and Distributed Networks (3)

**Electives (3-6)**
Select from the following or other approved courses:
- ISM 675 Models and Methods in Business Analytics (3)
- ISM 685 Business Analytics for Competitive Advantage (3)

Supply Chain, Logistics, and Transportation Management, PBC, (12-15)
The online Post-Baccalaureate Certificate in Supply Chain, Logistics, and Transportation Management consists of a minimum of 12 semester hours but may not exceed 15 semester hours. It provides state-of-the-art knowledge and skills in the operation and management of supply chain and logistics systems and the use of various technologies to improve the performance of these business systems.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
Certificate Requirements

Required Courses (9)
- SCM 650  Supply Chain Management Concepts and Principles (3)
- SCM 651  Transportation, Logistics and Distribution in Supply Chain Management (3)
- SCM 652  Strategic Cost, Design, Procurement and Contracts (3)

Electives (3-6)
Select from the following or other approved courses:
- SCM 655  Global Supply Operations Strategy (3)
- SCM 678  Project Management (3)
- SCM 680  Independent Study in Supply Chain Management (3)
- SCM 681  Supply Chain Management Internship (3)
- SCM 682  Executive Mentorship in Supply Chain Management (3)

Information Technology and Management, MS, (30-36)
The MS in Information Technology and Management (MSITM) program focuses on both information technology and the management of information technology resources. The program combines technological and managerial components to train graduates who can deal effectively with the variety and complexity of issues involved in applying information technology successfully within organizations. The MSITM program seeks to extend both the knowledge of students and their ability to effectively utilize their knowledge in a collaborative work environment.

The curriculum is designed to be flexible and dynamic and provides state-of-the-art exposure to both information technology and management practices. The program places an emphasis on problem solving activities, multifunctional group decision making, and communication skills. In addition to technology and business studies, all students will be required to demonstrate acceptable competence in communication and presentation skills, interpersonal skills, teamwork skills, and problem-solving capabilities.

Students in the MSITM program can opt for a concentration in Business Analytics (BA) with a specific focus on gaining state-of-the-art knowledge and skills in models, methods, tools, and techniques in BA. Depending on the business and information technology background the student possesses, the length of the program will vary. A student can complete the program in 18 to 24 months, depending on the individual student’s background and course load.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
In addition to the application materials required by The Graduate School, applicants are encouraged to submit a resume and a personal statement. GMAT or GRE scores are required. Applicants should consult the ISSCM Graduate Program Director for specific admission requirements.

An applicant with a terminal/professional degree such as MD, JD, Ed.D, PhD, and DBA may request to waive the GMAT/GRE requirement if the applicant has:
- A minimum GPA of 3.0 for these graduate degrees.

An applicant with a Master’s Degree may request to waive the GMAT/GRE requirement if the applicant has:
- A master’s degree from at least a regionally accredited institution which required a standardized test (such as the GRE or equivalent), as an entrance requirement; AND
- A graduate GPA of at least 3.3 out of 4.0; AND
- At least five years of relevant IT work experience; AND
- A demonstration of adequate quantitative ability in the form of a statistics or algebra course at the college-level with a grade of C or better.
Applicants whose application meets the minimum requirements may be interviewed by the admissions subcommittee.

The MSITM program is open to students with diverse undergraduate degrees.

**Degree Requirements**
Depending on business background the student possesses, the length of the program will be 30-36 semester hours. Thesis and project options are offered.

**Basic Business Knowledge (0-6)**
Foundation level courses in financial accounting and operations management will be required for students who do not have an adequate business background. These courses may be waived for students who have completed equivalent academic course work and who can meet specific learning objectives. Applicants should consult with the ISSCM Graduate Program Director for course waiver information.

**Core courses (12)**
- ISM 671 Data Management (3)
- ISM 674 Systems Analysis and Design (3)
- ISM 677 Information Systems Management (3)
- ISM 678 Project Management (3)

**Applied courses (9)**
- ISM 672 Web Programming (3)
- ISM 673 Telecommunications and Distributed Networks (3)
- ISM 676 Information Security and Privacy (3)

**Thesis/Non-thesis options (9)**
Option A: Thesis (9)
- ISM 699 Thesis (6)
- Elective 1 course (3)

Option B: Non-thesis (9)
- ISM 698 Capstone project (3)

**Electives 6 hours**
- ISM 698 Project in Information Technology (3)
- ISM 699 Thesis (1-6)

**Electives**
Electives can come from the following graduate level courses or other approved courses in consultation with the ISSCM Graduate Program Director.
- ISM 675 Models and Methods in Business Analytics (3)
- ISM 685 Business Analytics for Competitive Advantage (3)
- ISM 696 Organizational Internship (1-3)
- STA 671 Multivariate Analysis (3)
- ELC 665 Approaches to Qualitative Inquiry (3)
- MBA 701 Quantitative Analysis for Decision Making (3)
- MBA 702 Financial and Managerial Accounting (3)
- MBA 703 Economic Policies and Impact on Global Outcomes (3)
- MBA 706 Marketing Management (3)

All MBA courses are face-to-face, on-campus courses.

Required total hours remain at 30 hours

**Business Analytics Concentration**

**Core courses (12)**
- ISM 671 Data Management (3)
- ISM 674 Systems Analysis and Design (3)
ISM 677  Information Systems Management (3)  
ISM 678  Project Management (3)  

**BA Focus Area Required (9)**  
ISM 672/ENT 672  Web Programming (3)  
ISM 675  Models and Methods in Business Analytics (3)  
ISM 685  Business Analytics for Competitive Advantage (3)  

**Thesis/non-thesis options (9)**  
Option A: Thesis (9)  
ISM 699  Thesis (6)  
Elective 1 course (3)  
Option B: Non-thesis (9)  
ISM 688  Projects in Business Analytics (3)  

**Electives 6 hours**  
ISM 699  Thesis (1-6)  
ISM 688  Projects in Business Analytics (3)  

**Electives**  
Electives can come from the following graduate level courses or other approved courses in consultation with the ISSCM Graduate Program Director.  
ISM 673  Telecommunications and Distributed Networks (3)  
ISM 676  Information Security and Privacy (3)  
ISM 696  Organizational Internship (1-3)  
STA 671  Multivariate Analysis (3)  
ELC 665  Approaches to Qualitative Inquiry (3)  
MBA 701  Quantitative Analysis for Decision Making (3)  
MBA 702  Financial and Managerial Accounting (3)  
MBA 703  Economic Policies and Impact on Global Outcomes (3)  
MBA 706  Marketing Management (3)  

All MBA courses are face-to-face, on-campus courses.  
Required total hours remain at 30 hours  
The MSITM program (along with Business Analytics concentration) will be delivered in two distinct modes: face-to-face and online.  

Information Technology, PMC, (12-15)  
The purpose of the online 12-hour Post-Master’s Certificate in Information Technology is to provide professionals who already have an MBA degree (or a master’s degree in a related field) with state-of-the-art knowledge and skills in the application of information technology to the solution of organizational problems.  

**Application and Admission**  
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.  

Applicants to the Post-Master’s Certificate program are required to have an MBA or related master’s degree.  

**Certificate Requirements**  
**Required Courses (12)**  
Based on the student’s background, 12 hours from the following courses will be recommended by the program director.  
ISM 671  Data Management (3)  
ISM 672  Web Programming (3)  
ISM 673  Telecommunications and Distributed Networks (3)  
ISM 674  Systems Analysis and Design (3)
ISM 675  Models and Methods in Business Analytics (3)
ISM 676  Information Security and Privacy (3)
SCM 650  Supply Chain Management Concepts and Principles (3)
SCM 651  Transportation, Logistics and Distribution in Supply Chain Management (3)

Information Systems, PhD, (71)
The PhD in Information Systems requires 71 semester hours and is an innovative research degree program designed to prepare professionals and research scholars of the highest quality for careers in academic IS units and other organizations. The program enhances the traditional PhD program with four distinctive elements: commitment to practical relevance, emphasis on producing quality teachers, research apprenticeship, and interdisciplinary research. An emphasis on global information technology is available to interested students. The program is primarily for full-time students and is available to students with master’s degrees in appropriate areas such as business, computer science, public administration, engineering, or the social sciences.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a one-page personal statement and a resume. Applicants should consult the PhD Program Director for specific admission requirements.

Students without a master’s degree in business will need to take additional courses to establish an understanding of business processes.

Degree Requirements
Leveling Courses/Prerequisites
To be taken as needed to remedy deficiencies, in consultation with the PhD Program Director.
ISM 671  Data Management (3)
ISM 672  Web Programming (3)
ISM 673  Telecommunications and Distributed Networks (3)
ISM 674  Systems Analysis and Design (3)
ISM 677  Information Systems Management (3)

Students with no business background must take at least three of the four courses, in consultation with the PhD Program Director.
MBA 702  Financial and Managerial Accounting (3)
MBA 706  Marketing Management (3)
MBA 708  Operations for Competitive Advantage (3)

Major (29)
Core Courses (18)
Students are required to take ISM 785, ISM 785, ISM 788 and any three courses from ISM 753, ISM 754, ISM 755, and ISM 766.
ISM 753  Seminar in IS Planning, Management, and Global Issues (3)
ISM 754  Seminar in Inter-Organizational Systems (3)
ISM 755  Seminar in Current and Emerging Information Technologies (3)
ISM 756  Seminar in Information Systems Behavioral Topics (3)
ISM 785  Theories of Information Systems (3)
ISM 786  Introduction to Research and Frameworks in Information Systems (3)
ISM 788  Seminar in IS Research Methods (3)

IS Teaching Education (4-7)
Courses chosen in consultation with the PhD Program Director.
IS Research Seminars (7-8)
A minimum of 7 hours taken throughout the program.

Supporting Area (9)
Courses chosen in consultation with the PhD Program Director.

Research Methodology (15)
Courses chosen in consultation with the PhD Program Director. Possible courses include:
- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
- STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)
- STA 671 Multivariate Analysis (3)
- ERM 731 Structural Equation Modeling in Education (3)
- ELC 665 Approaches to Qualitative Inquiry (3)

Organizational Research Internship
Required of students lacking relevant work experience, as determined by the PhD Program Director.

Research Apprenticeship
Two papers must be submitted for publication in conference proceedings or journals prior to taking written comprehensive examinations.

Comprehensive Written Examination
Upon completion of the required course work and research apprenticeship, the student will be eligible to sit for written comprehensive examinations. The major examination will have two parts: the first part will be composed of IS content from various courses and existing literature; the second part will be designed to evaluate the research readiness of the student. Typically, the major examination is given in the fall semester. If the student fails at the first attempt, a second attempt may be allowed by the PhD Program Director.

Oral Examination
Following the successful completion of the written comprehensive examination, the student will be given an oral examination by the doctoral Advisory/Dissertation Committee. Upon successful completion of the oral examination, the student may apply for doctoral candidacy.

Proposal Defense
Following the oral examination, the student will prepare a dissertation proposal that will be defended before the doctoral Advisory/Dissertation Committee. The defense may be attended by others outside the committee.

Dissertation (18-24)
A minimum of 18 hours credit will be devoted to research that culminates in the preparation of the required doctoral dissertation.

Information Systems, Doctoral Minor, (12)
Requirements
The doctoral minor in information systems requires 12 semester hours taken from the following course options.
- ISM 671 Data Management (3)
- ISM 672 Web Programming (3)
- ISM 673 Telecommunications and Distributed Networks (3)
- ISM 674 Systems Analysis and Design (3)
- ISM 677 Information Systems Management (3)
Program Director's permission is required for taking 700 level courses.

ISM -Information Systems and Supply Chain Management Graduate Courses
ISM 512 Open Source Software and Applications (3:3)
Study of open source systems (OSS), the concept and state of the art OSS applications; experience with the installation, administration, development, and deployment of OSS in organizations.
Prerequisite
ISM 240 or equivalent
ISM 515 Object-Oriented Programming (3:3)
Provides a foundation in Object-Oriented (OO) concepts and programming for students who wish to learn how to develop applications in a contemporary OO programming language.
Prerequisite
ISM 240 or equivalent

ISM 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ISM 600 Desktop Data Management Tools (1.5:1.5)
Computer hardware, software and micro processing applications including the internet, word processing, spreadsheets, databases, and web page design. Emphasis on effective collaboration and file sharing techniques.
Prerequisite
Admission to a Bryan School graduate program

ISM 613 Directed Studies (1–3)
Individual study problems in the field. Regular conferences with instructor required.
Prerequisite
Permission of MSITM Program Director and instructor who will supervise study

ISM 616 Object-Oriented Programming (3:3)
Provides a foundation in object-oriented concepts and programming course for students who wish to learn how to develop applications in Java.
Prerequisite
ISM 672 or permission of MSITM Program Director

ISM 659 Seminar in Management Information Systems (3:3)
The relationships of information systems planning to overall business goals, policies, management and industry conditions with an overview of strategies and techniques of structured analysis and design.

ISM 671 Data Management (3:3)
Fundamental concepts of database management systems, including database design, implementation, and the use of the SQL query language.

ISM 672 Web Programming (3:3)
Apply fundamental programming concepts in designing and implementing applications for the web. Foundations for developing web applications.
Cross Listed Courses
ENT 672

ISM 673 Telecommunications and Distributed Networks (3:3)
Technology related to internal and external network/telecommunication services. Managerial and business issues related to the identification, acquisition, and management of network/telecommunications services in the contemporary enterprise.

ISM 674 Systems Analysis and Design (3:3)
Study of systems analysis and structure methodologies to create conceptual blue prints of systems and their processes using systems design principles. Covers principles of software engineering, testing, and software quality.

ISM 675 Models and Methods in Business Analytics (3:3)
The interactive process of analyzing and exploring enterprise data to find valuable insights that can be exploited for competitive advantage. Business Analytics models and methods are discussed.

**ISM 676 Information Security and Privacy (3:3)**
Study of the technical, managerial, and organization issues in systems security, including systems security models, analysis of business process and technology for systems security, and information assurance.  
*Prerequisite*  
ISM 673 or permission of MSITM program director; admission to a UNCG graduate program

**ISM 677 Information Systems Management (3:3)**
Examines the role of information technology to improve processes and business performance. Analyze the interaction of business strategies, work processes, competitive markets, technology and people for effective IT management.

**ISM 678 Project Management (3:3)**
Modern methods of defining, planning, and executing large IT and other projects. Computer software and network modeling are used to support the efficient scheduling of interdependent activities.  
*Prerequisite*  
Admission to MSITM program or MBA 701

**ISM 679 Special Topics in Information Systems (3:3)**
Special topics in information systems, technology, and management.  
*Notes*  
May be repeated for credit when topic varies.

**ISM 680 Healthcare Information Technology Management (3:3)**
Introduction to management competencies for computer technology related to healthcare data and the tools and techniques for collecting, storing, retrieving, and reporting healthcare data.

**ISM 681 Healthcare Decision Making for IT Managers (3:3)**
Learning and applying qualitative and quantitative techniques for decision-making related to health information technology. Methods for implementing HIT decisions using evidence-based materials covered.

**ISM 685 Business Analytics for Competitive Advantage (3:3)**
Data is viewed as a strategic organizational asset to gain and sustain competitive advantage. Capabilities and infrastructure needed to achieve this along with recent advances in Business Analytics are discussed.

**ISM 688 Projects in Business Analytics (3:1:6)**
A capstone experience in which the students demonstrate a broad knowledge of Business Analytics by undertaking hands-on projects with realistic data.

**ISM 695 Special Topics in IT (1.5:1.5)**
Specific course title identified each time the course is offered. Selected topics will address contemporary issues in information technology and its management.  
*Prerequisite*  
Admission to MSITM degree program and permission of MSITM Program Director  
*Notes*  
Course may be repeated for credit when topic varies.

**ISM 696 Organizational Internship (1–3:1–3)**
Academic and required work components allow students to gain organization experience. Course supervised by a designated graduate faculty member and an organization manager.

**Prerequisite**
Permission of MSITM Program Director

**Notes**
May be repeated for credit.

**ISM 698 Project in Information Technology (3:3)**
Capstone experience in which the student demonstrates a broad knowledge of the material covered in the MSITM curricula by undertaking a project approved in consultation with the MSITM Program Director.

**Prerequisite**
Completion of at least 18 hours of required course for MSITM

**ISM 699 Thesis (1–6)**
An independent, theory-based inquiry in which a student applied knowledge and skills acquired to the scholarly study of information technology and management.

**ISM 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**ISM 753 Seminar in IS Planning, Management, and Global Issues (3:3)**
Research issues in IS planning management, and global information technology management. Topics includes strategy formulation, tactics, process integration, business alignment, global environment, outsourcing, transborder dataflows, and cultural issues.

**Prerequisite**
ISM 677 or permission of PhD Director

**ISM 754 Seminar in Inter-Organizational Systems (3:3)**
Current research issues on organizational processes and inter-organizational linkages that are transformed by the emergence of general information technology and Internet based applications.

**Prerequisite**
ISM 677 or permission of PhD Director

**ISM 755 Seminar in Current and Emerging Information Technologies (3:3)**
Research related to current and emerging information technologies in organizations. Topics include communications and network technologies, service-oriented architecture, workflow systems, semantic web technologies and virtual world environments.

**Prerequisite**
ISM 677 or permission of PhD Director

**ISM 756 Seminar in Information Systems Behavioral Topics (3:3)**
Issues in design, development, use and impact of information systems from a behavioral perspective. Topics include ethical, privacy, societal, decision support, user interface, system usability and training aspects.

**Prerequisite**
Permission of PhD Director

**ISM 782 Practicum in IS Teaching (1–3)**
Supervised teaching of an information systems (IS) course. Faculty mentor will guide in planning and delivery.

**Prerequisite**
Permission of PhD Director

**Notes**
Course may be repeated for credit. Grade: Satisfactory/Unsatisfactory, S/U

**ISM 783 Organizational Research Internship (3–6)**
Organizational work and research in information systems in actual organization. Expose student to practical and relevant research problems. Supervised by designated faculty member and organization manager.
*Prerequisite*
Permission of PhD Director
*Notes*
May be repeated for credit.

**ISM 785 Theories of Information Systems (3:3)**
Examines underlying theories in information systems research. Theories from organizational behavior, strategic management, economics, other disciplines inside and outside business, and IS will be discussed.
*Prerequisite*
Permission of PhD Director

**ISM 786 Introduction to Research and Frameworks in Information Systems (3:3)**
Provides an in-depth understanding of the research process. Topics include: IS frameworks and research methodologies, models, development, and evaluation.
*Prerequisite*
Permission of PhD Director
*Notes*
Grade: Satisfactory/Unsatisfactory, S/U

**ISM 787 Research Development in Information Systems (3:3)**
Variety of field experiences in a community setting.
*Prerequisite*
ISM 786 or permission of PhD Director

**ISM 788 Seminar in IS Research Methods (3:3)**
Research process and various design elements for quantitative and qualitative research in information systems.
*Prerequisite*
STA 661, STA 662, and permission of PhD Director

**ISM 789 Research Seminar in Information Systems (1–3)**
Explores current and emerging research topics in information systems.
*Prerequisite*
ISM 786 or permission of PhD Director
*Notes*
May be repeated for credit.

**ISM 790 Independent Doctoral Research (1–6)**
Individual work on research issues related to the student’s primary area(s) of specialization. Work may consist of original research and/or critical examination and integration of existing literature.
*Prerequisite*
Permission of PhD Director

**ISM 799 Dissertation (1–24)**
*Prerequisite*
Admission to candidacy
ISM 801 Thesis Extension (1–3)

ISM 802 Dissertation Extension (1–3)

ISM 803 Research Extension (1–3)

SCM - Supply Chain Management Graduate Courses
SCM 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SCM 650 Supply Chain Management Concepts and Principles (3:3)
Presentation of core knowledge related to supply chain management. Provides insight into the complex, cross-functional elements of demand and supply planning and execution in a global environment.
Prerequisite
Admission to the graduate certificate program or MBA, MSA, MSITM, or ISOM certificate programs or permission of instructor

SCM 651 Transportation, Logistics and Distribution in Supply Chain Management (3:3:0)
Focus on contemporary management practices, sustainability metrics and technology applications within transportation, logistics and distribution center operations as part of the global supply chain.
Prerequisite
Admission to the graduate certificate program or MBA, MSA, MSITM, or ISSCM certificate programs or permission of instructor

SCM 652 Strategic Cost, Design, Procurement and Contracts (3:3)
Overview of strategic cost management and procurement in the supply chain; tactics in effective management of the procurement process and total cost of ownership; management of total supply chain costs.
Prerequisite
Admission to the graduate certificate program or MBA, MSA, MSITM, or ISSCM certificate programs or permission of instructor

SCM 655 Global Supply Operations Strategy (3:3)
Presentation of strategies, resources and information system requirements to plan, procure, create and deliver products globally. Emphasis on the complex interactions and need for collaboration between inter-film processes.
Prerequisite
Admission to the graduate certificate program or MBA, MSA, MSITM, or ISSCM certificate programs or permission of instructor

SCM 678 Project Management (3:3)
Modern methods of defining, planning and executing large scale projects. Computer software and network modeling are used to support the efficient scheduling of interdependent activities.
Prerequisite
Admission to the graduate certificate program or MBA, MSA, MSITM, or ISSCM certificate programs or permission of instructor

SCM 680 Independent Study in Supply Chain Management (3:3)
Explore in-depth contemporary issues of relevance and interest to the student under the guidance of a faculty member.
Prerequisite
Admission to the graduate certificate in Supply Chain, Logistics and Transportation Management (SCLTM)
SCM 681 Supply Chain Management Internship (3:0:3–9)
Elective course designed to provide students the opportunity to apply skills learned in the classroom in real-world environments. Course will be supervised by faculty and manager of the approved organization.
Prerequisite
Admission to the graduate certificate in Supply Chain, Logistics and Transportation Management (SCLTM)

SCM 682 Executive Mentorship in Supply Chain Management (3:0:3–9)
Students in the experimental learning course interact with instructor and mentor to gain in-depth knowledge related to supply chains, logistics and transportation. The mentor is an executive within the industry.
Prerequisite
Admission to the graduate certificate in Supply Chain, Logistics and Transportation Management (SCLTM)
Notes
May be repeated for a maximum of 6 credits.

SCM 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
MANAGEMENT, DEPARTMENT OF
366 Bryan Building • 336-334-5691 • bryan.uncg.edu/mgt/

Administration
Moses Acquaah, Department Head

Faculty

Professors
Moses Acquaah, Strategic management, international management and family business in emerging economies, with emphases on social capital/networking, competitive and corporate strategy, human factor development, and corporate reputation management (Head of Department). (E)
McRae C. Banks, II, Public policy, administration, entrepreneurship, strategy (Dean).
E. Holly Buttner, Diversity issues in organizations, the impact of organizational diversity climate on employee outcomes, issues of under-represented groups in entrepreneurial ventures and small business. (E)
Nir Kshetri, Globalization of modern information technologies, marketing of high-tech products.
William L. Tullar, Employee selection, knowledge management, human resource information systems security, organizational misbehavior. (E)

Associate Professors
Riikka Sarala, International management, mergers and acquisitions, knowledge management, organizational culture.

Assistant Professors
Yonghong “Tracy” Liu, Leadership, interpersonal relationships in teams, cross-cultural management, research methods.
Vladislav Maksimov, Strategic management, management of competing strategies, international strategy, international management, strategy in emerging economies, small business strategy, corporate social responsibility.
Vasyl Taras, International management/business, human resources/organizational behavior, quantitative research methods.

Graduate Programs
No graduate programs are offered; however, related programs include the Master of Business Administration.

MGT – Management Graduate Courses

MGT 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MGT 613 Directed Studies (3)
Individual study of problems in the field of management. Regular conferences with instructor required.
Prerequisite
12 semester hours of MBA course work and permission of Director of MBA program and instructor who will supervise study

MGT 670 Entrepreneurial Management (3:3)
How entrepreneurial managers discover and take advantage of innovative opportunities. The entrepreneurial process, starting new ventures, and developing entrepreneurship in large corporations.
Prerequisite
MBA 604, MBA 620
MARKETING, ENTREPRENEURSHIP, AND HOSPITALITY & TOURISM MANAGEMENT, DEPARTMENT OF
441 Bryan Building • 336-334-3797• bryan.uncg.edu/meht/

Administration
James Boles, Department Head

Graduate Programs
No graduate programs are offered; however, there are graduate courses offered by this department.

ENT – Entrepreneurship Graduate Courses

ENT 502 Urban Planning (3:3)
Fundamental concepts and techniques of urban planning as it relates to enhancing overall quality of life with a primary focus on land use patterns, the environment, business and entrepreneurship.
Cross Listed Courses
GEO-502

ENT 516 Entrepreneurship in Clinical Settings (3:3)
Designed to teach students how to effectively build and implement a successful business model for the design and delivery of clinical practices or related services.

ENT 530 Researching Opportunities in Entrepreneurship and Economic Development (3:3)
Students will learn how to conduct research necessary to make informed decisions for an entrepreneurial venture and measure and assess economic development opportunities. No business research experience necessary.
Cross Listed Courses
GEO 530, LIS 530, MKT 530

ENT 535 Entrepreneurship and Independent Press Publishing (3:3)
Exploration, analysis, and participation in independent press publishing from inception to final product while practicing the entrepreneurial strategies needed to begin a successful venture.
Cross Listed Courses
Same as ENG 535
Prerequisite
Permission of instructor
Offered
Spring

ENT 540 Social Entrepreneurship: Justice and a Green Environment (3:3)
Interdisciplinary engagement of social entrepreneurship as model for change on an issue of environmental sustainability. Exploration of models that respond to social, economic, environmental, and justice issues.
Cross Listed Courses
Same as BUS 540, CPS 540, CST 540, SWK 540, WGS 540
Prerequisite
Upper-division undergraduate or graduate student status

ENT 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ENT 605 Entrepreneurial Family Business (3:3)
Explores and analyzes in detail the management, ownership, family/business leadership skills, succession, and governance practices found in entrepreneurial family-owned and family-controlled businesses.
Cross Listed Courses
BUS 605

**ENT 606 International Entrepreneurship (3:3)**
Issues related to starting, joining, or holding stakes in international ventures, the creation and management of business ventures that have international dimensions, economic and formal/informal institutions affecting entrepreneurship.

*Cross Listed Courses*
BUS 606

**ENT 607 Entrepreneurship: Venture Opportunities and Plan (3:3)**
Knowledge and skills to evaluate ideas to determine if they are potential opportunities by developing a feasibility analysis, culminating in a venture plan to launch and grow a new business.

*Cross Listed Courses*
BUS 607

**ENT 608 Corporate Entrepreneurship (3:3)**
Examination of the challenges and opportunities for employees and organizations in creating and maintaining an entrepreneurial culture. Students consult with local for profit or non-profit organizations to perform an entrepreneurial audit.

*Cross Listed Courses*
BUS 608

**ENT 609 Franchising (3:3)**
Develop knowledge and skills needed to succeed as a franchisee, franchisor, or franchise executive, including understanding the Franchise Disclosure Document and the role of entrepreneurship in franchising.

*Cross Listed Courses*
BUS 609

**ENT 611A Silver Industries (1.5:1.5)**
Comprehensive overview of the gerontological trends and associated business consequences that characterize an aging society. Case illustrations highlighted.

*Cross Listed Courses*
GRO 611A

**ENT 615 Entrepreneurship for the Sciences (3:3)**
Develop knowledge and skills in entrepreneurship to identify and evaluate science and technology ideas in chemistry and the life sciences as opportunities to take through the feasibility and business plan.

*Cross Listed Courses*
CHE 615

**ENT 661 Entrepreneurial Career Development in Music (3:3)**
Focus on the entrepreneurship knowledge, skills, and career development to enable students to become the architect of his/her future.

*Cross Listed Courses*
MUS 661

**ENT 671 Issues in Apparel and Related Industries Entrepreneurship Research (3:3)**
Current state of research on entrepreneurship studies in general and particularly within the apparel and related products industry.

*Cross Listed Courses*
CRS 671

**ENT 672 Web Programming (3:3)**
Apply fundamental programming concepts in designing and implementing applications for the web. Foundations for developing web applications.
*Cross Listed Courses*
ISM 672

**ENT 677 Entrepreneurship Opportunities in Healthy Aging (3:3)**
Examination of entrepreneurship opportunities related to the aging population, with specific attention to products and services that extend the healthy lifespan. Includes development of Business Opportunity Analysis.
*Cross Listed Courses*
GRO 677, KIN 677

**ENT 701 Promoting and Protecting Health through Entrepreneurship (3:3)**
Introduction to Federal Small Business Research grant mechanisms for entrepreneurial research. Preparation of a grant proposal for submission to NIH, CDC, or Department of Education.
*Cross Listed Courses*
HEA 701

**ENT 711 Experimental Course**
This number reserved for experimental courses. Refer to Course Schedule for current offerings.

**ENT 803 Research Extension (1–3)**

*Marketing Graduate Courses*

**MKT 530 Researching Opportunities in Entrepreneurship and Economic Development**
Students will learn how to conduct research necessary to make informed decisions for an entrepreneurial venture and measure and assess economic development opportunities. No business research experience necessary.
*Prerequisites*
Junior, senior, or graduate standing
*Cross Listed Courses*
Same as ENT 530, GEO 530, LIS 530.
THE BRYAN MBA PROGRAM
301 Bryan Building • 336-334-5390 • www.mba.uncg.edu

Administration
William Brown, Associate Dean, Director of Graduate Study
Tuisha Fernandes Stack, Administrative Director

About
The MBA is a professional program built on a strategic management theme. The curriculum emphasizes an interdisciplinary approach to decision making in a changing global environment in which globalization and sustainability are changing the way all organizations function. Students in the full-time program complete the 45 semester hours of course work in the sequence specified below over a 21-month period. The part-time program requires 42 hours of course work and may take up to five years to complete depending on the number of credit hours taken each semester. Concentrations in finance, information technology, business analytics, marketing, and supply chain management are offered both to full-time and part-time students.

Faculty
The MBA program is a school wide program composed of all graduate faculty members. Members of the MBA Program Committee are:

Moses Acquaah, Corporate strategy, competitive strategy, family business entrepreneurship in emerging economics, global strategic alliances, transfer, diffusion and management of innovation (Department of Management).

William Brown, Financial economics, corporate governance (Department of Accounting and Finance)

Joseph Erba, Strategy and leadership (Department of Management)

Vidyaranya Gargeya, Global operations strategy, supply chain management, total quality management, customer relationship management, performance measurement for continuous improvement, service operations management (Department of Information Systems and Supply Chain Management)

Dayong Huang, Financial markets and institutions, corporate finance, investments, options and futures, personal finance (Department of Accounting and Finance)

Al Salam, Information systems, strategy and competition, ERP implementation and management, eService convenience, social media and business strategy (Department of Information Systems and Supply Chain Management)

Daniel Winkler, Real estate finance, corporate finance, investments, and financial education (Department of Accounting and Finance)

Graduate Programs
- Post-Baccalaureate Certificate in Business Foundations (12)
- Master of Business Administration (MBA) (33-45)
- Master of Science in Nursing/Master of Business Administration (MSN/MBA) in Health Management (62)

Business Foundations, PBC, (12)
The purpose of 12-hour Post-Baccalaureate Certificate in Business Foundations is to provide professionals who have a bachelor’s degree in a non-business field the opportunity to acquire education in business administration without committing to the lengthier MBA program.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
In addition to the application materials required by The Graduate School, applicants must submit an admission essay indicating the reasons for pursuing the certificate. An interview may be required.

Qualified applicants will have relevant managerial experience indicating increasing levels of managerial responsibilities.

Current students in the MBA, MS in accounting, or MS in information technology and management programs will not be eligible for the Post-Baccalaureate Certificate. Course work taken as part of the certificate program may be applied towards the MBA degree in accordance with the policies of The Graduate School.

**Certificate Requirements**

**Required Courses**

- MBA 701  Quantitative Analysis for Decision Making (3)
- MBA 702  Financial and Managerial Accounting (3)
- MBA 703  Economic Policies and Impact on Global Outcomes (3)
- MBA 716  Leadership and Sustainable Business (3)

Master of Business Administration, MBA, (33-45)
The Bryan School of Business and Economics offers a graduate program of study leading to a 45 hour (full-time day option) or a 42 hour (part-time evening option) Master of Business Administration degree. Students may be allowed to waive up to 9 hours of basic level MBA courses based on prior academic accomplishment. A minimum of 36 hours (full-time day option) or 33 hours (part-time evening option) must be completed to earn the degree.

Concentrations in finance, information technology, business analytics, marketing, and supply chain management are offered both to full-time and part-time students.

**Application and Admission**
The MBA program is designed for qualified students from any academic background.

In addition to the applicant’s materials required by The Graduate School, applicants must submit an admission essay indicating the reasons for pursuing the MBA degree and relevant preparation for either the Part-time Evening MBA or Fulltime Day MBA option. Qualified applicants to the Part-time Evening MBA will have relevant managerial experience indicating increasing levels of managerial responsibilities. Qualified applicants to the Fulltime Day MBA will have five years or less full-time work experience and evidence of leadership potential. An interview may be required.

An applicant that is a member of the Beta Gamma Sigma honor society with a minimum 3.3 GPA out of 4.0:
- No waiver application necessary. BGS must be noted on application for admission and a copy of the BGS certificate must be submitted.

An applicant with a terminal/professional degree such as MD, JD, Ed.D, PhD, or DBA may request to waive the GMAT/GRE requirement if the applicant has:
- A minimum GPA of 3.0 for these graduate degrees.

An applicant with a master’s degree may request to waive the GMAT/GRE requirement if the applicant has:
- A master’s degree from at least a regionally accredited institution which required a standardized test (such as the GRE or equivalent) as an entrance requirement; AND
- A graduate GPA of at least 3.0 out of 4.0; AND
- Relevant professional work experience (may include military service), to be determined by the department admission committee; AND
- A demonstration of adequate quantitative ability in the form of a statistics or algebra course at the college-level with a grade of C or better.
An applicant with a bachelor’s degree from a regionally accredited institution and significant work experience may request to waive the GMAT/GRE if the applicant has:

- At least seven years of significant progressive professional work experience (may include military service), to be determined by the department admission committee; AND
- A minimum GPA of 3.0

Applicants may be interviewed by the admission subcommittee.

Students are admitted to the Fulltime Day MBA option only in August of each academic year.

**Degree Requirements**

**Computer Literacy:** MBA degree program students should have a working knowledge of word processing and spreadsheet applications in a PC environment. Familiarity with Excel is required. Students must also be familiar with basic probability and statistics as covered in computer-based training modules.

**Full-time Program Option**

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MBA 701</td>
<td>Quantitative Analysis for Decision Making</td>
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<tr>
<td>MBA 702</td>
<td>Financial and Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MBA 703</td>
<td>Economic Policies and Impact on Global Outcomes</td>
<td>3</td>
</tr>
<tr>
<td>MBA 706</td>
<td>Marketing Management</td>
<td>3</td>
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<tr>
<td>MBA 707</td>
<td>Financial Management</td>
<td>3</td>
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<tr>
<td>MBA 708</td>
<td>Operations for Competitive Advantage</td>
<td>3</td>
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<tr>
<td>MBA 712</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MBA 716</td>
<td>Leadership and Sustainable Business</td>
<td>3</td>
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<tr>
<td>MBA 717</td>
<td>Technology and Innovation</td>
<td>3</td>
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<tr>
<td>MBA 718</td>
<td>Global Business in Practice</td>
<td>3</td>
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<tr>
<td>MBA 741</td>
<td>Creating and Sustaining Competitive Advantage</td>
<td>3</td>
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<tr>
<td>MBA 742</td>
<td>Organizational Internship</td>
<td>1.5-3</td>
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*Note: MBA 741: Capstone Experience*

**Part-time Program Option**

<table>
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<td>Creating and Sustaining Competitive Advantage</td>
<td>3</td>
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</tbody>
</table>

*Note: MBA 741: Indicates Capstone Experience*

**Electives (9)**

With prior approval by the MBA Program Director or Associate Director, a student will select 9 hours of courses. Courses in other departments and schools at the 500-, 600- and 700-level may be taken.

**Finance Concentration**

For a concentration in finance a student will select 9 hours from the following courses:
MBA 720 Investments (3)
MBA 721 Financial Statement Analysis and Valuation (3)
MBA 723 Corporate Governance (3)
MBA 724 Financial Institutions (3)

Other appropriate courses as approved by the MBA Program Director or Associate Director.

Business Analytics Concentration

For a concentration in Business Analytics, students must take these two courses:
- ISM 675 Methods and Models in Business Analytics (3)
- ISM 685 Business Analytics for Competitive Advantage (3)

Students should select at least 3 credit hours from the following courses:
- ISM 671 Data Management (3)
- ISM 688 Projects in Business Analytics (3)
- MBA 730 Marketing Research (3)
- ECO 643 Econometric Methods (3)

Other appropriate courses as approved by the MBA Program Director or Associate Director.

Information Technology Concentration

For a concentration in information technology a student will select 9 hours from the following courses:
- ISM 671 Data Management (3)
- ISM 672/ENT 672 Web Programming (3)
- ISM 673 Telecommunications and Distributed Networks (3)
- ISM 675 Models and Methods in Business Analytics (3)
- ISM 676 Information Security and Privacy (3)
- ISM 679 Special Topics in Information Systems (3)

Other appropriate courses as approved by the MBA Program Director or Associate Director.

Marketing Concentration

For a concentration in marketing a student will select 9 hours from the following courses:
- MBA 730 Marketing Research (3)
- MBA 731 Brand Management (3)
- MBA 732 Consumer Behavior (3)
- MBA 733 International Marketing Management (3)

Other appropriate courses as approved by the MBA Program Director or Associate Director.

Supply Chain Management Concentration

For a concentration in supply chain management a student will select 9 hours from the following courses:
- SCM 650 Supply Chain Management Concepts and Principles (3)
- SCM 651 Transportation, Logistics and Distribution in Supply Chain Management (3)
- SCM 652 Strategic Cost, Design, Procurement and Contracts (3)
- SCM 655 Global Supply Operations Strategy (3)
- SCM 678 Project Management (3)

Nursing/Business Administration, MBA, (62)
The MSN/MBA in is offered jointly by the School of Nursing and the Bryan School of Business and Economics and requires a minimum of 62 semester hours.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. Applicants must have a baccalaureate degree in nursing from an accredited program, current
unrestricted licensure as a registered nurse in one of the 50 states or International Licensure and a minimum of one year of full-time clinical nursing experience.

**Degree Requirements**

**Computer Literacy:** Upon entry to the MSN/MBA in Health Management degree program, students should have a working knowledge of word processing and spreadsheet applications in a PC environment. Familiarity with Excel is required.

**Statistics Concentration**
Completion of a statistics course prior to enrollment in NUR 705 is required. ECO 250, MBA statistics modules, or comparable is recommended to meet the program prerequisite for statistics.

**Required Courses (62)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 506</td>
<td>Role of Nursing Administration in Quality and Safety (2)</td>
</tr>
<tr>
<td>NUR 540</td>
<td>Financial Management in Healthcare (3)</td>
</tr>
<tr>
<td>NUR 606</td>
<td>Advanced Quality and Safety (3)</td>
</tr>
<tr>
<td>NUR 607</td>
<td>Interprofessional/Interdisciplinary Collaboration and Negotiation (3)</td>
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<tr>
<td>NUR 614</td>
<td>Information Technology in Nursing Administration (3)</td>
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<td>NUR 620</td>
<td>Law, Policy, and Economics of Healthcare (3)</td>
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<td>NUR 641</td>
<td>Leadership and Management Essentials in Healthcare: Theories and Roles (4)</td>
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<tr>
<td>NUR 644</td>
<td>Organizational Leadership and Management (4)</td>
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<td>NUR 645</td>
<td>Strategic Management of Health Care Organizations (4)</td>
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<td>NUR 646</td>
<td>Nursing Administration Practicum (4)</td>
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<td>MBA 701</td>
<td>Quantitative Analysis for Decision Making (3)</td>
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<td>MBA 702</td>
<td>Financial and Managerial Accounting (3)</td>
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<td>MBA 703</td>
<td>Economic Policies and Impact on Global Outcomes (3)</td>
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<td>NUR 705</td>
<td>Utilization of Research and Evidence Based Practice (3)</td>
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<td>MBA 706</td>
<td>Marketing Management (3)</td>
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<td>MBA 707</td>
<td>Financial Management (3)</td>
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<tr>
<td>MBA 708</td>
<td>Operations for Competitive Advantage (3)</td>
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<tr>
<td>MBA 712</td>
<td>Strategic Management (3)</td>
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<td>MBA 717</td>
<td>Technology and Innovation (3)</td>
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<td>MBA 741</td>
<td>Creating and Sustaining Competitive Advantage (3)</td>
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<td>MBA 741:</td>
<td>Capstone Experience (3)</td>
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**BUS - Business Administration Graduate Courses**

**BUS 540 Social Entrepreneurship: Justice and a Green Environment (3:3)**
Interdisciplinary engagement of social entrepreneurship as model for change on an issue of environmental sustainability. Exploration of models that respond to social, economic, environmental, and justice issues.

**Cross Listed Courses**

Same as CPS 540, CST 540, ENT 540, SWK 540, WGS 540

**Prerequisite**
Upper-division undergraduate or graduate student status

**BUS 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**BUS 605 Entrepreneurial Family Business (3:3)**
Explores and analyzes in detail the management, ownership, family/business leadership skills, succession and governance practices found in entrepreneurial family-owned and family-controlled businesses.

**Cross Listed Courses**

ENT 605
BUS 606 International Entrepreneurship (3:3)
Issues related to starting, joining, or holding stakes in international ventures, the creation and management of business ventures that have international dimensions, economic and formal/informal institutions affecting entrepreneurship.
*Cross Listed Courses*
ENT 606

BUS 607 Entrepreneurship: Venture Opportunities and Plan (3:3)
Knowledge and skills to evaluate ideas to determine if they are potential opportunities by developing a feasibility analysis, culminating in a venture plan to launch and grow a new business.
*Cross Listed Courses*
ENT 607

BUS 608 Corporate Entrepreneurship (3:3)
Examination of the challenges and opportunities for employees and organizations in creating and maintaining an entrepreneurial culture. Students consult with local for profit or non-profit organizations to perform an entrepreneurial audit.
*Cross Listed Courses*
ENT 608

BUS 609 Franchising (3:3)
Develop knowledge and skills needed to succeed as a franchisee, franchisor, or franchise executive, including understanding the Franchise Disclosure Document and the role of entrepreneurship in franchising.
*Cross Listed Courses*
ENT 609

BUS 611 Analysis of Research (3:3)
Intensive study, analysis, and evaluation of research in business and related fields.

BUS 612 Field Study (1–3)
Individual investigation conducted in absentia with periodic conferences and reports. Students are encouraged to study their individual problems with approved research technique.

BUS 613 Independent Study in Business and/or Marketing Education (1–3)
Demonstrated capacity for independent work and permission of instructor.
*Prerequisite*
Demonstrated capacity for independent work and permission of instructor

BUS 699 Thesis (1–3)

BUS 711 Experimental Course
This number reserved for experimental courses. Refer to Course Schedule for current offerings.

BUS 801 Thesis Extension (1–3)

*MBA - Master of Business Administration Graduate Courses*

MBA 595: Selected Topics in Business Administration (1.5–3)
Opportunity for advanced students of Business Administration to study in depth a topic or issue of special interest.
*Prerequisite*
Permission of instructor
Notes
May be repeated when topic varies.

**MBA 701 Quantitative Analysis for Decision Making (3:3)**
Quantitative methods and spreadsheet skills to support management practice and decision making. Topics include statistical hypothesis testing, confidence intervals, regression analysis, optimization modeling, decision analysis and risk analysis.

*Prerequisite*
Pre-MBA workshop in statistics and spreadsheet skills or a spreadsheet-based undergraduate course in probability and statistics.

**MBA 702 Financial and Managerial Accounting (3:3)**
Introduction to financial and managerial accounting. Topics include financial statements, financial analysis of those statements, cost accounting, and accounting’s role in managerial decision-making.

**MBA 703 Economic Policies and Impact on Global Outcomes (3:3)**
Economic analysis of markets, and government intervention that addresses the sustainability of fiscal, monetary and exchange rate policy and their short-run and long-run impact on the global environment.

**MBA 706 Marketing Management (3:3)**
Issues related to the marketing process, major trends and forces that are changing the marketing landscape, marketing information, building and managing brands, marketing strategy and roles of ethics in marketing.

*Prerequisite*
MBA 701

**MBA 707 Financial Management (3:3)**
Financial decision-making; time value of money, risk and return, valuation of securities, financial options, cost of capital, capital budgeting, working capital policy, financing decisions.

*Prerequisite*
MBA 701, MBA 702

**MBA 708 Operations for Competitive Advantage (3:3)**
Examines design, operation, and control of organizations for gaining and maintaining competitive advantage in the market place. Strategic and tactical issues integrated with a systems approach.

*Prerequisite*
MBA 701

**MBA 711 Experimental Course**
This number reserved for experimental courses. Refer to Course Schedule for current offerings.

**MBA 712 Strategic Management (3:3)**
Examines the tools and techniques of strategic analysis, the formulation and implementation of competitive and corporate strategy for creating and sustaining competitive advantage.

*Prerequisite*
MBA 703, MBA 706, MBA 707, MBA 708, MBA 716, MBA 717

*Corequisite*
MBA 703

**MBA 716 Leadership and Sustainable Business (3:3)**
Introduction to the values associated with ethics and sustainability relative to leadership, from idea formulation through communication within various constituencies across organizational contexts and communication media.
**MBA 717 Technology and Innovation (3:3)**
The role of technology (including informational technology, business intelligence, and data analytics) in innovation. Students will develop a technology-based actionable plan for an organization.

**MBA 718 Global Business in Practice (3:3)**
Principles and practices of conducting business in a global environment.
*Prerequisite*
MBA 703, MBA 706, MBA 707, MBA 708, MBA 716, and MBA 717
*Corequisite*
MBA 703

**MBA 719 Strategic Management in Action (3:3)**
Integration of tools and techniques of strategic analysis, formulation and implementation of competitive and corporate strategy. Students engage in professional consulting and/or experiential projects with local organizations.
*Prerequisite*
MBA 703, MBA 706, MBA 707, MBA 708, MBA 716, and MBA 717
*Corequisite*
MBA 703

**MBA 720 Investments (3:3)**
Explores theories and applications related to portfolio theory, asset allocation, return predictability, and anomalies. Risk management including the use of derivatives also covered.

**MBA 721 Financial Statement Analysis and Valuation (3:3)**
Value with emphasis on equity analysis and valuation for public and private firms. Other types and purposes of valuation also covered.
*Prerequisite*
MBA 707

**MBA 723 Corporate Governance (3:3)**
Current issues in and theories of corporate governance. Topics include examination of internal and external corporate controls, stakeholder theories and international governance comparisons.

**MBA 724 Financial Institutions (3:3)**
Survey course intended for those interested in financial services careers and in general finance. Topics include financial institutions, investment funds, trading markets, and financial market regulation.

**MBA 730 Marketing Research (3:3)**
Defining the purpose of marketing research, selecting a data gathering method, writing a survey/questionnaire, and sampling methods. Using statistics and interpreting the results to make marketing decisions.
*Prerequisite*
MBA 706

**MBA 731 Brand Management (3:3)**
Examines brand management strategies, tools and decisions faced by organizations in planning, building and measuring brand equity for long term profitability.
*Prerequisite*
MBA Student or permission of instructor
MBA 732 Consumer Behavior (3:3)
Applying behavioral theories to understand consumer consumption behaviors and the effect of environmental and psychological influences on the consumer decision making process.
Prerequisite
MBA student or permission of instructor

MBA 733 International Marketing Management (3:3)
Activities that direct the flow of products to markets in a transnational, transcultural context; transcultural consumer behavior; channel strategy, physical distribution, promotion, and pricing.
Prerequisite
MBA 706

MBA 741 Creating and Sustaining Competitive Advantage (3:3)
Student teams will serve as consultants to area organizations and provide their managers with comprehensive solutions to strategic challenges.
Prerequisite
MBA 703, MBA 706, MBA 707, MBA 708, MBA 716, MBA 717
Corequisite
MBA 703

MBA 742 Organizational Internship (1.5–3)
Academic and required work components allow students to gain organizational experience in an area of business. Course supervised by a designated graduate faculty member and an appropriate manager of the approved organization.
Prerequisite
MBA 706, MBA 707, MBA 708, MBA 717, or Permission of MBA Program Director
Notes
May be repeated for credit.

MBA 743 Directed Studies (1.5–3)
Independent study of a business administration topic, not currently covered by courses in the MBA program, under the supervision of a faculty member(s).
Prerequisite
Completion of 12 hours or equivalent in the MBA program and permission of MBA Program Director
Notes
May be repeated for a maximum of 6 hours credit when topic varies.

MBA 744 Special Topics in Business Administration (1.5 or 3)
Specific course title identified each semester by the topical extension to the basic title: e.g., Special Topics in Business Law; Organizational Theory.
Notes
May be repeated for credit when topic varies.

MBA 745 Experience Business Abroad (1.5–3)
Practices and principles involved in conducting business in a specified country. Lectures and seminars by local academicians and site visitations and lectures by foreign business people.
Prerequisite
Permission of MBA Director

MBA 803 Research Extension (1–3)
EDUCATION, SCHOOL OF
324 School of Education Building • 336-334-5000 • soe.uncg.edu

Administration
Randy Penfield, Dean
Jewell Cooper, Associate Dean of Academic Affairs and Student Services
Troy Sadler, Associate Dean for Research

About
The SOE offers over 20 different degree programs, many of which include a range of specialty concentrations to allow our students to focus on topics most relevant to their interests and professional goals. Degree programs include 5 undergraduate programs and 15 graduate programs spanning Master, Specialist, and Doctoral degrees. The 20 degree programs are complemented by numerous non-degree certificate and add-on licensure programs. The SOE has a student body of approximately 1,500 students that is among the most diverse in the UNC system. Approximately 75% of our students are enrolled in graduate programs and 25% are enrolled in undergraduate programs.

The faculty of the SOE includes nearly 100 full-time professors who are highly accomplished scholars, teachers, and partners with community organizations and schools.

The Departments in the School of Education are as follows:
- Counseling and Educational Development
- Educational Leadership and Cultural Foundations
- Educational Research Methodology
- Library and Information Studies
- Specialized Educational Services
- Teacher Education and Higher Education

Accreditation(s)
The University of North Carolina at Greensboro is accredited under the National Council for Accreditation of Teacher Education (NCATE) Standards through the CAEP Accreditation System, for a period of six years, from 2015-21.

UNCG will seek accreditation under the Council for the Accreditation of Educator Preparation (CAEP) Standards in 2021. Formed in 2013, CAEP is the single specialized accreditor for educator preparation, and administers NCATE accreditation.
COUNSELING AND EDUCATIONAL DEVELOPMENT, DEPARTMENT OF
228 Curry Building • 336-334-3434 • soe.uncg.edu/academics/departments/ced

Administration
J. Scott Young, Department Head
L. DiAnne Borders, Director of Graduate Study

About
There are three primary program areas in counselor education for which the Master’s, Specialist, and Doctorate degrees are offered: clinical mental health counseling, college counseling and student development, and school counseling. Within these three program areas, the Council for Accreditation of Counseling and Related Educational Programs (CACREP), a specialized accrediting body recognized by the Council on Postsecondary Accreditation (COPA), has conferred accreditation to the following programs and specializations in the Department of Counseling and Educational Development at UNCG: clinical mental health counseling (MS), school counseling (MS), couple and family counseling (MS), and counseling and counselor education (PhD). Applicants admitted to a program are expected to enroll as full-time students, registering for a minimum of 12 credit hours each semester. Students appointed to graduate assistantships, however, may reduce their credit load and retain full-time status. All students admitted to the program have as their objective the completion of the entry-level MS degree or dual MS and EdS degrees, or the advanced PhD degree.

The Curriculum
The Counselor Education program faculty adheres to the scientist-practitioner model of training. Consistent with this approach is the program’s goal of graduating students who have broad knowledge of counseling theory and process, possess a high level of competency in providing professional services to diverse client populations, and view assessment and research in counseling as a continuous cyclical activity throughout the counseling process. Research is a means for obtaining and using information to generate and establish counseling goals and strategies, and for identifying “best practices” or empirically-based practices that are integral to effectiveness in counseling. The focus of this ongoing process is to bring about client change. The major tenets underlying the program include (a) exposure to a variety of theoretical orientations to counseling, (b) reliance on both the clinical-counseling and vocational-educational approaches in designing counseling and programmatic interventions, (c) a commitment to developing the student’s skills as a clinician who uses research methodology in practice, (d) a strong emphasis on the normal developmental issues of the individual as opposed to an approach based on pathology, and (e) intentionality around challenging students to increase their self-awareness about and knowledge of diverse populations, and to use culturally-appropriate interventions in an effort to become multiculturally competent practitioners.

Especially important to the program faculty are the commitment to mental “health” (or wellness) and the value attached to understanding the common developmental themes throughout a person’s life. An appealing feature is the diversity of the faculty’s theoretical orientations, which translates into a variety of research opportunities available to creative students, as well as varied counseling approaches and different applied settings for gaining training experience.

To achieve the program’s curriculum goals of the scientist-practitioner model of training, students are required to demonstrate satisfactory knowledge in each of the following core areas: the helping relationship; group dynamics, process, and counseling; social and cultural diversity; career and lifestyle development; appraisal of individuals; research and evaluation; and professional orientation. Available within the program requirements are courses offered by other departments that enable students to benefit from the resources of the entire University.

Required professional core courses constitute the cognitive foundation for the development of skills in providing professional services. Also available are specialized courses dealing with particular groups and environmental
settings, such as courses in family intervention, multicultural counseling, counseling children and adolescents, and substance abuse. Supervised clinical experience in the Vacc Counseling and Consulting Clinic is offered throughout the program parallel to core and specialty courses. Experience in applied settings is available on the campus as well as at off-campus sites; these include community mental health services; career counseling and placement; student affairs; inpatient facilities; college counseling centers; child, youth, and family agencies; and sports, outreach, and alcohol and drug programs. Students are encouraged to explore internship experiences specifically tailored to their individual needs and interests. This diversity of opportunities allows students to develop programs consistent with their own particular goals and talents.

Students are given strong encouragement to participate in professional organizations and collaborate on original research projects. Opportunities for professional involvement and leadership development include the student organization in the Department as well as state and national counseling organizations. Research courses are available at the entry level and required at the doctoral level. To help students design and complete high quality relevant dissertations, doctoral students are required to take courses in research design and statistical methods of data analysis. In addition to being given strong encouragement to participate in original research projects and presentations at professional meetings, students are expected to work closely with their selected professors in conducting their research projects. Close consultation with the faculty is strongly encouraged, particularly for students working on doctoral dissertations. The faculty views doctoral research as providing students with a starting point for developing an ongoing research program that continues beyond completion of their degree.

Mechanisms for student evaluation include progress evaluations by instructors, practicum supervisors, and internship supervisors, and reports from host internship supervisors. Comprehensive exams provide valuable feedback to students regarding their progress in the program. Faculty supervisors appraise the student’s clinical skills, and this feedback is available to students.

A majority of master’s degree students complete the required curriculum in two years, although students are encouraged to attend summer school after their first year in the program. A majority of dual degree MS/EdS students finish in two and one-half years, and doctoral students generally complete their degree in three years. Although a few doctoral students complete their dissertations after their full-time study at the University, students are strongly encouraged to complete all degree requirements before leaving.

Graduates are eligible for one or more state and national credentials. Because the program is CACREP-approved, all fully enrolled master's students can take the National Counselor Examination for Licensure and Certification (NCE) during their last semester of the program. The NCE is the first step toward becoming a National Certified Counselor (NCC) and a Licensed Professional Counselor (LPC) in North Carolina. In addition, the post-master’s experience requirement for the NCC credential is waived. The NCC credential is a prerequisite for several national specialty certifications offered by the National Board of Certified Counselors (NBCC), including school counseling, clinical mental health counseling, and addictions counseling. School counseling graduates are eligible for the “S” state school counseling license. Graduates of the clinical mental health counseling specialization in couple and family counseling (MS and MS/EdS dual degrees) qualify for the National Academy for Certified Family Therapist (NACFT) credential. Preparation for American Association of Marriage and Family Therapy (AAMFT) membership (see Departmental secretary for additional information) and for the Certified Substance Abuse Counselor (CSAC) in North Carolina also is available.

Recent graduates of the program have accepted positions in diverse settings similar to the breadth of internships available for students. The interest and talents of the students have served as the major criteria for determining the type of internship and employment obtained.

Faculty

Professors
James M. Benshoff, Group counseling and process, leadership and consultation, teaching and technology, globalization of counseling, counseling supervision, student development in higher education. (E)
L. DiAnne Borders, Clinical supervision, mentoring new and future counselor educators, researching identity development, adoptive families, especially trans-cultural adoptive families. (Director of Graduate Study). (E)
Craig S. Cashwell, Spirituality in counseling, couples counseling, sexual addiction counseling, counseling skills development, accreditation in counselor education, professional identity supervision. (E)
Kelly L. Wester, Self-injurious behaviors, research integrity and the responsible conduct of research, evidence-based treatments, professional develop. (E)
J. Scott Young, The interface of spirituality, religion, and the counseling process; experiential approaches to counseling; the use of art in counseling; and community-based counseling (Chair of Department). (E)

**Associate Professors**
Christine Murray, Family violence, bridging research and practice, preventive interventions, the role of resources in couple relationships, family systems and health, service learning in counselor education. (E)

**Assistant Professors**
Pamela N. Harris, School counseling, school-family collaboration and partnerships, culturally responsive counseling and counselor supervision, academic, career, and social/emotional development of Black/African American families.
Connie T. Jones, Addiction counseling, reentry and addiction counseling with offenders, broaching, multiculturalism in counseling, diversity in counselor education faculty and students, clinical mental health counseling.

**Clinical Professor**
Keith Mobley, Community counseling, adolescence and adolescent development, wellness, men’s studies. (E)

**Graduate Programs**
- Master of Science (MS) in Counseling, Clinical Mental Health Counseling, or School Counseling concentrations, (60)
- Master of Science (MS) in Counseling, Couple and Family Counseling, (66)
- Master of Science and Specialist in Education dual degree (MS/EdS) in Counseling, Clinical Mental Health Counseling, Couple and Family Counseling, or School Counseling concentrations, (72)
- Post-Master’s Certificate in Advanced School Counseling, (12) (On Moratorium)
- Doctor of Philosophy (PhD) in Counseling and Counselor Education, (82-88)

Counseling, MS, (60)
The MS in Counseling requires 60 semester hours and offers concentrations in clinical mental health counseling and school counseling. The MS in Counseling with a specialization in couple and family counseling requires 66 semester hours.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume/vita and a personal statement. Applicants should have vocational goals compatible with the selected program and subspecialty. Program standards are competitive and not all applicants may be admitted. Preference is given to students desiring full-time study.

**Clinical Mental Health Counseling Concentration (60)**
Required Core Areas
- Human Growth and Development (3 hours as advised)
- Counseling individuals at all developmental levels, e.g., CED 612 Developmental Counseling (3)
- Social and Cultural Diversity (3 hours as advised)
- Counseling in a multicultural and diverse society, e.g., CED 605 Counseling Diverse Populations (3)

Professional Core (18 hours as advised)
- CED 610 Helping Relationships (3)
- CED 620 Counseling Theories and Practice (3)
- CED 650 Group Counseling Theory and Practice (3)
- CED 669 Career Development and Career Counseling (3)
- CED 678 Professional Orientation (3)
- CED 682 Application of Measurement and Clinical Appraisal Techniques (3)

Research (3 hours as advised)
Research methods used in counseling practice, ethical and legal considerations in counseling research, e.g., CED 611 The Counselor as Scientist-Practitioner (3)

Specialized and Environmental Curricular Studies (12 hours as advised)
Twelve (12) hours, as advised, in one of the following areas (see departmental program planner for specific courses):
- Child and youth settings
- Clinical mental health settings
- Employment settings
- Older adult settings
- Organizational development/business and industrial settings
- Public offender settings
- Substance abuse settings
- Sports counseling settings (Students should meet with faculty in Kinesiology to plan course of study.)

Supervised Practica and Internships (18)
Twelve (12) hours of counseling internship across two (2) semesters, plus three (3) hours of field practicum, three (3) hours of advanced counseling practicum, and other practicum experiences across the curriculum as required in the Schedule of Courses.
- CED 653 Practicum in Counseling (1)
- CED 675 Counseling Field Practicum (3)
- CED 679 Advanced Counseling Practicum (3)
- CED 680a Counseling Internship (6)
- CED 680b Counseling Internship (6)

Curricular Electives (3)
Under advisement, a student will select from courses in Required Core Areas.

Collateral Expertise
A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

Comprehensive Examination (Capstone Experience)
Please consult with Departmental office for dates of this examination.

School Counseling Concentration
Required Core Areas
- Human Growth and Development (3 hours as advised)
  - Counseling individuals at all developmental levels, e.g., CED 612 Developmental Counseling (3)
  - Social and Cultural Diversity (3 hours as advised)
  - Counseling in a multicultural and diverse society, e.g., CED 605 Counseling Diverse Populations (3)

Professional Core (18 hours as advised)
CED 610  Helping Relationships (3)
CED 620  Counseling Theories and Practice (3)
CED 650  Group Counseling Theory and Practice (3)
CED 669  Career Development and Career Counseling (3)
CED 678  Professional Orientation (3)
CED 682  Application of Measurement and Clinical Appraisal Techniques (3)

**Research (3 hours as advised)**
Research methods used in counseling practice, ethical and legal considerations in counseling research, e.g., CED 611 The Counselor as Scientist-Practitioner (3)

**Specialized and Environmental Curricular Studies (15 hours as advised)**
Fifteen (15) hours across elementary, middle and high school:
CED 641  Counseling Children (3)
CED 648  Foundations of School Counseling (3)
CED 671  Understanding and Counseling Adolescents (3)
CED 698  Implementing and Evaluating School Counseling Programs (3)
SES 540  Introduction to Exceptional Individuals (3)

**Supervised Practica and Internships (18)**
Twelve (12) hours of school counseling internship across two (2) semesters, plus three (3) hours of CED 677 School Certification (counseling field practicum), three (3) hours of advanced counseling practicum and other practicum experiences across the curriculum as required in the Schedule of Courses.
CED 653  Practicum in Counseling (1)
CED 677  School Certification (3)
CED 679  Advanced Counseling Practicum (3)
CED 680a  Counseling Internship (6)
CED 680b  Counseling Internship (6)

**Collateral Expertise**
A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

**Comprehensive Examination (Capstone Experience)**
Please consult with departmental office for dates of this examination.

**Couple and Family Counseling Concentration (66)**

**Required Core Areas**

**Human Growth and Development (3 hours as advised)**
- Counseling individuals at all developmental levels, e.g., CED 612 Developmental Counseling (3)
- Social and Cultural Diversity (3 hours as advised)
- Counseling in a multicultural and diverse society, e.g., CED 605 Counseling Diverse Populations (3)

**Professional Core (18 hours as advised)**
CED 610  Helping Relationships (3)
CED 620  Counseling Theories and Practice (3)
CED 650  Group Counseling Theory and Practice (3)
CED 669  Career Development and Career Counseling (3)
CED 678  Professional Orientation (3)
CED 682  Application of Measurement and Clinical Appraisal Techniques (3)

**Research (3 hours as advised)**
Research methods used in counseling practice, ethical and legal considerations in counseling research, e.g., CED 611 The Counselor as Scientist-Practitioner (3)

**Specialized and Environmental Curricular Studies (12 hours as advised)**
CED 644  Foundations of Mental Health Counseling (3)
CED 642  Substance Abuse Counseling (3)
CED 687  Diagnosis and Treatment Planning in Counseling (3)
CED 690  Counselors Working with Families (3)
CED 691  Advanced Clinical Topics in Couple and Family Counseling/Therapy (3)

**Supervised Practica and Internships (18)**

Twelve (12) hours of counseling internship across two (2) semesters, plus three (3) hours of field practicum, three (3) hours of advanced counseling practicum, and other practicum experiences across the curriculum as required in the Schedule of Courses.

CED 653  Practicum in Counseling (1)
CED 675  Counseling Field Practicum (3)
CED 679  Advanced Counseling Practicum (3)
CED 680a  Counseling Internship (6)
CED 680b  Counseling Internship (6)

**Collateral Expertise**

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

**Comprehensive Examination (Capstone Experience)**

Please consult with Departmental office for dates of this examination.

Counseling, MS/EdS, (72)

The dual degree MS and EdS in Counseling sequence allows students the opportunity to achieve a level of professional attainment beyond the MS degree and recognition of that higher level of professional attainment by receiving the EdS degree. A student admitted to the dual degree program will be awarded the MS and EdS degrees concurrently after successful completion of all prescribed course work beyond the bachelor’s degree.

Concentrations are offered in clinical mental health counseling, couple and family counseling, college counseling and student development, and school counseling. All concentrations require 72 semester hours.

On average, the completion of a dual degree program takes two and one-half years.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume/vita and a personal statement. Applicants should have vocational goals compatible with the selected program and subspecialty. Program standards are competitive and not all applicants may be admitted. Preference is given to students desiring full-time study.

**Clinical Mental Health Counseling concentration**

**Required Core Courses**

**Human Growth and Development (3 hours as advised)**

- Counseling individuals at all developmental levels, e.g., CED 612 Developmental Counseling (3)
- Social and Cultural Diversity (3 hours as advised)
- Counseling in a multicultural and diverse society, e.g., CED 605 Counseling Diverse Populations (3)

**Professional Core (21 hours as advised)**

CED 610  Helping Relationships (3)
CED 620  Counseling Theories and Practice (3)
CED 642  Substance Abuse Counseling (3)
CED 650  Group Counseling Theory and Practice (3)
CED 669  Career Development and Career Counseling (3)
CED 678  Professional Orientation (3)  
CED 682  Application of Measurement and Clinical Appraisal Techniques (3)  

**Research (3 hours as advised)**  
Research methods used in counseling practice, ethical and legal considerations in counseling research, e.g., CED 611, The Counselor as Scientist-Practitioner (3)  

**Specialized and Environmental Curricular Studies (18 hours as advised)**  
(Prerequisite: A course in abnormal behavior.)  
Choose one of the following eight areas as an emphasis:  
- Child and youth settings  
- Clinical mental health settings  
- Employment settings  
- Older adult settings  
- Organizational development/business and industrial settings  
- Public offender settings  
- Substance abuse settings  
- Sports counseling settings (Students should meet with faculty in Kinesiology to plan course of study.)  

**Supervised Practica and Internships (18)**  
Twelve (12) hours of counseling internship across two (2) semesters, plus three (3) hours of field practicum, three (3) hours of advanced counseling practicum and other practicum experiences across the curriculum as required in the Schedule of Courses.  
CED 653  Practicum in Counseling (1)  
CED 675  Counseling Field Practicum (3)  
CED 679  Advanced Counseling Practicum (3)  
CED 680a  Counseling Internship (6)  
CED 680b  Counseling Internship (6)  
CED 680c  Counseling Internship (6)  
CED 680d  Counseling Internship (6)  

**Curricular Electives (6)**  
Under advisement, a student will select from courses in Required Core Areas.  

**Collateral Expertise**  
A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.  

**Comprehensive Examination (Capstone Experience)**  
Please consult with departmental office for dates of this examination.  

**Couple and Family Counseling Concentration**  
The couple and family counseling program requires that students follow the basic plan of study for clinical mental health counseling but with specialized studies in couple and family counseling. Students in couple and family counseling enroll in specialized course work to include CED 690 Counselors Working with Families, CED 691 Advanced Clinical Topics in Couples and Family Counseling/Therapy, and internships in family counseling. Other couple and family counseling course work is selected under advisement.  

**School Counseling Concentration**  
**Required Core Areas**  
**Human Growth and Development (3 hours as advised)**  
- Counseling individuals at all developmental levels, e.g., CED 612 Developmental Counseling (3)  
- Social and Cultural Diversity (3 hours as advised)  
- Counseling in a multicultural and diverse society, e.g., CED 605 Counseling Diverse Populations (3)  

**Professional Core (21 hours as advised)**  
CED 610  Helping Relationships (3)  
CED 620  Counseling Theories and Practice (3)
CED 642 Substance Abuse Counseling (3)
CED 650 Group Counseling Theory and Practice (3)
CED 669 Career Development and Career Counseling (3)
CED 678 Professional Orientation (3)
CED 682 Application of Measurement and Clinical Appraisal Techniques (3)

Research (3 hours as advised)
Research methods used in counseling practice, ethical and legal considerations in counseling research, e.g., CED 611 The Counselor as Scientist-Practitioner (3)

Specialized and Environmental Curricular Studies (15)
Fifteen (15) hours across elementary, middle and high school:
CED 641 Counseling Children (3)
CED 648 Foundations of School Counseling (3)
CED 671 Understanding and Counseling Adolescents (3)
CED 698 Implementing and Evaluating School Counseling Programs (3)
SES 540 Introduction to Exceptional Individuals (3)

Supervised Practica and Internships (18)
Twelve (12) hours of school counseling internship across two (2) semesters, plus three (3) hours of field practicum, three (3) hours of advanced counseling practicum, and other practicum experiences across the curriculum as required in the Schedule of Courses.
CED 653 Practicum in Counseling (1)
CED 677 School Certification (3)
CED 679 Advanced Counseling Practicum (3)
CED 680a Counseling Internship (6)
CED 680b Counseling Internship (6)
CED 680c Counseling Internship (6)
CED 680d Counseling Internship (6)

Curricular Electives (9)
Under advisement, a student will select from courses in Required Core Areas.

Collateral Expertise
A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

Comprehensive Examination (Capstone Experience)
Please consult with departmental office for dates of this examination.

Advanced School Counseling, PMC, (12) (On Moratorium)
The Post-Master’s Certificate in Advanced School Counseling is currently not accepting applications.
Post-Master’s Certificate programs are designed to meet practicing counselors’ needs for professional development, in response to advances and greater specialization in the profession.

The certificate is based on national accreditation standards, competency statements, and certification standards. The certificate consists of 12 semester hours of required course work (all online).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. Post-Master’s Certificate applicants must hold a Master’s degree in counseling.

Advanced School Counseling
In addition to the application materials required by The Graduate School, applicants should submit a complete vita/resume, a statement of professional goals in applying for this certificate, a copy of the school counseling license, and a letter of endorsement from current principal or other school administrator.
A cohort model is used in the PMC in advanced school counseling. The application deadline is December 1; cohorts begin each spring semester. Applications remain active for 1 year; if not accepted for one cohort, the application is considered for the next cohort.

**Advanced School Counseling (12)**
The online advanced school counseling certificate is designed to allow fully licensed, practicing school counselors with at least 2 years experience as a school counselor to move from the “M” level license to the “S” level license. All students take the required 12 hours of course work.

- CED 661 Group Counseling in Schools (3)
- CED 662 Multicultural Considerations in School Counseling (3)
- CED 663 School Counselors as Consultants in Educational Settings (3)
- CED 664 Advanced Contemporary Topics in School Counseling (3)

**Counseling, PhD, (82-88)**
The PhD in Counseling and Counselor Education requires 82-88 semester hours beyond the master’s or, for those students entering the program in the MS/PhD enrollment option, a minimum of 108 semester hours beyond the baccalaureate degree. Students enrolling in the MS/PhD option must hold an appropriate baccalaureate degree combined with superior ability and a high level of motivation and dedication to learning. After completing the MS degree, MS/PhD students continue study toward the PhD contingent on strong progress throughout their previous course work. Because entry-level (master’s level) preparation programs vary, the doctoral program requirements are cumulative from the baccalaureate degree for entering PhD students who have completed a master’s degree program at another institution. The doctoral program focuses on developing professional competencies of the student through advanced study of theory and practice of counseling as it relates to research, the behavioral sciences, and clinical supervision.

**Admission Requirements**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, doctoral applicants are required to have graduated from a master’s program in counseling or acceptable equivalent that is accredited by the Council for Accreditation of Counseling and Related Educational Programs. They also may present evidence of an appropriate degree from a regional accredited university. (CACREP requirements for a master’s program are needed; if missing, these are prerequisites for admission.)

Applicants to all graduate counseling programs should have vocational goals compatible with the selected program and subspecialty. Program standards are competitive and not all applicants may be admitted. Preference is given to students desiring full-time study.

**Degree Requirements**

**Professional Core (19)**
- CED 756a Advanced Counseling Theory and Research
- CED 756b Advanced Counseling Theory and Research
- CED 760a Consultation in Counseling and Counselor Education (2)
- CED 760b Leadership in Counseling and Counselor Education (2)
- CED 777a Seminar in Counseling (3)
- CED 777c Seminar in Counseling (3)
- CED 781a Clinical Supervision (3)
- CED Elective

**Cognate (12 hours as advised)**
To be selected under advisement.
Supervised Practica and Internships (15)

- CED 779 Advanced Counseling Practicum (3)
- CED 757 Internship in University Teaching in Counseling (3)
- CED 780a Advanced Counseling Internship (6)
- CED 781b Clinical Supervision (3)

Note: Students who enter the doctoral program directly from their master’s program will be required to complete an additional semester of internship CED 780b.

Note: Students may enroll in additional semesters of teaching (CED 757) and supervision (CED 781c and d), assuming successful experience in prior semesters.

Research Techniques (24)

- CED 720a Research Apprenticeship
- CED 720b Research Apprenticeship
- CED 740 Research Practicum in Counseling (3)
- CED 777b Seminar in Counseling (3)
- CED 777d Seminar in Counseling (3)
- ERM or STA sequence

Comprehensive Examination

Requires consultation with major advisor concerning format and dates of this examination.

Dissertation (12)

It is expected that doctoral students will be continuously enrolled in course work until graduation. Students will maintain continuous enrollment after course work has been completed by enrollment in CED 775 Directed Doctoral Research.

CED Counseling Educational Development Graduate Courses

- CED 506 Institutes in Education (1–3)
  Practicum or workshop experiences to focus on issues, problems, or approaches in the profession.
  Notes
  Students may apply no more than 3 sh of this course to any degree program. Grade: Satisfactory/Unsatisfactory, S/U

- CED 516 Entrepreneurship in Clinical Settings (3:3)
  Designed to teach students how to effectively build and implement a successful business model for the design and delivery of clinical practices, or related services.
  Cross Listed Courses
  ENT-516

- CED 574 Contemporary Topics in Counseling (3:3)
  Designed to study issues, problems, and new approaches in helping relationships. Emphasis placed on current topic(s) of interest.
  Prerequisite
  Advanced undergraduates in appropriate major
  Notes
  May be repeated for credit when topics vary.

- CED 574a Contemporary Topics in Counseling: Counseling Women

- CED 589 Experimental Course
  This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

- CED 602 Student Development in Higher Education (3:3)
Study of development services. Areas such as admissions, orientation, career counseling, academic advising, student activities, housing, and financial aid are reviewed.

**Prerequisite**
CED 610 or permission of instructor.

**Corequisite**
CED 675

**Notes**
Formerly CED 579. Students who took this course as CED 579 are not eligible to take CED 602 and receive credit.

**CED 603 Contemporary College Students (3:3)**
Developmental tasks and processes, including cognitive, moral, emotional, career, and identity, as applied to traditional and nontraditional students and diverse populations.

**Prerequisite**
CED 610 and counseling major.

**Corequisite**
CED 653

**Notes**
Formerly CED 505. Students who took this course as CED 505 are not eligible to take CED 605 and receive credit.

**CED 605 Counseling Diverse Populations (3:3)**
Examination of substantive and theoretical issues concerning counseling diverse populations. Includes study of counseling issues relevant to race/ethnicity, gender, sexual orientation, and other diversity topics.

**Prerequisite**
CED 610 and counseling major.

**Corequisite**
CED 653

**Notes**
Formerly CED 505. Students who took this course as CED 505 are not eligible to take CED 605 and receive credit.

**CED 610 Helping Relationships (3:3)**
Fundamental principles of providing a helping relationship through counseling and interviewing are integrated in a conceptual framework for subsequent professional studies in counseling. Personal and professional development through skills training in techniques.

**Corequisite**
For counseling majors CED 653

**CED 611 The Counselor as Scientist-Practitioner (3:3)**
Ways in which counselors can demonstrate accountability in a broad range of settings and from a variety of theoretical perspectives.

**Prerequisite**
Counseling major

**CED 612 Developmental Counseling (3:3)**
Developmental theories and processes of diverse individuals, families, and groups form the basis for understanding and applying techniques of developmental assessment and intervention. Cognitive-developmental approaches are emphasized.

**Prerequisite**
CED 610, CED 620; counseling major, human development/developmental psychology or equivalent or permission of instructor.

**Corequisite**
CED 653

**CED 620 Counseling Theories and Practice (3:3)**
Examine various counseling theories, their philosophical underpinnings, techniques, cultural implications, and the relationship between theory and practice. Apply theories through case conceptualization, observations, and supervised practice.

**Prerequisite**
CED 610 and counseling major.

**Corequisite**
CED 653

**CED 641 Counseling Children (3:3)**
Case conceptualization and intervention strategies for working with young children in school and community settings, with an emphasis on play therapy and behavioral interventions.

**Prerequisite**
CED 610, CED 620, and/or permission of instructor.

**Corequisite**
CED 653

**Notes**
Formerly CED 576. Students who took this course as CED 576 are not eligible to take CED 641 and receive credit.

**CED 642 Substance Abuse Counseling (3:3)**
Counseling intervention strategies related to prevention, substance use, abuse and dependency will be emphasized. Etiology, assessment, and professional counseling concerns discussed.

**Prerequisite**
CED 610 or permission of instructor.

**Corequisite**
CED 653

**CED 644 Foundations of Mental Health Counseling (3:3)**
Theoretical and applied information for counselors working in clinical mental health counseling settings. Explores delivery systems, procedures, and techniques related to counseling individuals, groups, couples, and families in these settings.

**Prerequisite**
CED 610; counseling major.

**Corequisite**
CED 675

**CED 645 Mental Health Issues for Genetic Counselors (3:3)**
Overview of mental health-related theories and constructs relevant to genetic counseling. Development of interviewing skills and strategies. Focus on professional self-awareness, with emphasis on demands of professional practice.

**Prerequisite**
Matriculation to fourth semester of the MS in genetic counseling

**CED 647b Consultation in Counselor Education: Theory and Process (3:3)**
Skill development in consultation.

**Prerequisite**
CED 610 and counseling major.

**Corequisite**
CED 653

**Notes**
Intended for master’s degree students in counseling and development.
CED 648 Foundations of School Counseling (3:3)
The role and functions of school counselors, including their work with students, teachers, administrators, and parents, as well as their complimentary relationships with other student services personnel.
Prerequisite
CED 610 and counseling major.
Corequisite
CED 653
Notes
Must be completed successfully before post-master’s certificate student can enroll in internship.

CED 650 Group Counseling Theory and Practice (3:3)
Develop understanding and skills in the theory and practice of group work, the relationship of group activities to counseling, and fundamental group counseling techniques.
Prerequisite
CED 610, CED 620, and counseling major.
Corequisite
CED 653

CED 653 Practicum in Counseling (1:1)
Skill development and application of theory to practice in counseling, assessment and consultation through supervised work with clients in a laboratory setting.
Prerequisite
Counseling major.
Corequisite
Liability insurance
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 661 Group Counseling in Schools (3:3)
Practical considerations and approaches to developing and implementing group counseling experiences in K-12 schools.
Prerequisite
Admission to the Post-Master’s Certificate Program in Advanced School Counseling

CED 662 Multicultural Considerations in School Counseling (3:3)
Explore the influence of student diversity on the role of school counselor. Racial identity, self-awareness, diversity knowledge, and multicultural counseling skills.
Prerequisite
Admission to the Post-Master’s Certificate Program in Advanced School Counseling

CED 663 School Counselors as Consultants in Educational Settings (3:3)
Consultation methods for school counselors working with parents and teachers in a collaborative, strength-based approach. Strategies for improving student interaction in educational settings.
Prerequisite
Admission to the Post-Master’s Certificate Program in Advanced School Counseling

CED 664 Advanced Contemporary Topics in School Counseling (3:3)
Current topics affecting school counselors: the impact of leadership and advocacy, the ASCA National Model, and ethics and legal issues.
Prerequisite
Admission to the Post-Master’s Certificate Program in Advanced School Counseling
CED 669 Career Development and Career Counseling (3:3)
Traditional and contemporary career development theories. Career counseling processes, techniques, and information resources. Career development influences and needs of diverse populations.
Prerequisite
CED 610, CED 620, and counseling major
Corequisite
CED 653

CED 671 Understanding and Counseling Adolescents (3:3)
Contemporary adolescence; theories of psycho-social, cognitive, emotional and moral development, combined with selective readings on adolescent problems, and evaluating the implications of these ideas for developing more effective approaches in working with adolescent youth.
Prerequisite
CED 610 or permission of instructor.
Corequisite
CED 653

CED 672 Counseling for Middle and Later Life (3:3)
Theories of middle and late-life development and counseling theories are integrated to develop understanding of persons in middle and later life and for selecting appropriate counseling interventions to meet their needs.
Prerequisite
CED 610; permission of instructor.
Corequisite
CED 653
Notes
Must be completed successfully before post-master’s certificate student can enroll in internship.

CED 673 Group Process and Leadership (3:3)
Overview of theories and research regarding group work, processes and dynamics, cultural influences, and group leadership in a variety of settings. Supervised experience as a group leader.
Prerequisite
CED 610, CED 620, CED 650, and/or permission of instructor.
Corequisite
CED 653

CED 675 Counseling Field Practicum (3:1:3)
Introduction to staff, structures, functions, programs, and policies of a counseling site through a minimum of 45 hours of field-based experiences and weekly supervision session on campus.
Corequisite
CED 605, ED 610, ED 620 and ED 678; ED 602 or ED 644; any ED 653 corequisite experiences for these courses. Must have liability insurance.
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 676a-f Organization and Administration of Student Development Services (3:3)
Organizing and administering student development services for postsecondary institutions of varying types and sizes; process and function of management in student development, student financial aid, student union programming and management, residential life, admissions, career counseling and placement, student development services.
Prerequisite
CED 602; counseling major

CED 677 School Certification (3:3)
Introduction to staff, structures, functions, programs and policies of a school counseling program through a minimum of 45 hours of field-based experiences and weekly supervision sessions on campus.

Corequisite
Liability insurance

Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 678 Professional Orientation (3:3)
History, goals, and objectives of professional organizations, codes of ethics, legal considerations, standards of preparation, certification, licensing, and role identity of counselors in various settings.

Prerequisite
Counseling major

CED 679 Advanced Counseling Practicum (3:3:6)
Application of counseling skills, theories and multicultural competencies through a minimum of 40 direct service hours with clients in Departmental Clinic, under intense/close supervision.

Prerequisite
Counseling major, CED 605, CED 610, CED 620, CED 678, and CED 602/CED 644/CED 648 and related CED 653 corequisites. Must have liability insurance.

CED 680a Counseling Internship (6:0:20)
On-the-job experience for counselors totaling a minimum of 600 hours over a one-year period.

Prerequisite
Advanced standing and recommendation by the major professor.

Corequisite
Liability insurance

Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 680b Counseling Internship (6:0:20)
On-the-job experience for counselors totaling a minimum of 600 hours over a one-year period.

Prerequisite
Advanced standing and recommendation by the major professor.

Corequisite
Liability insurance

Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 680c Counseling Internship (6:0:20)
On-the-job experience for counselors totaling a minimum of 600 hours over a one-year period.

Prerequisite
Advanced standing and recommendation by the major professor

Corequisite
Liability insurance

Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 680d Counseling Internship (6:0:20)
On-the-job experience for counselors totaling a minimum of 600 hours over a one-year period.

**Prerequisite**
Advanced standing and recommendation by the major professor

**Corequisite**
Liability insurance

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**CED 682 Application of Measurement and Clinical Appraisal Techniques (3:3)**
Selecting, administering, and interpreting a variety of standardized and nonstandardized instruments, assessments, and appraisal techniques in various settings with diverse populations. Relevant psychometric principles and ethical/legal issues.

**Prerequisite**
Counseling major.

**Corequisite**
CED 653

**CED 687 Diagnosis and Treatment Planning in Counseling (3:3)**
Provides the skills needed to diagnose accurately and effectively and to develop a comprehensive treatment plan. Emphasis on understanding and evaluating diagnosis with a diverse clientele.

**Prerequisite**
CED 610, CED 644 and counseling major.

**Corequisite**
CED 653

**CED 688 Contemporary Problems Seminar (1–3)**
Specific course title identified each semester by subscript, e.g., Contemporary Problems Seminar; Issues in Professional Counseling.

**Prerequisite**
Advanced master’s or doctoral standing, or permission of instructor

**Notes**
May be repeated for credit when topic varies.

**CED 689 Global Perspectives in Counseling (6:6)**
This course will require travel, cultural immersion, and the provision of services to members of that community, with an overarching goal of improving cultural competence and awareness as a counselor.

**Prerequisite**
Admission to CED graduate programs, successful completion of CED 610, or permission of instructor.

**CED 690 Counselors Working with Families (3:3)**
Counseling families from family systems and multicultural theoretical perspectives. Clinical skills including assessment, treatment planning, and techniques.

**Prerequisite**
CED 610, CED 620.

**Corequisite**
CED 653

**Notes**
Must be completed successfully before post-master’s certificate student can enroll in internship.

**CED 691 Advanced Clinical Topics in Couple and Family Counseling/Therapy (3:3)**
Advanced seminar in the scientific and cultural foundations for practice of couple and family counseling/therapy.
Prerequisite
CED 690 or permission of instructor.
Corequisite
CED 653
Notes
May be repeated for credit when topic varies. Must be completed successfully before post-master's certificate student can enroll in internship.

CED 692 Independent Study (1–4)
Guided readings, research, and individual project work under direction of a staff member.
Prerequisite
Permission of instructor

CED 698 Implementing and Evaluating School Counseling Programs (3:3)
Methods for designing, implementing, and evaluating comprehensive school counseling programs, in relation to the academic, career, and personal-social development of children and adolescents.
Prerequisite
CED 648.
Corequisite
CED 641, CED 671, and CED 680.

CED 711 Experimental Course
This number reserved for experimental courses. Refer to Course Schedule for current offerings.

CED 720a Research Apprenticeship
CED 720b Research Apprenticeship

CED 740 Research Practicum in Counseling (3:3)
Individual data-based work on problems of special interest in counseling and development. Registration requires approval of dissertation committee chair.
Prerequisite
ERM 680, ERM 681, or equivalent courses

CED 756a Advanced Counseling Theory and Research
Prerequisite
Admission to doctoral program or permission of instructor

CED 756b Advanced Counseling Theory and Research
Prerequisite
Admission to doctoral program or permission of instructor

CED 757 Internship in University Teaching in Counseling (3:3)
Supervised teaching in the area of counseling and development in a college or university setting.
Prerequisite
Permission of instructor

CED 760a Consultation in Counseling and Counselor Education (2:2)
Theory pertaining to the principles and practice of consultation in a variety of settings. Includes models, skills, issues, and ethical considerations in consultation.
Prerequisite
Doctoral standing or permission of instructor

CED 760b Leadership in Counseling and Counselor Education (2:2)
Theory pertaining to the principles and practice of leadership in a variety of settings. Includes models, skills, issues, and ethical considerations in leadership.
Prerequisite
CED 760A and doctoral standing, or permission of instructor

CED 774 Advanced Career Theories and Career Counseling (3:3)
In-depth analysis and application of career counseling theories to diverse populations. Critical examination of career-related constructs and research. Supervised supervision of career counseling.
Prerequisite
CED 669 or permission of instructor.
Corequisite
CED 653

CED 775 Directed Doctoral Research (3)
Individual work on research problems consisting of collection, analysis, critical review, integration, and interpretation of research literature on a topic.
Prerequisite
Advanced doctoral standing or permission of instructor
Notes
May be repeated for credit.

CED 777a Seminar in Counseling (3:3)
Research methods in counseling; clinical assessment tools and issues; contemporary issues and trends in counselor education, including professional and ethical issues and global perspectives.
Prerequisite
Advanced doctoral standing in counselor education and recommendation of doctoral adviser.

CED 777b Seminar in Counseling (3:3)
Research methods in counseling; clinical assessment tools and issues; contemporary issues and trends in counselor education, including professional and ethical issues and global perspectives.
Prerequisite
Advanced doctoral standing in counselor education and recommendation of doctoral adviser.

CED 777c Seminar in Counseling (3:3)
Research methods in counseling; clinical assessment tools and issues; contemporary issues and trends in counselor education, including professional and ethical issues and global perspectives.
Prerequisite
Advanced doctoral standing in counselor education and recommendation of doctoral adviser.

CED 777d Seminar in Counseling (3:3)
Research methods in counseling; clinical assessment tools and issues; contemporary issues and trends in counselor education, including professional and ethical issues and global perspectives.
Prerequisite
Advanced doctoral standing in counselor education and recommendation of doctoral adviser.

CED 779 Advanced Counseling Practicum (3:3)
Counseling skills, multicultural competencies and applied counseling theories for 40 direct hours with actual clients under faculty supervision.
Prerequisite
Full doctoral admission

**CED 780a Advanced Counseling Internship (6:0:20)**
In-depth supervised field experience for advanced doctoral students in counselor education. Concentrated practice in individual, group, family, and/or consultation modes of counseling with individual faculty supervision in selected clinical settings.
Prerequisite
CED 756 or CED 774.
Corequisite
Liability insurance
Notes
Grade: Satisfactory/Unsatisfactory, S/U

**CED 780b Advanced Counseling Internship (6:0:20)**
In-depth supervised field experience for advanced doctoral students in counselor education. Concentrated practice in individual, group, family, and/or consultation modes of counseling with individual faculty supervision in selected clinical settings.
Prerequisite
CED 756 or CED 774.
Corequisite
Liability insurance
Notes
Grade: Satisfactory/Unsatisfactory, S/U

**CED 780c Advanced Counseling Internship (6:0:20)**
In-depth supervised field experience for advanced doctoral students in counselor education. Concentrated practice in individual, group, family, and/or consultation modes of counseling with individual faculty supervision in selected clinical settings.
Prerequisite
CED 756 or CED 774.
Corequisite
Liability insurance
Notes
Grade: Satisfactory/Unsatisfactory, S/U

**CED 780d Advanced Counseling Internship (6:0:20)**
In-depth supervised field experience for advanced doctoral students in counselor education. Concentrated practice in individual, group, family, and/or consultation modes of counseling with individual faculty supervision in selected clinical settings.
Prerequisite
CED 756 or CED 774.
Corequisite
Liability insurance
Notes
Grade: Satisfactory/Unsatisfactory, S/U

**CED 781a Clinical Supervision (3:3)**
Clinical supervision theories, models, research, interventions and skills, relationship and diversity issues; ethical and legal considerations. Didactic instruction followed by graduated supervised experiences.
Prerequisite
CED 780a, advanced doctoral standing, and recommendation by the major professor.
Corequisite
Liability insurance, CED 653 for CED 781a

CED 781b Clinical Supervision (3:3)
Clinical supervision theories, models, research, interventions and skills, relationship and diversity issues; ethical and legal considerations. Didactic instruction followed by graduated supervised experiences.
Prerequisite
CED 780a, advanced doctoral standing, and recommendation by the major professor.
Corequisite
Liability insurance, CED 653 for CED 781a
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 781c Clinical Supervision (3:3)
Clinical supervision theories, models, research, interventions and skills, relationship and diversity issues; ethical and legal considerations. Didactic instruction followed by graduated supervised experiences.
Prerequisite
CED 780a, advanced doctoral standing, and recommendation by the major professor.
Corequisite
Liability insurance, CED 653 for CED 781a
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 781d Clinical Supervision (3:3)
Clinical supervision theories, models, research, interventions and skills, relationship and diversity issues; ethical and legal considerations. Didactic instruction followed by graduated supervised experiences.
Prerequisite
CED 780a, advanced doctoral standing, and recommendation by the major professor.
Corequisite
Liability insurance, CED 653 for CED 781a
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CED 781e Clinical Supervision (3:3)
Clinical supervision theories, models, research, interventions and skills, relationship and diversity issues; ethical and legal considerations. Didactic instruction followed by graduated supervised experiences.
Prerequisite
CED 780a, advanced doctoral standing, and recommendation by the major professor.
Corequisite
Liability insurance, CED 653 for CED 781a

CED 799 Dissertation (1–12)
Individual direction in the development and execution of a doctoral dissertation.

CED 802 Dissertation Extension (1–3)

CED 803 Research Extension (1–3)
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Administration
Rochelle Brock, Department Head
Brian Clarida, Director of Graduate Study – MSA/PMC/Principal Fellows
Kathy Hytten, Director of Graduate Study for the EdD Program
Craig Peck, Director of Graduate Study for the EdS Program
Leila Villaverde, Director of Graduate Study for the PhD Program

About
The Department of Educational Leadership and Cultural Foundations (ELC) is concerned with issues of educational theory and philosophy, sociocultural analysis, educational leadership and school organization, educational policy, and critical pedagogy. The faculty members share a sociopolitical perspective that undergirds our scholarship, teaching, and service. We are committed to the development of a just and caring democratic society in which schools serve as centers of inquiry and forces for social transformation that foster social, economic, and educational equity by honoring differences in race, class, gender, ethnicity, and sexual preference. The ELC faculty seek to prepare thoughtful and effective leaders in education through programs of study that are interdisciplinary in focus and that emphasize questions of moral concern, the cultural context of education, and a reconstructive vision for excellent and equitable schooling. Our purpose is to create change agents who work with parents, staff, students, and communities to develop critical understandings of the assumptions, beliefs, and regularities that support schooling and who identify and create practices that allow schools to function more fully as democracies while preparing students for democracy.

The department offers four graduate programs and two certificate programs: Master of School Administration, Specialist in Education in Educational Leadership, Doctor of Education in Educational Leadership, and Doctor of Philosophy in Educational Studies with a concentration in Cultural Studies and Post Masters in School Administration and Post Masters in Cultural Foundations and Social Justice Education. As a valued member of our academic community, you will have the advantage of a supportive environment in which you are known, cared for, challenged and invested in. Faculty members take your preparation and your success very seriously. For that same reason, we equip you with more than knowledge; we give you the tools and experience to understand what your future decisions in the field will mean to learners and how you can use your position to bring about positive change for education. ELC is committed to embodying our shared commitments in all of our actions, with social justice and equity as the expressed centerpiece of who we are.

Faculty
Professors
Rochelle Brock, Curriculum studies, critical pedagogy, culturally responsive education, multicultural education, Black feminist theory (Department Head). (E)
Glenn M. Hudak, Interdisciplinary studies in philosophy of education, autism/disabilities studies, Buddhist and psychoanalytic theory, digital technology, epistemology, ethics, phenomenology. (E)
Kathy Hytten, Philosophy and sociology of education, social justice, diversity, democracy, critical pedagogy, globalization (Director of Graduate Study - EdD). (E)
Leila E. Villaverde, Curriculum studies, critical pedagogy, visual studies, feminist theories, gender studies, cultural/historical studies, and intersections with critical inquiry and praxis (Director of Graduate Study - PhD). (E)

Associate Professors
Silvia C. Bettez, Sociology of education, social justice education, critical multicultural education, qualitative research methods, critical community building. (E)
Kimberly Kappler Hewitt, qualitative and quantitative research methods, curriculum and instructional leadership, feminist studies. (E)
Carl Lashley, Critical practice of administration, university-school partnerships, legal and ethical dimensions of education, special education administration, disability studies and policy. (E)
Craig Peck, History of education, principalship, educational technology, educational reform, and social change (Director of Graduate Study - EdS/EdD). (E)

Clinical Assistant Professors
Brian Clarida, School law, principal leadership, community engagement, student achievement (Director of Graduate Study – MSA/PCM/Principal Fellows).

Graduate Programs
Master of School Administration (MSA), (42)
Post-Master’s Certificate in School Administration, (24-27)
Post-Master’s Certificate in Cultural Foundations and Social Justice Education, (18)
Post-Master’s Certificate in School Administration - Specialized Education, (15) (On Moratorium)
Specialist in Education (EdS) in Educational Leadership, Advanced Principal and Superintendent Concentration, (33)
Doctor of Education (EdD) in Educational Leadership (without licensure), (54)
Doctor of Philosophy (PhD) in Educational Studies, Cultural Studies concentration, (60)

Master of School Administration (MSA), (42)
The Master of School Administration (MSA) meets state standards for North Carolina Level I administrator licensure (school principal). The degree requires 42 semester hours. Students engage the content of leadership preparation through graduate classroom engagement and assignments, observing schools and school leaders in their practice, and performing tasks under the supervision of a school-based and university mentor during the internship.

Courses are offered in the evenings during the Fall and Spring terms and at various times in the Summer term. Courses are offered off campus or in blended, online formats. Most students are enrolled part-time.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a resume or curriculum vitae and a personal statement (see departmental website for topic and details). Qualified applicants will have at least 3 years of teaching or other professional educational experience (not limited to public schools).

Application Deadline: March 30th

Degree Requirements
Required Courses (24)

- ELC 616 Culturally Responsive Leadership (3)
- ELC 660 The School Principalship
- ELC 670 Leadership for Teaching and Learning (3)
- ELC 673 Principal Leadership for Special Education (3)
- ELC 675 Schools as Centers of Inquiry (3)
- ELC 683 Engaging the Public in Education (3)
- ELC 684 Teacher Rights, Recruitment, Retention, and Evaluation (3)
- ELC 694 Cultural and Political Dimensions of Schooling (3)
Electives (6)
Students will work with their advisors to choose two electives (6)— either in the Department or outside it—that match the student’s interests and provide both content and activities that are necessary to complete the student’s preparation. Advisors will encourage students to choose electives that create interdisciplinary and interprofessional connections in the student’s preparation.

Required Field Experiences (12)
Students are required to complete an internship experience that is the equivalent of one year of full-time administrative field experience.

  ELC 690  Practicum in Educational Administration (3-6)

Capstone Experience
To be eligible to receive North Carolina state licensure as a principal, students must submit a Licensure Portfolio to the department for review. The portfolio will include material drawn from the student’s coursework and internship and provide documentary evidence of meeting state leadership standards. ELC faculty members will review the student's portfolio for approval.

Program and Course Delivery
We offer students a coordinated blend of online and hybrid online/faceto-face courses. Our approach to program and course delivery is academically rigorous at the same time it is mindful of students’ professional obligations and personal lives.

School Administration, PMC
The Post-Master’s Certificate in School Administration requires 24-27 semester hours and is designed to prepare students for positions as principals or assistant principals and meets the requirements of the state legislation that supports an alternative path to school administration licensure (also known as “add-on” principal licensure).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume that details all previous leadership and professional roles and a personal statement (see departmental website for topic and details). One of the required recommendations must come from a principal or education supervisor. Some applicants may be requested to participate in an interview.

Qualified applicants will have a master’s degree in education or a field closely affiliated with youth or adult development and at least 3 years of teaching or other professional educational experience (not limited to public schools).

Application Deadlines: March 30th (face-to-face PMC program) and April 30th (online PMC program)

Certificate Requirements
Required Courses (12-15)

  ELC 660  The School Principalship
  ELC 670  Leadership for Teaching and Learning (3)
  ELC 684  Teacher Rights, Recruitment, Retention, and Evaluation (3)
  ELC 694  Cultural and Political Dimensions of Schooling (3)

Based on an assessment of a student’s academic and professional background as reflected in the application, the PMC committee may require students to take an additional course in the ELC department to help prepare them for a school leadership role.
Required Field Experiences (12)
Students are required to complete an internship experience equivalent to one year of full-time administrative field experience.

ELC 690 Practicum in Educational Administration (3-6)

Capstone Experience
To be eligible to receive NC state licensure as a principal, students must submit a Licensure Portfolio to the department for review. The portfolio will include material drawn from the student’s course work and internship and provide documentary evidence of meeting state leadership standards. ELC faculty members will review the student’s portfolio for approval.

School Administration -Specialized Education, PMC, (15) (On Moratorium)
The PMC in School Administration – Specialized Education is currently not accepting applications. The Post-Master’s Certificate in School Administration -Specialized Education Focus requires 15 semester hours and is specifically designed for students graduating from the UNCG MEd in special education curriculum who have completed the leadership emphasis area of focused study. The certificate meets the requirements of the state legislation that supports an alternative path to school administration licensure (also known as “add-on” principal licensure).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume that details all previous leadership and professional roles and a personal statement (see departmental website for topic and details). One of the required recommendations must come from a principal or education supervisor. Some applicants may be requested to participate in an interview.

Qualified applicants will hold an MEd in special education and have at least 3 years of teaching or other professional educational experience (not limited to public schools).

Certificate Requirements
Required Courses (3)
Students will complete the courses below that were not taken as part of the MEd in Special Education, leadership emphasis.

ELC 660 The School Principalship (3)
ELC 670 Leadership for Teaching and Learning (3)
ELC 684 Teacher Rights, Recruitment, Retention, and Evaluation (3)
ELC 694 Cultural and Political Dimensions of Schooling (3)

Required Field Experiences (12)
Students are required to complete an internship experience equivalent to one year of full-time administrative field experience.

ELC 690 Practicum in Educational Administration (3-6)

Licensure Portfolio/Capstone Experience
To receive NC state licensure as a principal, students must submit a Licensure Portfolio to the department for review. The portfolio will include material drawn from the student’s course work and internship and provide documentary evidence of meeting state leadership standards. ELC faculty members will review the student’s portfolio for approval.

Urban School Leadership and Administration, PMC, (27)
The Post-Master’s Certificate in Urban School Leadership and Administration requires 27 semester hours and is designed to prepare students for positions as principals or assistant principals in urban schools. The certificate
meets the requirements of the state legislation that supports an alternative path to school administration licensure (also known as “add-on” principal licensure).

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume that details all previous leadership and professional roles and a personal statement (see departmental website for topic and details). One of the required recommendations must come from a principal or education supervisor. Some applicants may be requested to participate in an interview.

Qualified applicants will have a master’s degree in education or a field closely affiliated with youth or adult development and at least 3 years of teaching or other professional educational experience (not limited to public schools).

**Certificate Requirements**

**Required Courses (15)**

- ELC 660  The School Principalship (3)
- ELC 670  Leadership for Teaching and Learning (3)
- ELC 684  Teacher Rights, Recruitment, Retention, and Evaluation (3)
- ELC 691  Urban School Organizational Leadership: Best Practices (3)
- ELC 694  Cultural and Political Dimensions of Schooling (3)

**Required Field Experiences (12)**
Students are required to complete an internship experience in an urban educational setting equivalent to one year of full-time administrative field experience.

- ELC 690  Practicum in Educational Administration (3-6)

**Capstone Experience**
To receive NC state licensure as a principal, students must submit a Licensure Portfolio to the department for review. The portfolio will include material drawn from the student’s course work and internship and provide documentary evidence of meeting state leadership standards. ELC faculty members will review the student’s portfolio for approval.

Prior to program completion, each student will prepare a portfolio that describes and reflects on his/her development during the certificate program. ELC faculty members will review the student’s capstone experience for approval.

**Cultural Foundations and Social Justice Education, PMC, (18)**
The Post-Master’s Certificate in Cultural Foundations and Social Justice Education requires 18 credit hours and offers students a broad, interdisciplinary, scholarly tradition that currently shapes cultural foundations and social justice education. Attention is given to preparing students to teach in this area. Students have five academic years to complete the certificate.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

**Certificate Requirements**

**Core Courses (15)**
The certificate requires the following courses:

- ELC 676 Educational Sociology: Race, Class, and Gender Power Dynamics (3)
- ELC 679 History of Education in the United States (3)
- ELC 693 Introduction to Critical Pedagogy (3)
- ELC 696 Philosophies in Education (3)
- ELC 729 Foundations of Critical Theory (3)

Must select one course from the following:

- ELC 661 Ethics and Education (3)
- ELC 682 Teaching Social Justice (3)
- ELC 685 Passionate Pedagogies (3)
- ELC 688 Peace Education (1-3)

Or another ELC course as approved by advisor

**Educational Leadership, EdS, (33)**

The Ed.S. in Educational Leadership is a 33-hour degree program intended for students with a previous Master of School Administration degree and/or P licensure who seek preparation for advanced building-level administrator, district-level administrator, and superintendent positions. The degree leads to eligibility for specialist-level principal licensure and superintendent licensure (AP and AS licensure).

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, the applicant must submit a resume or curriculum vitae and a personal statement (see departmental Web site for topic and details).

**Degree Requirements**

**Administration and Leadership Courses (21)**

*Students will take 21 credits from among the following or additional courses as approved by the student’s advisor.*

- ELC 700 Critical Perspectives in Education, Leadership, and Culture (3)
- ELC 701 The School Superintendency (3)
- ELC 702 School District Leadership (3)
- ELC 750 Advanced Seminar in School Law Research (3)
- ELC 751 Cases and Concepts in Educational Leadership (3)
- ELC 790 Internship in Educational Leadership (3-18)

*Note: ELC 701: to be taken in conjunction with ELC 790 Internship.*

**Organizational & Instructional Leadership and Social & Cultural Foundations (9)**

*Students will take 9 credits from among the following or from other courses in curriculum & instructional leadership and social & cultural foundations.*

- ELC 615 Foundations of Curriculum (3)
- ELC 616 Culturally Responsive School Leadership (3)
- ELC 661 Ethics and Education (3)
- ELC 672 Technology and Administrative Leadership (3)
- ELC 675 Schools as Centers of Inquiry (3)
- ELC 683 Engaging the Public in Education (3)
- ELC 685 Passionate Pedagogies (3)
- ELC 686 Curriculum Theory (3)
- ELC 688 Contemporary Problems Seminar (1-3)
- ELC 693 Introduction to Critical Pedagogy (3)
- ELC 752 Theories in Educational Administration (3)
ELC 754  Personal Leadership Assessment and Enhancement (3)
ELC 755  Law and Policy in Special Education

Research (3)
3 semester hours from the following or from other courses in research:
   ELC 710  Data Literacy and Structured Inquiry

Capstone Experience
The EdS Capstone experience consists of an essay and hearing.

Essay
The student will write a paper that responds to the following:
Reflect on the ways in which your approach to leadership practice in schools (or other contexts) has changed as a result of your learning experiences in the Specialist in Education program.
Reflecting on your course work and the literature on education, leadership, and culture, describe the core values you want to promote in your professional practice, and discuss how they would be reflected in your response to several challenges you expect to face in your work.
Discuss some of the lingering questions you still have about education, leadership, and culture and society, questions that may frame your personal and professional learning in the future.
The capstone essay should be both reflective and scholarly. It should include reference citations to works that were influential in the student’s development, and a properly-formatted reference list (that is, using APA format, as detailed in the 6th edition of the Publication Manual of the American Psychological Association). The essay should reflect growth beyond the student’s master’s degree work. A copy of the capstone paper is due to each of the 2 faculty members participating in the student’s capstone hearing 2 weeks prior to the capstone hearing.
The discussion of the capstone essay prompts (see above) should be thoroughly grounded in the professional literature. The essay should provide evidence not only of the student’s professional growth in the Ed.S. program, but it should also document how the professional literature contributed to that growth. It is likely that in order to adequately address the prompts and to ground them in the professional literature, the capstone essay will be 15-20 double-spaced pages in length, plus references.

Hearing
The capstone hearing may be an individual hearing with the student’s advisor, or a group hearing with multiple students and faculty members participating in each hearing. During individual CAP hearings, the student will discuss the essay with the advisor. During group CAP hearings, each student will have 10 minutes to make a presentation about the content in their CAP essay. The student will answer questions specific to his/her presentation and dialogue about it with fellow students and faculty members. Students are welcome to use PowerPoint or other media for their individual presentations, but they are not obligated to do so.

Capstone hearings will take place during late October/November (Fall semester) or March/April (Spring semester). Students will typically be notified of the date and time for their capstone hearing by early October Fall or mid to late February Spring.

Applying for the Ed.S. Capstone
The student should provide notice of intent to complete the Capstone Experience at the beginning of the semester in which they intend to do so by submitting a written memo to their advisor and to the Coordinator of the Ed.S. program.

Educational Leadership, EdD, (54)

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
In addition to the application materials required by The Graduate School, the applicant must submit a resume or curriculum vitae and a personal statement (see departmental website for topic and details).

**Degree Requirements**
The Ed.D. in Educational Leadership is a 54 hour degree program.

**Foundational Coursework (18)**
Coursework from the areas of administration and leadership, curriculum and instruction, social and cultural foundations, or research that provides a foundation for the student’s in-depth inquiry in the major focus area (see below). Coursework in this category may be counted from the EdS program if courses meet Graduate School regulations and are approved by the student’s doctoral committee.

**Major Focus Area Coursework (12)**
Coursework in this category should be carefully selected to help the student develop scholarly expertise in her/his chosen area of focus within educational leadership. Focus areas and supporting coursework include the following:

**Organizational and Leadership Studies**
- ELC 662  Power, Politics, and Schools (3)
- ELC 688  Contemporary Problems Seminar (1-3)
- ELC 691  Urban School Organizational Leadership: Best Practices (3)
- ELC 752  Theories in Educational Administration (3)
- ELC 754  Personal Leadership Assessment and Enhancement (3)

**Law, Policy and Finance**
- ELC 659  Education Finance (3)
- ELC 688  Contemporary Problems Seminar (3)
- ELC 751  Cases and Concepts in Educational Leadership (3)
- ELC 755  Law and Policy in Special Education

**Curricular and Instructional Leadership**
- ELC 615  Foundations of Curriculum (3)
- ELC 672  Technology and Administrative Leadership (3)
- ELC 673  Principal Leadership for Special Education (3)
- ELC 675  Schools as Centers of Inquiry (3)
- ELC 686  Curriculum Theory (3)
- ELC 688  Contemporary Problems Seminar (1-3)
- ELC 693  Introduction to Critical Pedagogy (3)

**Social, Cultural, Historical, and Ethical Foundations of Educational Leadership**
- ELC 604  Moral Dimensions of Education (3)
- ELC 616  Culturally Responsive Leadership (3)
- ELC 661  Ethics and Education (3)
- ELC 663  Educational Administration in Historical Perspective (3)
- ELC 683  Engaging the Public in Education (3)
- ELC 688  Contemporary Problems Seminar (1-3)
- ELC 697  Selected Critical Issues in American Education (3)
- ELC 721  Social and Cultural Change and Education (3)

**Research (12)**
Coursework in this category should be carefully selected to help the student develop research expertise that facilitates the completion of a high-quality dissertation. Courses may be selected from a single or multiple methodological perspectives.

Students pursuing a qualitative track would typically complete the following course:
- ELC 665  Approaches to Qualitative Inquiry (3)
  or
- ELC 664  Foundations of Interpretive Inquiry (3)
9 additional hours from those listed below would be selected by the student in consultation with her/his committee chair:

- **ELC 767** Qualitative Data Collection and Analysis (3)
- **ELC 688** Contemporary Problems Seminar (1-3)
- **ELC 666** Writing Preparation and Proposal Development (3)
- **ELC 775** Directed Doctoral Research (3)

*Note: ELC 775 should not be taken until 9 hours of research courses have been completed.*

Other research courses pre-approved by the advisor and committee.

Students pursuing a quantitative track would typically select, in consultation with their committee chair, from courses such as the following:

- **ELC 688** Contemporary Problems Seminar (1-3)
- **ERM 604** Methods of Educational Research (3)
- **ERM 605** Educational Measurement and Evaluation (3)
- **ERM 642** Evaluation of Educational Programs (3)
- **ERM 668** Survey Research Methods in Education (3)
- **ERM 680** Intermediate Statistical Methods in Education (3)
- **ERM 682** Multivariate Analysis (3)
- **ERM 732** Hierarchical Linear Modeling (3)
- **ERM 750** Case Study Methods in Educational Research (3)

**Dissertation (12)**

- **ELC 799** Dissertation (1-12)

Educational Studies, PhD, (60)

**Cultural Studies Concentration**

The program in educational studies with a concentration in cultural studies is concerned with the breadth and depth of what is fundamental to educational practice--its ideology, philosophical assumptions, and moral claims--and is grounded in the study of education and culture with a particular interest in the integration of social analysis, cultural analysis and praxis.

The program focuses on theoretical and policy issues related to educational practice. In particular the degree emphasizes the following concerns.

- A concern for the disciplined study of the relationship between culture and education, encompassing philosophy, sociology, history, critical theory and pedagogy as it pertains to issues of power, equity, access, and privilege.
- A concern for providing broad philosophical, moral, and spiritual perspectives on educational policies and practices.
- A concern for the impact of current important intellectual movements in educational theory, including feminist theory, gender studies, queer studies, critical race theory and neoliberal critiques.
- A concern for the disciplined study of the relationships among visual studies, media culture, and community engaged work.
- A concern for the interdisciplinary work and serious study of emerging forms of inquiry.
- A concern for integrating personal and professional selves and for providing synthesis, perspective, and direction.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a resume or curriculum vitae and a personal statement (see departmental website for details).
Degree Requirements

Course Areas
The program has four course areas:

Educational Foundations (18)
Suggested foundational courses:
- ELC 676 Educational Sociology: Race, Class, and Gender Power Dynamics (3)
- ELC 679 History of Education in the United States (3)
- ELC 693 Introduction to Critical Pedagogy (3)
- ELC 696 Philosophies in Education (3)
- ELC 729 Foundations of Critical Theory (3)

Curriculum and Teaching (15-24)
Courses that encourage a broad, critical understanding of school, pedagogy, and society.

Research and Methods of Inquiry (15)
The following courses are required:
- ERM 517 Statistical Methods in Education (3)
  or
Acceptable substitute pending approval of advisor and The Graduate School

Dissertation (12)
- ELC 799 Dissertation (1-12)

ELC - Educational Leadership and Cultural Foundations Graduate Courses

ELC 506 Institutes in Education (1–3)
Practicum or workshop experiences to focus on issues, problems, or approaches in the profession.

Notes
Students may apply no more than 3 credits of this course to any degree program. Grade:
Satisfactory/Unsatisfactory, S/U

ELC 581 Teaching in the Urban School (3:3)
This course is designed to provide an opportunity for educators to examine research and literature related to the problems of teaching in the urban school.
Prerequisite
Admission to the Teacher Education Program or permission of instructor

ELC 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ELC 604 Moral Dimensions of Education (3:3)
Values involved in educational decision making; application of various moral discourses to educational practices.
Prerequisite
ELC 696 or ELC 697 or their equivalents

ELC 609 Epistemology and Education (3:3)
An overview of several systems of knowledge and the problems of knowing, knowing how, and belief. Deals with intellect, rationality, and positional knowledge.
Prerequisite
ELC 696 or ELC 697 or their equivalents
ELC 615 Foundations of Curriculum (3:3)
Historical, cultural, and sociopolitical foundations of curriculum theory and practice. Emphasis on ideological shifts in transformative practice, curriculum development/analysis, and relations between curriculum, individual, and society.

ELC 616 Culturally Responsive Leadership (3:3)
Theories of and strategies related to culturally responsive leadership that will prepare K-12 school leaders to develop effective and equitable, multicultural school communities.

ELC 625 Seminar in Teaching and Social Foundations of Education (3:3)
Critical consideration of the purpose and philosophy of undergraduate social foundations courses, perspectives and approaches to teaching, and reflection on issues and problematics of critical pedagogy.

Notes
This course can be taken up to 2 times for credit.

ELC 657 Critical Multicultural Education (3:3)
Introduces students to critical multicultural education, including historical and sociological dynamics of power, privilege, and oppression, and contemporary equity topics in education, using multicultural education theory and educator narratives.

ELC 659 Education Finance (3:3)
Financial management of education; how funds are provided for public education, administered, and effectively utilized. Issues of equity in the provision of school services and support.

ELC 660 The School Principalship (3:3)
For prospective principals. Functions in organizing people to meet educational goals, leadership in instruction, supervision, curriculum design and development, personnel administration, and ethical and legal responsibilities.

ELC 661 Ethics and Education (3:3)
Appraisal of human aims and practices, attitudes towards character, and conceptions of desirable human life, as these are related to educational theory and practice.

Prerequisite
ELC 696 or ELC 697 or their equivalents

ELC 662 Power, Politics, and Schools (3:3)
The politics of education as the set of interactions that influence and shape the authoritative allocation of values in this society and its educational organizations.

ELC 663 Educational Administration in Historical Perspective (3:3)
Evolution of administrative thought and practice in ancient, medieval, and modern times and their relevance to the functioning of educational organizations.

ELC 664 Foundations of Interpretive Inquiry (3:3)
Theoretical and philosophical dimensions of interpretive inquiry in education; concepts that are the foundation for qualitative methodologies in educational research.

ELC 665 Approaches to Qualitative Inquiry (3:3)
Introduction to empirical qualitative research: philosophical foundations, research design strategies, methods for data collection and analysis (especially interviewing and field observation), options for reporting research. Emphasis on skill development.
Prerequisite
ELC 609, ELC 664 recommended

ELC 666 Writing Preparation and Proposal Development (3:3)
Workshop addresses dissertation process and academic professional development in ways that build on the theory and practice of scholarly writing.

ELC 670 Leadership for Teaching and Learning (3:3)
Examines conceptions of 'good' schools and the nature of instruction, curriculum, assessment, and professional development. Explores leadership, change, and school renewal that works toward good schooling and pedagogy.
Prerequisite
Admission to MSA, PMC, EdS, or EdD program in educational leadership or permission of instructor

ELC 671 Principal Fellows Seminar (3:3)
Provides enrichment activities for Principals Fellows as required by the Principal Fellows Program.
Prerequisite
Enrollment as a Principal Fellow
Notes
Required for Principal Fellows each semester during their enrollment in the MSA program.

ELC 672 Technology and Administrative Leadership (3:3)
How school leaders can use technology to meet their management, instructional, inquiry, and problem solving responsibilities.

ELC 673 Principal Leadership for Special Education (3:3)
Strategies school principals can use to advocate and implement programs for exceptional children that are effective for students and compliant with legal requirements.

ELC 675 Schools as Centers of Inquiry (3:3)
Effective schools function as professional learning communities characterized by a culture of inquiry and collaboration. Builds the skills of students in facilitating individual and whole school inquiry.
Prerequisite
Admission to MSA, PMC, EdS, or EdD program in educational leadership or permission of instructor

ELC 676 Educational Sociology: Race, Class, and Gender Power Dynamics (3:3)
Key sociological concepts and theories are utilized to analyze, critique, and understand how power operates on both micro and macro levels within United States educational systems.

ELC 678 Feminist Theories and Education (3:3)
Where feminism and education intersect, specifically how gender and other social categories impact lived experience. Political, economic, social inequities studied to transfer theory and practice in educational contexts.

ELC 679 History of Education in the United States (3:3)
Historical foundations of the educational system in the U.S. Contributions of selected educational leaders and the responses of the educational system to the dilemmas posed by major events and movements in the history of the country.

ELC 680 Transnational and Postcolonial Feminist Perspectives (3:3)
Study of transnational and postcolonial feminist perspectives in multiple world regions. Emphasis on global political developments, grassroots efforts to use education as social change, and developing critical power literacies.
ELC 682 Teaching Social Justice (3:3)
Examines various ways people might teach to promote social justice. Explores conceptual frameworks for understanding issues of oppression and privilege. Opportunity to apply diverse pedagogical strategies.

ELC 683 Engaging the Public in Education (3:3)
Examination of parent involvement in schooling, school/family/community partnerships, civic deliberation about education, school’s role in community transformation. Emphasis on equity/justice, school’s accountability to the public, research evidence, effective practice.

ELC 684 Teacher Rights, Recruitment, Retention, and Evaluation (3:3)
Processes and systems to recruit, induct, support, evaluate, develop, and retain a high quality staff. Legal and ethical reasoning systems influencing school administrators with regard to teachers’ legal rights.

ELC 685 Passionate Pedagogies (3:3)
Examination of how passion, on the part of both teachers and learners, can become a motivating force for deeper understandings of ourselves and critical social issues.

ELC 686 Curriculum Theory (3:3)
The nature of theory and of theory building; application of theoretical criteria to the field of curriculum.
Prerequisite
ELC 515 or its equivalent

ELC 687 Legal and Ethical Dimensions of Leadership (3:3)
The constitutional and statutory precedents and principles underlying the roles of federal, state, and local governments in public education. Recent court decisions relating to public education; development of awareness of freedoms and constraints of law and ability to implement and apply the intention of law and court decisions to practical problems of school administration.
Prerequisite
Basic knowledge of history of American education, governance and organization of education and basic U.S. history and/or constitutional law

ELC 688 Contemporary Problems Seminar (1–3)
Specific course title identified each semester by subscript, e.g., Contemporary Problems Seminar; Issues in Professional Negotiations.
Notes
May be repeated for credit when topic varies.

ELC 689 Seminar in Leadership Development (6)
For students from all disciplines who intend to pursue a career in administrative positions. Development of creative leadership potential and maximization of personal growth. Students requested to make emotional as well as intellectual commitment to development of leadership qualities.
Cross Listed Courses
MBA 689
Notes
Grade: Satisfactory/Unsatisfactory, S/U

ELC 690 Practicum in Educational Administration (3–6)
Planned administrative functions in appropriate school setting with objective of providing direct experience with processes and functions of educational administration. Supervision is shared responsibility of university and public school faculties.
Prerequisite
For educational administration majors at either master’s or sixth-year level. Completion of 12 hours in MSA program and permission of instructor

*Distribution*
SVL

*Notes*
May be repeated for a maximum of 12 hours credit. Grade: Satisfactory/Unsatisfactory, S/U

**ELC 691 Urban School Organizational Leadership: Best Practices (3:3)**
Examines organizational dimensions of urban schooling (structure, culture, politics, bureaucracy, community); explores practical organizational leadership reform initiatives that aim to promote educational excellence and encourage social justice.

**ELC 692 Independent Study (1–4)**
Guided readings, research, and individual project work under direction of a staff member.

*Prerequisite*
Approval of instructor

**ELC 693 Introduction to Critical Pedagogy (3:3)**
Introduction to the theory and practice of critical pedagogy including its relationship to critical social theory. Emphasis on education as vehicle for social change, moral critique, and personal transformation.

**ELC 694 Cultural and Political Dimensions of Schooling (3:3)**
Structures and processes of school governance, including the impacts of district, state and Federal policies, and influence of special interest groups. Attention to policy development, advocacy, implementation, analysis, and critique.

**ELC 695 Comparative Education (3:3)**
Definition, purpose, and scope of comparative education; the role of such factors in education as race, language, religion, geography, economics, nationalism, socialism, and democracy; a survey of education in England, France, Germany, U.S.S.R., China, Japan, and India.

**ELC 696 Philosophies in Education (3:3)**
Major philosophic viewpoints (traditional and contemporary) as they apply to education; analysis of past and present changes in educational outlook and practices.

**ELC 697 Selected Critical Issues in American Education (3:3)**
Identification and analysis of selected major policy questions facing education; relationship between the social, political, and cultural milieus, and issues in education.

**ELC 698 Gender, Art, Politics, and Pedagogy (3:3)**
Focus on artists whose art is political and pedagogical. How artists use art as public voice, identity formation, documentation of public memory/history, redefinition of aesthetics, and reconstruction of learning.

**ELC 699 Thesis (1–6)**
Individual guidance and direction in the development of a research problem in the master’s degree thesis.

**ELC 700 Critical Perspectives in Education, Leadership, and Culture (3:3)**
Explores the challenges of educational transformation, including improved teaching and learning, equity/social justice, and democracy in institutions with complex cultural contexts. Introduction to habits of mind for advanced graduate study.
ELC 701 The School Superintendency (3:3)
Designed for both aspiring superintendents and central office administrators. Focuses on basic knowledge and skill development around a broad range of issues critical to superintendent success.
Prerequisite
Admission to EdS or EdD program in educational leadership or permission of instructor

ELC 702 School District Leadership (3:3)
This course prepares school administrators to lead school districts. District leadership requires enacting a vision, organizing personnel, and managing operations to address human and community needs.

ELC 710 Data Literacy and Structured Inquiry (3:3)
This course focuses on data literacy and structured inquiry for educational leaders. Throughout the course, there will be an emphasis on ethical and equity issues regarding data and inquiry.

ELC 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ELC 721 Social and Cultural Change and Education (3:3)
Consideration of social, cultural, political, and moral challenges facing education in the 21st century. Critical social and educational perspectives on the crises of meaning, democracy, globalization, religion, and identity.
Prerequisite
ELC 696 or ELC 697 or their equivalents

ELC 722 Aesthetics, Visual Studies, and Critical Pedagogy (3:3)
Aesthetics, visual literacy, visual culture, semiotics, and their influences in contemporary education. Development of critical visual literacy for the understanding and integration of the arts in pedagogy.

ELC 725 Community College Leadership Seminar (3:3)
Analysis of community college leadership competencies from transdisciplinary perspectives. Seminar participants develop a personal leadership development plan and critique research on community college leadership competencies.

ELC 726 Organizational Strategy in the Community College (3:3)
Critique of strategies for aligning resources and programs with learner and community needs in a global political economy. Emphasis on democratic approaches to educational programming.

ELC 727 Community College Policy Seminar (3:3)
Introduction to policy affecting the community college. Analysis of relations among government, the college, the trustees, students, and faculty. Discussion of the implications of globalization for the community college.

ELC 728 Community College Research Seminar (3:3)
Overview of scholarship on the community college. Examination and critique of ontological, epistemological, and methodological assumptions. Seminar participants develop, articulate, and refine research interests.

ELC 729 Foundations of Critical Theory (3:3)
Provides a survey of foundational critical theorists, the Frankfurt School, and contemporary fields of study on power, social, cultural, and economic life through historical and sociopolitical analysis.

ELC 749 Doctoral Dissertation Seminar (1–3)
Develop, discuss, and defend a dissertation prospectus.
Prerequisite
Permission of instructor
Notes
Grade: Satisfactory/Unsatisfactory, S/U

ELC 750 Advanced Seminar in School Law Research (3:3)
Case studies in school law.
Notes
For EdS students or the doctoral student writing a legal dissertation.

ELC 751 Cases and Concepts in Educational Leadership (3:3)
Uses cases and problem-based learning as opportunities to explore key analytic/theoretical perspectives and research evidence relevant to leadership for meaningful and equitable educational reform.

ELC 752 Theories in Educational Administration (3:3)
The nature of theory, definition, utilization; contemporary theories applied to educational administration; system theory and its application possibilities to educational administration.

ELC 753 Problems and Dilemmas in Administering Education (1–3:6)
Student/faculty teams will identify problems of administrative practice in education, identify methods or processes to study each problem, analyze problems/solutions in situ, explore alternative solutions (e.g. literature search) and develop conclusions.

ELC 754 Personal Leadership Assessment and Enhancement (3:3)
For students who intend to pursue educational leadership roles and careers in administration. Emphasizes development of creative leadership potential and maximization of personal growth.
Prerequisite
Admission to EdS or EdD program in educational leadership or permission of instructor

ELC 755 Law and Policy in Special Education
Examination of legal, ethical, and policy perspectives in the leadership of special education programs in schools and school districts and their integration into diverse organizational settings.
Prerequisite
ELC 673 or equivalent, or permission of instructor

ELC 767 Qualitative Data Collection and Analysis (3:3)
In-depth experience in qualitative data collection and analysis beyond the introductory level. Completion of a qualitative research project in collaboration with other students in the class.
Cross Listed Courses
HED 767, TED 767
Prerequisite
ELC 664, ELC 665, or other course in qualitative research

ELC 770 Community Engaged Research and Practice (3:3)
An in-depth exploration of the history, theory, ethics, research methods, and reporting of community-engaged research with an emphasis on positionality and reflexivity. Research practices in community settings are required.
Prerequisite
TED 730, ELC 664, ELC 665, ERM 750 or permission of instructor
Notes
Cross listed with TED 770 and SES 770

ELC 775 Directed Doctoral Research (3)
Individual work on dissertation research problems: collection analysis, critical review, integration, and interpretation of research literature on a topic pertinent to the student’s dissertation.

Prerequisite
Doctoral students in ELC or TED/HED and permission of instructor

Notes
May be repeated once for credit.

**ELC 790 Internship in Educational Leadership (3–18)**
Directed year-long internship in an appropriate educational administration field-based setting. Supervision shared by department faculty and field-based mentors.

Prerequisite
Minimum of 24 semester hours beyond the master’s, or a minimum of all prerequisite courses and 24 additional semester hours for those admitted to the program without a master’s degree. All such work to be approved in writing by the student’s Advisory/Dissertation Committee.

Notes
Grade: Satisfactory/Unsatisfactory, S/U

**ELC 799 Dissertation (1–12)**
Individual direction in the development and execution of a doctoral dissertation.

**ELC 801 Thesis Extension (1–3)**

**ELC 802 Dissertation Extension (1–3)**

**ELC 803 Research Extension (1–3)**
EDUCATIONAL RESEARCH METHODOLOGY, DEPARTMENT OF
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Administration
John Willse, Associate Chair of Department
Bob Henson, Director of Graduate Study

About
Graduates of the degree programs offered by the Department of Educational Research Methodology are prepared for careers in such settings as universities and colleges, school systems, state and federal departments of education, social service agencies, educational research and development centers, and the corporate sector. Course work is supplemented with research experience on grants and funded projects that include measurement research and evaluation that are being conducted by individual faculty and the UNCG Center for Educational Research and Evaluation.

Faculty

Professors
Micheline Chalhoub-Deville, Second/foreign language testing and assessment, including proficiency, performance-based, computer-based/adaptive, and achievement testing; large-scale/standardized testing, especially in international contexts; the assessment of less commonly taught languages, and language policy and planning in educational testing. (E)
Richard Luecht, Educational measurement, employment and professional testing; performance assessments; standard setting; design of computerized testing systems; integration of cognitive science and measurement; assessment engineering, automated test assembly; structural equation modeling; experimental design; multivariate statistics. (E)
Randy Penfield, Educational measurement, item response theory, statistical methods for evaluating test fairness and measurement invariance, differential item functioning, equity of test-based educational accountability policies, test construction, computer adaptive testing, applied statistics, experimental design, cluster, randomized control trails in education settings (Dean). (E)

Associate Professors
Bob Henson, Development and application of cognitive diagnosis models (also known as diagnostic classification models), in addition to generalizing concepts such as test construction and item information to CDMs; latent variable modeling; classification analysis; hierarchical linear models (Director of Graduate Study). (E)
John Willse, Educational measurement and statistics; latent variable modeling, including structural equation modeling, item response theory, and diagnostic classification models; outcomes assessment in higher education. (Associate Chair of Department). (E)

Assistant Professors
Jill Chouinard, Program evaluation, participatory evaluation methods, qualitative research methods, cross-cultural issues in evaluation. (E)
Ayesha Boyce, Program evaluation theory and practice; values-engaged educative, culturally responsive, and mixed methods research and evaluation; STEM and multi-site program evaluation. (E)
Devdass Sunnassee, Educational measurement, application of statistical methods in social and behavioral sciences, test equating.

Adjunct Faculty
Jodi Pettazzoni, (Director of Academic Assessment).

Graduate Programs
• Post-Baccalaureate Certificate in Educational Assessment, (15)
• Master of Science (MS) in Educational Research, Measurement, and Evaluation, Measurement and Quantitative Methods concentration, (33) or Program Evaluation concentration, (33)
• Master of Science/Doctor of Philosophy (MS/PhD) in Educational Research, Measurement, and Evaluation, Measurement and Quantitative Methods concentration, (78) or Program Evaluation concentration, (78)
• Doctor of Philosophy (PhD) in Educational Research, Measurement, and Evaluation, Measurement and Quantitative Methods concentration, (60) or Program Evaluation concentration, (60)
• Doctoral Minor in Educational Research Methodology, (15)

Educational Assessment, PBC, (15)
The Post-Baccalaureate Certificate in Educational Assessment requires 15 semester hours and provides school district testing coordinators or school administrators the opportunity to acquire focused education in educational assessment and evaluation.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Certificate Requirements
Required Core Courses (15)
ERM 517  Statistical Methods in Education (3)
ERM 604  Methods of Educational Research (3)
ERM 605  Educational Measurement and Evaluation (3)
ERM 642  Evaluation of Educational Programs (3)
ERM 675  Data Presentation and Reporting (3)

Educational Research, Measurement, and Evaluation, MS, (33)
The MS in Educational Research, Measurement, and Evaluation requires 33 semester hours.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Degree Requirements
Required Core Courses (21)
In cases where students have previously satisfied these requirements, course substitutions may be allowed with the approval of the major advisor.
ERM 600  Validity and Validation (3)
ERM 604  Methods of Educational Research (3)
ERM 642  Evaluation of Educational Programs (3)
ERM 650  Foundations of Qualitative Research Methods (3)
ERM 667  Foundations of Educational Measurement Theory (3)
ERM 680  Intermediate Statistical Methods in Education (3)
ERM 681  Design and Analysis of Educational Experiments (3)

Additional Required Core for the Measurement and Quantitative Methods Concentration (6)
ERM 682  Multivariate Analysis (3)
ERM 669  Item Response Theory (3)

Additional Required Core for the Program Evaluation Concentration (6)
ERM 643  Applied Educational Evaluation (3)
ERM 645  Culturally Responsive Approaches to Research and Evaluation (3)

Electives (6)
Students must complete a combination of 6 hours in elective courses at the 600 level or higher. Electives may come from any ERM courses not included in the required core or from non-ERM courses with the approval of the major advisor.

Comprehensive Examination (Capstone Experience)
The student will successfully complete a written comprehensive examination to be arranged by the major advisor, usually in the semester in which course work is completed.

Educational Research, Measurement, and Evaluation, MS/PhD, (78)
The PhD in Educational Research, Measurement, and Evaluation requires 78 semester hours beyond the baccalaureate degree (for student's entering the program in the MS/PhD track).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Degree Requirements
Required Core Courses (24)
In cases where students have previously satisfied these requirements, course substitutions may be allowed with the approval of the major advisor.

ERM 600  Validity and Validation (3)
ERM 604  Methods of Educational Research (3)
ERM 642  Evaluation of Educational Programs (3)
ERM 650  Foundations of Qualitative Research (3)
ERM 667  Foundations of Educational Measurement Theory (3)
ERM 668  Survey Research Methods in Education (3)
ERM 680  Intermediate Statistical Methods in Education (3)
ERM 681  Design and Analysis of Educational Experiments (3)

Additional Required Core for the Measurement and Quantitative Methods Concentration (12)
ERM 633  Second Language Assessment and Testing (3)
ERM 669  Item Response Theory (3)
ERM 682  Multivariate Analysis (3)
ERM 685  R for Education and the Social Sciences (3)

Additional Required Core for the Program Evaluation Concentration (12)
ERM 643  Applied Educational Evaluation (3)
ERM 645  Culturally Responsive Approaches to Research and Evaluation (3)
ERM 743  Advanced Theory in Program Evaluation (3)
ERM 744  Policy in Evaluation (3)

Electives (30)
Students must complete a combination of 30 hours in elective courses at the 600 level or higher. Electives may come from any ERM courses not included in the required core or from non-ERM courses with the approval of the major advisor. At least 15 hours must be ERM courses.

Comprehensive Examination
Students are required to take the MS comprehensive exam following 24 hours of core courses and electives. Students must successfully pass the MS comprehensive exam and formally apply to graduate from the MS program by The Graduate School deadline before taking courses in the doctoral program.

The student will successfully complete a written comprehensive examination to be arranged by the doctoral advisor, usually in the semester in which course work is completed.

**Dissertation (12)**
Research that culminates in the preparation of a required doctoral dissertation.

- ERM 799 Dissertation (1-12)

**Educational Research, Measurement, and Evaluation, PhD, (60)**

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

**Degree Requirements**
The PhD degree in Educational Research, Measurement, and Evaluation requires 60 semester hours.

**Required Core Courses (18)**
In cases where students have previously satisfied these requirements, course substitutions must be made pending agreement of the major advisor.

- ERM 600 Validity and Validation (3)
- ERM 642 Evaluation of Educational Programs (3)
- ERM 650 Foundations of Qualitative Research Methods (3)
- ERM 667 Foundations of Educational Measurement Theory (3)
- ERM 668 Survey Research Methods in Education (3)

**Additional Required Core for the Measurement and Quantitative Methods Concentration (12)**

- ERM 633 Second Language Assessment and Testing (3)
- ERM 669 Item Response Theory (3)
- ERM 682 Multivariate Analysis (3)
- ERM 685 R for Educational and Social Science (3)

**Additional Required Core for the Program Evaluation Concentration (12)**

- ERM 643 Applied Educational Evaluation (3)
- ERM 645 Culturally Responsive Approaches to Research and Evaluation (3)
- ERM 743 Advanced Theory in Program Evaluation (3)
- ERM 744 Policy in Evaluation (3)

**Electives (18)**
Students must complete a combination of 18 hours in elective courses at the 600 level or higher. Electives may come from any ERM courses not included in the required core or from non-ERM courses with the approval of the major advisor. At least 9 hours must be ERM courses.

**Comprehensive Examination**
The student will successfully complete a written comprehensive examination to be arranged by the doctoral advisor, usually in the semester in which course work is completed.

**Dissertation (12)**
Research that culminates in the preparation of a required doctoral dissertation.
ERM 799  Dissertation (1-12)

Educational Research Methodology, Doctoral Minor, (15)
The Doctoral Minor in Educational Research Methodology requires 15 semester hours completed from the following list of courses:

**Minor Requirements**
- ERM 600  Validity and Validation (3)
- ERM 633  Second Language Assessment and Testing (3)
- ERM 636  Advanced Studies in Second Language Testing (3)
- ERM 642  Evaluation of Educational Programs (3)
- ERM 643  Applied Educational Evaluation (3)
- ERM 667  Foundations of Educational Measurement Theory (3)
- ERM 668  Survey Research Methods in Education (3)
- ERM 669  Item Response Theory (3)
- ERM 675  Data Presentation and Reporting (3)
- ERM 680  Intermediate Statistical Methods in Education (3)
- ERM 681  Design and Analysis of Educational Experiments (3)
- ERM 682  Multivariate Analysis (3)
- ERM 685  R for Education and the Social Sciences (3)
- ERM 693  Seminar in Advanced Research Methods (3)
- ERM 726  Advanced Topics in Educational Measurement (3)
- ERM 727  Computer-Based Testing: Methods and Applications (3)
- ERM 728  Exploratory and Confirmatory Factor Analytic Methods for Scale Construction (3)
- ERM 729  Advanced Item Response Theory (3)
- ERM 731  Structural Equation Modeling in Education (3)
- ERM 732  Hierarchical Linear Modeling (3)
- ERM 734  Equating (3)
- ERM 735  Multidimensional Item Response Theory (3)
- ERM 742  Advanced Topics in the Evaluation of Educational Programs (3)
- ERM 750  Case Study Methods in Educational Research (3)

**ERM - Educational Research Methodology Graduate Courses**

**ERM 517 Statistical Methods in Education (3:3)**
Introductory course in applied descriptive statistics, correlational methods, and linear regression that provides a conceptual and theoretical foundation for more advanced work and a thorough grounding in the use of computers for descriptive statistical analysis, and interpretation of results.

*Prerequisite*
Elementary algebra

**ERM 600 Validity and Validation (3:3)**
Validity is fundamental to all testing operations. The course covers seminal theories, critical perspectives, as well as prominent validation research of critical importance to professionals working in diverse industry settings.

**ERM 604 Methods of Educational Research (3:3)**
Techniques and uses of research in education. Designed to provide the student with the ability to read, understand, and critically evaluate published empirical research.

*Notes*
Formerly EAR 593. Students who took this course as EAR 593 are not eligible to take ERM 604 and receive credit.

**ERM 605 Educational Measurement and Evaluation (3:3)**
For teachers, counselors, and administrators. Principles of measurement and evaluation; methods of scoring and interpreting tests. Construction and use of teacher-made tests. Statistical concepts basic to understanding and interpreting test data.

Notes
Formerly EAR 670. Students who took this course as EAR or ERM 670 are not eligible to take ERM 605 and receive credit.

ERM 633 Second Language Assessment and Testing (3:3)
Theoretical and practical issues related to second language testing with special attention paid to the assessment of English as a second language, world Englishes, and foreign languages.

ERM 636 Advanced Studies in Second Language Testing (3:3)
Language testing for English and foreign language learners as well as the World Englishes domain. Policies, theories, research, and tools employed to measure different language modalities.

ERM 642 Evaluation of Educational Programs (3:3)
Existing and emerging formulations of educational evaluation. Developing operational guidelines for conducting evaluations in educational settings.

Prerequisite
Permission of instructor and ERM 517 or equivalent

ERM 643 Applied Educational Evaluation (3:3)
An application course that uses modern evaluation models, data collection, statistical analyses, and interpretation of findings to establish the effectiveness and utility of an educational program.

Prerequisite
ERM 642

ERM 644 Approaches to Collaborative Research and Evaluation in Education (3:3)
This course provides a comprehensive overview of collaborative and participatory approaches to evaluation and research in educational settings and how these approaches are differentiated from other methodological approaches.

Prerequisite
ERM 604

ERM 645 Culturally Responsive Approaches to Research and Evaluation (3:3)
This course provides a comprehensive overview of culturally responsive approaches to evaluation and research in educational settings and includes both theoretical and practical applications.

Prerequisite
ERM 604

ERM 650 Foundations of Qualitative Research Methods (3:3)
This course will provide graduate students with a theoretical understanding of qualitative research and practical, hands-on experience conducting a small-scale study.

ERM 667 Foundations of Educational Measurement Theory (3:3)
Statistical foundations, classical test theory, reliability, validity, item analysis, and norms; selected topics in modern test theory. Designed for those who will develop, evaluate, and select measurement instruments in their professional roles.

Prerequisite
ERM 680 or equivalent course

Notes
Credit may not be obtained for PSY 437.

**ERM 668 Survey Research Methods in Education (3:3)**
Theory, methods, and procedures of survey research as this methodology is applied to problems in education. Sampling from finite populations.

*Prerequisite*
ERM 517 and ERM 680 or equivalent

**ERM 669 Item Response Theory (3:3)**
Conceptual and mathematical foundations, parameter estimation, tests of model assumptions and goodness of fit, and practical applications of IRT.

*Prerequisite*
ERM 667, and either ERM 681 or STA 662, or equivalent courses and permission of instructor.

**ERM 675 Data Presentation and Reporting (3:3)**
Modern techniques for summarizing and visualizing univariate and multivariate data using various statistical and graphical software packages. Covers theories and research on graphics and the perception of visual data.

*Prerequisite*
ERM 680

**ERM 680 Intermediate Statistical Methods in Education (3:3)**
Applied descriptive and inferential statistics. Topics include applied probability, power analysis, chi-square distributions, hypothesis testing for a variety of applications, and correlation and regression. Concept learning, applications, and computer analyses are stressed.

*Prerequisite*
Elementary algebra

*Notes*
Formerly ERM 618. Students who took this course as ERM 618 are not eligible to take ERM 680 and receive credit.

**ERM 681 Design and Analysis of Educational Experiments (3:3)**
Advanced inferential statistics including factorial ANOVA, repeated measures design, multiple regression, ANCOVA, log-linear analysis. Applications in education and the social sciences.

*Prerequisite*
ERM 680 or equivalent, or permission of instructor

**ERM 682 Multivariate Analysis (3:3)**
Multivariate normal distribution. Cluster analysis, discriminant analysis, canonical correlation, principal component analysis, factor analysis, multivariate analysis of variance. Use and interpretation of relevant statistical software.

*Cross Listed Courses*
STA 671

*Prerequisite*
ERM 680 and ERM 681, or STA 573, or STA 662, or permission of instructor

**ERM 685 R for Education and the Social Sciences (3:3)**
Using R to learn about programming fundamentals, data management, automating large numbers of analyses, conducting simulation studies, conducting specialized analyses, and producing high quality graphics.

*Prerequisite*
ERM 680, 681, or permission of instructor

**ERM 688 Contemporary Problems Seminar (1–3)**
Specific course title identified each semester by subscript, e.g., Contemporary Problems Seminar; Issues in Professional Negotiations.

**Prerequisite**
Advanced master’s or doctoral standing, or permission of instructor

**Notes**
May be repeated for credit when topic varies.

**ERM 692 Independent Study (1–4)**
Guided readings, research, and individual project work under direction of a staff member.

**Prerequisite**
Permission of instructor

**ERM 693 Seminar in Advanced Research Methods (3:3)**
Advanced techniques of research or measurement applied to educational or social and behavioral science problems.

**Prerequisite**
ERM 604, ERM 605, ERM 680, ERM 681, or equivalent

**ERM 699 Thesis (1–6)**
Individual guidance and direction in the development of a research problem in the master’s degree thesis.

**ERM 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**ERM 720 Evaluation and Public Policy (3:3)**
This course will provide student with a critical understanding of the multiple connections (and disconnections) between public policy and evaluation.

**Prerequisite**
ERM 642 or equivalent

**ERM 725 Applied Methods of Educational Research (3:3)**
Investigates procedures and methodologies necessary to pursue research problems in measurement, evaluation, and applied statistics. Student work must demonstrate the ability to organize and conduct a research project.

**ERM 726 Advanced Topics in Educational Measurement (3:3)**
Technical developments and applications in classical test theory, item response theory, generalizability theory, models of selection bias, differential item functioning, and test score equating.

**Prerequisite**
ERM 680, ERM 667 or permission of instructor

**ERM 727 Computer-Based Testing: Methods and Applications (3:3)**
Computer-based testing applications including automated test assembly, item banking, computer-adaptive and multistage testing, web-based testing, large scale assessment development and support systems, and computer-based performance assessments. Covers state-of-the-art research and developments.

**Prerequisite**
ERM 667

**Notes**
Formerly ERM 670.

**ERM 728 Exploratory and Confirmatory Factor Analytic Methods for Scale Construction (3:3)**
Exploratory and confirmatory factor analysis methods for developing and validating measurement scales. Includes PCA, common factor models, and structural equation modeling applications using SPSS, SAS, Systat and LISREL statistical packages.

**Prerequisite**
ERM 682 or permission of instructor

**ERM 729 Advanced Item Response Theory (3:3)**
Estimation techniques for various unidimensional dichotomous and polytomus IRT models using various software packages. IRT applications such as computerized testing, equating, test construction, and differential item/test functioning are also covered.

**Prerequisite**
ERM 669 or equivalent

**ERM 730 Practicum in Educational Research and Evaluation (3)**
Field-based and mentored practicum.

**Prerequisite**
Permission of instructor

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**ERM 731 Structural Equation Modeling in Education (3:3)**
Formulation of structural models, estimation of structural coefficients using LISREL, estimation of model fit, confirmatory factor analysis models, practical applications.

**Prerequisite**
ERM 682 or permission of instructor

**ERM 732 Hierarchical Linear Modeling (3:3)**
Structure of hierarchical data, random intercepts, individual change/growth models, applications in meta-analysis, assessing hierarchical models, hierarchical generalized linear models, hierarchical models for latent variables, cross-classified random effects, estimation.

**Prerequisite**
ERM 682, STA 671, or permission of instructor

**ERM 734 Equating (3:3)**
Equating designs, equating and scaling assumptions, design of anchor sets, observed score equating methods, true-score equating methods, standard error of equating, use and interpretation of relevant statistical software.

**Prerequisite**
ERM 681, ERM 667, or permission of instructor

**ERM 735 Multidimensional Item Response Theory (3:3)**
Multidimensional item response theory models including their estimation, representation, and application. Use of relevant estimation and graphing software discussed.

**Prerequisite**
ERM 669 and ERM 729 or permission of instructor

**ERM 737 Diagnostic Classification Models (3:3)**
Philosophy of diagnostics models, DINA/DINO model, RUM, Log-Linear Cognitive Diagnosis Model, Test Construction, Estimation of Diagnostic Models, Application of Diagnostic Models

**Prerequisite**
ERM 669
ERM 742 Advanced Topics in the Evaluation of Educational Programs (3:3)
Theoretical understanding of evaluation design and strengthening of practical program evaluation skills.
Prerequisite
ERM 642 and permission of instructor

ERM 743 Advanced Theory in Program Evaluation (3:3)
Advanced seminar of complex issues in program evaluation. Students will develop a deep synthesis of the major approaches and theories of evaluation. The purpose of evaluation in society will be examined.
Prerequisite
ERM 642 or equivalent

ERM 750 Case Study Methods in Educational Research (3:3)
Overview of the methodology of case study research; enhancement of students’ skills in using case study methods.
Prerequisite
ERM 604, ERM 642, or equivalent

ERM 775 Directed Doctoral Research (1–6)
Individual work on dissertation research problems: collection and analysis of data; critical review, integration, and interpretation of research literature on a topic pertinent to the student’s dissertation.
Prerequisite
Doctoral students in ERM and permission of instructor

ERM 799 Dissertation (1–12)
Individual direction in the development and execution of a doctoral dissertation.

ERM 801 Thesis Extension (1–3)

ERM 802 Dissertation Extension (1–3)

ERM 803 Research Extension (1–3)
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446 School of Education Building • 336-334-3477 • soe.uncg.edu/academics/departments/lis

Administration
Lisa O’Connor, Department Chair
Nora Bird, Director of Graduate Study

About
The Master of Library and Information Studies program prepares its graduates for an exciting and rewarding career in a field that is broad and deep in its vocational variety and committed to freedom of speech, equitable access to information and lifelong learning. The program is accredited by the American Library Association and graduates find positions in academic, public, school and special libraries, as well as in a wide array of other information work.

The MLIS program is available on the main campus in Greensboro and also totally online for students unable to attend class in Greensboro. Our online program is based on a philosophy of connection and for many classes attendance at synchronous web sessions is required. It is a 36-hour degree program designed for either working or full-time students and the average completion rate is 2.5 years for part-time study. There are only four core courses that cover the essential concepts common to all information work and these are supplemented by a full complement of elective courses in specialized information resources, archival management and computer applications. Every student works with an advisor to construct a program that fits the student’s interests, background and career aspirations. There is room for customization with the possibility of two independent study courses and a practicum, or field experience.

The Department also offers the degree with a school library focus that has additional accreditation by the Council for the Accreditation of Educator Preparation (formerly NCATE). This concentration includes all of the courses necessary to prepare students for licensure by the North Carolina Department of Public Instruction which carries reciprocity with many other states.

Mission statement
The central mission of the program is to “connect people, libraries, and information through research, teaching and service to enrich living and working in a global environment.” This informs the work of its faculty, students and alumni.

Faculty

Professors
James V. Carmichael, Jr., Library history, information retrieval, gender and race studies. (E)

Associate Professors
Julia A. Hersberger, Foundations of library and information studies, human information behavior, disenfranchised populations, information ethics and policy. (E)
Nora Bird, Knowledge acquisition and use, scientific communication, community college libraries (Director of Graduate Study).
Anthony Chow, Information seeking behavior and usability in digital environments, systems thinking and organizational management, instructional technology, and information technology.
Lisa O’Connor, Information behavior, information use, information literacy, information seeking for civic engagement and personal financial decision making (Chair of Department).
Fatih Oguz, Digital libraries, online education, permanence of digital information, database design.

Assistant Professors
Noah Lenstra, Community informatics, community engagement, public libraries, archives and special collections, digital culture.

Clinical Assistant Professors
Anne Trice Akers, School library media, and graduate support coordinator.

Graduate Programs
- Post-Baccalaureate Certificate, Special Endorsement for Computer Education (jointly with the Department of Teacher Education and Higher Education), 18 hours that can lead to the North Carolina Department of Public Instruction 079 licensure.
- Master of Library and Information Studies (MLIS), and programs leading to North Carolina Department of Public Instruction licensure in Instructional Technology (077) or Media Coordinator (076) Licensures, (36)

Licensure Only Options
- Course work leading to eligibility for Instructional Technology (077) or School Library Media Coordinator (076) licensure is offered to applicants who already have an MLIS degree.
- Course work leading to eligibility for Media Supervisor (078) licensure is offered to applicants who already have an MLIS degree and Media Coordinator (076) licensure and three years of school library media experience.
- Applicants who wish to pursue a licensure-only option should contact the department for specific requirements.

Application and Admission
In addition to the application materials requested by The Graduate School, applicants for the MLIS program and for the licensure only programs must submit a resume and personal statement. Admission for all programs are processed as received and there is no fixed deadline for fall and spring admission. Applicants are urged to submit complete applications as early as possible for thorough review.

Graduate Faculty

Special Endorsement in Computer Education, PBC (LIS), (18)
The Post-Baccalaureate Certificate for Special Endorsement in Computer Education requires 18 semester hours and is offered jointly by the departments of Library and Information Studies and Teacher Education and Higher Education. The certificate provides educators with extensive knowledge and skills to work with students and other teachers to use computers in on-going instructional programs and to serve as a computer education leader for a school. Completion of the certificate provides NC licensed teachers the opportunity to fulfill requirements to apply for the NC endorsement for the position of Technology Facilitator. Offered on-campus or online.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the requirements set forth by The Graduate School, applicants must submit a resume and personal statement and currently hold a NC teaching license.

Certificate Requirements

Required Courses

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>TED 610</td>
<td>Integrating Technology into Subject Matter Instruction</td>
<td>3</td>
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<tr>
<td>LIS 631</td>
<td>Emerging Technological Trends in Information Access</td>
<td>3</td>
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<tr>
<td>LIS 632</td>
<td>Managing School/Library Computer Laboratories</td>
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<tr>
<td>LIS 630</td>
<td>Computer-Related Technologies for Information Management</td>
<td>3</td>
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<tr>
<td>LIS 635</td>
<td>Media Production Services for Library Programs</td>
<td>3</td>
</tr>
<tr>
<td>LIS 672</td>
<td>Instructional Design</td>
<td>3</td>
</tr>
<tr>
<td>SES 662</td>
<td>Assistive Technology for Inclusive Education</td>
<td>3</td>
</tr>
</tbody>
</table>
Master of Library and Information Studies (MLIS), (36)

The MLIS emphasizes the rapidly changing library and information field and prepares students for positions of leadership in school, public, special, and academic libraries and other information centers, and for a variety of roles in both public and private agencies as information specialists. The MLIS requires 36 semester hours. In addition to the general MLIS degree, there are two concentrations that students may choose with their MLIS: the Instructional Technology concentration and the School Library Media Coordinator concentration. The Instructional Technology (077) licensure concentration requires 36 semester hours and prepares students to apply for 077 licensure in North Carolina. The School Library Media Coordinator concentration requires 36 semester hours and prepares students to apply for 076 licensure. All MLIS graduates may qualify for North Carolina Public Library Certification.

The MLIS program is accredited by the American Library Association and is approved by the North Carolina Department of Public Instruction for the licensure of school library media personnel. The school library media specialist program is approved by NCATE using the AASL/ALA professional education association guidelines.

The MLIS program with all concentrations is offered on the UNCG campus and online.

**Degree Requirements**

**Required Core Courses (13)**

- LIS 600  Foundations of Library and Information Studies (3)
- LIS 620  Information Sources and Services (3)
- LIS 640  Information Organization and Access (3)
- LIS 650  Library Administration and Management (3)
- LIS 698  Capstone Experience in Library and Information Studies (1)

**Additional Technology Requirement (3)**

Selected with advisement:

- LIS 630  Computer-Related Technologies for Information Management (3)
- LIS 631  Emerging Technological Trends in Information Access (3)
- LIS 632  Managing School/Library Computer Laboratories (3)
- LIS 635  Media Production Services for Library Programs (3)

**Electives (20)**

Twenty hours are selected with advisement from graduate courses in Library and Information Studies or cognate fields. Students in licensure programs in schools or state certification in public libraries should confer with faculty advisors for specific requirements.

**MLIS with Instructional Technology (077) Licensure Concentration**

The instructional technology (077) licensure concentration is designed for teachers and other candidates who wish to focus their studies on instructional technology as it relates to library and information studies.

**MLIS Core Courses (13 hours, see above)**

**Concentration Courses (21)**

- LIS 631  Emerging Technological Trends in Information Access (3)
- LIS 632  Managing School/Library Computer Laboratories (3)

  or

- LIS 630  Computer-Related Technologies for Information Management (3)
- LIS 635  Media Production Services for Library Programs (3)
- LIS 691  Practicum (3-6)

  or

- TED 644  Supervised Practicum in Curriculum and Teaching (3)
- TED 610  Integrating Technology into Subject Matter Instruction (3)
- LIS 672  Instructional Design (3)
- SES 662  Assistive Technology for Inclusive Education (3)

Plus electives to total at least thirty-six semester hours.
MLIS with School Library Media Coordinator (076) Licensure Concentration

The school library media coordinator (076) licensure only program is designed for anyone with a MLIS degree who would like to work in public school libraries. Students without a current North Carolina teaching license will be required to take additional course work including an additional practicum.

MLIS Core Courses (13 hours, see above)

Designated Electives (15)
- LIS 617 Materials for Children (3)
- or
- LIS 618 Materials for Adolescents (3)
- LIS 635 Media Production Services for Library Programs (3)
- LIS 653 The School Library (3)
- LIS 654 School Library Media Specialist and the Curriculum (3)
- LIS 693 Practicum in School Library Media (3)

Plus electives to total at least thirty-six semester hours.

LIS - Library and Information Studies Graduate Courses

LIS 505 Introduction to Archival Management (3:3)
Principles of archival management, featuring both classroom instruction in archival theory and practical experience in manuscript repositories and public and private archives.

Cross Listed Courses
Same as HIS 505
Prerequisite
Permission of instructor

LIS 530 Researching Opportunities in Entrepreneurship and Economic Development (3:3)
Students will learn how to conduct research necessary to make informed decisions for an entrepreneurial venture and measure and assess economic development opportunities. No business research experience necessary.

Cross Listed Courses
ENT 530, GEO 530, LIS 530

LIS 589 Experimental Course
This number reserved for experimental courses. Refer to the course schedule for current offerings.

LIS 600 Foundations of Library and Information Studies (3:3)
Survey of access issues in library and information studies; professional operations and potential roles in society.

Notes
Required for all MLIS students in first year. Core course.

LIS 604 The History of Libraries and Librarianship (3:3)
Examines the history of libraries in the western world with particular emphasis on the United States.

Notes
Formerly LIS 621.

LIS 610 Collection Management (3:3)
Principles, processes, and problems in selection, evaluation, and acquisition of resources for libraries and information centers.

Notes
Formerly LIS 615.

LIS 614 Public Documents Information Sources (3:3)
Federal, state, and United Nations agency documents: selection, organization, and use. For students in library studies, business and economics, history and political science.

**LIS 617 Materials for Children (3:3)**
Survey of resources for early childhood through elementary school levels, study of selection aids and criteria, use of materials and investigation of reading, listening, viewing interests.

**LIS 618 Materials for Adolescents (3:3)**
Survey of resources and services appropriate for adolescents, study of selection aids and criteria, use of resources, and investigation of reading, listening, viewing interests.

**LIS 620 Information Sources and Services (3:3)**
The origins and characteristics of information sources and related access issues such as identification of information needs, negotiation of information requests, and the connection of requests with the appropriate sources.

*Notes*
Core course.

**LIS 623 Principles of Database Information Retrieval (3:3)**
Principles of bibliographic database structure, evaluation, and utilization for effective search strategy formulation, critical evaluation of retrieved information, and presentation of results.

*Prerequisite*
LIS 620

*Notes*
Formerly LIS 605d.

**LIS 625 Electronic Resources for Youth (3:3)**
How today’s youth use technology to access information with an emphasis on the effective use of technology to enhance learning.

**LIS 626 Social Sciences Information Sources (3:3)**
Major bibliographic and information sources and services in the social and behavioral sciences.

*Prerequisite*
LIS 600, LIS 620, or permission of instructor

*Notes*
Formerly LIS 610.

**LIS 627 Humanities Information Sources (3:3)**
Major bibliographic and information sources and services in the humanities.

*Prerequisite*
LIS 600, LIS 620, or permission of instructor

*Notes*
Formerly LIS 611.

**LIS 628 Science and Technology Information Sources (3:3)**
Major bibliographic and information sources and services in the sciences and technology.

*Prerequisite*
LIS 600, LIS 620, or permission of instructor

*Notes*
Formerly LIS 612.

**LIS 629 Business Information Sources and Services (3:3)**
Business reference work in the library setting; types of business topics, reference materials, and methods of research.

**LIS 630 Computer-Related Technologies for Information Management (3:3)**
Essential computer-related technologies in a library/school/information agency environment.
*Prerequisite*
LIS 600 or permission of instructor
*Notes*
Formerly LIS 645.

**LIS 631 Emerging Technological Trends in Information Access (3:3)**
Emerging technologies in libraries including local, regional, national, and international communication systems for information transfer as these trends impact delivery of information to library and information center users.
*Notes*
Formerly LIS 647.

**LIS 632 Managing School/Library Computer Laboratories (3:3)**
Design, development, maintenance and management of computer labs in libraries and schools. Other topics include: performance support for school and library users, budgeting and planning.
*Notes*
Formerly LIS 648.

**LIS 635 Media Production Services for Library Programs (3:3)**
Media and technology applications in libraries and information agencies. Develops competencies in designing, developing and producing, and presenting media and technology.
*Notes*
Formerly LIS 616.

**LIS 636 Website Production and Usability for Librarians (3:3)**
Introduction to Website production and usability issues that are particularly relevant to librarians. Emphasis on seeking to understand and enhance users’ experiences.
*Notes*
Formerly LIS 605a.

**LIS 640 Information Organization and Access (3:3)**
Introduction to the organization of information and collections to enhance access. Topics include format choice, verification of appropriate sources, collection definition, methods and systems of description, classification, and metadata assignment.
*Notes*
Core course.

**LIS 641 Cataloging and Classification (3:3)**
Cataloging and classification of materials using current cataloging codes and appropriate techniques of subject analysis and classification.
*Prerequisite*
LIS 640 or permission of instructor.

**LIS 642 Seminar in Indexing and Abstracting (3:3)**
Critical study of print and computer-assisted indexes and indexing with creation of thesaurus, indexes, and concordances. Study of database management program indexing and indexing of internet resources.
*Prerequisite*
LIS 600, LIS 640, or permission of instructor

Notes
Formerly LIS 646.

**LIS 643 Metadata (3:3)**
Introduces conceptual and practical metadata knowledge. Identifies commonalities among metadata schemas and reviews design and profiling processes related to needs of various application domains and environments.

*Prerequisite*
LIS 640 or permission of instructor

**LIS 644 Digital Libraries (3:3)**
Introduces processes, procedures, and systems for the collection development of unique digital resources in libraries, archives, and museums. Includes basics of digitization, standards for different formats, and curation of electronic materials.

*Prerequisite*
LIS 640

**LIS 650 Library Administration and Management (3:3)**
Emphasizes management functions, resource management, and application of concepts to management situations in libraries and information centers.

*Notes*
Core course.

**LIS 653 The School Library (3:3)**
The role and function of the school library media center; planning, evaluation, and program development.

*Prerequisite*
LIS 600, LIS 650, or permission of instructor

**LIS 654 School Library Media Specialist and the Curriculum (3:3)**
Relationship of the library media program to the school curriculum; library/media and computer skills K-12 instructional program. Observation and practice in school settings.

*Prerequisite*
LIS 600, LIS 650, or permission of instructor

**LIS 655 The Public Library (3:3)**
The public library in the governmental structure, the librarian as a public administrator, financial and cooperative planning, library services, community analysis.

*Prerequisite*
LIS 600, LIS 650, or permission of instructor

**LIS 656 The Academic Library (3:3)**
Major trends, issues, and problems in the organization and provision of services in college and university libraries.

*Prerequisite*
LIS 600, LIS 650, or permission of instructor

**LIS 657 The Special Library (3:3)**
Major trends, issues, and problems in the provision of services in profit and not-for-profit special libraries.

*Prerequisite*
LIS 600, LIS 650, or permission of instructor

**LIS 661 Library and Information Science Research (3:3)**
Problems of concern to libraries and information center personnel, including application of interdisciplinary concepts and research methods.

**LIS 662 Information Services to Diverse Client Groups (3:3)**
Changing demographic patterns affecting library and information services in all types of libraries. Services, collections and staffing to reflect a variety of cultural/ethnic experiences/needs.

*Notes*
Formerly LIS 658.

**LIS 663 Library Services for Young People (3:3)**
Planning, evaluation, and administration of programs and services designed to meet the needs of individuals and groups of children and adolescents; current issues in public libraries.

**LIS 664 Reading, Literacy, and the Library (3:3)**
Introduction to the development of reading and literacy skills, the needs of readers (early childhood to adult), and strategies for librarians to support this development.

**LIS 665 Information Literacy (3:3)**
Introduce concepts of information literacy, teaching philosophies and techniques, and assessment.

*Prerequisite*
LIS 620

**LIS 666 Information Ethics and Policy (3:3)**
Examination of legal and ethical aspects of information ethics and policies in libraries/information centers. Covers traditional concerns of access to print, government information, and issues of technology access, privacy concerns.

**LIS 667 Information Services for Adults (3:3)**
Design, planning, evaluation, and administration of information services designed to meet lifelong learning goals and needs of individuals and groups of adults in information organizations. Primary emphasis on public libraries.

**LIS 672 Instructional Design (3:3)**
Components of the systems approach to instructional design.

*Cross Listed Courses*
TED 672

**LIS 673 Methods of Teaching Computer Literacy and Computer Programming (3:3:3)**
Content and method for teaching for computer literacy and computer programming and strategies for teaching these subjects. Designed for computer specialists, computer teachers, and regular classroom teachers.

*Cross Listed Courses*
TED 609

*Prerequisite*
LIS 672, TED 669; or permission of the instructor

*Notes*
Formerly LIS 609.

**LIS 674 Seminar: Issues and the Virtual Community (3:3)**
Major social and ethical issues emerging in the virtual community including those embraced by access, privacy, intellectual property, freedom of speech, institutional/social control, and evolving formats.

*Cross Listed Courses*
TED 674
LIS 682 Seminar in Information Sources and Services (3:3)
Exploration of advanced topics in information sources and services with an emphasis on library and information agencies.
Prerequisite
LIS 620

LIS 685 Seminar in Library Administration and Management (3:3)
Exploration of advanced topics in library administration and management with an emphasis on library and information agencies.
Prerequisite
LIS 650 or permission of instructor

LIS 688 Seminar in Selected Topics I (1–4)
Contemporary issues and current trends in librarianship, educational technology, and information science. Topics to be identified for a particular seminar.
Notes
Course may be repeated when topic varies.

LIS 690 Independent Study (1–4)
Guided readings, research, and individual project work under direction of faculty.
Prerequisite
LIS 600, or permission of instructor

LIS 691 Practicum (3–6)
Supervised field experience in library/media center settings, with seminars. Credit required will vary with individual needs.
Prerequisite
LIS 600 and permission of instructor
Notes
Only 3 hours credit may count towards MLIS degree. Formerly LIS 601. Grade: Satisfactory/Unsatisfactory, S/U

LIS 692 Field Experience in School Library Media (3:0:3)
Supervised field experiences in a school library media center with seminars, observation, and exploration into the school setting and media coordinator roles, for students with no teaching license.
Notes
Formerly LIS 602a.

LIS 693 Practicum in School Library Media (3:0:3)
Supervised field experiences in a school library media center with seminars.
Prerequisite
LIS 600, LIS 615, LIS 617 or LIS 618, LIS 620, LIS 635, LIS 640, LIS 650, LIS 653, and LIS 654; and LIS 692 for students who do not have a teaching licensure
Notes
Meets a requirement for licensure as a school library media coordinator. Formerly LIS 602b.

LIS 694 Supervision: School System Library Media Programs (3:3)
Principles and problems in administration and supervision of the district level library/media program of the school system.
Prerequisite
Permission of instructor
Notes
Formerly LIS 660.

LIS 698 Capstone Experience in Library and Information Studies (1:1)
Developing a professional portfolio or master’s project. Faculty supervised, department chair approved.
Prerequisite
Completion of all other degree requirements and permission of instructor
Notes
Required in final semester of MLIS program. Consult LIS homepage for details. Formerly LIS 603. Grade: Satisfactory/Unsatisfactory, S/U

LIS 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

LIS 803 Research Extension (1–3)
SPECIALIZED EDUCATION SERVICES, DEPARTMENT OF
444 School of Education Building • 336-334-5843 • soe.uncg.edu/academics/departments/ses/

Administration
Diane Ryndak, Department Chair
Pamela Williamson, Director of Graduate Study

About
The primary goal of the department is to prepare professionals for diverse roles in working with individuals with disabilities and other exceptional needs across the life span in a variety of community and educational environments. Programs in the department emphasize the delivery of services in integrated settings, with a focus on interdisciplinary and interagency collaboration. Upon graduation students are prepared for leadership roles in early childhood, special education, and deaf education that enable them to assume positions such as consultant, teacher, early interventionist, community college teacher, special services administrator, advocate, and university faculty member or other leadership roles.

All department programs are fully accredited by the National Council for the Accreditation of Teacher Education. Graduate study in the Department of Specialized Education Services may lead to teacher licensure with the degree of Master of Education. All students enrolled in SES programs must meet departmental technical standards.

Accreditation(s)
All department programs are fully accredited by the National Council for the Accreditation of Teacher Education. Graduate study in the Department of Specialized Education Services may lead to teacher licensure with the degree of Master of Education. All students enrolled in SES programs must meet departmental technical standards.

Faculty

Professors
Claudia M. Pagliaro, Education of deaf/hard of hearing students, American sign language, mathematics, instruction/learning of students with special needs, teacher preparation in deaf education. (E)
Diane Ryndak, Severe disabilities, significant cognitive impairment, inclusive education, collaborative teaming, school reform, teacher and doctoral preparation (Chair of Department). (E)

Associate Professors
Mary V. Compton, Deaf teachers and deaf culture, social interaction of young deaf children, telecommunications discourse, narrative analysis, naturalistic inquiry method, interpersonal communication and deafness. (E)
Belinda J. Hardin, Inclusion and international early childhood education practices, EI/ECSE services for English language learners, family involvement in EI/ECSE services. (E)
Stephanie A. Kurtts, Inclusive education, online collaborative practice, universal design for learning, mild/moderate disabilities, peer coaching, differentiated instruction. (E)
Marcia Rock, Special education, emotional and behavior disorders, technology and teacher preparation (e.g., online coaching), effective instruction for students with mild/moderate disabilities, applied behavior analysis, positive behavior support. (E)
Pamela Williamson, Reading and autism, teaching and learning for students with disabilities, special education policy (Director of Graduate Study). (E)

Assistant Professors
Jon Henner, First and second language acquisition of sign language, sign language assessment, language and cognition, language deprivation, research methodologies with low-incidence populations.
Jean Kang, Supporting young children with and without disability and their families’ transition to kindergarten, school readiness, Universal Design for Learning in early childhood.

Clinical Professors
Sam Parker, Sign language interpreters working in diverse community settings such as medical, mental health, vocational, legal, religious, social service and theatrical environments with an emphasis on ethical codes of conduct and the demands and controls that sign language interpreters face in these settings.

Clinical Assistant Professors
Teresa Little, Functional curriculum for students with moderate to severe intellectual disabilities, accessing the general curriculum for students with moderate to severe intellectual disabilities.

Graduate Programs
• Post-Baccalaureate Certificate in Leadership in Early Care and Education (jointly with the Department of Human Development and Family Studies), (18)
• Post-Baccalaureate Alternative Initial Teacher Licensure (PAIL), (21)
• Birth-Kindergarten (BK) Post-Baccalaureate Initial Licensure Certificate (jointly with the Department of Human Development and Family Studies), (20)
• Master of Education (MEd) in Special Education: General Curriculum, (30-33)
• Master of Education (MEd) in Special Education: Early Childhood Leadership and Advanced Teaching Licensure or Early Childhood Leadership and Program Administration (jointly with the Department of Human Development and Family Studies), (37)
• Doctor of Philosophy (PhD) in Special Education, (69-81)

Birth-Kindergarten (BK) Post-Baccalaureate Initial Licensure Certificate, PBC (SES), (20)
The online Birth-Kindergarten (BK) Post-Baccalaureate Initial Licensure Certificate provides training for students with a bachelor's degree seeking an initial NC Birth-Kindergarten teaching license. This certificate program requires 20 semester hours and is offered jointly by the departments of Human Development and Family Studies and Specialized Education Services. The program is designed to provide students with graduate level training and an initial teaching license in BK. Students also have an option for transitioning from this program into the MEd program in which they may be eligible for an advanced license in BK. Course work from the plan of study for the Post-Baccalaureate Initial Licensure Certificate may be applied to the MEd in Birth to Kindergarten: Interdisciplinary Studies in Education and Development (BKISED) provided the student meets all admission requirements of The Graduate School, the Department of Human Development and Family Studies and the Department of Specialized Education Services.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The certificate is available to individuals with a bachelor's degree in early childhood education, child development, early childhood special education, or a related field. Students who wish to transition into the MEd program must submit a new application for the MEd to The Graduate School. It is the students' responsibility to initiate the process and review it with their advisor. It is recommended that that student take the GRE within the first 6 hours of study to guarantee a timelier processing of their application package.

Certificate Requirements
BK Initial Licensure Required Courses
SES 601  Introduction to Inclusive Birth-Kindergarten Services (3)
SES 607  Infant-Toddler Learning in Inclusive Settings (4)
SES 606  Preschool-Kindergarten Learning in Inclusive Settings (4)
SES 603  Screening/Assessment in Inclusive Early Childhood Services (3)
SES 649c  Practicum in Special Education (4-6)
Certificate with MEd in Birth-Kindergarten: Interdisciplinary Studies in Education and Development (BKISED) (44)

Courses listed in Certificate Requirements plus the following 24 hours:
- HDF 650 Theory and Research in Early Childhood (3)
- ERM 604 Methods of Educational Research (3)
- SES 602 Inclusive Family-Centered Practices in Early Childhood (3)
- HDF 633 Advanced Curriculum in Early Childhood Education (3)
- HDF 636 Leadership and Mentoring in Educating Young Children (3)
- SES 604 Internship in Inclusive Early Childhood (6)

Elective (3)
Professional Portfolio

Leadership in Early Care and Education, PBC (SES), (18)

The online Post-Baccalaureate Certificate in Early Care and Education Leadership requires 18 semester hours and is offered jointly by the departments of Human Development and Family Studies and Specialized Education Services. The program is designed to provide students with graduate level training and a credential to pursue careers in leadership positions in early care and education settings including early intervention, Smart Start, resource and referral, and community college instruction.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The certificate is available to students with a bachelor’s or master’s degree who do not plan to pursue a degree program or for students who are pursuing a master’s degree in Human Development and Family Studies or Specialized Education Services. If pursuing a master’s degree simultaneously, students must meet all requirements for admission to The Graduate School, Human Development and Family Studies, and Specialized Education Services. The Certificate is also open to graduate students with background knowledge in early childhood education, child development, early childhood special education, or a closely related field.

Certificate Requirements
Required Courses (15)
- HDF 634 Contemporary Issues in Early Childhood Policy (3)
- HDF 636 Leadership and Mentoring in Educating Young Children (3)
- HDF 650 Theory and Research in Early Childhood (3)
- SES 601 Introduction to Inclusive Birth-Kindergarten Services (3)
- SES 605 Diversity and Inclusive Early Care and Education (3)

Electives (3)
With the approval of the advisor, students choose 3 hours of electives at the 500 or 600 level.

Alternative Initial Teacher Licensure, PAIL, (21)
The Post-Baccalaureate Alternative Initial Teacher Licensure program is designed to provide the opportunity for initial teacher licensure in Special Education: General Curriculum to individuals who have an undergraduate degree in a field other than special education. In PAIL, students complete foundation courses in assessment in special education, instructional practices for students with mild to moderate disabilities, learning theory, and models of teaching. Specialty area courses in instructional practices for students with mild to moderate disabilities provide an introduction to the field, methods for teaching in the field, programming for the field, and clinical field experience. Throughout the course work, students have numerous opportunities to use cases and problem-based learning that include appropriate implementation of inclusive practices.

Students also have an option for transitioning from this program into the MEd program in which they may be eligible for an advanced license in special education general curriculum. Course work from the plan of study for the
Post-Baccalaureate Alternative Initial Teacher Licensure program in Special Education: General Curriculum may be applied to the MEd in special education provided the student meets all admission requirements of The Graduate School and the Department of Specialized Education Services.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a resume and Personal Statement of goals, past experience and unique skills.

Students who wish to transition into the MEd program must submit a new application for the MEd to The Graduate School. It is the students’ responsibility to initiate the process and review it with their advisor. It is recommended that the student take the GRE within the first 6 hours of study to guarantee a timelier processing of their application package. Students must maintain a GPA of 3.0.

Licensure Requirements
Special Education: General Curriculum (21)
- SES 540 Introduction to Special Education (3)
- SES 640 Policies and Procedures in Special Education (3)
- SES 641 Assessment in Special Education (3)
- SES 642 Reading Instruction (3)
- SES 652 Writing Instruction (3)
- SES 659 Behavior Management (3)
- SES 661 Student Teaching: Special Education (3-6)

PAIL with MEd in Special Education General Curriculum (39)
Courses listed in General Curriculum plus the following 18 hours:
- ERM 604 Methods of Educational Research (3)
- SES 643 Special Education Trends/Issues (3)
- SES 647 Collaboration and Leadership (3)
- SES 649 Practicum in Special Education (High-Incidence focus) (3)
- SES 658 Positive Behavior Supports (3)
- SES 660 Families, Schools, and Students with Exceptionalities (3)

Birth-Kindergarten Interdisciplinary Studies in Education and Development, MEd, (37)
The synchronous online Master of Education (M.Ed.) program in Birth-Kindergarten Interdisciplinary Studies in Education and Development (BK:ISED) prepares students to assume leadership roles in diverse settings (both education and community-based) that develop and implement programming for young children with and without disabilities, ages birth to five, and their families. The degree consists of a minimum of 37 semester hours of graduate course work beyond the Bachelor’s degree. Additional academic work may need to be completed by students without foundational skills or content knowledge in early childhood. Prerequisite credits may not be applied toward the M.Ed. degree unless they are Birth-Kindergarten Initial Licensure Program (BK:ILP) courses (see Birth-Kindergarten: Initial Licensure Program in the graduate bulletin). Prerequisite requirements must be satisfied as early as possible in the program. The BK Graduate Program Committee approves any transfer credit.

Two concentrations are offered: one on Early Childhood Leadership & Advanced Teaching Licensure and another on Early Childhood Leadership & Program Administration.

The concentration in Early Childhood Leadership & Advanced Teaching Licensure is designed for students with a Standard Professional I or initial license seeking education in early childhood leadership and an advanced teaching
license. Those with an initial license in another field of education must satisfy prerequisite requirements and complete eight (8) weeks of student teaching (which adds 6 credit hours to the program). Students are eligible for the "M" advanced license in BK upon successful completion of the program.

The concentration in Early Childhood Leadership & Program Administration equips teachers, directors/administrators, technical assistance providers, and other professionals working closely with early childhood educators to be leaders in the field. It includes advanced training in a variety of areas, including personnel development and support, financial management, early childhood systems and policy, leadership and mentoring, child and program assessment, and curriculum within the context of family-centered practices to work effectively with diverse children and families in inclusive settings.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Applicants must submit an application to The Graduate School, which includes: a professional statement, a current resume, official transcripts with a GPA of 3.0 or higher, and three letters of recommendation with at least one academic reference if possible. Applicants to the Early Childhood Leadership & Advanced Teaching Licensure concentration must also submit documentation of their initial teaching license. The GRE is not required. An interview and writing sample may be required.

Degree Requirements
Core Courses Required for Both Concentrations
Course work related to Theory and Practice (15)
- SES 601 Introduction to Inclusive Birth-Kindergarten Services (3)
- SES 602 Inclusive Family-Centered Practices in Early Childhood (3)
- SES 603 Screening/Assessment in Inclusive Early Childhood Services (3)
- HDF 636 Leadership and Mentoring in Educating Young Children (3)
- HDF 633 Advanced Curriculum in Early Childhood Education (3)
Course work related to Research (6)
- ERM 604 Methods of Educational Research (3)
- HDF 650 Theory and Research in Early Childhood (3)
Practicum (6)
- SES 604 Internship in Inclusive Early Childhood (6)
Professional Portfolio (Capstone Experience)
The final portfolio is the culminating experience. It includes two components: 1) a written document that includes a series of reflective essays and 2) oral defense, discussing the content of the essays and rationale for the use of documents. This portfolio will demonstrate the mastery of skills and knowledge in the program competency areas. It is submitted on TaskStream by the student and evaluated by a team of two faculty and one practicing professional. If the portfolio and presentation do not meet departmental standards, one revision is allowed. The final portfolio is required of all students graduating from the BK:ISED program.

Early Childhood Leadership & Advanced Teaching Licensure Concentration
In addition to the Core Courses, the Leadership & Advanced Licensure Concentration requires:
Electives (6)
To be selected from list or with approval of advisor.
- HDF 730 Cross-cultural Perspectives on Child Development (3)
- HDF 720 Applied Theories and Principles of Parenting (3)
- HDF 634 Contemporary Issues in Early Childhood Policy (3)
- HDF 653 Contemporary Research in Family Studies (3)
- HDF 715 Infant Development (3)
SES 608  Seminar in Early Childhood Education (3)
SES 605  Diversity and Inclusive Early Care and Education (3)
SES 647  Collaboration and Leadership (3)
SES 662  Assistive Technology for Inclusive Education (3)
SES 607/HDF 607  Infant-Toddler Learning in Inclusive Settings (4)
Other courses as approved by advisor.

Practicum (6)
As applicable, if student's initial licensure is in an area other than B-K.
SES 649c  Practicum in Special Education (4-6)

Course work related to Theory and Practice (4)
SES 606/HDF 606  Preschool-Kindergarten Learning in Inclusive Settings (4)

Early Childhood Leadership & Program Administration Concentration
In addition to the Core Courses, the Leadership & Program Administration Concentration requires:

Course work related to Theory and Practice (4)
HDF 602  Special Topics in Human Development and Family Studies (2-4)

Required Electives (6)
HDF 634  Contemporary Issues in Early Childhood Policy (3)
SES 605  Diversity and Inclusive Early Care and Education (3)

Special Education: General Curriculum, MEd, (33)
The Masters of Education (MEd) program in Special Education: General Curriculum is designed to provide the opportunity for students licensed in special education or another area of education to gain advanced skills in serving students with disabilities. Students with a license in education but not special education will need to successfully complete two prerequisite courses (6 credit hours) before beginning the MEd program. Throughout the course work, students have numerous opportunities to use cases and problem-based learning that include appropriate implementation of inclusive practices. The MEd program leads to eligibility for advanced licensure in Special Education: General Curriculum. At least 27 hours in the program of study must be in 600-level courses.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a resume and Personal Statement of goals, past experience, and unique skills. Applicants must submit all application materials required by The Graduate School by the appropriate deadline. Students are admitted in Fall, Spring, and Summer semesters.

Prerequisites for students without initial licensure in special education (6)
SES 540  Introduction to Special Education (3)
SES 659  Behavior Management (3)

Required Coursework (33)
SES 610  Ecologically Based Instruction (3)
SES 611  Universal Design for Learning (3)
SES 612  Transition Across the Age-Span (3)
SES 642  Reading Instruction (3)
SES 643  Special Education Trends/Issues (3)
SES 645  Advanced Seminar: Special Education (3)
SES 647  Collaboration and Leadership (3)
SES 652  Writing Instruction (3)
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SES 656  Math and Science Instruction (3)
SES 658  Positive Behavior Supports (3)
ERM 604  Methods of Educational Research (3)

All department programs are fully accredited by the National Council for the Accreditation of Teacher Education. Graduate study in the Department of Specialized Education Services may lead to advanced teacher licensure with the degree of Master of Education. All students enrolled in SES programs must meet departmental technical standards.

Additional Requirements for ALL Special Education MEd Students
Portfolio (Capstone Experience)
In addition to satisfactorily completing the above course work, students also are required to submit a portfolio of work that demonstrates their mastery of knowledge and skills in the six program competency areas: multiple service delivery models, interdisciplinary planning and service delivery, advanced skills for assessing learner needs, advanced skills for effective instruction, collaborative planning and intervention, and improved special education services. Each student’s portfolio will be developed in consultation with an advisor and will be based on the student’s particular educational and work experiences. The portfolio is designed during the initial semester, refined each semester, and evaluated during the last semester prior to planned graduation. Detailed instructions for completing the portfolio are provided on the SES website (www.uncg.edu/ses/gradprog/med_special_edu.html).

Reflective Essays
Prior to the completion of the program, each student is required to submit reflective essays that speak adequately to the ways in which products included in the portfolio meet program objectives and demonstrate attainment of competencies required for advanced licensure. An oral presentation related to the reflective portfolio and essays also are required. If the portfolio and presentation do not meet departmental standards, one revision is allowed. Detailed instructions for completing the reflective essays are located on the SES website (www.uncg.edu/ses/gradprog/med_special_edu.html).

Special Education, PhD (69-81)
The PhD in Special Education is intended for students interested in special education, deaf education, or early intervention. The program requires a minimum of 69 semester hours beyond the master’s degree, and it emphasizes four areas: generating knowledge to help shape the future of the field; sharing knowledge with others so that they can understand it and use it to improve their practice; facilitating strong professional relationships through collaboration; and creating, interpreting, and implementing special education policy and procedures. Required and elective courses, including the research component, are listed below. Students in the SES doctoral program are required to successfully complete all listed course work. Additional course requirements are determined on an individual basis and in consultation with the student’s major advisor and advisory/dissertation committee.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a resume and Personal Statement of goals, past experience and unique skills. Applicants must have 3 years of related professional experience.

Degree Requirements
Doctoral Seminars in Special Education (15)
  SES 753  Issues and Trends in Special Education (1)
  SES 755  Critical Review of Special Education Literature (3)
SES 757  School Reform and Leadership in Special Education (3)
SES 758  History and Future of Specialized Education (3)
SES 759  Grant Writing in Special Education (3)

Research/Inquiry (27-30)
ERM 680  Intermediate Statistical Methods in Education (3)
ERM 681  Design and Analysis of Educational Experiments (3)
SES 760  Single Subject Research Design (3)
SES 775  Directed Research (3)
TED 730  Qualitative Methods in Curriculum and Instruction (3)
TED 738  Mixed Methods Research Design in Curriculum and Instruction

*Note: SES 775 Directed Research may be repeated once*
ERM XXX  A third quantitative methods course selected with advice and approval of the student's doctoral committee members
TED XXX  A second qualitative methods course selected with advice and approval of the student's doctoral committee members
TED XXX  A third qualitative methods course selected with advice and approval of the student's doctoral committee members

Professional Practice (6-12)
SES 761  Coaching and Supervision of Teaching & Learning (3) [required]
SES 763  College Teaching & Adult Learning Theory (3) [required]

ERM 642  Evaluation of Educational Programs (3) [optional]
ERM 643  Applied Educational Evaluation (3) [optional]

Specialization (9-12)
Students are expected to work closely with the major advisor and advisory/dissertation committee members to identify a set of courses in a related area of interest that forms a specialization, including an internship. This course work may be in the areas of counseling, educational leadership, teacher education, early childhood, family studies, psychology, or others.
SES 749  Internship in Specialized Education (3)

Dissertation (12)
SES 799  Dissertations (1-12)

Each candidate for a doctoral degree must prepare and present a dissertation that focuses on some aspect of special education, that is, in one of the three areas noted above (early childhood, special education, deaf education). This product must demonstrate independent investigation and a synthesis of the skills learned in the program. The dissertation must be acceptable in form and content to the student’s dissertation committee and The Graduate School.

SES - Specialized Education Services Graduate Courses
SES 508 International Service-Learning in Special Education (6:6)
A cross-cultural experience to learn about special education and early childhood practices through a service-learning project, program visits, and professional exchanges. Historical context and cultural practices emphasized.
Offered Summer

SES 540 Introduction to Special Education (3:3)
Introductory course designed to survey the field of students with disabilities. Major attention focused on characteristics of students with disabilities, free appropriate public education, and the least restrictive environment.
Notes
Restricted to seniors and graduate students.

SES 543 Inclusion of Individuals with Special Needs (3:3)
Explores critical issues, service delivery alternatives, and promising practices that promote responsible inclusion of individuals with special needs in integrated learning environments.
Prerequisite
Permission of instructor
Offered
Fall
Notes
Restricted to seniors and graduate students.

SES 577 Auditory-Oral Communication Practices with Deaf Students (3:3)
Strategies for developing and maintaining spoken language and using residual hearing and speechreading in school-age children with hearing loss.
Prerequisite
SES 240 or equivalent and CSD 334
Offered
Fall

SES 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SES 601 Introduction to Inclusive Birth-Kindergarten Services (3:3)
Introduction to issues and policies in inclusive birth through kindergarten programs. Legislation, service delivery models, policy issues, family roles, and research outcomes discussed.

SES 602 Inclusive Family-Centered Practices in Early Childhood (3:3)
Analysis of theoretical perspectives, intervention strategies, and research outcomes for young children with disabilities in inclusive settings and their families. Family-centered practices emphasized.
Prerequisite
SES 601

SES 603 Screening/Assessment in Inclusive Early Childhood Services (3:3)
Conceptual knowledge and practical application of screening and assessment techniques and procedures for infants, toddlers, preschoolers, and kindergartners. Report writing, IFSPs, IEPs, family assessments, and program evaluation included.
Prerequisite
SES 601, ERM 604, SES 406/HDF 606 or permission of instructor

SES 604 Internship in Inclusive Early Childhood (6:1:15)
An in-depth exploration of the principles of early childhood care and education and learning strategies for young children with and without disabilities. Field placements in BK setting are required.
Prerequisite
HDF 636, admission to BKISED program, or permission of instructor

SES 605 Diversity and Inclusive Early Care and Education (3:3)
In-depth analysis of issues, recommended practices, and experiences to prepare students for meeting the needs of young children from diverse populations in inclusive early care and education settings.
Prerequisite
Admission to Leadership in Early Care and Education certificate, MEd BKISED, or permission of instructor

SES 606 Preschool-Kindergarten Learning in Inclusive Settings (4:3:3)
In-depth exploration of the principles of early childhood care and education and learning strategies for preschool/Kindergarten children with and without disabilities. Field placements in BK setting are required.
Cross Listed Courses
HDF 606
Prerequisite
Admission to BKISED degree program and 601

SES 607 Infant-Toddler Learning in Inclusive Settings (4:3:3)
An examination of development in infancy and toddlerhood and strategies for facilitating very young children's growth and learning in early childhood care and education settings. Field placement required.
Cross Listed Courses
HDF 607
Prerequisite
HDF or SES major or permission of instructor

SES 608 Seminar in Early Childhood Education (3:3)
For students preparing to teach in the area of early childhood education, or currently involved in early childhood education in the areas of teaching, curriculum, or supervision.
Prerequisite
Permission of instructor

SES 610 Ecologically Based Instruction (3:3)
This course will enable the participant to identify psychological, physical, educational, medical, behavioral, and learning characteristics and needs of students with disabilities.

SES 611 Universal Design for Learning (3:3)
Content includes strategies for developing curriculum and instructional techniques for teaching students with disabilities through universal design for learning and embedded systematic instruction.

SES 612 Transition Across the Age-Span (3:3)
Course content focuses on implementing transition programs from school to career and daily living for students with disabilities, including vocational/career assessment and individualized programs integrating family, agencies, and business.

SES 613 Education of the Multihandicapped Deaf Child (3:3)
Characteristics of severely handicapping conditions existing with deafness. Effects on educational, psychosocial, and vocational achievement.

SES 615 Seminar on Deafness (3:3)
Studies dealing with specialized areas of deafness of professional concern. Topic to be announced each semester course is offered.
Prerequisite
Courses in appropriate content area and admission to appropriate degree program, or permission of instructor
Notes
May be repeated for credit when topic varies.

SES 616 Preschool Hearing-Impaired Children (3:3)
Characteristics and management of hearing-impaired children, educational techniques.
Prerequisite
CSD 307 and a course in early childhood development, admission to appropriate degree program, or permission of instructor

SES 617 Teaching Reading to Hearing-Impaired Individuals (3:3)
Research on the reading abilities of deaf individuals. Techniques of writing and rewriting materials, and methods of teaching deaf individuals to read.
Prerequisite
SES 378 and TED 517 or equivalent preparation, admission to appropriate degree program, or permission of instructor

SES 633 Advanced Curriculum in Early Childhood Education

SES 640 Policies and Procedures in Special Education (3:3)
Detailed study of federal and North Carolina policies and procedures that ensure that students with disabilities receive a free appropriate public education in the least restrictive environment.

SES 641 Assessment in Special Education (3:3)
Provides a knowledge base, guided practice, and practical application of assessment practices for making eligibility and instructional planning decisions for students with disabilities, with emphasis on authentic assessment practices.
Notes
For special education majors.

SES 642 Reading Instruction (3:3)
Emphasizes systematic, explicit practices for teaching essential skills in phonemic awareness, emergent literacy, the alphabetic principle, fluency, vocabulary, and reading comprehension to students with disabilities.

SES 643 Special Education Trends/Issues (3:3)
Explores critical issues and strategies in developing, implementing, evaluating, and financing programs and services for students with disabilities.

SES 645 Advanced Seminar: Special Education (3:3)
Research and current issues in the psychology and education of students with disabilities.
Notes
May be repeated for credit when topic varies.

SES 647 Collaboration and Leadership (3:3)
Provides a knowledge base, guided practice, and practical application of consultation skills and consultation-based services needed for implementing effective instructional programs for students with disabilities.
Notes
For special education majors.

SES 648 Secondary Programming: Students with Mild Disabilities (3:3)
Provides for special education professionals and others detailed information on the development and design of secondary and transition programs for adolescents and young adults with mild disabilities.

SES 649 Practicum in Special Education (High-Incidence focus)

SES 649c Practicum in Special Education (4-6:3:40)
Eight or ten weeks of supervised experience in inclusive early childhood education settings designed to offer opportunities for practice of skills and professional development within program goals.

Prerequisite
Core courses and permission of program coordinator

SES 649d Practicum in Special Education (3–6)
Supervised experience in clinic or school settings in special education designed to offer opportunities for practice of skills and professional development within program goals.

Prerequisite
SES 649c, core courses, and permission of program coordinator

SES 650 Independent Study (1–3)
Topic to be determined by faculty advisor and student.

Prerequisite
Admission to appropriate degree program or permission of instructor and major advisor

SES 652 Writing Instruction (3:3)
Emphasizes Universal Design for Learning, systematic and explicit practices for teaching written language skills to students with disabilities using evidence and research based practices.

SES 655 Introduction to Learning Disabilities (3:3)
Addresses the history of LD, characteristics of learners with LD across the lifespan, legislative and legal issues for the LD field, and services and interventions for these individuals.

SES 656 Math and Science Instruction (3:3)
Addresses broad array of evidence-based instructional strategies for working with students with disabilities to teach math and science.

Prerequisite OR Corequisite
SES 655

SES 657 Characteristics of Students with High-Incidence Disabilities (3:3)
Addresses history, characteristics, legal and legislative issues, and services and interventions relevant to meeting the learning and behavioral needs of students with high incidence disabilities.

SES 658 Positive Behavior Supports (3:3)
Addresses broad array of instructional strategies for working with students with disabilities using contemporary educational and therapeutic practices to address instructional as well as social/emotional needs.

SES 659 Behavior Management (3:3)
Concepts, skills, and practices for understanding and using principles of behaviorism in the education of students.

SES 660 Families, Schools, and Students with Exceptionalities (3:3)
Relationships among school personnel, parents/families, students, and agency personnel for educating students with special needs. Skills for proactively involving parents/families in their children’s education and resolving conflicts in school-family interactions.

SES 661 Student Teaching: Special Education (3–6)
Supervised experience in a variety of classroom or other public school settings and related seminar emphasizing the design and delivery of best-practices services and instruction to students with disabilities.

Notes
May be repeated for credit. Grade: Satisfactory/Unsatisfactory, S/U
**SES 662 Assistive Technology for Inclusive Education (3:3)**
Overview of assistive technology in meeting the educational goals of individuals with disabilities. Includes experiences with devices and services associated with assistive technology and instructional technology.

**SES 688 Contemporary Problems Seminar (1–3)**
Specific course title identified each semester by subscript (e.g., Contemporary Problems Seminar: Issues in Professional Negotiations).

*Prerequisite*
Advanced master’s or doctoral standing or permission of instructor

*Notes*
May be repeated for credit when topic varies.

**SES 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**SES 747 Seminar in Special Education (3:3)**
Current trends and issues in the field of special education.

*Prerequisite*
SES 540 or permission of instructor

*Notes*
May be repeated for a total of nine semester hours credit when topic varies.

**SES 749 Internship in Specialized Education (3:0:10)**
Directed internship in an advanced leadership position related to the chosen area of specialization in which the knowledge base is integrated with the profession.

*Prerequisite*
Admission to PhD in special education and permission of instructor

*Notes*
May be repeated once for credit.

**SES 753 Issues and Trends in Special Education (1:3)**
This seminar is designed to provide doctoral students with opportunities to explore current issues and trends in special education within the broader context of education, society, and history.

*Prerequisite*
Admission to PhD in special education or permission of instructor.

**SES 755 Critical Review of Special Education Literature (3:3)**
This seminar is designed to provide doctoral students with opportunities to critically analyze professional literature and grant proposals; and write literature reviews for publication, dissertation and research.

*Prerequisite*
Admission to PhD in special education or permission of instructor.

**SES 757 School Reform and Leadership in Special Education (3:3)**
This seminar addresses the research and professional literature related to changing schools to improve academic and behavior outcomes for all students.

*Prerequisite*
Admission to PhD in special education or permission of instructor.

**SES 758 History and Future of Specialized Education (3:3)**
Overview of the history of special education with implications for facilitation of more effective practice in the field.
**SES 759 Grant Writing in Special Education (3:3)**
As future leaders in the field, doctoral students will be charged with securing funding for programs/research. The purpose of this course is to help students develop grant-writing skills.

*Prerequisite*
Admission to PhD in special education or permission of instructor.

**SES 760 Single Subject Research Design (3:3)**
Understanding the rationale, purpose, design, analysis and implementation of single subject research.
Implementation within classroom settings will be discussed.

*Prerequisite*
Admission to PhD in special education or permission of instructor.

**SES 761 Coaching and Supervision of Teaching & Learning (3:3)**
This course provides opportunities for doctoral students to develop a knowledge base in coaching and supervision. Topics include: coaching models, supervisory approaches, professionalism, and methods for giving and receiving feedback.

*Prerequisite*
Admission to PhD in special education or permission of instructor.

**SES 763 College Teaching & Adult Learning Theory (1:2)**
This course will prepare doctoral students for teaching at the collegiate level. Topics include: adult learning, course design, professional and ethical issues in teaching, and evidence-based approaches to teaching.

*Prerequisite*
Admission to PhD in Specialized Education or permission of instructor.

**SES 770 Community Engaged Research and Practice (3:3)**
An in-depth exploration of the history, theory, ethics, research methods, and reporting of community-engaged research with an emphasis on positionality and reflexivity. Research practices in community settings are required.

*Prerequisite*
TED 730, ELC 664, ELC 665, ERM 750 or permission of instructor

*Notes*
Cross listed with ELC 770 and TED 770

**SES 775 Directed Research (3:3)**
Individual work on dissertation or research problems, including literature analysis, critical review, data analysis, and integration; or completion of a pilot study in preparation for the dissertation.

*Prerequisite*
Admission to PhD in special education and permission of instructor

*Notes*
May be repeated once for credit.

**SES 790 Independent Doctoral Study (1–3)**
Advanced guided readings, research, and individual project work under the direction of a graduate faculty member.

*Prerequisite*
Admission to PhD in special education and permission of instructor

*Notes*
May be repeated for credit.
SES 799 Dissertation (1–12)
Individual direction in the development and execution of the doctoral dissertation.
Prerequisite
Admission to candidacy for the PhD in special education and permission of instructor

SES 802 Dissertation Extension (1–3)

SES 803 Research Extension (1–3)
TEACHER EDUCATION AND HIGHER EDUCATION, DEPARTMENT OF
488 School of Education Building • 336-334-3437 • soe.uncg.edu/academics/departments/tehe

Administration
Colleen Fairbanks, Department Chair
Kerri Richardson, Director of Graduate Study for the MEd Program
Dale Schunk, Director of Graduate Study for the PhD Program
Brad Johnson, Director of Graduate Study for the MEd & PhD Programs
Jacqueline Dozier, Director of The Collaborative for Teacher Educator Preparation

Faculty
Professors
Heidi B. Carlone, Anthropology of science education, equity in science education, science curriculum. (E)
Jewell Cooper, Equity education, culturally responsive pedagogy, community-based learning in preservice teacher education (Associate Dean). (E)
Colleen Fairbanks, Adolescent literacy, and identity, teacher knowledge and development, writing instruction (Chair of Department). (E)
Victoria Randal Jacobs, Mathematics education, teacher education, cognitively guided instruction. (E)
Barbara B. Levin, Teacher education, pedagogical thinking, technology education for teachers and children, case-based teaching, problem-based learning, social studies curriculum.
Samuel D. Miller, Literacy development, student motivation, teacher education. (E)
Dale H. Schunk, Social cognitive learning, self-regulation, motivation (Director of Graduate Study, PhD Program). (E)

Associate Professors
Beverly Faircloth, Educational psychology, student motivation and development, sense of school belonging. (E)
Laura Gonzalez, Latino immigrant families, college access, supports and barriers, social cognitive career theory, college student development. (E)
Ye He, TESOL, teacher education, multicultural education. (E)
Wayne Journell, Social studies education, political education, technology integration. (E)
Kerri Richardson, Mathematics education, teacher education, mathematics curriculum (Director of Graduate Study, MEd Program). (E)
Edna Tan, Urban science education, girls’ science education, teaching science for social justice. (E)
P. Holt Wilson, Mathematics education, professional development, and learning trajectories. (E)
Amy Vetter, Literacy and identity, discourse analysis, case studies. (E)

Clinical Assistant Professors
Walter Scott Howerton IV, Teacher education and development, reading comprehension, adaptive teaching, educational psychology, teacher visioning, metacognition and self-regulation.
Jennifer Mangrum, Teacher education and development, elementary education.
Robert Bradley Johnson, Student personnel administration in higher education (Director of Graduate Study, Med & PhD Programs).

Assistant Professors
Jeannette Alarcón, Elementary education, social studies education.
Sara Heredia, Science teacher professional learning, organizational sensemaking, and equitable science teaching.
Brian McGowan, Higher education administration.
Melody Patterson Zoch, Teacher Education, reading education.
Jamie Schissel, Teacher Education and development, TESOL education.

Graduate Programs
• Post-Baccalaureate Certificate in Special Endorsement in Computer Education (jointly with Department of Library and Information Studies), (18)
• Post-Baccalaureate Certificate in Teaching English to Speakers of Other Languages, (18)
• Master of Arts in Teaching, various concentrations, (39)
• Master of Education (MEd) in Teacher Education, various concentrations, (33-39)
• Master of Education (MEd) in Student Affairs Administration in Higher Education, (42)
• Doctor of Philosophy (PhD) in Educational Studies, Teacher Education and Development concentration, (60) or Higher Education concentration, (60)

Special Endorsement in Computer Education, PBC (TEHE), (18)
The Post-Baccalaureate Certificate for Special Endorsement in Computer Education requires 18 semester hours and is offered jointly by the departments of Library and Information Studies and Teacher Education and Higher Education. The certificate provides educators with extensive knowledge and skills to work with students and other teachers to use computers in ongoing instructional programs and to serve as a computer education leader for a school. Completion of the certificate provides NC licensed teachers the opportunity to fulfill requirements to apply for the NC endorsement for the position of Technology Facilitator.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. Applicants must currently hold a NC teaching license.

Certificate Requirements
Required Courses
TED 610 Integrating Technology into Subject Matter Instruction (3)
LIS 631 Emerging Technological Trends in Information Access (3)
LIS 632 Managing School/Library Computer Laboratories (3)
or
LIS 630 Computer-Related Technologies for Information Management (3)
LIS 635 Media Production Services for Library Programs (3)
TED 672 Instructional Design (3)
SES 662 Assistive Technology for Inclusive Education (3)

Teaching English to Speakers of Other Languages, PBC, (18)
The Post-Baccalaureate Certificate in Teaching English to Speakers of Other Languages requires 18 semester hours and is intended for those with a bachelor’s degree in any field and documented evidence of having studied a foreign language. The curriculum is designed to develop the knowledge, skills, and dispositions of those who are currently teaching or desire to teach language-minority adults and children to understand, speak, read, and write English in a variety of community, educational, and business settings.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement and resume.

Certificate Requirements
Required Courses
TED 523 Legal, Historical, and Cultural Issues in ESL (3)
TED 603 Literacy Instruction for English Language Learners
TED 604  Applied Linguistics for ESL Teachers (3)
TED 614  Word Study (3)
TED 618  Teaching English as a Second Language (3)
Elective

Teaching, MAT, (39)

Various Concentrations
The Master of Arts in Teaching offers five concentrations—elementary education, middles grades education, social studies education, science education, teaching English to speakers of other languages (TESOL)—that culminate with the development of an Initial Competencies Portfolio, providing eligibility for candidates to apply for “A” licensure from the North Carolina Department of Public Instruction and require 39 semester hours.

The Master of Arts in Teaching is designed for candidates who have a bachelor’s degree but did not pursue teacher education or licensure as an undergraduate. All concentrations in this track will also have prerequisite or corequisite courses, which are required for teaching licensure in North Carolina. The prerequisite or corequisite courses must be completed before a candidate can be recommended for licensure. A list of prerequisite or corequisite courses is available on the Teacher Education and Higher Education website at http://soe.uncg.edu/academics/departments/tehe/tehe-programs/ or the School of Education's list of majors and degrees (http://soe.uncg.edu/academics/majors-and-degrees/).

Elementary Education K-6 Concentration
Core Courses
   TED 545  Diverse Learners (3)
   TED 636  Educational Psychology & Differentiated Instruction (3)
   ERM 605  Education Measurement & Evaluation (3)
Pedagogical Expertise
   TED 641  Literacy I: Reading and Writing in the Primary Grades (3)
   TED 518  Mathematics in the Elementary Schools (3)
   TED 519  Science in the Elementary School (3)
   TED 520  Social Studies in the Elementary School (3)
   TED 642  Literacy II: Reading and Writing in the Intermediate Grades (3)
   TED 625  Mathematics in the Elementary School II
Professional Development/Leadership
   TED 650  Establishing and Maintaining a Responsive Classroom Environment (3)
   TED 680a  Clinical Experience in Teaching (3-6)
   TED 680b  Clinical Experience in Teaching Seminar (3)

Middle Grades Education Concentration
Core Courses
   TED 545  Diverse Learners (3)
   TED 669  Educational Implication of Learning & Developmental Theory (3)
   ERM 605  Education Measurement & Evaluation (3)
Pedagogical Expertise
   TED 535  Literacy in the Content Area (3)
   TED 626  Middle Grades Curriculum and Instruction (3)
   TED 634  Seminar in Middle Grades Education (3 – with internship)
   or
   TED 622  Differentiated Instruction (3)
6 hours content
3 hours methods
Professional Development/Leadership
  TED 650  Establishing and Maintaining a Responsive Classroom Environment (3)
  TED 680a Clinical Experience in Teaching (3-6)
  TED 680b Clinical Experience in Teaching Seminar (3)

Science Education Concentration
Core Courses
  TED 545  Diverse Learners (3)
  TED 669  Educational Implication of Learning & Developmental Theory (3)
  ERM 605  Education Measurement & Evaluation (3)

Pedagogical Expertise
  TED 559  Teaching Practices and Curriculum in Science (3)
  TED 623  Environmental Education (3)

15 hours content courses

Professional Development/Leadership
  TED 638  Seminar in Secondary Education (3)
  TED 680a Clinical Experience in Teaching (3-6)
  TED 680b Clinical Experience in Teaching Seminar (3)

Social Studies Education Concentration
Core Courses
  TED 545  Diverse Learners (3)
  TED 669  Educational Implication of Learning & Developmental Theory (3)
  ERM 605  Education Measurement & Evaluation (3)

Pedagogical Expertise
  TED 553  Teaching Practices and Curriculum in Social Studies

18 hours content courses
  Note: Content Courses: (3-2-1 across 3 different social studies disciplines)

Professional Development/Leadership
  TED 638  Seminar in Secondary Education (3)
  TED 680a Clinical Experience in Teaching (3-6)
  TED 680b Clinical Experience in Teaching Seminar (3)

Teaching English to speakers of other languages (TESOL) Concentration
Core Courses
  TED 545  Diverse Learners (3)
  TED 636  Educational Psychology & Differentiated Instruction (3)
  ERM 605  Education Measurement & Evaluation (3)

Pedagogical Expertise
  TED 516  Emergent Literacy and Literature (3)
  or
  TED 535  Literacy in the Content Area (3)
  TED 523  Legal, Historical, and Cultural Issues in ESL (3)
  TED 603  Literacy Instruction for English Language Learners (3)
  TED 604  Applied Linguistics for ESL Teachers (3)
  TED 614  Word Study (3)
  TED 618  Teaching English as a Second Language (3)

Professional Development/Leadership
  TED 650  Establishing and Maintaining a Responsive Classroom Environment (3)
  TED 680a Clinical Experience in Teaching (3-6)
TED 680b  Clinical Experience in Teaching Seminar (3)

Teacher Education, MEd (School of Education), (33-39)

Various Concentrations
The MEd in Teacher Education (formerly Teacher Leadership Track) offers thirteen concentrations, including seven concentrations that culminate with the development of an Advanced Competencies Portfolio, providing eligibility for candidates to apply for “M” licensure from the North Carolina Department of Public Instruction or preparation for advanced graduate study in educational research or policy. All concentrations and tracks require 33-42 semester hours for the master’s degree.

The program is designed for candidates who already hold the Standard Professional I license or initial license to teach and wish to pursue more advanced study in a field of education.

The Instructional Technology concentration is designed for teachers and other candidates who wish to focus their studies on instructional technology as it relates to curriculum and instruction. The Instructional Technology Specialist—Computers (077) licensure is attached to this concentration.

Field experiences (school-based activities) are required across the curriculum of the MEd programs.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement and resume.

Degree Requirements
Core Courses for All Concentrations (9)
(unless otherwise noted)
TED 545  Diverse Learners (3)
or
TED 646  Introduction to Equity Education (3)
or approved substitute
TED 669  Educational Implications of Learning and Developmental Theory (3)
or
TED 622  Differentiated Instruction (3)
or approved substitute
ERM 605  Educational Measurement and Evaluation (3)
or
ERM 604  Methods of Educational Research (3)
or approved substitute

Advanced Competencies Portfolio and Other Required Culminating Experiences (Capstone Experience)
For some tracks, a technology portfolio and PRAXIS exams are necessary for licensure and graduation, while for others only the Advanced Competencies Portfolio and a possible assessment day are required.

Elementary Science Education Concentration
Core Courses
TED 669  Educational Implications of Learning and Developmental Theory (3)
or
TED 622  Differentiated Instruction (3)
TED 646  Introduction to Equity Education (3)
ERM 605  Educational Measurement and Evaluation (3)
  or
ERM 604  Methods of Educational Research (3)

Pedagogical Expertise
TED 651  Life Sciences in the Elementary School (3)
TED 652  Physical Sciences in the Elementary School (3)
TED 653  Earth and Space Sciences in the Elementary School (3)
TED 623  Environmental Education (3)
TED 657  Nature of Science, Technology, and Society (3)

Professional Development-Leadership
TED 616  Literacy Development and Instruction Across the Elementary Grades (3)
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

Add-on Licensure in Elementary Science
Required Courses
TED 651  Teaching Life Sciences (3)
TED 652  Teaching Physical Sciences (3)
TED 653  Teaching Earth Sciences (3)
TED 623  Environmental Education (3)
TED 657  The Nature of Science/Technology and Society
TED 632  Science Education: Teaching Practices and Curriculum (3)
  or
TED 616  Literacy Development and Instruction Across Grades (3)
  or
TED 644  Teaching Problem Solving (3)

Elementary Education K-6 Concentration
Pedagogical Expertise
  18 hours selected on basis of approved plan of study

Professional Development/Leadership
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

Elementary Mathematics Education Concentration
Pedagogical Expertise
TED 658  Number Systems and Operations: K-5 Mathematical Tasks (3)
TED 659  Rational Numbers and Operations: K-5 Learning Trajectories (3)
TED 660  Data Analysis and Measurement: K-5 Classroom Interactions (3)
TED 661  Algebraic Reasoning: K-5 Discourse and Questioning
TED 662  Geometry and Spatial Visualization: K-5 Assessment
TED 663  Mathematical Modeling: K-5 Leadership

Professional Development/Leadership
TED 670  Research in Mathematics Education (3)
  or
TED 676  Teacher as Researcher and Leader I (3)

Note: Teacher as Researcher and Leader II when TED 670 is not offered

Add-On Licensure in Elementary Mathematics
Required Courses
TED 658  Number Systems and Operations: K-5 Mathematical Tasks (3)
TED 659  Rational Numbers and Operations: K-5 Learning Trajectories (3)
TED 660  Data Analysis and Measurement: K-5 Classroom Interactions (3)
TED 661  Algebraic Reasoning: K-5 Discourse and Questioning
TED 662  Geometry and Spatial Visualization: K-5 Assessment
TED 663  Mathematical Modeling: K-5 Leadership

**The Learning Sciences (Educational Psychology) Concentration**

Core Courses (9)
(common across M.Ed. concentrations)

Concentration/expertise (18)
Courses are selected from this list on basis of approved plan of study to support chosen area of expertise (certain courses may be approved for more than one area):

1) **Advanced Pedagogy**
   TED 603  Literacy Instruction for English Language Learners (3)
   TED 609  Methods of Teaching Computer Literacy and Computer Programming (3)
   TED 610  Integrating Technology into Subject Matter Instruction (3)
   TED 614  Word Study (3)
   TED 615  Literacy in the Early Years (3)
   TED 616  Literacy Development and Instruction Across the Elementary Grades (3)
   TED 618  Teaching English as a Second Language (3)
   TED 622  Differentiated Instruction (3)
   TED 635  Reading in the Secondary School and Content Areas (3)
   TED 640  Writing Instruction Across the Grade Levels (3)
   TED 665  Diagnosis and Corrective Teaching in Mathematics (3)
   TED 667  Technology in Mathematics Education (3)
   SES 540  Introduction to Exceptional Individuals (3)

2) **Learning Theory**
   TED 607  Adult Learning and College Teaching (3)
   TED 615  Literacy in the Early Years (3)
   TED 616  Literacy Development and Instruction Across the Elementary Grades (3)
   TED 619  Issues and Trends in Literacy Education (3)
   TED 620  Theories of Reading and Writing Processes (3)
   TED 621  Diagnosing Learning Difficulties in Elementary and Junior High School (3)
   TED 628  Trends and Issues in Curriculum and Instruction (3)
   TED 688  Contemporary Problems Seminar (1-3)
   TED 692  Independent Study (1-4)
   SES 540  Introduction to Exceptional Individuals (3)

3) **Motivation**
   TED 628  Trends and Issues in Curriculum and Instruction (3)
   TED 646  Introduction to Equity Education (3)
   TED 688  Contemporary Problems Seminar (1-3)
   TED 692  Independent Study (1-4)
   ELC 675  Schools as Centers of Inquiry (3)
   ELC 685  Passionate Pedagogies (3)
   ELC 688  Contemporary Problems Seminar (1-3)
   ELC 693  Introduction to Critical Pedagogy (3)

4) **Assessment/Research**
   TED 617b  Advanced Practicum in Literacy Assessment, Instruction, and Leadership (3)
   TED 621  Diagnosing Learning Difficulties in Elementary and Junior High School (3)
   TED 660  Data Analysis and Measurement: K-5 Classroom Interactions (3)
   ELC 664  Foundations of Interpretive Inquiry (3)
ERM 604  Methods of Educational Research (3)
ERM 605  Educational Measurement and Evaluation (3)
ERM 642  Evaluation of Educational Programs (3)
ERM 668  Survey Research Methods in Education (3)
ERM 675  Data Presentation and Reporting (3)
ERM 680  Intermediate Statistical Methods in Education (3)
ERM 681  Design and Analysis of Educational Experiments (3)
ERM 682  Multivariate Analysis (3)
ERM 731  Structural Equation Modeling in Education (3)
ERM 732  Hierarchical Linear Modeling (3)

**Professional Development/Leadership (6)**

TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

**French Education Concentration**
(See Languages, Literatures, and Cultures)

**Instructional Technology Concentration**

**Pedagogical Expertise**

TED 610  Integrating Technology into Subject Matter Instruction (3)
TED 628  Trends and Issues in Curriculum and Instruction (3)
TED 667  Technology in Mathematics Education (3)
TED 672  Instructional Design (3)
TED 674  Seminar: Issues and the Virtual Community (3)
LIS 631  Emerging Technological Trends in Information Access (3)
LIS 688  Seminar in Selected Topics I (1-4)
LIS 632  Managing School/Library Computer Laboratories (3)
LIS 630  Computer-Related Technologies for Information Management (3)
LIS 635  Media Production Services for Library Programs (3)
SES 662  Assistive Technology for Inclusive Education (3)

*Note: TED 628: when topic is Integrating Technology into the K-12 Curriculum*

**Professional Development/Leadership**

TED 676 Teacher as Researcher and Leader I (3)
TED 677 Teacher as Researcher and Leader II (3)

**Middle/Secondary English Language Arts (33) Concentration**

**Pedagogical Expertise**

TED 626  Middle Grades Curriculum and Instruction (3)
TED 638  Seminar in Secondary Education (3)
TED 628  Trends and Issues in Curriculum and Instruction (3)
TED 695  Youth Literacies: Advanced Topics in Education (3)
Note: TED 628: with appropriate topics: Gender and Education, Identity Matters, Youth Literacies

Content Area Specialization Courses
TED 645  Critical Perspectives on English Language Arts (3)
One English course selected from the following list and with consent of advisor
ENG 522  Teaching Composition: Theories and Applications (3)
ENG 590  Literacy, Learning, and Fieldwork (4)
ENG 697  Composing Theories in Reading and Writing (3)
ENG 602  Electronic Research, Writing, and Editing (3)
or approved substitute

One TED course selected from the following list and with consent of advisor
TED 622  Differentiated Instruction (3)
TED 604  Applied Linguistics for ESL Teachers (3)
TED 618  Teaching English as a Second Language (3)
TED 616  Literacy Development and Instruction Across the Elementary Grades (3)
or approved substitute

Professional Development/Leadership
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

Literacy Education K-12 Concentration (36)
Core Courses (9)
TED 646  Introduction to Equity Education (3)
TED 669  Educational Implications of Learning and Developmental Theory (3)
ERM 605  Educational Measurement and Evaluation (3)

Pedagogical Expertise (choose 18 hours from the following listing of courses):
TED 590  Community Literacies and Adult Learners (3)
TED 614  Word Study (3)
TED 616  Literacy Development and Instruction Across the Elementary Grades (3)
TED 617a  Practicum in Literacy Assessment and Instruction (3)
TED 617b  Advanced Practicum in Literacy Assessment, Instruction, and Leadership (3)
TED 619  Issues and Trends in Literacy Education (3)
TED 626  Middle Grades Curriculum & Instruction (3)
or
TED 638  Seminar in Secondary Education
TED 635  Reading in the Secondary School and Content Areas (3)
TED 640  Writing Instruction Across the Grade Levels (3)
or
ENG 552  Teaching Composition: Theories and Applications (3)
TED 645  Critical Issues in English Language Arts (3)
TED 695  Youth Literacies (3)
ENG 590  Literacy, Learning, and Fieldwork (3)
ENG 602  Electronic Research, Writing, and Editing (3)
ENG 697  Composing Theories in Reading and Writing (3)

Professional Development/Leadership
TED 628  Trends and Issues in Curriculum and Instruction (3)
or approved substitute
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

Add-on Licensure in Reading (18)
The add-on program in reading is designed for professionals who have already completed a master's program in education or who are currently enrolled in a master's program and would like additional licensure as a reading specialist. The program requires 18 hours of course work. Some of these hours may be completed as part of another master's program such as those offered by the Department of Teacher Education and Higher Education or the Department of Specialized Education Services.

**Required Courses**
- TED 614 Word Study (3)
- TED 616 Literacy Development and Instruction Across the Elementary Grades (3)
- TED 617a Practicum in Literacy Assessment and Instruction (3)
- TED 617b Advanced Practicum in Literacy Assessment, Instruction, and Leadership (3)
- TED 619 Trends and Issues in Literacy Instruction (3)
- TED 640 Writing Instruction Across the Grade Levels (3)

**Middle/Secondary Mathematics Education Concentration**

**Pedagogical Expertise**
- TED 630 Mathematics Teaching in Middle and Secondary Schools (3)
- TED 671 Thinking and Learning in Middle Grades and Secondary Mathematics: Number and Algebra (3)
- TED 673 Thinking and Learning in Middle Grades and Secondary Mathematics: Geometry, Statistics, and Probability (3)

**Math Education Elective**
Two mathematics courses selected from the following list and under advisement from the Departments of Mathematics and Statistics and Teacher Education and Higher Education:
- MAT 503 Problem Solving in Mathematics (3)
- MAT 513 Historical Development of Mathematics (3)
- MAT 514 Theory of Numbers (3)
- MAT 516 Intermediate Abstract Algebra (3)
- MAT 517 Theory of Groups (3)
- MAT 518 Set Theory and Transfinite Arithmetic (3)
- MAT 519 Intuitive Concepts in Topology (3)
- MAT 520 Non-Euclidean Geometry (3)
- MAT 521 Projective Geometry (3)
- MAT 531 Combinatorial Analysis (3)
- MAT 532 Introductory Graph Theory (3)
- MAT 540 Introductory Complex Analysis (3)
- MAT 545 Differential Equations and Orthogonal Systems (3)
- TED 664 Teaching Problem Solving (3)
- TED 667 Technology in Mathematics Education (3)
- TED 670 Research in Mathematics Education (3)

**Professional Development/Leadership (Choose one or the other)**
- TED 676 Teacher as Researcher and Leader I (3)
- TED 677 Teacher as Researcher and Leader II (3)

*Note: Teacher as Researcher and Leader II: when TED 670 is not offered.*

**Middle/Secondary Science Education Concentration**

**Pedagogical Expertise**
- TED 657 Nature of Science, Technology, and Society (3)
- TED 623 Environmental Education (3)
- TED 632 Science Education: Teaching Practices and Curriculum (3)

Two approved content courses College of Arts and Sciences (6) or a second semester of TED 623, TED 657 and/or TED 632 with instructor permission or approved substitutes.

**Professional Development/Leadership**
TED 638  Seminar in Secondary Education (3)

or

TED 626  Middle Grades Curriculum and Instruction (3)
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

**Spanish Education Concentration**
(See Languages, Literatures, and Cultures)

**Middle/Secondary Social Studies Education Concentration**

**Pedagogical Expertise**

9 hours content courses in HIS, PSC, GEO, ECO, ATY, PSY, or SOC at 500 or 600 level

Two courses from different categories

**ESL**
TED 628  Trends and Issues in Curriculum and Instruction (3)
TED 523  Legal, Historical, and Cultural Issues in ESL (3)

or approved substitute

**SES**
SES 540  Introduction to Exceptional Individuals (3)
SES 543  Inclusion of Individuals with Special Needs (3)
SES 643  Issues in Educating Individuals with Special Needs (3)
SES 648  Secondary Programming: Students with Mild Disabilities (3)

or approved substitute

**Technology**
TED 628  Trends and Issues in Curriculum and Instruction (3)

or approved substitute

**Professional Development/Leadership**
TED 638  Seminar in Secondary Education (3)

or

TED 626  Middle Grades Curriculum and Instruction (3)
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

**Teaching English to Speakers of Other Languages (TESOL) Concentration**

**Pedagogical Expertise**
TED 523  Legal, Historical, and Cultural Issues in ESL (3)
TED 603  Literacy Instruction for English Language Learners (3)
TED 604  Applied Linguistics for ESL Teachers (3)
TED 614  Word Study (3)

or approved substitute

TED 618  Teaching English as a Second Language (3)

**6 hours electives under advisement**
Electives under advisement: to include courses in reading, language arts, math, science, social studies, instructional technology, and special education

**Professional Development/Leadership**
TED 676  Teacher as Researcher and Leader I (3)
TED 677  Teacher as Researcher and Leader II (3)

**Add-on Licensure in ESL (15)**

**Required Courses**
TED 523 Legal, Historical, and Cultural Issues in ESL (3)
TED 603 Literacy Instruction for English Language Learners (3)
TED 604 Applied Linguistics for ESL Teachers (3)
TED 614 Word Study (3)
TED 618 Teaching English as a Second Language (3)

Student Affairs Administration in Higher Education, MEd, (42)
The MEd in Student Affairs Administration in Higher Education prepares graduates to implement transformative and integrated learning experiences in college, university, and other postsecondary setting. In preparation for careers in college student affairs administration, graduate learners complete a minimum of 42 hours in foundation studies, professional studies, assessment and research, and a coherent sequence of supporting courses as well as an internship in college student affairs administration. Graduates may select supporting courses for an emphasis on adult learning.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement and resume.

Degree Requirements
Foundational Studies (3)
   HED 601 Foundations of College Student Affairs Administration

Professional Studies (18 hours minimum)
   HED 602 Student Development Theory in Higher Education (3)
   HED 606 Organization and Administration of Student Affairs in Higher Education
   HED 608 Leadership in Higher Education (3)
   HED 609 Student Development II (3)
   HED 612 Current Issues in Higher Education (3)
   HED 663 Program Planning in Post-Secondary Education (3)
   HED 688 Effects of College on Students (3)
   CED 610 Helping Relationships (3)

Assessment and Research (3)
   ERM 604 Methods of Educational Research (3)

Supervised Practice (3)
   HED 690 Internship and Professionalism in Student Affairs

Supporting Courses (9)
   Students select a coherent sequence of supporting courses in consultation with the advisor.

Capstone Experience
   In lieu of a thesis or comprehensive examinations, students will complete an academic portfolio of their work accomplished during the program as submission for their capstone experience.

Educational Studies, Teacher Education and Development or Higher Education Concentration, PhD, (60)

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement and resume.
**Teacher Education and Development Concentration**
The PhD in Educational Studies with a concentration in teacher education and development requires a minimum of 60 semester hours. All students must meet requirements as described below. Additional course requirements are determined on an individual basis through planning by the student and his/her doctoral advisory/dissertation committee.

**Required Core Courses (12)**
- TED 646 Introduction to Equity Education (3)
- or
- TED 765 Research in Equity Education
- TED 746 Seminar: Research on Teaching
- TED 747 Doctoral Seminar in Learning and Cognition
- TED 749 Disciplined Inquiry in Teacher Education

**Research Requirements (21)**
The research component must include both qualitative and quantitative research courses, plus an applied research component. Students are expected to acquire a deep understanding of the concepts of research and inquiry as they relate to curriculum and instruction. The knowledge base should include understanding of various research paradigms, criticisms of these paradigms, and the ability to conduct scholarly research.

**Research Component**
The research component must include one doctoral-level statistics course, one doctoral-level qualitative methods course, one doctoral-level mixed methods research course and at least 6 hours of applied research courses as follows.
- TED 730 Qualitative Methods in Curriculum and Instruction (3)
- TED 738 Mixed Methods Research Design in Curriculum and Instruction
- TED 775 Directed Doctoral Research
- ERM 681 Design and Analysis of Educational Experiments (3)

*Notes: TED 775: two times for a total of 6 semester hours; ERM 680, prerequisite for ERM 681, can be counted in the 21 hours; The remaining research courses must be selected with advice and approval of the doctoral committee.*

**Concentration Courses (15)**
Students will decide on courses with the advice and approval of the doctoral committee. By carefully selecting courses, students may develop a focus in any of several areas including teacher education, elementary education, middle grades education, reading and literacy education, mathematics education, social studies education, science education, equity education, or an interdisciplinary focus.

**Comprehensive Examination**
Each candidate for the doctoral degree is required to successfully pass an oral and written comprehensive examination. Dates for this examination are determined by the student and the doctoral advisory/dissertation committee chair.

**Dissertation (12 hours minimum)**
Each candidate for a doctoral degree must prepare and present a dissertation that focuses on some aspect of teacher education, shows independent investigation, and is acceptable in form and content to the student’s committee and The Graduate School.

**Higher Education Concentration**
The PhD in Educational Studies with a concentration in higher education requires 60 semester hours and is intended for experienced administrators and qualified scholars. Students develop the skills, knowledge, and attitudes necessary for investigating, understanding, and shaping the dynamic relations among students, institutions of higher education, and society. Graduates pursue careers as scholar-practitioners in student affairs and higher education.

**Core Course Requirements (15)**
- HED 745 Higher Education: Equity, Inclusion and Learning
HED 746  Organizational Theory in Higher Education  
HED 747  Advanced Student Development Theory  
HED 748  Law of Higher Education  
HED 749  Professional Seminar in Higher Education Research  

**Concentration Course Requirements (15)**

The concentration should complement the student’s interests and, therefore, is individually designed. In consultation with the advisor, students will select a coherent set of concentration courses focusing on specific problems of theory, policy, or practice in higher education and are appropriate for the student’s professional goals and interests.

**Research Methods (18)**

- ERM 680  Intermediate Statistical Methods in Education (3)
- ERM 681  Design and Analysis of Educational Experiments (3)
- HED 775  Directed Doctoral Research

One course in qualitative or interpretive research methods

One advanced course in research methods

One elective research methods course

**Examinations**

Upon completing the curriculum, and prior to beginning a doctoral dissertation, students must pass a qualifying examination in their major area of study before the student advances to candidacy. The comprehensive examination is an opportunity for PhD students to demonstrate they can apply the knowledge gained in the program curriculum to a series of questions linked to a specific case or problem. Following review by the faculty, the student must orally defend the written examination in a meeting with the approved doctoral committee. In effect, this examination process is intended to determine if a student is qualified to begin work on a doctoral dissertation.

**Dissertation (12)**

Each candidate will complete an original research project and orally defend at the final defense of the dissertation.

**TED - Teacher Education Graduate Courses**

**TED 506 Institutes in Education (1–3)**

Practicum or workshop experiences to focus on issues, problems, or approaches in the profession. Students may apply no more than 3 hours of this course to any degree program. (Graded on S-U basis)

**Notes**

Grade: Satisfactory/Unsatisfactory, S/U. Students may apply no more than three (3) sh of this course to any degree program.

**TED 516 Emergent Literacy and Literature (3:3)**

Explores emergent literacy development from birth to age 5 and investigates the role that texts play in young children's development.

*Offered*

(Spring & Summer)

**TED 518 Mathematics in the Elementary Schools (3:3)**

Current mathematics program, including emphasis on meaning theory and on instructional materials, methods, and procedures in teaching fundamental operations.

*Offered*

Fall & Spring

**TED 519 Science in the Elementary School (3:3)**

Designing and developing science learning experiences for children in the biological, physical, earth, and space sciences. The nature of elementary school science and children's interests are considered.

*Offered*
Summer

TED 520 Social Studies in the Elementary School (3:3)
Designed to help educators gain more complete understanding of elementary school social studies. Special emphasis given to evaluation of the field beginning with the separate subjects approach to correlation, to broad fields, to integration, and separate disciplines approach. Emphasis also given to identification of key skills that help children function intelligently in this field. Development of democratic citizens also a major consideration.
*Offered*
Summer & Fall

TED 523 Legal, Historical, and Cultural Issues in ESL (3:3)
Exploration of legal and historical bases of English as a Second Language. Analysis of differences among home and school cultures, especially related to language.
*Offered*
Spring

TED 527 Teaching Second Languages: Elementary/Middle Schools (3:3)
Study of second language teaching approaches applicable to the elementary/middle school pupil. Materials development and evaluation. Organizing effective second language programs in the elementary and middle schools.
*Prerequisite*
TED 545 and admission to teacher education program or permission of instructor
*Offered*
Fall

TED 530 Middle Grades Language Arts (3:3)
Course develops competencies in middle grades language arts instruction as related to adolescent learners. Emphases include practical and theoretical attention to best-practices, curriculum, assessment, and standards of practice.
*Prerequisite*
Admission to middle grades education major
*Offered*
Fall

TED 535 Literacy in the Content Area (3:3)
Designed to prepare middle grades, secondary, and special subject or content area teachers to work with students who exhibit a variety of reading and writing levels.
*Prerequisite*
Admission to teacher education or M.Ed. program
*Offered*
Fall, Spring, Summer

TED 545 Diverse Learners (3:3:2)
Provides students with a broad base of knowledge and skills that will facilitate their effectiveness in meeting the needs of diverse learners through appropriate instructional, curricular, and behavioral strategies.
*Prerequisite*
Admission to teacher education, or permission of instructor
*Offered*
Fall & Spring

TED 551 Teaching Practices and Curriculum in English (3:3:2)
Designed to acquaint prospective teachers with modern concepts and practices of English instruction in secondary schools; emphasis on teaching four fundamental language arts: speaking, writing, reading, and listening.

**Prerequisite**
TED 445, admission to teacher education, and an overall minimum GPA of 2.75, or permission of instructor

**Offered**
Fall

**Notes**
Required of student teachers in English.

**TED 552 Teaching Practices and Curriculum in Foreign Languages (3:3:2)**
Designed to acquaint second-language teachers with modern methods and techniques of instruction in secondary schools. Emphasis on proficiency in listening, speaking, reading and writing and on teaching materials.

**Prerequisite**
TED 545 and admission to teacher education or permission of instructor

**Offered**
Fall

**Notes**
Required of student teachers in foreign languages.

**TED 553 Teaching Practices and Curriculum in Social Studies (3:3:2)**
Organization of social studies in secondary schools; classroom methods, techniques, and activities; teaching materials; testing and evaluation.

**Prerequisite**
TED 445, admission to Teacher Education Program, and an overall minimum GPA of 3.0; or permission of instructor

**Offered**
Fall

**Notes**
Required of student teachers in social studies.

**TED 554 Middle Grades Social Studies Education (3:3)**
Examination of candidate competencies in middle grades social studies instruction. Emphases include practical and theoretical attention to curriculum development, planning, resources, standards, instructional strategies, and assessment.

**Prerequisite**
Admission to Middle Grades Education major

**TED 555 Multicultural Education (3:3)**
Philosophical and sociocultural perspectives on pluralism and diversity. Emphases include interdependent individual, cultural, and institutional behaviors related to race, religion, class, cultural/ethnic heritage, and gender.

**Offered**
Spring

**TED 557 Teaching Practices and Curriculum in Mathematics (3:3:2)**
Special teaching problems in secondary mathematics. Teaching procedures for important topics discussed in relation to their foundations in mathematics and logic.

**Prerequisite**
TED 450, TED 545, and admission to teacher education. Coreq. or Pr.TED 470, or permission of instructor

**Offered**
Fall

**Notes**
Required of student teachers in mathematics.
TED 558 Middle Grades Mathematics Education (3:3)
Development of middle grades mathematics instruction as related to adolescent learners. Emphases include practical and theoretical attention to best practices, curriculum, assessment, and standards of practice.
Prerequisite
Admission to Middle Grades Education major at the undergraduate or graduate level [classroom practice track (CPT) only—CPTs are students who have a bachelor’s degree in a discipline other than education and want to pursue an education degree]; and lateral entry middle grades mathematics teachers or permission of instructor.
Corequisite
Undergraduate and CPT students: TED 375 or equivalent
Offered
Spring

TED 559 Teaching Practices and Curriculum in Science (3:3:2)
Development of philosophy of science teaching and of attitudes and values relative to science teaching in secondary school. Emphasis on recent curriculum studies in biology, chemistry, physics, and earth-science and the changing approaches to teaching these subjects.
Prerequisite
TED 545 and admission to teacher education or permission of instructor
Offered
Fall
Notes
Required of student teachers in science.

TED 560 Middle Grades Science Education (3:3:5)
Develops candidate competencies in middle grades science instruction as related to adolescent learners. Emphases include practical and theoretical attention to best practices, curriculum, assessment, and standards of practice.
Prerequisite
Admission to Middle Grades Education major

TED 580 Education in Global Settings (0-6:3:3-18)
This course is designed for students who are interested in exploring education issues through guided study-abroad experiences. Students will participate in field experiences and interact with students and teachers abroad. Course may be repeated for maximum of 6 credit hours.

TED 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

TED 590 Community Literacies and Adult Learners (3:3)
This course focuses on working with adult learners, including families of K-12 English learners, who are learning English as an additional language, in both formal and informal settings.

TED 600 The Community College (3:3)
Development of the community college on the national and state levels, including objectives, organization, curricula, instruction, and services.

TED 601 Foundations of College Student Personnel Administration (3:3)
Historical, philosophical, ethical, cultural, and research foundations of higher education that inform student affairs practice. Learners articulate the inherent values of the profession as guided by key professional documents.
Prerequisite
Admission to The Graduate School
TED 602 Theoretical Foundations of Higher Learning (3:3)
Learning as a comprehensive, holistic, and transformative experience integrating academic learning and student development. Overview of campus programs and services. Review of research on the impact of college on undergraduates.
Prerequisite
Admission to The Graduate School

TED 603 Literacy Instruction for English Language Learners (3:3)
Basic knowledge of theory and research in second language acquisition and literacy development and strategies and techniques for effective literacy instruction for English language learners.
Distribution
SVL

TED 604 Applied Linguistics for ESL Teachers (3:3)
Linguistics theories on phonology, morphology, syntax, psycholinguistics and sociolinguistics; basic theories of second language acquisition; and application of the theories and models of applied linguistics in ESL classroom teaching.

TED 605 Developmental Psycholinguistics (3:3)
Processes involved in the acquisition and development of a first language in the human species. Interrelations between psycholinguistics and cognition. Field work will include observations in a natural setting and in language testing situations.
Prerequisite
One course in human development or child development, one course focusing on human learning, or permission of instructor. A course in linguistics is recommended.

TED 606 Administration of Higher Education (3:3)
Basic skills and theory of administrative behavior, organizational structure, governance and management of higher education; processes and factors influencing institutional decision making and higher education planning.
Prerequisite
Permission of instructor

TED 607 Adult Learning and College Teaching (3:3)
Alternative teaching models: their nature, curriculum foundations, relationship to the adult learner, analysis, and evaluation. Research on teaching and issues in faculty evaluation.

TED 609 Methods of Teaching Computer Literacy and Computer Programming (3:3:3)
Content and method for teaching for computer literacy and computer programming and strategies for teaching these subjects. Designed for computer specialists, computer teachers, and regular classroom teachers.
Cross Listed Courses
LIS 673

TED 610 Integrating Technology into Subject Matter Instruction (3:3:3)
Study of ways to integrate a variety of computer-based technologies for teaching and learning content in the K-12 curriculum. Designed for classroom teachers, computer teachers, and computer specialists.

TED 611 Survey of Adult Education (3:3)
Survey of concepts and history of the professional field of adult education and affiliated fields. Examination of the role of the influencer or teacher of adults within today’s context of accelerating cultural change.
TED 612 Current Issues in Higher Education (3:3)
Identification and analysis of current issues with discussion of proposals for resolution.

TED 613 Linguistics for ESL Teachers (3:3)
Designed for teachers pursuing advanced licensure in English as a Second Language. Focuses on understanding general linguistic concepts and their application to ESL pedagogy.

TED 614 Word Study (3:3)
Designed to familiarize educators with underlying developmental theories and teaching strategies for word recognition, spelling, and vocabulary development. Special attention given to issues surrounding phonics.

TED 615 Literacy in the Early Years (3:3)
Course explores how children learn to read and how to facilitate readers' growth in the primary grades. Emphasis on at-risk readers.

TED 616 Literacy Development and Instruction Across the Elementary Grades (3:3)
Designed to give teachers a deeper understanding of the theories and research behind effective reading instruction for students in the elementary grades.

TED 617a Practicum in Literacy Assessment and Instruction (3)
Causes of reading disabilities, diagnostic instruments, standard and informal assessments, report writing, and materials and methods of struggling readers. Work with individual students or small groups identified as struggling readers.
Prerequisite TED 614, TED 615 and TED 616 or permission of instructor

TED 617b Advanced Practicum in Literacy Assessment, Instruction, and Leadership (3)
Further examination of struggling readers in a supervised, clinical context. Evaluation of formal and informal assessments, the generation of educational prescriptions, and the directions of assessment procedures.
Prerequisite TED 617a or permission of instructor

TED 618 Teaching English as a Second Language (3:3)
Specific instructional methods and strategies to facilitate content area instruction and English language development for students who speak languages other than English.
Distribution SVL

TED 619 Issues and Trends in Literacy Education (3:3)
Examines contemporary issues in Literacy Education. Special attention to the changing contexts of literacy curricula and instruction.
Prerequisite Minimum of 9 hours in reading education and TED 604 or 605; or permission of instructor

TED 620 Theories of Reading and Writing Processes (3:3)
Current cognitive and social theories of reading processes and writing processes. Implications of applying those theories to the elementary and middle school curriculum.

TED 621 Diagnosing Learning Difficulties in Elementary and Junior High School (3:3)
Procedures and techniques in diagnosing learning problems, especially in the language arts area. Emphasis placed on assessment and treatment procedures related to learning processes. Practical application stressed through contact with school-age children.

**TED 622 Differentiated Instruction (3:3)**
Methods appropriate for assessing individual learning needs in a performance-based curriculum, and constructing, implementing, and evaluating a long-term instruction plan in specific content area(s).

*Prerequisite*
Admission to MEd in curriculum and instruction; TED 545, TED 669, ERM 605, and a minimum of 15 hours in the pedagogical expertise area, or permission of instructor

**TED 623 Environmental Education (3:3)**
Teachers will design, conduct, and evaluate environmental education activities. Course activities partially fulfill requirements for North Carolina environmental education certification.

*Prerequisite*
TED 545, TED 669, ERM 605, or permission of the instructor

*Notes*
Weekend field trip is required. May be repeated for credit when topic varies.

**TED 624 Elementary School Curriculum and Instruction (3:3)**
Curricular and instructional principles, processes, and designs applicable to children from early childhood to early adolescence. Current and emerging elements of the modern elementary school curriculum.

*Prerequisite*
500-level course in elementary education

**TED 625 Mathematics in the Elementary School II**
*Prerequisite*
Admission to the MAT, Elementary Education concentration, or permission of instructor

**TED 626 Middle Grades Curriculum and Instruction (3:3)**
Curricular and instructional principles, processes, and designs applicable to students in the middle grades. Particular emphasis is given to exemplary middle school programs.

*Prerequisite*
Permission of instructor

**TED 627 Enrollment Management (3:3)**
‘Enrollment influences’ including the institution’s integrated efforts in marketing, recruitment, admission, and retention.

*Prerequisite*
CED 579 or permission of instructor

**TED 628 Trends and Issues in Curriculum and Instruction (3:3)**
Examination of selected current trends and issues in curriculum and instruction, focusing on causes, intentions, and effects of policies at the local, state, and national levels. May be repeated for credit when topic varies.

**TED 629 Academic Discourse Communities in Graduate Studies (3:3)**
Examines efficient techniques for evaluating academic research and for developing writing and oral skills in different genres of academic discourses appropriate to disciplinary communities.

**TED 630 Mathematics Teaching in Middle and Secondary Schools (3:3)**
Examines models of mathematics instruction in middle grades and secondary mathematics classrooms
Notes
May be repeated for credit when topic varies.

Historical development and objectives of social studies curriculum in schools; structure of individual disciplines in social studies, trends and new directions in curriculum, and implications of significant research in social studies curriculum and methodology. May be repeated once for credit when topic varies.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit when topic varies.

TED 632 Science Education: Teaching Practices and Curriculum (3:3)
Application of reform efforts in the sciences with attention given to eco and social justice perspectives.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit when topic varies.

TED 633 Trends in Teaching Practices and Curriculum in Foreign Languages (3:3)
Research in first and second language acquisition as it relates to second language teaching. Developments in foreign language curriculum and methodology.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit when topic varies.

TED 634 Seminar in Middle Grades Education (3:3)
Will focus on the unique needs of students and teachers in middle level schools.
Prerequisite
Completion of a course in middle grades curriculum and instruction

TED 635 Reading in the Secondary School and Content Areas (3:3)
Reading development; problems and procedures of teaching basic and mature reading skills to pupils in junior and senior high schools; explore implications of research for teaching, and identify problem areas.
Prerequisite
TED 664 or permission of instructor

TED 636 Educational Psychology and Differentiated Instruction (3:3)
Understanding and applying current theory and research addressing education psychology (child/adolescent development, learning theory and motivation) and differentiated instruction.
Prerequisite
Admission to the MAT, Elementary Education concentration, or permission of instructor

Prerequisite
Permission of instructor
Notes
May be repeated once for credit when topic varies.
TED 638 Seminar in Secondary Education

TED 638a Seminar in Secondary Education (3:3)
Group analysis of selected problems. Individual student presentations of research done on topics related to that person’s professional situation.

TED 638b Seminar in Secondary Education (3:3)
Group analysis of selected problems. Individual student presentations of research done on topics related to that person’s professional situation

TED 639 Global Education in the Curriculum (3:3)
Develop awareness of need for global education and skills and processes necessary for implementation in the curriculum.

TED 640 Writing Instruction Across the Grade Levels (3:3)
Interrelates knowledge, research and practice in teaching writing as a process across grade levels from elementary through secondary levels. Special attention to implementing the writing process across the curriculum.

TED 641 Literacy I: Reading Instruction (3:3)
Course focuses on how children learn to read and write and what classroom teachers can do to facilitate their growth as readers and writers in the elementary grades.
Prerequisite
Admission to the MAT in Elementary Education, or permission of instructor

TED 642 Literacy II: Language Arts Instruction (3:3)
Integrated reading and language arts course designed to prepare students to teach reading and writing in the elementary grades.
Prerequisite
Admission to the MAT in Elementary Education, or permission of instructor

TED 644 Supervised Practicum in Curriculum and Teaching (3:3)
Directed studies of curricular and instructional issues in a field setting.
Prerequisite
Permission of instructor
Notes
Grade: Satisfactory/Unsatisfactory, S/U

TED 645 Critical Perspectives on English Language Arts (3:3)
Examines theoretical, political, and practical elements of the English language arts. Engages students in critical reflection about their teaching and analysis of perspectives on the purposes of English language arts instruction.

TED 646 Introduction to Equity Education (3:3)
Designed to introduce concept of equity education (culture, race, ethnicity, socioeconomic status, language, gender, and exceptionality). Students acquire knowledge, skills, and dispositions necessary to create equitable environments in K-12 educational settings.

TED 650 Establishing and Maintaining a Responsive Classroom Environment (3:3)
Competencies in motivating and increasing student learning through the development of positive interpersonal relationships in the classroom, effective classroom organization and instruction, and altering unproductive student behavior.
Prerequisite
Permission of instructor

**TED 651 Life Sciences in the Elementary School (3:3)**
Analysis and expansion of content knowledge and pedagogical content knowledge related to core ideas and crosscutting concepts in earth sciences appropriate for elementary teachers.
*Prerequisite*
Graduate student in teacher education program or permission of instructor

**TED 652 Physical Sciences in the Elementary School (3:3)**
Analysis and expansion of content knowledge and pedagogical content knowledge related to core ideas and crosscutting concepts in the earth sciences appropriate for elementary teachers.
*Prerequisite*
Graduate student in teacher education program or permission of instructor

**TED 653 Earth and Space Sciences in the Elementary School (3:3)**
Analysis and expansion of content knowledge and pedagogical content knowledge related to core ideas and crosscutting concepts in the earth sciences appropriate for elementary teachers.
*Prerequisite*
Graduate student in teacher education program or permission of instructor

**TED 654 Teaching Models and the Analysis of Instruction (3:3)**
Alternative models of instruction in elementary, secondary and non-school contexts: curriculum foundations, analysis and implications, observation systems, evaluation of teaching and teachers, and critical instructional issues.

**TED 655 Supervision of Instruction (3)**
Supervision as curriculum and instructional leadership, focusing on the analysis and evaluation of instruction, generation of curriculum alternatives, interpersonal relationships between supervisor and supervisee, and strategies for the supervisory conference.

**TED 657 Nature of Science, Technology, and Society (3:3)**
Study of nature of science, encompassing literature from history, philosophy, and sociology of science. Applications of this literature on school science instruction.
*Prerequisite*
TED 559 or equivalent science methods course
*Notes*
May be repeated for credit when topic varies.

**TED 658 Number Systems and Operations: K-5 Mathematical Tasks (3:3)**
Analysis and construction of effective mathematical tasks in teaching number systems and operations at the K-5 level; attention also given to expansion of content knowledge.
*Prerequisite*
Teacher licensure

**TED 659 Rational Numbers and Operations: K-5 Learning Trajectories (3:3)**
Focus on rational number concepts through learning trajectories at the K-5 level; attention also given to problem solving and content knowledge.
*Prerequisite*
TED 658

**TED 660 Data Analysis and Measurement: K-5 Classroom Interactions (3:3)**
Focus on statistical literacy of elementary teachers and the teaching of data analysis and measurement to K-5 students; attention also given to learning methods that facilitate appropriate classroom interactions.

**Prerequisite**
TED 658

**TED 661 Algebraic Reasoning: K-5 Discourse and Questioning**

**TED 662 Geometry and Spatial Visualization: K-5 Assessment**

**TED 663 Mathematical Modeling: K-5 Leadership**

**TED 664 Teaching Problem Solving (3:3)**

**Prerequisite**
Admission to a graduate program, or permission of instructor

**TED 665 Diagnosis and Corrective Teaching in Mathematics (3:3)**

**TED 667 Technology in Mathematics Education (3:3)**
Technologies used to learn mathematics and ways of incorporating those technologies into mathematics instruction.

**TED 668 Seminar in Mathematics Pedagogy (3:3)**
Analysis of alternative pedagogy for specific mathematics content, with design of instruction and assessment based on that analysis.

**Notes**
May be repeated for credit; maximum of 6 hours applicable toward any degree.

**TED 669 Educational Implications of Learning and Developmental Theory (3:3)**
How learning and developmental theories define the teacher’s role as instructional leader, how curricular materials might be designed and used, and student learning and motivation.

**TED 670 Research in Mathematics Education (3:3)**
Research in mathematics instruction and learning; attention to synthesizing and identifying educational implications of research.

**TED 671 Thinking and Learning in Middle Grades and Secondary Mathematics: Number and Algebra (3:3)**
An examination of research on the teaching and learning of number and algebra in middle grades and secondary mathematics classrooms.

**TED 672 Instructional Design (3:3)**
Components of the systems approach to instructional design.

**Cross Listed Courses**
LIS 672

**673 Thinking and Learning in Middle Grades & Secondary Mathematics: Geometry, Statistics, & Probability (3:3)**
An examination of research on the teaching and learning of geometry, statistics, and probability in middle grades and secondary mathematics classrooms.
TED 674 Seminar: Issues and the Virtual Community (3:3)
Major social and ethical issues emerging in the virtual community including those embraced by access, privacy, intellectual property, freedom of speech, institutional/social control, and evolving formats.
Cross Listed Courses
LIS 674
Prerequisite
Permission of instructor

TED 676 Teacher as Researcher and Leader I (3:3)
Leadership skills for teachers working with school, district, state and/or national initiatives and issues. Course focuses on inquiry, developing an action research proposal, and practical application of findings.
Prerequisite
ERM 605 and 24 hours of MEd course work, or permission of instructor

TED 677 Teacher as Researcher and Leader II (3:3:3)
Conducting and interpreting a teacher action project investigating curriculum, instruction, teaching, and learning. Course focuses on systematic inquiry, conducting research, practical application of findings, and sharing research in professional settings. May be repeated once for credit.
Prerequisite
TED 676
Notes
May be repeated once for credit.

TED 680a Clinical Experience in Teaching (3–6)
Supervised in-school clinical experience. Required full-time teaching.
Prerequisite
Admission to MEd, MAT program, or permission of department

TED 680b Clinical Experience in Teaching Seminar (3)
Seminar focused on the ways students learn within the classroom and community context.
Prerequisite
Admission to MEd, MAT program, or permission of department

TED 685 Supervision: Theory and Concepts (3:3)
Theories and practices in educational supervision; curriculum development and coordination, staff development and assessment, and organizational alternatives designed to improve both student and teaching functioning in schools.

TED 688 Contemporary Problems Seminar (1–3)
Specific course title identified each semester by subscript (e.g., Contemporary Problems Seminar; Issues in Professional Negotiations).
Prerequisite
Advanced master’s or doctoral standing, or permission of instructor
Notes
May be repeated for credit when topic varies.

TED 690 Internship in Higher Education (3)
Provides experiential learning opportunities in six functional areas of higher education. Learners engage in professional work activities and explore career interests within business, student, and academic affairs, among others.
Prerequisite
Must have completed 18 semester hours in the Plan of Study and permission of instructor

Notes
Grade: Satisfactory/Unsatisfactory, S/U

TED 692 Independent Study (1–4)
Guided readings, research, and individual project work under direction of a staff member.

Prerequisite
Permission of instructor

TED 695 Youth Literacies: Advanced Topics in Education (3:3)

TED 698 Human Development (3:3)
Selected works in social and biological sciences to determine basic psychological foundations of learning and human behavior and their application to the helping professions.

TED 699 Thesis (1–6)
Individual guidance and direction in the development of a research problem in the master's degree thesis.

TED 710 Human Development and Education (3:3)
Major conceptual approaches to human development, current developmental research topics and their application to education.

Prerequisite
TED 698 or permission of instructor

TED 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

TED 726 Seminar in Curriculum Development in Middle Grades Education (3:3)
Current research in young adolescent development and curriculum development as it relates to improving middle grades education.

Prerequisite
Master's degree in middle grades education; 644, 654, 655 or permission of instructor

TED 728 Topics in Curriculum and Instruction
Advanced study of special topics in curriculum and teaching.

Prerequisite
Permission of instructor

Notes
May be repeated up to three times for credit when topic varies.

TED 730 Qualitative Methods in Curriculum and Instruction (3:3)
Qualitative research design in education, including its history, philosophy and nature. Includes discussion of types of qualitative research, assessment issues, and critical reading of qualitative research.

Prerequisite
TED 750 or permission of instructor

TED 738 Mixed Methods Research Design in Curriculum and Instruction
Overview of mixed methods research including its history, current literature, and typology. Topics include research design, data collection, data analysis, validity, and proposed writing for a mixed methods study.

TED 744 Higher Education: Finance and Political Economy (3:3)
Research and scholarship on political economy of higher education, budget models, strategic planning, impact on students, and policy augmentation. Production of an in-depth literature review on a related topic.
Prerequisite
TED 601, TED 606, and TED 661

TED 745 Higher Education: Equity, Inclusion, and Learning (3:3)
Review of theory and research on inclusion and equity in postsecondary education. Addresses skills, knowledge, and dispositions necessary for establishing culturally responsive learning environments.

TED 746 Seminar: Research on Teaching

TED 747 Doctoral Seminar in Learning and Cognition

TED 749 Disciplined Inquiry in Teacher Education

TED 753 Accountability in Higher Education (3:3)
Overview of accountability issues related to assessment, accreditation, institutional effectiveness, and self-study processes for graduate students and faculty interested in teaching or administrative positions in postsecondary education.
Prerequisite
TED 661 or permission of instructor

TED 754 Internship in Curriculum and Instructional Leadership (3:0:10)
Directed internship in an appropriate curriculum and instructional leadership setting. Supervision provided by departmental faculty in collaboration with field-based mentors.
Prerequisite
Minimum of 24 semester hours from courses included in the doctoral student’s program of study including the following or their equivalent: TED 654, TED 655, TED 685; written verification by the student’s doctoral committee that student is ready for in
Notes
May be repeated once for credit.

TED 756 Public Policy in Higher Education (3:3)
Overview of the roles of principal forces and actors in formulating federal and state policies related to access, affordability, and accountability in postsecondary education.
Prerequisite
TED 661 or permission of instructor

TED 759 College Teaching Practicum (3:3)
Supervised experiences in teaching college level course(s).
Prerequisite
Advanced standing in the curriculum and teaching doctoral track and permission of instructor

TED 765 Research in Equity Education

TED 770 Community Engaged Research & Practice (3:3)
An in-depth exploration of the history, theory, ethics, research methods, and reporting of community-engaged research with an emphasis on positionality and reflexivity. Research practices in community settings are required.

**Prerequisite**
An introductory methods course including either TED 730, ELC 664, ELC 665, ERM 750 or permission of instructor

**Notes**
Cross listed with ELC 770 and SES 770

**TED 775 Directed Doctoral Research**

**TED 785 Research on Teacher Education (3:3)**
In-depth study of current trends and issues in research on teaching.

**TED 790 Practicum: Applied Research in Higher Education (3)**
Complete an applied research project that addresses specific information needs of the cooperating institution. Learn to uphold the standards of the selected research methods.

**Prerequisite**
Must have completed 36 semester hours in the Doctoral Plan of Study (including one methods course in qualitative research and one methods course in quantitative research) and permission of instructor

**Notes**
May be repeated once for credit. Grade: Satisfactory/Unsatisfactory, S/U

**TED 799 Dissertation (1–12)**
Individual direction in the development and execution of a doctoral dissertation.

**TED 801 Thesis Extension (1–3)**

**TED 802 Dissertation Extension (1–3)**

**TED 803 Research Extension (1–3)**

**HED-Higher Education Graduate Courses**

**HED 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**HED 600 The Community College**

**HED 601 Foundations of College Student Affairs Administration**

**HED 602 Student Development Theory in Higher Education (3:3)**
Learning as a comprehensive, holistic, and transformative experience integrating academic learning and student development. Overview of campus programs and services. Review of research on the impact of college on undergraduates.

**HED 606 Organization and Administration of Student Affairs in Higher Education**
Basic skills and theories of organization and administration of student affairs programs in higher education.

**Prerequisite**
HED 601

**HED 607 Adult Learning and College Teaching**
HED 608 Leadership in Higher Education (3:3)
Examines the concepts of "good" and "effective" leadership and the nature of leadership development in higher education. Explores and investigates leadership models, theories, and frameworks in higher education.

HED 609 Student Development Theory II (3:3)
Examines the concepts of social justice in higher education. Explores and investigates various theories, perspectives, issues, and frameworks of social justice and social identities in higher education.

HED 611 Survey of Adult Education

HED 612 Current Issues in Higher Education

HED 627 Enrollment Management

HED 661 Higher Education in the U.S.
Policy governance and legal issues affecting contemporary higher education in the U.S. and their historical background.

HED 662 Curriculum in Higher Education

HED 663 Planning Programs in Postsecondary Education

HED 688 Contemporary Problems Seminar (1–3)
Specific course title identified each semester by subscript (e.g., Contemporary Problems Seminar; Issues in Professional Negotiations).
Prerequisite
Advanced master's or doctoral standing, or permission of instructor
Notes
May be repeated for credit when topic varies.

HED 690 Internship and Professionalism in Student Affairs
Provides experiential learning opportunities in functional area of higher education. Learners engage in professional work activities, explore career interests, and prepare for full-time employment.
Prerequisite
HED 601 and 602 and permission of instructor

HED 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

HED 730 Qualitative Methods in Education

HED 744 Higher Education: Finance and Political Economy

HED 745 Higher Education: Equity, Inclusion and Learning

HED 746 Organizational Theory in Higher Education (3:3)
Competing theories of college and university organization form a transdisciplinary perspective with attention to the cultural singularities of academia. Production of an in-depth literature review on a related topic.
Prerequisites
HED 601, HED 606, and HED 661
HED 749 Professional Seminar in Higher Education Research (3:3)
Overview of higher education as a field of study. Participants develop research interests, practice critical reading and writing strategies, and produce an in-depth literature review.

Prerequisites
HED 601, HED 606, and HED 661
THE COLLABORATIVE FOR EDUCATOR PREPARATION
School of Education • School of Education Building • (336) 334-3045 • soe.uncg.edu/partners/collaborative-for-educator-preparation

Administration
Jacqueline Dozier, Director
Amanda Shirk, Advisor

The Collaborative for Educator Preparation oversees policies and practices of professional education programs at UNCG, accreditation and DPI reviews in conjunction with the SOE Director of Assessment; dissemination of information about North Carolina State Department of Public Instruction (SDPI) licensing requirements; and the administration of school-university partnership activities related to USTEP funding.

The Collaborative for Educator Preparation is comprised of a Council of Program Coordinators (CPC) that represents all the professional education programs on the UNCG campus; an Executive Council with an administrative representative from each unit; a Leadership Council composed of representatives from teaching and non-teaching programs, from within and outside the SOE, and from local school districts.

Graduate Programs
• NC TEACH Alternative Licensure Program, (12-18)

NC TEACH Alternative Licensure Program (12-18)
North Carolina Teachers of Excellence for All Children (NC TEACH) is designed to recruit, train, support, and retain mid-career professionals as they become licensed teachers in North Carolina. The program is designed to offer lateral entry teachers the opportunity to earn an initial standard professional I license to teach in North Carolina. The Collaborative for Educator Preparation (CEP) administers the NC TEACH Alternative Licensure Program in the following areas: Middle Grades (6-9) Language Arts, Mathematics, Science, and Social Studies; Secondary (9-12) English, Latin, Mathematics, Science, and Social Studies; and K-12 Foreign Language (Spanish or French). Depending on the academic background of the student, the alternative licensure program consists of 12-18 semester hours. Students in the program enroll in a sequence of education courses and engage in field-based experiences as lateral entry teachers in local public school systems. Students may be required to take additional course work in their teaching area for licensure. For most of these teaching areas, students may apply up to 18 semester hours of NC TEACH course work toward a master’s degree program provided they apply and are accepted.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Alternative Licensure Requirements
Program of Study (12-18 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TED 535</td>
<td>Literacy in the Content Area</td>
<td>3</td>
</tr>
<tr>
<td>TED 545</td>
<td>Diverse Learners</td>
<td>3</td>
</tr>
<tr>
<td>TED 669</td>
<td>Educational Implications of Learning and Developmental Theory</td>
<td>3</td>
</tr>
<tr>
<td>TED 680a</td>
<td>Clinical Experience in Teaching (3-6)</td>
<td></td>
</tr>
</tbody>
</table>

One 3 hour methods course in the licensure area

Content Courses
Students must have at least 24 semester hours in their teaching areas or passing scores on the PRAXIS II teaching examinations. After a review of transcripts, students may also be required to complete additional course work to meet teaching standards.
HEALTH AND HUMAN SCIENCES, SCHOOL OF
401 Coleman Building • 336.334.5744 • http://www.uncg.edu/hhs/

Administration
Celia Hooper, Dean
Kathleen Williams, Senior Associate Dean for Academic Undergraduate Programs
David Demo, Associate Dean for Academic Graduate Programs

About
We are a group of faculty, staff, and students who value outstanding teaching, research, community engagement and service. Our dedicated and experienced faculty engage undergraduate, graduate and doctoral students in a love of learning, the creation of new knowledge, a spirit of entrepreneurship, and a commitment to our vision of making the world better, safer, healthier, and more humane and just.

Mission Statement
The School of HHS, through teaching, scholarship, community engagement and service, prepares new generations of professionals, leaders, scholars, and entrepreneurs to enhance the quality of life of individuals, families, and communities.

Departments and Programs
- Communication Sciences and Disorders
- Community & Therapeutic Recreation
- Human Development & Family Studies
- Kinesiology
- Nutrition
- Peace and Conflict Studies
- Public Health Education
- Social Work
- Genetic Counseling Program
- Gerontology Program

HHS – Health and Human Sciences Graduate Courses

HHS 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

HHS 625 Research Methods in the Health and Human Sciences (3:3)
Research methods and designs for the study of families and individuals across the lifespan. Focus is on application of methods to research in the health and human sciences.

HHS 630 Survey Design: Health and Human Sciences (3:3)
Survey design and implementation applied to problems in health and human sciences. Topics: maximizing response rates; selecting/writing/evaluating questions for different populations; reliability; validity; layout; modes of survey administration.

HHS 650 Applied Multiple Regression (4:3:3)
Applied instruction on the theoretical underpinnings and assumptions of multiple regression analysis and the valid implementation of this statistical model in testing of meaningful and nuanced research questions and hypotheses.

Prerequisite
ERM 680, STA 571, PSY 609, or permission of instructor
HHS 702 Professional Grant Writing for Community Organizations (3:3)
Theoretical and applied avenues to learning Professional Grant Writing for Health and Human Service Organizations in the Community.
Prerequisite
Enrolled graduate students in the School of HHS, or Permission of Instructor
Notes
Cross listed with HEA 702.

HHS 703 Teaching Undergraduates in Health and Human Sciences (3:2:3)
Analysis and application of innovative approaches to undergraduate course design, teaching, and evaluation in Health and Human Sciences.

HHS 706 Online Pedagogy in Kinesiology and Related Professions (3:2:3)
Online course design in Kinesiology and related professions using evidence-based best practices. Creation of online course and its modules using a collaborative, learner-centered approach to online instruction.

HHS 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

HHS 750 Professional Development Seminar (3:3)
Preparation for academic careers, including expectations for promotion and tenure; effective writing techniques for publishing in academic journals; and planning for the academic job market, job applications, and campus interviews.

HHS 776 Higher Education Administration and Leadership in Health and Human Sciences (3:2:3)
Addresses the major areas of responsibilities of a variety of academic administrative roles within a university, from program director and department chair/head to provost, from the base of HHS.
Prerequisite
Students must have an administrative mentor who agrees to participate in the practicum section of this course
Notes
Grade: Satisfactory/Unsatisfactory, S/U
COMMUNICATION SCIENCES AND DISORDERS, DEPARTMENT OF
300 Ferguson Building • 336-334-5184 • csd.wp.uncg.edu

Administration
Robert Mayo, Interim Department Chair
Denise Tucker, Director of Graduate Study

Faculty

Professors
Celia R. Hooper, Prevention of communication disorders, adult neurogenic speech and language disorders, voice disorders and care of the professional voice (Dean). (E)
Alan G. Kamhi, Speech, language, reading development and disorders. (E)
Robert Mayo, Fluency disorders, adult neurogenic disorders, public perceptions of communication disorders and differences (Interim Chair of Department). (E)

Associate Professors
Virginia A. Hinton, Normal speech physiology, craniofacial anomalies, neuromotor control for speech production. (E)
Kristine Lundgren, Adult neurogenic communication disorders.
Kathy Shapley, Early Intervention, early communication development and the effects of disparities in the language environments of young children.
Denise A. Tucker, Auditory electrophysiology, audiology, hearing aids, pediatric aural rehabilitation, cochlear implants, tinnitus (Director of Graduate Study). (E)

Academic Professional Professors
Perry F. Flynn, Adolescent language and reading, public school service delivery.

Academic Professional Associate Professor
Lisa G. Fox-Thomas, Central auditory processing, tinnitus evaluation and treatment, hearing aids (Coordinator of Audiology Services and Clinical Supervisor in Audiology).
Lyn B. Mankoff, Clinical supervision (Coordinator of Speech-Language Pathology Internships).
Lisa McDonald, Clinical supervision, school-age language and literacy, public school service delivery.

Academic Professional Assistant Professors
Emily Hamuka, Clinical supervision, school-age language and literacy, public school service delivery.
Terri Ramsey, Diagnostics, phonology.
Connie Williams, Reading disorders, prevention and/or assessment of language disabilities in school-aged children.

Graduate Programs

- Master of Arts (MA) in Speech-Language Pathology, (66)
- Doctor of Philosophy (PhD) in Communication Sciences and Disorders, (66)

Speech-Language Pathology, MA, (66)
The MA in Speech-Language Pathology is accredited by the Council of Academic Accreditation of the American Speech-Language-Hearing Association (ASHA) and provides academic and clinical instruction sufficient for the Certificate of Clinical Competence (CCC) in speech-language pathology awarded by ASHA and licensure in the state of North Carolina.

The program requires 66 semester hours (34 hours in academic course work and 32 hours in clinical course work, excluding clinical practicum hours earned) and provides a lifespan approach for advanced study of language, speech, swallowing, non-speech communication systems, and hearing in persons of all ages. The UNCG Speech and Hearing Center, the hearing and speech laboratories, and a variety of human service agencies provide ample practical and research experiences.
Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
In addition to the application materials required by The Graduate School, applicants must submit a written personal statement, not to exceed two double-spaced typed pages, focusing on the applicant’s unique qualifications and interests in the field of speech-language pathology and the master’s program at UNCG.

Students are admitted for full-time study only. Permission for exceptions must be approved by faculty. Typically, students are enrolled full-time for two consecutive academic years including one summer session.

Students without an undergraduate degree in communication sciences and disorders should expect to spend approximately one year taking pre-professional courses (see Undergraduate Bulletin, CSD major) required for graduate course work and should consult with advisors in this program for course selection that will meet degree, certification, and licensure requirements.

Upon admission, students will be assigned an academic advisor, who will provide information regarding academic and clinical aspects of the program.

Degree Requirements
Research Techniques (minimum of 6)
CSD 632 Introduction to Research in Communication Sciences and Disorders (3)
Non-thesis students must also take the following:
CSD 633 Special Projects in Communication Sciences and Disorders (3)
Thesis students must also enroll in:
CSD 699 Thesis for one or more semesters. (1-6)

Required Professional Area Courses (28)
Students must complete the following courses:
CSD 600 Professional Issues and Ethics in Speech-Language Pathology (3)
CSD 604 Fluency Disorders (2)
CSD 606 Cognitive-Linguistic Disorders in Adults (3)
CSD 612 Augmentative and Alternative Communication (1)
CSD 614 Language Learning Disabilities (3)
CSD 616 Motor Speech Disorders (3)
CSD 627 Cultural and Linguistic Diversity in Communication Sciences and Disorders (1)
CSD 629 Dysphagia (3)
CSD 636 Prevention, Assessment, and Intervention of Communication Disorders: Birth – 5 (3)
CSD 637 Prevention, Assessment, and Intervention of Communication Disorders: School Age (3)

And select one of the following topical seminars:
CSD 602 Seminar in Speech Pathology: Organic Disorders (3)
CSD 603 Seminar in Voice Problems (3)
CSD 605 Seminar in Speech and Language Pathology (3)
CSD 608 Seminar in Cleft Palate (3)
CSD 650 Independent Study (1-3)

Electives in Speech-Language Pathology
Students may select, in consultation with an academic advisor in the discipline, courses in the elective professional areas:
CSD 619 The Supervisory Process in Communication Sciences and Disorders (1)
CSD 630 Fundamentals for Speech and Language Analysis (3)
CSD 631 Structured Language Intervention for Language-Literacy Impairments (3)
CSD 635 Advanced Phonetic Transcription (1)
CSD 650 Independent Study (1-3)

Clinical Practicum (32)
In order to meet requirements for clinical certification and state licensure, students must complete specific clinical practicum requirements. The courses for supervised clinical practicum include:
  CSD 638 Minor Area Clinical Practicum for Speech-Language Pathology Majors (1)
  CSD 671 Beginning Clinical Practice in Speech-Language Pathology (5)
  CSD 677 Internship in Communication Disorders (3-9)
  CSD 678 Advanced Clinical Practice in Speech-Language Pathology (1-9)

Collateral Expertise
Additional courses may be selected to meet basic science requirements for certification or licensure from the following:
  CSD 552 Communication and Aging (3)
  CSD 554 Advanced Speech Science (3)
  CSD 588 Neurology of Speech, Language and Hearing (3)
  CSD 601 Special Topics in Communication Sciences and Disorders (1-3)

Capstone Experience
Non-thesis degree candidates will complete the research courses CSD 632 and 633 as capstone experiences. Thesis students will complete CSD 632 and 699.

Note: Fully admitted students will become academically ineligible to continue in the Department of Communication Sciences and Disorders under any of the following circumstances:
  • Academic Ineligibility
  • Grades of U, F, or WF are received in any course;
  • Grades of C+ or C are received in more than 6 semester hours;
  • Grades of C+ or C are received in CSD 678; or
  • The required 3.0 for graduation is not achieved within the minimum number of semester hours required for the degree.

Residence Requirement
In most cases, students will enroll as full-time students in the fall semester and continue full-time enrollment for the subsequent four semesters.

Communication Sciences and Disorders, PhD, (66)
The PhD in Communication Sciences and Disorders is designed for advanced study in communication sciences and disorders, intersecting disciplines, and development of research and teaching strategies. Students with backgrounds in speech language pathology, audiology, or other disciplines are encouraged to explore with the faculty the new frontiers in scientific discovery that link previous academic achievement and future study. Part-and full-time study is available.

The program requires a minimum of 66 semester hours. Students who enter with a master’s degree are required to earn 54 hours of course credit and 12 hours minimum of dissertation.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
In addition to the application materials required by The Graduate School, applicants must submit a current curriculum vitae describing all educational and work experience and be interviewed by UNCG faculty (prospective mentors) in the student’s area of special interest.

Degree Requirements
CSD Courses (18)
Doctoral students will complete 18 hours of course work in the discipline of communication sciences and disorders.

Intersecting Disciplines (12)
With the approval of the Individual Program Planning Committee (IPPC), the student will select at least 12 hours of course work in a related discipline. Examples of related fields include linguistics, gerontology, genetics, neuroscience, psychology, public health, and sociology.

Professional Development (3)
Doctoral students will complete three hours of professional seminar courses, wherein current topics related to the CSD profession are studied.

Tools (21)
With the approval of the IPPC, the student is expected to complete a minimum of 21 hours in doctoral “tool” courses. This course work includes instruction in teaching practices, grant writing, statistics, clinical supervision, and practicum courses. The CSD department will offer hands-on practicum courses in the areas of teaching, grant writing, clinical supervision, and academic administration.

Dissertation (12 hours minimum)
CSD 799 Dissertation (1-12)

Formal Reviews and Examinations
The student must pass each of the reviews and examinations listed below.
Approval of Plan of Study: Each doctoral student will have an Individual Program Planning Committee (IPPC) assigned by the Department Chair. The IPPC helps evaluate the student’s needs and assists in developing the Plan of Study.

Qualifying exams
The IPPC will prescribe the areas and elements of the exams. The exams will take place after at least 3/4 of the course work in the Plan of Study is completed.

Dissertation Proposal Approval Advancement to Candidacy
Following completion of course work, qualifying exams, and approval of dissertation proposal, the student may make application to The Graduate School for admission to candidacy for the doctoral degree.

Final Oral Examination

Communications Sciences and Disorders PhD (66)
Inter-institutional Distance Education Agreement for Learning and Leadership in Communication Sciences and Disorders (IDEALL)

The Inter-Institutional Distance Education Agreement for Learning and Leadership in Communication Sciences and Disorders (IDEALL) PhD in Communication Sciences and Disorders will prepare those who pursue careers in higher education for research careers in the academy and other settings. Also, the Program will prepare both UNCG and WCU graduates to teach and mentor undergraduate and graduate students in the areas of research and clinical supervision delivery as they create new knowledge. The educational objective of the Program is to prepare teachers, scholars, and professional leaders. This objective will be achieved by providing an innovative, responsive, high quality, and accessible course of study to students who have demonstrated excellent academic achievement in CSD or closely-related disciplines.

In sum, the program will require 66 graduate credit hours with 27 hours completed through WCU and 39 hours completed through UNCG. WCU courses will be delivered in a face-to-face format while UNCG courses will be delivered via distance/face-to-face technologies.
Application and Admission
Prospective students will apply to IDEALL through the Graduate School at UNCG. Admission procedures will follow those described in the UNCG Graduate Bulletin and practiced by the doctoral program in Communication Sciences and Disorders. A WCU faculty representative will sit on the Program admissions committee for IDEALL CSD applicants. This degree is a post-master’s degree program that includes 54 hours of course-work and 12 hours dissertation. Upon the recommendation of UNCG, WCU will allow visiting IDEALL CSD students to enroll in courses pertaining to their studies. UNCG will remain the students’ home institution. Visiting students will be accepted and enrolled following an inter-institutional model. The Registrar’s at WCU and UNCG will communicate directly so that the enrollment and registration of IDEALL CSD students will be accurately maintained.

Degree Requirements
Statistics Courses
The IDEALL CSD students located at WCU will be required to take 12 hours of Statistics courses at WCU. These courses will then be transferred to UNCG. This requirement follows the UNCG CSD PhD program requirement of 12 hours of Statistics courses. The CSD Department does not have a specific Statistics course sequence that all students must follow. Most of our PhD students take their Statistics courses through the UNCG ERM department.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ERM 680</td>
<td>Intermediate Statistical Methods in Education</td>
<td>3</td>
</tr>
<tr>
<td>ERM 681</td>
<td>Design and Analysis of Educational Experiments</td>
<td>3</td>
</tr>
<tr>
<td>ERM 682/STA 671</td>
<td>Multivariate Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ERM 668</td>
<td>Survey Research Methods in Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Intersecting Disciplines (12)
The UNCG CSD PhD program requires that students take 12 hours of Intersecting Disciplines. Our doctoral students select a related minor area theme and take courses from one or more disciplines around that theme. Thus, not all the minor area courses will be taken in the same department. The Intersecting Disciplines are individualized for each doctoral student and will be the same requirement for WCU IDEALL CSD students.

Many of our UNCG CSD students have selected courses from Psychology, Gerontology, and Special Education Departments for their Intersecting Disciplines topic area.

Tools
With the approval of the IPPC, the student is expected to complete a minimum of 21 hours in doctoral “tool” courses. This course work includes instruction in teaching practices, grant writing, statistics, clinical supervision, and practicum courses. The CSD department will offer hands-on practicum courses in the areas of teaching, grant writing, clinical supervision, and academic administration.

Teaching/Practicum and Grantwriting
The UNCG CSD PhD Program requires students to take classes in Teaching and Grant writing and a practicum in supervised teaching at the college level.

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CSD 771</td>
<td>Best Practices in Teaching Communication Sciences and Disorders</td>
<td>3</td>
</tr>
<tr>
<td>CSD 772/KIN 798</td>
<td>Doctoral Seminar in Grant Writing</td>
<td>3</td>
</tr>
<tr>
<td>CSD 773</td>
<td>Practicum in Teaching Communication Sciences and Disorders</td>
<td>3</td>
</tr>
</tbody>
</table>

Dissertation (12 hours minimum)
IDEALL CSD students will have a UNCG faculty sponsor as chair of their committee, in charge of directing the dissertation and the submission of all UNCG Graduate School forms. The UNCG CSD Department will submit names of WCU faculty with PhDs adjunct appointments with UNCG, and the UNCG Adjunct WCU faculty can be on an IDEALL CSD’s student committee.

CSD 799        | Dissertation                             | 1-12         |

Formal Reviews and Examinations
The student must pass each of the reviews and examinations listed below.
Approval of Plan of Study: Each doctoral student will have an Individual Program Planning Committee (IPPC) assigned by the Department Chair. The IPPC helps evaluate the student’s needs and assists in developing the Plan of Study.

**Qualifying exams**
The IPPC will prescribe the areas and elements of the exams. The exams will take place after at least 3/4 of the course work in the Plan of Study is completed.

**Dissertation Proposal Approval Advancement to Candidacy**
Following completion of course work, qualifying exams, and approval of dissertation proposal, the student may make application to The Graduate School for admission to candidacy for the doctoral degree.

**Final Oral Examination**

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**CSD - Communication Sciences Disorders Graduate Courses**

**CSD 550 Diagnostic Procedures: Inquiry, Observation and Measurement (3:2:3)**
Processes and techniques of data acquisition and analysis for the diagnosis, assessment, and evaluation of communication disorders.

*Prerequisite*
Completion of all CSD 300-level courses required for the major or permission of the instructor

**CSD 551 Speech and Language Disorders: Diagnostic Procedures (3:2:2)**
Differential diagnosis of speech, language, voice, and rhythm problems.

*Prerequisite*
Permission of instructor

**CSD 552 Communication and Aging (3:3)**
Development of communication in old age; factors affecting development and competency; communication evidence and theories of aging; facilitation of life-long functional communication.

*Prerequisite*
CSD 308 or permission of instructor

**CSD 554 Advanced Speech Science (3:3)**
Acoustic theory and methods of analysis; acoustic structure of speech and its physiological correlates; application of acoustic information to clinical management of disorders of communication.

*Prerequisite*
CSD 306, CSD 307, CSD 308, CSD 309

**CSD 556 Aural Rehabilitation (3:3)**
Principles of aural rehabilitation with hearing impaired adults and their significant others.

*Prerequisite*
CSD 334

*Offered*
Spring

**CSD 557 Pediatric Aural Rehabilitation (3:3)**
Study of new technologies available for children with hearing impairment and the impact of these technologies on therapy and teaching.

*Prerequisite*
CSD 334 for undergraduates; permission of instructor for graduate students

*Offered*
Spring

**CSD 575 Instrumentation for Communication Disorders (3:3)**
Instrumentation commonly used in communication disorders; operation and measurement techniques for clinical and research applications.  

**Prerequisite**  
Permission of instructor

**CSD 588 Neurology of Speech, Language and Hearing (3:3)**  
An overview of neuroanatomy and neurophysiology with a concentration on neurological mechanisms related to speech, language and hearing.  

**Prerequisite**  
CSD 309 or permission of instructor

**CSD 589 Experimental Course**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**CSD 600 Professional Issues and Ethics in Speech-Language Pathology (3:3)**  
Issues related to the profession, service delivery, ethics, legal considerations, funding issues, program administration and credentialing. Content is in accordance with the American Speech-Language-Hearing Association Scope of Practice.  

**Prerequisite**  
Admission to appropriate degree program or permission of instructor

**CSD 601 Special Topics in Communication Sciences and Disorders (1–3)**  
Topics in communication sciences and disorders.  

**Prerequisite**  
Admission to MA in speech-language pathology or permission of instructor  

**Notes**  
May be repeated for credit when topic varies.

**CSD 602 Seminar in Speech Pathology: Organic Disorders (3:3)**  
Study of organic disorders of communication.  

**Prerequisite**  
CSD 551 or equivalent and admission to appropriate degree program, or permission of instructor

**CSD 603 Seminar in Voice Problems (3:3)**  
Investigation of current literature and theories of vocal anomalies. Organic deviations.  

**Prerequisite**  
CSD 551 or equivalent and admission to appropriate degree program or permission of instructor

**CSD 604 Fluency Disorders (2:2)**  
Assessment, diagnosis, and treatment of fluency disorders in children, adolescents, and adults.  

**Prerequisite**  
Admission to appropriate degree program or permission of instructor

**CSD 605 Seminar in Speech and Language Pathology (3:3)**  
Studies dealing with specialized areas of communication disorders. Topic to be announced each semester course is offered.  

**Prerequisite**  
Graduate-level courses in appropriate content area and admission to appropriate degree program, or permission of instructor  

**Notes**  
May be repeated for credit when topic varies.
CSD 606 Cognitive-Linguistic Disorders in Adults (3:3)
Assessment, diagnosis, and treatment of communication disorders resulting from stroke, dementia, and traumatic brain injury.

Prerequisite
Admission to appropriate degree program, or permission of instructor

CSD 608 Seminar in Cleft Palate (3:3)
Investigation of current literature and theories in cleft palate. Speech and hearing aspects; controversial procedures in repair and rehabilitation.

Prerequisite
CSD 551, CSD 570 or equivalent and admission to appropriate degree program, or permission of instructor

CSD 612 Augmentative and Alternative Communication (1:1)
Knowledge of augmentative and alternative communications and problem-solving in the design and application of appropriate AAC systems.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 613 Communication Problems in Aging (3:3)
Nature, assessment, and management of communication disorders in the elderly.

Prerequisite
Permission of instructor

CSD 614 Language Learning Disabilities (3:3)
Assessment and treatment of spoken and written language learning disabilities in school-age children and adolescents with special emphasis on the collaborative role of the speech-language pathologist in school-based settings.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 615 Communication and Severe/Profound Disabilities (3:3)
Nature, assessment, and management of communication disorders in persons of all ages who have severe/profound disabilities.

Prerequisite
Permission of instructor

CSD 616 Motor Speech Disorders (3:3)
Neurologic basis, assessment and treatment of dysarthria and apraxia.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 617 Language Disorders and Neurological Theory (3:3)
Latest knowledge on the specialization of the two hemispheres and clinical syndromes/language disorders resulting from left and right hemisphere dysfunction.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 618 Counseling and Interviewing Skills in Communication Sciences and Disorders (1:1)
Instruction and practice in counseling and interviewing skills during the assessment and treatment of speech, language, and hearing disorders.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 619 The Supervisory Process in Communication Sciences and Disorders (1:1)
Study and practice of clinical supervision in speech-language pathology. Theoretical models of supervision, pertinent research, and clinical practice.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 623 Seminar in Central Auditory Processing (3:3)
Anatomy and physiology of the central auditory nervous system, methods and techniques of measurement and interpretation for the assessment, diagnosis, evaluation, and rehabilitation of individuals with central auditory processing disorders.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 626 Professional Writing and Speaking in Communication Sciences and Disorders (1:1)
Instruction and practice in writing professional reports, research papers, and in making oral presentations.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 627 Cultural and Linguistic Diversity in Communication Sciences and Disorders (1:1)
Identification and treatment of speech and language differences in diverse populations.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 629 Dysphagia (3:2:1)
Anatomical bases of normal and disordered swallowing in children and adults; evaluation and treatment of swallowing disorders.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 630 Fundamentals for Speech and Language Analysis (3:3:1)
Basic linguistic structures that support oral and written English, including phonetics and phonology, morphology, orthography, semantics, and syntax.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 631 Structured Language Intervention for Language-Literacy Impairments (3:3:1)
Certification course in the Language! TMCurriculum (Sopris West, Inc.), an intervention curriculum for individuals at risk for literacy problems.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 632 Introduction to Research in Communication Sciences and Disorders (3:3)
Introduction to research procedures in the study of communication sciences and disorders.
Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 633 Special Projects in Communication Sciences and Disorders (3:3)
Individual scholarly project developed by the student with faculty guidance.
Prerequisite
Admission to appropriate degree program or permission of instructor

Notes
Grade: Satisfactory/Unsatisfactory, S/U.

CSD 634 Research Design in Communication Sciences and Disorders (2:2)
Development of research proposal, from generation of hypothesis through data analysis and interpretation.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 635 Advanced Phonetic Transcription (1:1:2)
Detailed transcription of normal and disordered speech using the International Phonetic Alphabet.

Prerequisite
Completion of an introductory phonetics course and admission to appropriate degree program or permission of instructor

CSD 636 Prevention, Assessment, and Intervention of Communication Disorders: Birth – 5 (3:3)
Communication development and disorders (speech, language, and hearing) in infants, toddlers, and preschoolers.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 637 Prevention, Assessment, and Intervention of Communication Disorders: School Age (3:3)
Communication development and disorders in school age children and adolescents.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 638 Minor Area Clinical Practicum for Speech-Language Pathology Majors (1)
Instruction for speech-language pathology majors in the minor area of hearing assessment. Provides training and supervised clinical experiences in hearing screenings.

Prerequisite
CSD 334, graduate standing, and completion of 25 observation hours

Notes
Grade: Satisfactory/Unsatisfactory, S/U

CSD 639 Prevention, Assessment, and Intervention of Communication Disorders: Late Adolescence and Early Adulthood (3:3:2)
Communication development and disorders (speech, language, and hearing) in late adolescents and young adults.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 640 Prevention, Assessment, and Intervention of Communication Disorders: Middle and Older Adults (5:5:2)
Communication development and disorders (speech, language, and hearing) in middle aged and older adults.

Prerequisite
Admission to appropriate degree program or permission of instructor

CSD 650 Independent Study (1–3)
Topic to be determined by faculty advisor and student.

Prerequisite
Admission to appropriate degree program or permission of instructor and major advisor

CSD 670 Diagnostic Audiology I (3:2:2)
Basic diagnostic procedures in audiology. Includes anatomy, physiology, and disorders of the hearing mechanism, basic evaluation and interpretation of auditory function.

Prerequisite
CSD 334 or permission of instructor

CSD 671 Beginning Clinical Practice in Speech-Language Pathology (5:3:6)
Beginning clinical practice in the diagnosis of and therapy for communication disorders and differences.

CSD 673 Studies and Practice in Supervision of Communication Sciences and Disorders (3:3)
Supervision in speech-language pathology and audiology. Theoretical models of supervision, pertinent research, and clinical practice. Opportunities for observation.

Prerequisite
Permission of instructor

CSD 674 Diagnostic Audiology II (3:2:2)
Non-organic hearing loss; differential diagnosis; special problems in diagnosis.

Prerequisite
CSD 570 or equivalent

CSD 677 Internship in Communication Disorders (3–9)
Clinical experience under supervision of a certified speech-language pathologist in an off-campus facility.

Prerequisite
Permission of instructor

CSD 678 Advanced Clinical Practice in Speech-Language Pathology (1-9)
Advanced clinical practice in diagnosis of and therapy for communication disorders.

Prerequisite
Admission to appropriate degree program or permission of instructor

Notes
Course may be repeated twice for a total of 9 credit hours when instructor determines that student requires more time in clinical practice.

CSD 679 Service Learning and Clinical Practicum in International Settings (6:1:15)
Students will compare and contrast professional issues in global settings through guided study-abroad experiences, service learning experiences and interaction with students and teachers abroad while gaining clinical practicum hours.

Prerequisite
Successful completion of two semesters of graduate school in CSD at UNCG and highly recommended pre-departure orientation modules

CSD 688 Research Design in Communication Disorders (3:3)
Development of research proposals, from generation of hypothesis through data analysis and interpretation. Includes pilot study project.

Prerequisite
Admission to appropriate degree program and at least one semester of clinical practicum and two semesters of graduate courses

CSD 698 Experimental Design in Communication Disorders (3:3)
Research of normal communication processes and speech, language, and hearing disorders. Preparation of research for presentation or publication.

Prerequisite
CSD 688 and statistics and admission to appropriate degree program, or permission of instructor

CSD 699 Thesis (1–6)
Prerequisite
Admission to appropriate degree program, or permission of instructor and major advisor

CSD 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CSD 751 Professional Seminars in Communication Sciences and Disorders (1:1)
Weekly seminar on contemporary issues in communication sciences and disorders.
Notes
May be repeated four times for credit. Grade: Satisfactory/Unsatisfactory, S/U

CSD 760 Advanced Seminar in Communication Sciences and Disorders (3:3)
Critical analysis of special topics in communication sciences and disorders. Topics change each semester.
Notes
May be repeated when topic varies for a maximum of 18 hours.

CSD 771 Best Practices in Teaching Communication Sciences and Disorders (3:3)
Introduction to best practices in teaching in communication sciences and disorders.
Prerequisite
Permission of instructor for non-CSD majors

CSD 772 Doctoral Seminar in Grant Writing (3:3)
The grant writing process, including the procedures and technical strategies for developing and submitting a grant proposal for funding.
Cross Listed Courses
KIN 798
Prerequisite
Permission of instructor for non-CSD majors.
Co-requisite
CSD 790 with faculty advisor or course instructor for individualized mentoring of the grant writing project.
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CSD 773 Practicum in Teaching Communication Sciences and Disorders (3:3)
Practicum in teaching in communication sciences and disorders.
Prerequisite OR Corequisite
CSD 771. Prior permission of instructor for non-CSD majors
Notes
Course may be repeated once for credit. Grade: Satisfactory/Unsatisfactory, S/U.

CSD 780 Independent Study (1–3)
Guided readings, research, and individual project work.
Prerequisite
Permission of doctoral advisory committee and graduate faculty mentor
Notes
May be repeated for a maximum of 15 hours credit.

CSD 790 Directed Research (1–3)
Individual work on directed research or topics of special interest: collection and analysis of data, critical review, integration, and interpretation of research literature on a topic pertinent to the student’s research.

**Prerequisite**
Permission of doctoral advisory committee and graduate faculty mentor

**Notes**
May be repeated for a maximum of 15 hours credit.

**CSD 799 Dissertation (1–12)**

**Prerequisite**
Completion of doctoral examinations

**CSD 801 Thesis Extension (1–3)**

**CSD 802 Dissertation Extension (1–3)**

**CSD 803 Research Extension (1–3)**
COMMUNITY AND THERAPEUTIC RECREATION, DEPARTMENT OF
200B Ferguson Building • 336-334-5327 • ctr.wp.uncg.edu

Administration
Stuart J. Schleien, Ph.D., Department Chair and Director of Graduate Study

Faculty
Professors
Leandra A. Bedini, Therapeutic Recreation, family caregivers, women with disabilities, perceived stigma. (E)
Stuart J. Schleien, Therapeutic Recreation, community inclusion, intellectual and developmental disabilities, family advocacy (Head of Department & Director of Graduate Study). (E)

Associate Professors
Benjamin D. Hickerson, Community Recreation Management, public administration.

Assistant Professors
Justin T. Harmon, Community Recreation Management, community development.
Judy S. Kinney, Therapeutic Recreation, pediatric pain management, the impact of disability and hospitalization on child development.

Graduate Programs
• Accelerated BS in Recreation and Parks Management Program to MS in Parks and Recreation Management Program
• Master of Science (MS) in Parks and Recreation Management, Community Recreation Management (CRM) and Therapeutic Recreation (TR) concentrations
• Geriatric Recreational Therapy, PBC (On Moratorium)
• Animal Assisted Therapy, PBC (On Moratorium)

Application and Admission
Qualified UNCG undergraduate students who are pursuing the B.S. in Recreation and Parks Management may apply for admission to the Accelerated Degree Program (Applying for Admission). A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Applicants must have completed at least 60 semester credits and may not apply for admission to the ADP before the first semester of the junior year. Applicants will not be required to take an entrance exam. All applicants must submit the Request for Accelerated Degree Program to The Graduate School and must simultaneously apply for admission to the graduate degree program.

Admitted students may apply a maximum of 12 credits of graduate-level coursework (each course carries 3 credits) from the following course list toward completion of both the undergraduate and graduate degree, provided that they earn a grade of “B” (3.0) or better in each course and fulfill graduate-level requirements:

Required for both concentrations:
CTR 611 Foundations of Recreation and Parks (3)
CTR 613 Recreation and Parks Management (3)

For the Community Recreation Management (CRM) Concentration (both courses):
CTR 544 Recreation, Parks, and Health (3)
CTR 646 Seminar: Community Development (3)

For the Therapeutic Recreation (TR) Concentration (two of three courses):
CTR 633 Professional Issues in Therapeutic Recreation (3)
CTR 634 Advanced Procedures in Therapeutic Recreation (3)
CTR 637  Advanced Interventions and Facilitation Techniques in Therapeutic Recreation (3)

**Degree Requirements**

Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the M.S. degree in Parks and Recreation Management remain the same. Several undergraduate courses within the BS-Recreation and Parks Management program will be substituted with graduate-level courses identified within the ADP.

Parks and Recreation Management, MS, (36)
The MS in Parks and Recreation Management requires 36 semester hours. Students may choose one of the following two concentrations: community recreation management or therapeutic recreation.

The student, after discussing career goals with his/her advisor, may choose either the thesis or non-thesis option. If the student selects the non-thesis option, the advisor will determine (based on amount of professional experience) whether the student completes a project, an internship, or a combination of a project and an internship. For example, a student choosing the non-thesis option and having minimal professional experience will be required to complete an internship. Students must meet with their advisor or the Director of Graduate Study before registering for any coursework.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume and a professional statement including career goals. Interviews are encouraged for all applicants and required for graduate assistants. Students who do not have an undergraduate degree in recreation and parks and/or appropriate professional experience will be required to take one undergraduate course from their concentration; i.e., CTR 241. Students in the therapeutic recreation concentration will be required to take two of the following three courses; i.e., CTR 231, CTR 332, CTR 338.

**Degree Requirements**

**Required Core Courses (Required of all CTR Graduate Students) (9)**

CTR 611  Foundations of Recreation and Parks (3)
CTR 613  Recreation and Parks Management (3)

Select one of the following:

CTR 614  Organizational Behavior in Recreation and Parks (3)
MBA 710  Ethical Leadership and Sustainable Business (3)
PCS 605  Skills and Techniques of Conflict Transformation (3)
PCS 606  Organizational Conflict: Theories and Practices (3)
PCS 685  Resolving Conflict in Health Care Systems: Achieving Peace through Health (3)
PSC 540  Nonprofit Management and Leadership (3)
PSC 600  Public Administration and Management (3)
PSC 604  Public Personnel Management (3)

**Concentration Courses (9)**

**Community Recreation Management Concentration (9)**

CTR 511  Financing and Budgeting in Recreation and Parks (3)
CTR 544  Recreation, Parks, and Health (3)
CTR 646  Seminar: Community Development (3)

**Therapeutic Recreation Concentration (9)**
CTR 633  Professional Issues in Therapeutic Recreation (3)
CTR 634  Advanced Procedures in Therapeutic Recreation (3)
CTR 637  Advanced Interventions and Facilitation Techniques in Therapeutic Recreation (3)

**Research Techniques (Required of all CTR Graduate Students) (6)**
Select one of the following:
- ERM 517  Statistical Methods in Education (3)
- HEA 604  Public Health Statistics (3)
- KIN 610  Statistical Methods for Kinesiology (3)

Select one of the following:
- ERM 604  Methods of Educational Research (3)
- HHS 625  Research Methods in Health and Human Sciences (3)
- KIN 601  Applying Research to Professional Practice (3)
- SOC 616  Advanced Research Methods (3)

**Specialized Line of Study (6-9)**
After consultation and approval of his/her academic advisor, the student selects 6-9 hours of 500-to 700-level coursework that constitute a specialized knowledge base (line of study) relevant to the student’s academic and professional interests and goals.

**Capstone Experience (6)**
Select one of the following:
- CTR 697  Internship in Recreation and Parks (3-6)
- CTR 698  Field Project in Recreation and Parks (3-6)
- CTR 697  Internship in Recreation and Parks (3-6)
- CTR 698  Field Project in Recreation and Parks (3-6)
- CTR 699  Thesis (1-6)

Geriatric Recreational Therapy, PBC (On Moratorium)
The online Post-Baccalaureate Certificate in Geriatric Recreational Therapy (GRT) requires 15 semester hours and is designed for the practicing recreational therapist who is interested in specializing in practice with older adults. The certificate will fulfill the requirement for geriatric specialization recently established by the National Council of Therapeutic Recreation Certification (NCTRC).

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Certified Therapeutic Recreation Specialist (CTRS) status or permission of program directors is required for admission. In addition to the application materials required by The Graduate School, applicants must submit a current resume and a professional statement including geriatric recreational therapy goals. Interviews are encouraged for all applicants.

**Certificate Requirements**

**Required Courses (15)**
- CTR 630  Geriatric Recreational Therapy Practice: Roles and Responsibilities (3)
- CTR 631  Geriatric Assessment for Therapists (3)
- CTR 632  Evidence-based Practice in Geriatric Recreational Therapy (3)
- GRO 501  Seminar: Critical Issues of Aging (3)
GRO 631 Planning and Evaluation for Professionals in Aging (3)

Animal Assisted Therapy, PBC (On Moratorium)
The PBC in Animal Assisted Therapy is currently not accepting applications.
The Post-Baccalaureate Certificate in Animal Assisted Therapy requires 15 semester hours and is designed for the practicing health and human service professional who is interesting in specializing in using therapy animals within their professional practice. The basics of animal assisted therapy, its history, and instrumentation and intervention techniques, including assessment, treatment and evaluation processes are introduced. It includes field experiences in both clinical (AAT approaches for specific disabilities) and non-clinical (classroom) applications of AAT. Courses are taught online and face-to-face field experiences are required.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume and a professional statement including animal assisted therapy goals. Interviews are encouraged for all applicants.

Certificate Requirements (15)
Required Courses
CTR 535 Animal Assisted Therapy (3)
CTR 697 Internship in Recreation and Parks (3-6)
Two approved supportive courses
   RPM 535: This course requires a weekend Pet Partners workshop for handlers only.
Approved Supportive Courses: (e.g. animal behavior, animal psychology, abnormal psychology, assessment for geriatric therapists, special education, nursing, or advanced professional practice course) related to scope of Animal Assisted Therapy practice which must be 500-level or above.

CTR -Community and Therapeutic Recreation Graduate Courses
CTR 511 Financing and Budgeting Recreation and Parks (3:3)
Examination of the financial needs and techniques utilized in recreation and parks. Emphasis on philosophy, terminology, and measurement of economies, revenue streams, and budgets.
Prerequisite
RPM 315, senior standing, or permission of instructor

CTR 519 Directed Research in Recreation and Parks (3)
Identification and investigation of research questions in recreation and parks. Opportunity for students to conduct research with direction from scholars in the field.
Prerequisite
Permission of instructor

CTR 535 Animal Assisted Therapy (3:3)
An introduction to the theories, concepts, and techniques used in animal assisted therapy in long-term care, rehabilitation, acute care hospitals, special schools, and other settings.

CTR 544 Recreation, Parks, and Health (3:3)
Examination of evidence regarding the impacts of recreation, parks, green space, and leisure on the health and well-being of individuals and communities.
Prerequisite
Senior standing, graduate student, or permission of instructor.
CTR 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CTR 611 Foundations of Recreation and Parks (3:3)
Understand and apply various theories and concepts, as well as current research, which influence the study of leisure behavior and the delivery of recreation services.

CTR 613 Recreation and Parks Management (3:3)
Theories and patterns of management appropriate for leisure service delivery systems. Organizational planning, legal foundations, financial management, personnel management, and the politics of leisure service delivery systems.
Prerequisite
CTR 611 or permission of instructor

CTR 614 Organizational Behavior in Recreation and Parks (3:3)
Organizational behavior within recreation and park organizations. Management and organizational behavior, perception, motivation, diversity, power and politics, leadership, group dynamics, communications, conflict, and organizational design, culture, and change.
Prerequisite
CTR 613 or permission of instructor

CTR 630 Geriatric Recreational Therapy Practice: Roles and Responsibilities (3:3)
Analysis of advanced roles and responsibilities of geriatric recreational therapists in the broad delivery of evidence-based treatment services in long term care.
Prerequisite
Certified Therapeutic Recreation Specialist (CTRS) or permission of instructor

CTR 631 Geriatric Assessment for Therapists (3:3)
Development of necessary skills to master the process and techniques required to assess older adults and interpret assessment values for planning and treatment and evaluation of outcomes.
Prerequisite
Certified Therapeutic Recreation Specialist (CTRS) or permission of instructor

CTR 632 Evidence-based Practice in Geriatric Recreational Therapy (3:3)
Introduces recreational therapy practitioners to principles of evidence-based practice and policy, practice guidelines, and information utilization for practice modeling.
Prerequisite
Certified Therapeutic Recreation Specialist (CTRS) or permission of instructor

CTR 633 Professional Issues in Therapeutic Recreation (3:3)
Study of professional issues in therapeutic recreation including professionalism, credentialing, research, professional preparation, continuing education, health care, ethics, advocacy, legislation, marketing, and role of TR managers in addressing these issues.

CTR 634 Advanced Procedures in Therapeutic Recreation (3:3)
Health care delivery service in community and medical arenas. Role of therapeutic recreation within that system. Administrative/managerial procedures.
Prerequisite
CTR 611 or permission of instructor
CTR 637 Advanced Interventions and Facilitation Techniques in Therapeutic Recreation (3:3)
This course will prepare students to select, plan, implement, and evaluate advanced therapeutic recreation interventions using various therapeutic facilitation techniques. Relevant efficacy research and theoretical foundations will be included.
Prerequisite
CTR 611 or permission of instructor

CTR 646 Seminar: Community Development (3:3)
Historical, sociological, and contemporary investigations of the concept of “Community” and how it is used for bringing together disparate networks; negotiating resource allocation; group solidarity and collaboration; and civic engagement. This course is scheduled for alternate Spring semesters (even years) starting Spring 2018.

CTR 695 Independent Study (3)
Independent study to support graduate-level research and demonstration projects under the close supervision of a graduate faculty member in CTR.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit.

CTR 696 Directed Readings (3)
Opportunity to conduct in-depth study and library work on a particular topic in recreation and parks under close supervision of a graduate faculty member in CTR.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit.

CTR 697 Internship in Recreation and Parks (3–6)
A supervised field experience including a final paper.
Prerequisite
CTR 544, CTR 611, CTR 613, CTR 633
Notes
Grade: Satisfactory/Unsatisfactory, S/U

CTR 698 Field Project in Recreation and Parks (3–6)
A supervised field project including a major literature-based paper.
Prerequisite
CTR 544, CTR 611, CTR 613, CTR 645

CTR 699 Thesis (1–6)
Individual guidance in the development and examination of a research problem.
Prerequisite
CTR 611, CTR 613; either ERM 604, KIN 611, SOC 616, or GRO 620; ERM 517, HEA 604, or KIN 723; CTR 633; either CTR 634 or CTR 646

CTR 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

CTR 801 Thesis Extension (1–3)
CTR 803 Research Extension (1–3)
GENETIC COUNSELING, DEPARTMENT OF
996 Spring Garden Street • 336-256-0175 • gen.wp.uncg.edu

Administration
Lauren Doyle, Program Director and Director of Graduate Study

About
An interdisciplinary Master of Science in Genetic Counseling is offered through The School of Health and Human Sciences. The program is accredited by the Accreditation Council for Genetic Counseling (ACGC). Applicants admitted to the program are expected to enroll as full-time students, registering for the required courses for each of the four semesters of the program and the intervening summer sessions.

Accreditation(s)
Accreditation Council for Genetic Counseling (ACGC)

Interdisciplinary Faculty and Advisors:
Clinical Professor
Lauren Doyle, (Director of Program & Director of Graduate Study)
Associate Professor
Heather J. Gert, Philosophy and medical ethics (Department of Philosophy).
Kristine Lundgren, Cognitive-linguistic disorders in adults with acquired traumatic brain injury and in adults with right hemisphere damage, complementary alternative approaches to treating communication disorders, narrative and discourse impairments in individuals with acquired brain injury (Department of Communication Sciences and Disorders).
David L. Remington, Genetics of complex traits and adaptive evolution in plants (Department of Biology).
Clinical Associate Professor
Randi Culp Stewart, Clinical supervision, prenatal and pediatric genetic counseling.
Adjunct Professor
Pamela J. Reitnauer, Dysmorphology syndromes, primary care of individuals with genetic disorders, epidemiology of birth defects.

Graduate Program
- Master of Science (MS) in Genetic Counseling, (58)

Genetic Counseling, M.S.
The MS in Genetic Counseling program is accredited by the Accreditation Council for Genetic Counseling (ACGC). The program is designed to prepare students with the knowledge and proficiencies necessary to practice as genetic counselors in a variety of settings including prenatal, pediatric, adult, and cancer genetics. Upon completion of the program, students are eligible to apply for certification by the American Board of Genetic Counseling (ABGC).

A total of 58 semester hours are required for the MS in Genetic Counseling. The program includes required and elective course work, laboratory experience and clinical internships. Students are also required to complete a research project as the culminating experience for the degree.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal essay, resume, and evidence of successful completion of at least one upper level undergraduate course each in general
genetics and biochemistry and at least one undergraduate course in statistics. Applicants who are evaluated as meeting the standards for admission will be invited for a required personal interview with the admissions committee.

It is recommended that applicants have previous experience in a volunteer or paid position working in social service agencies or with crisis counseling organizations. It is also recommended that applicants have previous exposure to genetic counseling via shadowing or internship experiences.

**Degree Requirements**

**Required Courses**

**Year One: Fall Semester (12)**
- GEN 601 Principles of Genetic Counseling I (3)
- GEN 610 Genetic Counseling and the Community (2)
- GEN 618 Psychosocial Seminar (1)
- GEN 658/BIO 658 Molecular Diagnostics (2)
- GEN 688 Genetics Journal Club (1)
- BIO 614 Prenatal Development: Embryology and Teratology (3)

**Year One: Spring Semester (15)**
- GEN 602 Principles of Genetic Counseling II (3)
- GEN 618 Psychosocial Seminar (1)
- GEN 630 Medical/Clinical Genetics I (3)
- GEN 648 Capstone Seminar
- GEN 688 Genetics Journal Club (1)
- CSD 632 Introduction to Research in Communication Sciences and Disorders (3)
- Approved elective

**Year One: Summer Session I (2)**
- GEN 669 Clinical Skills Seminar (1)
- GEN 671 Quantitative Risks in Practice: Understanding Risk Assessment (1)

**Year One: Summer Session II (1 hour)**
- GEN 698 Summer Clinical Rotations (1)

**Year Two: Fall Semester (14)**
- GEN 618 Psychosocial Seminar (1)
- GEN 701 Principles of Genetic Counseling III (3)
- GEN 718 Clinical Rotations I (4)
- GEN 730 Medical/Clinical Genetics I (3)
- GEN 748 Research Project (3)
- GEN 748 Comprise Capstone Experience

**Year Two: Spring Semester (14-16)**
- CED 645 Mental Health Issues for Genetic Counselors (3)
- GEN 618 Psychosocial Seminar (1)
- GEN 719 Clinical Rotations II (4)
- GEN 749 Research Project (3)
- PHI 620 Ethics and Genetics (3)
- Optional elective
- Note: GEN 749 Comprise Capstone Experience

**Elective (3-6)**

An elective relevant to the student’s professional goals will be selected during the second semester of the program. Electives must be approved by the program director. With approval of the program director, students may select an additional (optional) elective in the fourth semester of the program.
Clinical Internships (9)
The clinical rotations are an integral part of the program and serve to provide students with opportunities to increase their general clinical knowledge, gain experience with genetic counseling for a variety of indications, and develop the necessary skills and competencies required for the practice of genetic counseling. Under the supervision of on-site, board certified genetic counselors, students will progress from observation to participation in various aspects of clinical genetic services. Evaluation/feedback of the student’s activities and progress will be an ongoing component of the clinical rotations. At the end of each rotation, a formal written evaluation will be conducted by the Clinical Supervisor and reviewed with the student. Students will be required to keep an accurate logbook of clinical cases according to guidelines provided by the Accreditation Council for Genetic Counseling. Students will complete a summer clinical rotation (GEN 698) during Summer Session II of the program. Summer clinical rotations will be available at the following sites: Carolinas Healthcare System, Duke University Medical Center, Fullerton Genetics Clinic, Cone Health System, University of North Carolina at Chapel Hill, Wake Forest School of Medicine, and Women's Health Specialties in Wilmington. Students may also make arrangements for a summer clinical rotation at another site with permission of the program director.

During the second year of the program, students will be assigned to four clinical rotations (GEN 718/719). Second year clinical rotations will be available at the following sites: Carolinas Healthcare System, Duke University Medical Center, Cone Health System, University of North Carolina at Chapel Hill, and Wake Forest School of Medicine, and Fullerton Genetics Clinic.

Research Project (6)
The culminating experience for students in the genetic counseling program will be a formal research project (GEN 748/749). The research project may consist of a detailed case study and library synthesis, a clinical application, or an original clinical or laboratory research project. Students must select a project during the second semester of the program. All projects must be approved by the program director. Projects will be completed under the guidance of a research project committee, which will consist of a chair and two other members. Adjunct clinical faculty may serve on research project committees. Students will be required to submit a detailed written report of their project and to make an oral presentation about their project to their classmates and the faculty.

GEN -Genetic Counseling Graduate Courses
GEN 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

GEN 601 Principles of Genetic Counseling I (3:3)
Introduction to techniques used in genetic evaluation and counseling. Issues in preconception and prenatal genetic counseling. Skill development including basic interviewing techniques, psychosocial assessment, pedigree construction, searching on-line resources.
Prerequisite
Enrollment in MS genetic counseling program

GEN 602 Principles of Genetic Counseling II (3:3)
Issues in genetic counseling for pediatric and adult-onset genetic disorders including cancer genetics. Skill development, including working with special populations, decision-making, elements of informed consent.
Prerequisite
Matriculation to second semester of MS genetic counseling program

GEN 605 Research Design in Genetic Counseling (3:3)
Knowledge and skills basic to critical analysis, interpretation of research findings. Use of the scientific method and research process to address issues in the practice of genetic counseling.
Prerequisite
Matriculation to second semester of MS genetic counseling program
GEN 610 Genetic Counseling and the Community (2:1.5:3)
Impact of genetic disorders on patients and families, structure and function of support groups, and role of allied health professionals in evaluation, treatment and referral of patients with genetic disorders.
Prerequisite
Enrollment in MS genetic counseling program

GEN 614 Prenatal Development: Embryology and Teratology (3:3)
Human embryological development with emphasis on normal and abnormal development. Issues in teratology and birth defects, clinical problems associated with birth defects and their means of prevention.
Cross Listed Courses
BIO 614
Prerequisite
Enrollment in MS genetic counseling program or permission of instructor

GEN 616 Human Molecular Genetics (3:3)
Review and extension of basic principles of molecular genetics and their application for the characterization, understanding, and treatment of genetically based disorders and susceptibilities.
Cross Listed Courses
BIO 616
Prerequisite
Enrollment in MS genetic counseling program or permission of instructor

GEN 618 Psychosocial Seminar (1:1)
Application of psychosocial aspects of genetic and genomic medicine with an emphasis on genetic counseling and the general public. Implementation of peer-supervision for discussion of components of particularly challenging cases.

GEN 630 Medical/Clinical Genetics I (3:3)
Introduction to clinical/medical genetics for genetic counseling students. Topics include clinical cytogenetics and molecular genetics, Mendelian and non-traditional inheritance, dysmorphology, genetics of common cancers.
Prerequisite
Enrollment in MS genetic counseling program, BIO 614, BIO 616

GEN 648 Capstone Preparation Seminar (1:1)
Introduction to research methods for genetic counselors. Knowledge and skills basic to critical analysis, interpretation of research findings, and proposal preparation.
Prerequisite
Enrollment in MS genetic counseling program or permission of instructor.

GEN 658 Molecular Diagnostics (2:1:3)
Survey of human molecular genetics and current clinical methods used for the diagnosis of human genetic disorders. Special emphasis given to the molecular principles, interpretations, and limitations of these tests.
Cross Listed Courses
BIO 658
Prerequisite
Enrollment in MS genetic counseling program or permission of instructor

GEN 669 Clinical Skills Seminar (1:1)
Skill development, eliciting histories, pedigree construction, case preparation and presentation, written documentation of clinical contacts. Introduction to components of clinical and dysmorphology examination and physical measurements.

**Prerequisite**
Matriculation to Summer Session I of MS genetic counseling program

**GEN 671 Quantitative Risks in Practice: Understanding Risk Assessment (1:3)**
Analytical and mathematical techniques utilized in genetic risk assessment. Topics include pedigree analysis, probability and segregation analysis. Bayes theorem, Hardy Weinberg, empiric risk counseling.

**Prerequisite**
Matriculation to Summer Session I of MS genetic counseling program

**GEN 688 Genetics Journal Club (1:1)**
Students will select or be assigned articles from the genetics literature for presentation/class discussion. Topics will reflect current trends in research, clinical practice, public policy and social issues.

**Prerequisite**
Enrollment in MS genetic counseling program or permission of instructor.

**Notes**
May be repeated for a maximum of two semester hours credit.

**GEN 698 Summer Clinical Rotations (1)**
Introduction to clinical genetic counseling. Supervised observational and participatory activities, skill development.

**Prerequisite**
Matriculation to Summer Session II of MS genetic counseling program

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**GEN 701 Principles of Genetic Counseling III (3:3)**
Issues in professional development, public policy and health care systems. Introduction to legal issues in genetic counseling. Skill development including advanced genetic counseling skills, case management and preparing educational programs.

**Prerequisite**
Matriculation to third semester of MS genetic counseling program

**GEN 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**GEN 718 Clinical Rotations I (4:0:15)**
Supervised clinical experiences in genetic counseling: case preparation, risk assessment and intervention, psychosocial assessment and support, identification of testing and support resources for patients, skill development.

**Prerequisite**
Matriculation to second year of MS genetic counseling program

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**GEN 719 Clinical Rotations II (4:0:15)**
Supervised clinical experiences in genetic counseling: case preparation, risk assessment and intervention, psychosocial assessment and support, identification of testing and support resources for patients, skill development.

**Prerequisite**
Matriculation to second year of MS genetic counseling program

Notes
Grade: Satisfactory/Unsatisfactory, S/U

GEN 730 Medical/Clinical Genetics I (3:3)

GEN 748 Research Project (3)
Research project in genetic counseling.
Prerequisite
Matriculation to third semester (GEN 748) and fourth semester (GEN 749) of MS genetic counseling program and successful completion of PSY 624
Notes
Grade: Satisfactory/Unsatisfactory, S/U

GEN 749 Research Project (3)
Research project in genetic counseling.
Prerequisite
Matriculation to third semester (748) and fourth semester (749) of MS genetic counseling program and successful completion of PSY 624
Notes
Grade: Satisfactory/Unsatisfactory, S/U

GEN 803 Research Extension (1–3)
GERONTOLOGY PROGRAM, DEPARTMENT OF SOCIAL WORK
212 Ferguson Building • 336-256-1020 • gerontology.wp.uncg.edu

Administration
Rebecca G. Adams, Program Coordinator

About
The mission of the UNCG Gerontology Program is to teach, apply, and create gerontological knowledge through collaborative relationships with academic disciplines, community organizations, and businesses to enrich the lives of older adults and their families. Graduates are prepared to be leaders in the profession and to serve older adults locally and nationally through the health, business, non-profit, and academic sectors.

Interdisciplinary Faculty and Advisors:
Professors
- Rebecca G. Adams, Successful aging, aging music audiences, older adult friendship (Department of Sociology, Gerontology Program Coordinator).
- Leandra Bedini, Therapeutic recreation services, family caregiving (Department of Community and Therapeutic Recreation).
- James Eddy, Worksite health promotion; distance education; design, implementation, and evaluation of health education programs; health behavior theory (Department of Public Health Education).
- Jennifer Etnier, Cognitive benefits of physical activity, exercise psychology, exercise and cognition, psychological benefits of exercise (Department of Kinesiology).
- Laurie M. Kennedy-Malone, Primary care, advanced practice nursing, older adult care, gerontological nurse practitioners, medical evaluation in older adults (School of Nursing).
- Susan Letvak, Workforce issues, aging RN, qualitative methods (School of Nursing).
- Dan Perlman, Intimate relationships, aging, life course (Department of Human Development and Family Studies).
- John Rife, Social and economic impacts of unemployment and income deficiency on older workers, families, and homeless (Department of Social Work).
- Olav Rueppell, Social insects, life history tactics, behavioral development and aging (Department of Biology).
- Dayna R. Touron, Cognitive functioning and skilled performance in older and younger adults, strategy use, skill learning, metacognition (Department of Psychology).
- William L. Tullar, Aspects of management, human resource management and development (Department of Management).

Associate Professors
- Gregory D. Carroll, Choral directing (School of Music).
- Nancy Green, Technology and aging (Department of Computer Science).
- William Karper, Physical Activity, health, older adults, chronic pain conditions (Department of Kinesiology).
- Kristine Lundgren, Cognitive-linguistic disorders in adults with acquired traumatic brain injury and adults with right hemisphere damage (Department of Communication Sciences and Disorders).
- Sudha Shreeniwas, Wellbeing and health over the life course in Asia and the U.S.; ethnicity, culture, and health among elderly persons worldwide (Department of Human Development and Family Studies).
- Stephen Sills, Fair housing, community-engaged research, program evaluation, immigrant incorporation (Department of Sociology).
- Patricia Sink, Music-related hearing loss, graduate music education (School of Music).

Assistant Professors
- Jiyoung Hwang, Marketing to older consumers (Department of Marketing, Entrepreneurship, Hospitality & Tourism).
Deborah Lekan, Gerontology, cardiovascular, frailty and resilience, health disparities, literacy (School of Nursing).

Tamaki Onishi, Public affairs, nonprofit management (Department of Political Science).

Jay Poole, Identity, gender and sexuality, clinical social work practice, gerontology in social work practice (Department of Social Work).

Meredith Powers, Sustainable aging, ecological justice (Department of Social Work).

**Clinical Professor**

Jacqueline Kayler Debrew, Gerontological community practice (School of Nursing).

### Graduate Programs

- **Post-Baccalaureate Certificate in Gerontology (16)**
- **Master of Science in Gerontology (31)**

### Gerontology, PBC (16)

The Post-Baccalaureate Certificate in Gerontology, offered as an online program, requires 16 semester hours that must be successfully completed during four academic years. Courses fulfilling the certificate program may be used to meet requirements in a degree program in accordance with the policies of the Graduate School.

### Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by the Graduate School, applicants must submit a personal essay elaborating on their experience and/or interest in working with older adults.

Students wishing to pursue the certificate in gerontology while pursuing a graduate degree should consult with the Gerontology Coordinator and with the department of interest.

### Certificate Requirements

**Required Core Courses (10)**

- GRO 501 Seminar: Critical Issues of Aging (3)
- GRO 600 Proseminar in Gerontology (1)
- GRO 621 Health and Aging (3)
- GRO 649 Gerontology Internship or Research Experience I (3)

GRO 501 and GRO 600 should be completed during the first academic year after acceptance to the certificate program.

**Electives (6)**

To meet the student’s educational objectives, two courses (6) are selected under advisement.

### Gerontology, MS (31)

The MS in Gerontology requires 31 semester hours of course work and internships or research experiences.

### Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal essay elaborating on their experience and/or interest in working with older adults.

### Degree Requirements
Required Core Courses (22)

- GRO 501 Seminar: Critical Issues of Aging (3)
- GRO 600 Proseminar in Gerontology (1)
- KIN 601 Applying Research to Professional Practice (3)
  or
- HHS 625 Research Methods for Health and Human Sciences (3)
  or
- Equivalent under advisement
- KIN 723 Statistical Methods for Kinesiology (3)
  or
- HEA 604 Public Health Statistics (3)
  or
- ERM 517 Statistical Methods in Education (3)
  or
- Equivalent under advisement
- GRO 621 Health and Aging (3)
- GRO 649 Gerontology Internship or Research Experience I (3)
- GRO 651 Integrative Seminar in Gerontology (3)
- GRO 679 Gerontology Internship or Research Experience II (3)

Note: GRO 651: Capstone Experience

Electives (9)
To meet the student’s educational objectives, nine (9) hours are selected under advisement.

GRO – Gerontology Graduate Courses

GRO 501 Seminar: Critical Issues of Aging (3:3)
Intensive review and analysis of the literature and research on issues and unresolved problems of aging. Offered both face-to-face and online.

Offered
Fall

GRO 511 Silver Industries (3:3)
Overview of the longevity economy and its influence on entrepreneurial opportunities. Case illustrations highlighted. Using the entrepreneurial business model, student explore opportunities, risks, and rewards in silver industries market.

GRO 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

GRO 600 Proseminar in Gerontology (1:1)
Introduction and gateway to the profession and study of gerontology including career roles and paths, professional development and ethics, and research processes and conduct.

GRO 601 Practical Issues in Aging (1:1)
Examination of a topic in aging from an applied perspective applicable to professionals working in the field of aging.

Notes
May be repeated for a maximum of 3 credits when topic varies.

GRO 610 Life Planning for the Third Age (3:3)
Integrative approach to explore how trends in finances, relationships, health, self-development, housing and work/leisure time interact to impact quality of life and options available to aging adults.

GRO 611 Issues in Aging and Business

GRO 612 The Boomer Demographic Phenomena (3:3)
Overview of the current and future societal and demographic trends as a consequence of the Boomer Demographic Phenomena with implications for government, community, and business markets. Applied basic demographic exercises.

GRO 613 Workforce and Human Resource Policies for Aging Societies (3:3)
Examines how countries facing crises stemming from aging populations, retirement, and related economic factors address older worker concerns, employer policies and programs, and government intervention in workforce issues.

GRO 620 Research Methods in Gerontology (3:3)
The integration and application of qualitative and quantitative research designs and methods used in gerontology. Additional attention focuses on the formulation and writing of a research proposal.
Prerequisite
GRO 501 and permission of instructor

GRO 621 Health and Aging (3:3)
Examines aspects of health and aging from an integration of biomedical and psychosocial perspectives. Foundations for the professional practice of gerontology.

GRO 622 Financing Longevity: Topics in Insurance (3:3)
Overview of concepts and products of insurance related to financing longevity in the United States. Topics include Medicare, Medicaid, long term care insurance and related products.

GRO 631 Planning and Evaluation for Professionals in Aging (3:3)
Introduction to the knowledge and skills related to planning and evaluating innovative responses to the aging of society using program theory as a foundation.

GRO 632 Communities Responding to an Aging Society (3:3)
Addresses community responses to an aging society and how those responses may be enhanced through civic engagement, infrastructure development, and public/private initiatives. Emphasizes developing and sustaining innovative programs.

GRO 633 Long Term Care Public Policy (3:3)
Addresses public policy related to the organization, financing, and delivery of the broad continuum of long term care with a concentration on the care of frail older adults.

GRO 649 Gerontology Internship or Research Experience I (3:0:10–12)
First internship or research experience for graduate students in gerontology. 140 to 160 hours in a program approved site developed from among nonprofit, governmental, or business settings.
Prerequisite
GRO 501 and permission of instructor
Notes
Grade: Satisfactory/Unsatisfactory, S/U.

GRO 651 Integrative Seminar in Gerontology (3:3)
Integration of current literature and theoretical applications in gerontology focusing on specific area(s) of student’s specialty and internship experiences. Additional emphasis on professional writing, presentations, networks, and extramural funding.

**Prerequisite**
Enrollment in the MS in gerontology program and completion of at least 24 hours of course work including: 501, 620, 649, ERM 517 or STA 571 (plus lab), and 12 hours of gerontology electives

**Offered**
Spring

**GRO 676 Special Topics in Gerontology (1 or 3)**
Study of a special topic in gerontology.

**Notes**
May be repeated for credit when topic varies.

**GRO 677 Entrepreneurship Opportunities in Healthy Aging (3:3)**
Examination of entrepreneurship opportunities related to the aging population, with specific attention to products and services that extend the healthy lifespan. Includes development of Business Opportunity Analysis.

**Cross Listed Courses**
ENT 677, KIN 677

**GRO 679 Gerontology Internship or Research Experience II (3:0:12–15)**
Final internship or research experience for graduate students in gerontology. 160 to 200 hours in a program approved site developed from among nonprofit, governmental, or business settings

**Prerequisite**
Admission to the MS in gerontology. Completion of at least 2/3 course work, including GRO 501, GRO 600, GRO 620, and GRO 649, CITI certification for social and behavioral sciences, and permission of instructor

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U.

**GRO 695 Independent Study (1–3)**
Intensive study in an area of special interest in gerontology.

**Notes**
May be repeated for a maximum of 6 semester hours credit.

**GRO 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
HUMAN DEVELOPMENT AND FAMILY STUDIES, DEPARTMENT OF
248 Stone Building • 336-334-5307 • www.uncg.edu/hdf

Administration
Cheryl Buehler, Interim Department Chair
Stephanie Irby Coard, Director of Graduate Study

About
The Department of Human Development and Family Studies faculty have a wide range of research interests and methodological approaches. The faculty’s research interests cluster in five focal areas:

- Early childhood development, care, and education including social, emotional, and cognitive development in young children, child care, and early childhood education;
- Parent-child relationships;
- Adolescence;
- Close relationships, marriage, and divorce; and
- Human development and family diversity in sociocultural context.

Faculty use a variety of quantitative and qualitative approaches including tests of children’s social and cognitive development, micro-analytic analyses of peer and parent-child interactions, surveys, interviews, feminist methodologies such as photovoice and interpretive inquiry, and the design and evaluation of educational and intervention programs for children, family members, and educational personnel. Within these general areas of concentration and varied methods of inquiry, students focus upon more specific topics of study. Graduate course work in human development and family studies focuses on individuals and families as they relate to friendship and kinship networks, the workplace, and economic, human service, health, and formal and informal educational systems. Graduate students have considerable flexibility in tailoring their studies to special interests and career goals.

Faculty
Professors
Arthur D. Anastopoulos, Child and adolescent psychopathology; assessment and treatment of attention-deficit hyperactivity disorder (ADHD). (E)
Cheryl Buehler, Marital conflict, adolescence, parenting, maternal employment, adolescent risk and resiliency, family processes. (Interim Department Chair) (E)
Susan D. Calkins, Social and emotional development in infancy and early childhood. (E)
David H. Demo, Family diversity, family relationships and children’s well-being; parent-child interaction; family transitions (Associate Dean for Academic Administration). (E)
Mark Fine, Effects of family transitions on family members; early childhood development; family structure; divorce; early intervention; effects of alternative reproductive technologies on family members. (E)
Anne C. Fletcher, Parental and peer influences on adolescent adjustment, parent and adolescent social integration, social network closure. (E)
Karen LaParo, Childcare quality, early elementary classroom quality, inclusive classrooms, early intervention, teacher-child relationships. (E)
Esther M. Leerkes, Parent-child interaction in infancy/early childhood and links with children’s social-emotional well-being; child influences on parents and family (Associate Dean for Research). (E)
Daniel Perlman, Intimate relationships and friendships including initiation, maintenance, and termination; the dark side of relationships; loneliness. (E)
Catherine Scott-Little, Early childhood education standards, assessments, and school readiness (Director of the BK Graduate Program). (E)
Jonathan Tudge, The development of gratitude and the decline of materialist values; ecological and socio-cultural theory; children’s development in ethnic, social, and cross-cultural contexts; links between home, preschool, and school. (E)

**Associate Professors**

Stephanie Irby Coard, Socio-cultural influences on child mental health, racial/ethnic socialization processes, racial/ethnic identity development. (Director of Graduate Study). (E)

Danielle Crosby, Effects of welfare and employment policies on young children in low-income families. (E)

Heather Helms, Marriage, friendship, work and family in dual-earner couples; midlife parenting and relationships. (E)

Linda Lott Hestenes, Child care quality, outdoor environments for young children, inclusive classrooms. (E)

Andrea Hunter, Diversity in children’s living arrangements, grandparenthood, multigeneration family systems, constructions of gender. (E)

Roger Mills-Koonce, Parenting and parent-child relationships; developmental psychobiology; early onset conduct problems; diverse family systems, including families with LGBT parents or children. (E)

Mary Y. Morgan, Women’s everyday lived experiences using feminist research approaches and exploring ethnic and racial diversity. (E)

Sudha Shreeniwas, Well-being and health over the life course; ethnicity, culture, and health among the elderly. (E)

Andrew J. Supple, Contextual influences on youth and adolescent development, ethnic and cultural variations in parenting and adolescent outcomes, and advanced quantitative analyses. (E)

**Graduate Programs**

- **Post-Baccalaureate Certificate in Leadership in Early Care and Education** (jointly with the Department of Specialized Education Services), (18)
- **Birth-Kindergarten (BK) Post-Baccalaureate Initial Licensure Certificate** (jointly with the Department of Specialized Education Services), (20)
- **Master of Education (MEd) in Birth-Kindergarten Interdisciplinary Studies in Education and Development** (Early Childhood Leadership and Advanced Teaching Licensure or Early Childhood Leadership and Program Administration) jointly with the Department of Specialized Education Services, (37)
- **Master of Science (MS) in Human Development and Family Studies**, (40)
- **Doctor of Philosophy (PhD) in Human Development and Family Studies**, (51)
- **Doctoral Minor in Human Development and Family Studies**, (12)

**Birth-Kindergarten BK Post-Baccalaureate Initial Licensure Certificate, PBC (HDFS), (20)**

The online Birth-Kindergarten (BK) Post-Baccalaureate Initial Licensure Certificate provides training for students with a bachelor’s degree seeking an initial NC Birth-Kindergarten teaching license. This certificate program requires 20 semester hours and is offered jointly by the departments of Human Development and Family Studies and Specialized Education Services. The program is designed to provide students with graduate level training and an initial teaching license in BK. Students also have an option for transitioning from this program into the MEd program in which they may be eligible for an advanced license in BK. Course work from the plan of study for the Post-Baccalaureate Initial Licensure Certificate may be applied to the MEd in Birth to Kindergarten: Interdisciplinary Studies in Education and Development (BKISED) provided the student meets all admission requirements of The Graduate School, the Department of Human Development and Family Studies and the Department of Specialized Education Services.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The certificate is available to individuals with a bachelor’s degree in early childhood education, child development, early childhood special education, or a related field. Students who wish to transition into the MEd program must
submit a new application for the MEd to The Graduate School. It is the students' responsibility to initiate the process and review it with their advisor.

**Certificate Requirements**

**BK Initial Licensure Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES 601</td>
<td>Introduction to Inclusive Birth-Kindergarten Services (3)</td>
</tr>
<tr>
<td>SES 607/HDF 607</td>
<td>Infant-Toddler Learning in Inclusive Settings (4)</td>
</tr>
<tr>
<td>SES 606/HDF 606</td>
<td>Preschool-Kindergarten Learning in Inclusive Settings (4)</td>
</tr>
<tr>
<td>SES 603</td>
<td>Screening/Assessment in Inclusive Early Childhood Services (3)</td>
</tr>
<tr>
<td>SES 649c</td>
<td>Practicum in Special Education (4-6)</td>
</tr>
</tbody>
</table>

Leadership in Early Care and Education, PBC (HDFS), (18)
The online Post-Baccalaureate Certificate in Early Care and Education Leadership requires 18 semester hours and is offered jointly by the departments of Human Development and Family Studies and Specialized Education Services. The program is designed to provide students with graduate level training and a credential to pursue careers in leadership positions in early care and education settings including early intervention, Smart Start, resource and referral, and community college instruction.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The certificate is available to students with a bachelor’s or master’s degree who do not plan to pursue a degree program or for students who are pursuing a master’s degree in Human Development and Family Studies or Specialized Education Services. If pursuing a master’s degree simultaneously, students must meet all requirements for admission to The Graduate School, Human Development and Family Studies, and Specialized Education Services. The Certificate is also open to graduate students with background knowledge in early childhood education, child development, early childhood special education, or a closely related field.

**Certificate Requirements**

**Required Courses (15)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDF 634</td>
<td>Contemporary Issues in Early Childhood Policy (3)</td>
</tr>
<tr>
<td>HDF 636</td>
<td>Leadership and Mentoring in Educating Young Children (3)</td>
</tr>
<tr>
<td>HDF 650</td>
<td>Theory and Research in Early Childhood (3)</td>
</tr>
<tr>
<td>SES 601</td>
<td>Introduction to Inclusive Birth-Kindergarten Services (3)</td>
</tr>
<tr>
<td>SES 605</td>
<td>Diversity and Inclusive Early Care and Education (3)</td>
</tr>
</tbody>
</table>

**Electives (3)**

With the approval of the advisor, students choose 3 hours of electives at the 500 or 600 level.

Birth through Kindergarten: Interdisciplinary Studies in Education and Development MEd

The synchronous online Master of Education (M.Ed.) program in Birth through Kindergarten: Interdisciplinary Studies in Education and Development (BKISED) prepares students to assume leadership roles in diverse settings (both education and community-based) that develop and implement programming for young children with and without disabilities, ages birth to five, and their families. The degree consists of a minimum of 37 semester hours of graduate course work beyond the Bachelor’s degree. Additional academic work may need to be completed by students without foundational skills or content knowledge in early childhood. Prerequisite credits may not be applied toward the M.Ed. degree unless they are Birth-Kindergarten Initial Licensure Program (BK:ILP) courses (see Birth-Kindergarten: Initial Licensure Program in the graduate bulletin). Prerequisite requirements must be satisfied as early as possible in the program. The BK Graduate Program Committee approves any transfer credit.
Two concentrations are offered: one on Early Childhood Leadership & Advanced Teaching Licensure and another on Early Childhood Leadership & Program Administration.

The concentration in Early Childhood Leadership & Advanced Teaching Licensure is designed for students with a Standard Professional I or initial license seeking education in early childhood leadership and an advanced teaching license. Those with an initial license in another field of education must satisfy prerequisite requirements and complete eight (8) weeks of student teaching (which adds 6 credit hours to the program). Students are eligible for the "M" advanced license in BK upon successful completion of the program.

The concentration in Early Childhood Leadership & Program Administration equips teachers, directors/administrators, technical assistance providers, and other professionals working closely with early childhood educators to be leaders in the field. It includes advanced training in a variety of areas, including personnel development and support, financial management, early childhood systems and policy, leadership and mentoring, child and program assessment, and curriculum within the context of family-centered practices to work effectively with diverse children and families in inclusive settings.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Applicants must submit an application to The Graduate School, which includes: a professional statement, a current resume, official transcripts with a GPA of 3.0 or higher, and three letters of recommendation with at least one academic reference if possible. Applicants to the Early Childhood Leadership & Advanced Teaching Licensure concentration must also submit documentation of their initial teaching license. The GRE is not required. An interview and writing sample may be required.

Degree Requirements
Core Courses Required for Both Concentrations
Course work related to Theory and Practice (15)
- SES 601 Introduction to Inclusive Birth-Kindergarten Services (3)
- SES 602 Inclusive Family-Centered Practices in Early Childhood (3)
- SES 603 Screening/Assessment in Inclusive Early Childhood Services (3)
- HDF 636 Leadership and Mentoring in Educating Young Children (3)
- HDF 633 Advanced Curriculum in Early Childhood Education (3)

Course work related to Research (6)
- ERM 604 Methods of Educational Research (3)
- HDF 650 Theory and Research in Early Childhood (3)

Practicum (6)
- SES 604 Internship in Inclusive Early Childhood (6)

Professional Portfolio (Capstone Experience)
The final portfolio is the culminating experience. It includes two components: 1) a written document that includes a series of reflective essays and 2) oral defense, discussing the content of the essays and rationale for the use of documents. This portfolio will demonstrate the mastery of skills and knowledge in the program competency areas. It is submitted on TaskStream by the student and evaluated by a team of two faculty and one practicing professional. If the portfolio and presentation do not meet departmental standards, one revision is allowed. The final portfolio is required of all students graduating from the BK:ISED program.

Early Childhood Leadership & Advanced Teaching Licensure Concentration
In addition to the Core Courses, the Leadership & Advanced Licensure Concentration requires:

**Course work related to Theory and Practice (4)**
- HDF 606/SES 606 Preschool-Kindergarten Learning in Inclusive Settings (4)

**Electives (6)**
To be selected from list or with approval of advisor.
- HDF 730 Cross-cultural Perspectives on Child Development (3)
- HDF 720 Applied Theories and Principles of Parenting (3)
- HDF 634 Contemporary Issues in Early Childhood Policy (3)
- HDF 653 Contemporary Research in Family Studies (3)
- HDF 715 Infant Development (3)
- SES 608 Seminar in Early Childhood Education (3)
- SES 605 Diversity and Inclusive Early Care and Education (3)
- SES 647 Collaboration and Consultation in Education (3)
- SES 662 Assistive Technology for Inclusive Education (3)
- SES 607/HDF 607 Infant-Toddler Learning in Inclusive Settings (4)

Other courses as approved by advisor.

**Practicum (6)**
As applicable, if student’s initial licensure is in an area other than B-K.
- SES 649c Practicum in Special Education (4-6)

**Early Childhood Leadership & Program Administration Concentration**
In addition to the Core Courses, the Leadership & Program Administration Concentration requires:

**Course work related to Theory and Practice (4)**
- HDF 602 Special Topics in Human Development and Family Studies (2-4)

**Required Electives (6)**
- HDF 634 Contemporary Issues in Early Childhood Policy (3)
- SES 605 Diversity and Inclusive Early Care and Education (3)

Human Development and Family Studies, MS, (40)
The MS in Human Development and Family Studies requires a minimum of 40 hours (including thesis) and prepares graduates to conduct research or to embark on a doctoral program of study.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to a review of the admission materials required by The Graduate School, the department considers the compatibility of the student’s interest areas with those of the faculty and with curriculum emphasis, as well as the student’s availability for full-time graduate study.

**Degree Requirements**

**Core Content (19)**
- HDF 640 Professional Seminar I (1)
- HDF 653 Contemporary Research in Family Studies (3)
- HDF 651 Contemporary Research in Human Development (3)
HDF 652  Theories of Human Development (3)
HDF 655  Family Theory (3)
HDF 656  Race, Class, and Culture (3)
HDF 661  Professional Seminar II (1)
HDF 745  College Teaching in Human Development and Family Studies I (2)

Area of Specialization (6)
Area of specialization courses are selected jointly by the student and the faculty advisory committee. All 6 hours must be fulfilled through content courses, and at least 3 of the 6 hours must be taken within the Department of Human Development and Family Studies. Please note that research methods and statistics cannot count as area of specialization courses for the MS degree.

Statistics and Methodology (9)
ERM 680  Intermediate Statistical Methods in Education (3)
ERM 681  Design and Analysis of Educational Experiments (3)
HDF 658  Research Methods in Human Development and Family Studies (3)

Research (6) (Capstone Experience)
HDF 699  Thesis (1-6)

Oral Examination

Human Development and Family Studies, PhD, (51)
The PhD in Human Development and Family Studies requires 89 semester hours beyond the baccalaureate degree (for students entering the program in the MS/PhD track) or a minimum of 51 hours beyond a master’s degree program. Required and elective course work and research are listed below. Entering doctoral students who have completed a master’s degree program at another institution or department must fulfill (or have comparable substitutions for) all of the requirements of the HDFS MS degree program. Assessment of prerequisite courses occurs at the time of admission to the program. These requirements must be fulfilled in addition to completing the minimum of 51 hours of course work and research shown below.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to a review of the admission materials required by The Graduate School, the department considers the compatibility of the student’s interest areas with those of the faculty and with curriculum emphasis, as well as the student’s availability for full-time graduate study.

Degree Requirements

Area of Specialization (18)
The PhD program requires the completion of 18 hours of elective course work (selected jointly by the student and the faculty advisory committee) beyond the minimum of 9 hours of specialization course work taken for the MS. Of the 18 hours to be taken for the PhD, 9 hours must be fulfilled through structured electives. One course in each of the following areas is required: Development Area (HDF 665, HDF 666, HDF 667, HDF 668), Family Studies Area (HDF 660, HDF 671, HDF 672, HDF 674, HDF 721), and Sociocultural Context Area (HDF 610, HDF 634, HDF 673). Specific offerings of HDF 602 and HDF 711 will be eligible for inclusion in target areas specified by the department.

Professional Development (1 hour)/Teaching Practicum (5)
All doctoral students will complete a two-semester teaching practicum supervised by the student’s advisor, or the advisor’s designee. The practicum requires the student to serve as an assistant, then as a co-instructor of a course (or courses) at the 200, 300, or 400 level.

HDF 745  College Teaching in Human Development and Family Studies I (2)
HDF 750  Professional Seminar III (1)
HDF 765  College Teaching Practicum in Human Development and Family Studies II (3)

Statistics and Methodology (15)
  STA 671  Multivariate Analysis (3)
  HDF 756  Advanced Research Design in Human Development and Family Studies (3)
One additional content course in statistical analysis
One additional content course in research methodology
One additional content course in either statistical analysis or research methodology

Preliminary Examination
Written and oral preliminary examinations of the student’s knowledge of the specialization area and of research methods, design, and statistical analyses, must be passed prior to commencing the dissertation research.

Research (12)
  HDF 799  Dissertation Problem (1-12)
Requirements for the MS and PhD program of study are specified further in departmental curriculum guides.

Human Development and Family Studies, Doctoral Minor, (12)
The doctoral minor in Human Development and Family Studies requires 12 semester hours.

Minor Requirements
Core (3)
Select one course from:
  HDF 651  Contemporary Research in Human Development (3)
  HDF 652  Theories of Human Development (3)
  HDF 653  Contemporary Research in Family Studies (3)
  HDF 655  Family Theory (3)

Electives (9)
Select three of the following courses:
  HDF 602  Special Topics in Human Development and Family Studies (2-4)
  HDF 626  Social and Economic Problems of the Family (3)
  HDF 634  Contemporary Issues in Early Childhood Policy (3)
  HDF 636  Leadership and Mentoring in Educating Young Children (3)
  HDF 650  Theory and Research in Early Childhood (3)
  HDF 711  Experimental Course
  HDF 713  Social and Emotional Development (3)
  HDF 714  Intellectual Development in Young Children (3)
  HDF 715  Infant Development (3)
  HDF 716  Seminar in Adolescence (3)
  HDF 720  Applied Theories and Principles of Parenting (3)
  HDF 721  Seminar in Parent-Child Relations (3)
  HDF 722  Families in Middle and Later Life (3)
  HDF 723  Divorce, Remarriage, Cohabitation (3)
  HDF 726  Close Relationships in Adulthood (3)
  HDF 727  Contemporary Family Life (3)
  HDF 730  Cross-cultural Perspectives on Child Development (3)
  HDF 731  Cross-cultural Perspectives on Families (3)
  HDF 740  Feminist Theory and Research Methodologies (3)
  HDF 755  Advanced Theory in HDFS (3)
  HDF 756  Advanced Research Design in Human Development and Family Studies (3)
HDF - Human Development Family Studies Graduate Courses

HDF 502 Gender in Families (3:3)
Influence of social, philosophical, political, and technological change on gender relationships in families in the past, present and future.
Prerequisite
HDF 211, HDF 212, HDF 410 or permission of instructor

HDF 510 Child and Family Ecology (3:3)
Study of children and families in their social contexts; examination of issues such as parent-child relations, child maltreatment, divorce and single-parent families, and work-family linkages.
Prerequisite
HDF 452 or graduate standing

HDF 527 Problems in Human Development and Family Studies (2–6)
In-depth study of new areas in child and family studies such as: children and technology; multi-cultural families; developmental consequences of child maltreatment.
Prerequisite
HDF 211, HDF 212

HDF 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

HDF 601 Directed Individual Study in Human Development and Family Studies (1–6)
Prerequisite
6 semester hours of HDF graduate courses and permission of instructor

HDF 602 Special Topics in Human Development and Family Studies (2–4)
Designated special topics such as Child Care Administration, Parent Education, Practicum, Child Guidance.
Notes
May be repeated for credit.

HDF 603 Research Laboratory Practicum in Human Development and Family Studies (1:0:3)
Supervised practicum experiences in planning, designing, and implementing research investigations in the field of human development and family studies.
Notes
Students must obtain approval of a supervising graduate faculty member before registering. May be repeated for credit; credit cannot be used to meet minimum hour requirements of a degree program. Grade: Satisfactory/Unsatisfactory, S/U.

HDF 606 Preschool-Kindergarten Learning in Inclusive Settings (4:3:3)
In-depth exploration of the principles of early childhood care and education and learning strategies for preschool/kindergarten children with and without disabilities. Field placements in BK setting are required.
Cross Listed Courses
SES 606
Prerequisite
Admission to BKISED degree program and SES 601

HDF 607 Infant-Toddler Learning in Inclusive Settings (4:3:3)
An examination of development in infancy and toddlerhood and strategies for facilitating very young children's growth and learning in early childhood care and educational settings. Field placement required.
Cross Listed Courses
SES 607
Prerequisite
HDF or SES major or permission of instructor

**HDF 626 Social and Economic Problems of the Family (3:3)**
Social and economic conditions in the U.S. as they affect the welfare of families in general and influence or interact with an individual family’s values, goals, and resource development and use.

**Notes**
Formerly HDF 606.

**HDF 631 Families of Individuals with Special Needs (3:3)**
Current theory, research and intervention models concerning family coping and adaptation to children’s exceptional development: physical handicaps, developmental disabilities, chronic illness, and psychiatric disorders.

**Prerequisite**
HDF major or permission of instructor

**Notes**
Formerly HDF 660.

**HDF 633 Advanced Curriculum in Early Childhood Education (3:3)**
Examination of theoretical and developmental foundations of early childhood curriculum approaches, including critique of accepted early childhood practices, action research, and published research in curriculum and program effectiveness.

**Prerequisite**
SES 606/HDF 606

**Notes**
Formerly HDF 609, HDF 633.

**HDF 634 Contemporary Issues in Early Childhood Policy (3:3)**
Analysis of how federal, state, and local policies impact early childhood programs, early childhood professionals, children, and families.

**HDF 636 Leadership and Mentoring in Educating Young Children (3:3)**
Examination of advanced leadership, mentoring, lifelong learning, and teaching skills for those who develop and implement early childhood programs.

**HDF 640 Professional Seminar I (1:1)**
Conceptual and methodological perspectives of multidisciplinary study in the field of human development and family studies. Required of all first-year master’s and doctoral students.

**HDF 644 Applications of Theory and Research in Family Studies (3:3)**
Abbreviated examination of theories that relate to family studies and contemporary research findings in the areas of family studies relevant to family life/parent education.

**HDF 650 Theory and Research in Early Childhood (3:3)**
Examination of theory and current research pertaining to the development of children from birth through kindergarten within the context of the family, community, and larger society.

**Prerequisite**
ERM 604, SES 601

**HDF 651 Contemporary Research in Human Development (3:3)**
Examination of contemporary research findings in the field of human development.
HDF 652 Theories of Human Development (3:3)
Survey of selected theories of individual development.

HDF 653 Contemporary Research in Family Studies (3:3)
Examination of contemporary research findings in the field of family studies.

HDF 654 Applications of Theory and Research in Human Development (3:3)
Abbreviated examination of theories that relate to human development and contemporary research findings in the areas of human development relevant to family life/parent education.

HDF 655 Family Theory (3:3)
Theories that relate to studying families; linking conceptual ideas, theorizing, and research examples relevant to families.
Notes
Formerly HDF 642

HDF 656 Race, Class and Culture (3:3)
Examination and application of theory and research related to racial/ethnic, social class, and cultural issues; self-awareness and cultural competence are emphasized.
Prerequisite
HDF 651, 652, 653 or 655 or permission of instructor

HDF 658 Research Methods in Human Development and Family Studies (3:3)
Research methods and designs of research with children and families.
Notes
Core requirement for MS and PhD degrees. Formerly HDF 630.

HDF 661 Professional Seminar II (1:1)
Professional activities and ethical responsibilities of university teachers and research scholars; professional writing, peer-review, extramural funding, and research practices with human subjects.
Notes
Core requirement for MS and PhD degrees. Formerly HDF 690.

HDF 675a Family Conflict Resolution (3:3)
Explores the theory, research and methods of working with family conflicts related to divorce (financial and parenting), parent-child, and older adult issues. Assignments include reading, case studies, and role plays.
Prerequisite
HDF 672 or permission of instructor

HDF 675b Divorce Mediation Practicum (3)
Skill development and application of theory to practice in divorce mediation through supervised work with clients in a laboratory setting.
Prerequisite
HDF 675a or permission of instructor
Notes
Grade: Satisfactory/Unsatisfactory, S/U

HDF 695 Professional Seminar in Family Life and Parent Education (1:1)
Professional issues and career development skills in the field of family life and parent education.
HDF 696 Supervised Professional Experience in Human Development and Family Studies (1–6:0:3–12)
Supervised professional experience in selected commercial or industrial organizations, public or private agencies. Completion of a major project or activities appropriate to the goals of the agencies.
Prerequisite
Permission of instructor

HDF 699 Thesis (1–6)
Prerequisite
Permission of instructor
Notes
Required of all candidates for the Master of Science degree. Credit may be divided over two or more semesters.

HDF 701 Minor Research (2–6)
Prerequisite
Permission of instructor

HDF 703 Contemporary Topics in Human Development and Family Studies (3:3)
Advanced study of designated contemporary topics in Human Development and Family Studies.
Prerequisite
Doctoral standing or permission of instructor
Notes
May be repeated for credit

HDF 711 Experimental Course
This number reserved for experimental courses. Refer to Course Schedule for current offerings.

HDF 713 Social and Emotional Development (3:3)
Integrates theory and research focusing on social-emotional growth across the lifespan. Importance of peer and family relations in personality development; social and emotional competence and adjustment difficulties.
Cross Listed Courses
PSY 715
Prerequisite
HDF 651 (or HDF 650) and HDF 652, or permission of instructor

HDF 714 Intellectual Development in Young Children (3:3)
Current theories and recent research on intellectual development from infancy through middle childhood; language acquisition, thinking, conceptual representation, learning, memory, and perceptual development.
Prerequisite
HDF 651 (or HDF 650 or HDF 654), HDF 652, or permission of instructor
Notes
Formerly HDF 666

HDF 715 Infant Development (3:2:3)
Principles of perceptual, motor, cognitive and socio-emotional development in infants and very young children.
Prerequisite
HDF 651 (or HDF 650), HDF 652, or permission of instructor
Notes
Formerly HDF 667

HDF 716 Seminar in Adolescence (3:3)
Integrates theory, research, and practice focusing on dimensions of normative and problematic adolescent development within its ecological contexts.

**Prerequisite**
HDF 651 (or HDF 650) or permission of instructor

**Notes**
Formerly HDF 668

**HDF 720 Applied Theories and Principles of Parenting (3:3)**
Examination of established parenting models and programs. Theoretical foundations and issues related to program development, adaptation, and implementation. Implications for outcome analyses and program evaluation.

**HDF 721 Seminar in Parent-Child Relations (3:3)**
Synthesizes theoretical perspectives and current research on parent-child relations. Topics include: links between parenting and child outcomes, determinants of parenting, links between parenting and adult development/relationships. Integrates applied implications.

**Prerequisite**
HDF 651, HDF 652, and HDF 653; or permission of instructor

**HDF 722 Families in Middle and Later Life (3:3)**
This course examines family configurations and relationships as individuals move through middle and later life.

**Prerequisite**
admitted to a graduate program or permission of instructor

**HDF 723 Divorce, Remarriage, Cohabitation (3:3)**
Integrates theory and research focusing on variations within and changes to family structures and processes (e.g., communication, intimacy, conflict management). Sociocultural variations within and across groups.

**Prerequisite**
HDF 653, HDF 655 or permission of instructor

**HDF 725 Psychobiology of Human Development and Family Processes (3:3)**
This seminar will focus on recent theoretical and empirical work on the genetic, physiological, and neural processes that play a role in human development and family functioning.

**Prerequisite**
HDF 651 (or HDF 650) and HDF 652, or permission of instructor

**HDF 726 Close Relationships in Adulthood (3:3)**
Interdisciplinary introduction to close relationships in adulthood, including the major theoretical perspectives scholars use to examine close relationships, the methods researchers employ, and the substantive foci that characterize the field.

**Prerequisite**
HDF 653 or HDF 644 or permission of instructor

**Notes**
Formerly HDF 674

**HDF 727 Contemporary Family Life (3:3)**
Contemporary families; the nature of family dynamics and the needs of family members in a changing social context.

**Prerequisite**
HDF 653, HDF 655, or permission of instructor

**Notes**
Formerly HDF 671
HDF 730 Cross-cultural Perspectives on Child Development (3:3)
Examines how culture influences children’s development and also is influenced by members of that culture.

HDF 731 Cross-cultural Perspectives on Families (3:3)
Family patterns in different cultures; viewing family systems within their cultural contexts.
Notes
Formerly HDF 673

HDF 740 Feminist Theory and Research Methodologies (3:3)
Research issues associated with the study of women and families from a feminist perspective on scholarship. Examination of feminist research methods focusing on interpretive inquiry and critical science.
Notes
Formerly HDF 624

HDF 745 College Teaching in Human Development and Family Studies I (2:1:3)
Introduction to college teaching through observation and exploration of issues for beginning teachers. Students are assigned to work with graduate faculty members.
Prerequisite
2nd year master’s student and above
Notes
May be repeated with a different member of the graduate faculty. Formerly HDF 664. Grade: Satisfactory/Unsatisfactory, S/U

HDF 750 Professional Seminar III (1:1)
Job search methods and strategies in human development and family studies for doctoral students.
Prerequisite
HDF 640, HDF 661

HDF 755 Advanced Theory in HDFS (3:3)
In-depth study of particular theories used to study children and families. Theories addressed will vary by instructor. May include mechanics of theory building and refining.
Prerequisite
HDF 652, HDF 655, or permission of instructor

HDF 756 Advanced Research Design in Human Development and Family Studies (3:3)
Methods and designs of research with individuals and families from problem specification, data collection and reduction, to data analysis.
Prerequisite
HDF core requirements and two graduate statistics courses or permission of instructor
Notes
Core requirement for PhD degree

HDF 765 College Teaching Practicum in Human Development and Family Studies II (3:1:6)
Supervised experiences in planning, teaching, and evaluating a college-level course.
Notes
Student must obtain the approval of a supervising graduate faculty member before registering. May be repeated with a different member of the graduate faculty.

HDF 790 Independent Doctoral Research (1–6)
Individual work on problems related to the student’s primary area(s) of specialization. Work may consist of empirical research or of critical reviews and integrations of existing literature.

**HDF 799 Dissertation Problem (1–12)**
Required of all candidates for the Doctor of Philosophy degree.

*Prerequisite*
Permission of instructor

*Notes*
Credit may be divided over two or more semesters.

**HDF 801 Thesis Extension (1–3)**

**HDF 802 Dissertation Extension (1–3)**

**HDF 803 Research Extension (1–3)**
KINESIOLOGY, DEPARTMENT OF
250 Coleman Building • 336-334-5347 • kin.wp.uncg.edu

Administration
Scott E. Ross, Department Chair
Jennifer L. Etnier, Associate Department Chair
Paul Davis, Director of Graduate Study
Pamela Kocher Brown, Director of EdD in Kinesiology Online

Faculty

Professors
Ang Chen, Curriculum and Pedagogy Studies in Physical Education. Children/adolescent motivation, learning, and physical activity behavior change. (E)
Jennifer L. Etnier, Sport and Exercise Psychology. Mental health benefits of physical activity, exercise and cognitive performance (Associate Department Chair). (E)
Diane L. Gill, Sport and Exercise Psychology. Social psychological aspects of physical activity and well-being across the lifespan. (E)
Laurie Wideman Gold, Exercise physiology, exercise endocrinology focused on the hormonal, cytokine and adipokine responses to acute and chronic exercise. (E)
Allan H. Goldfarb, Exercise Physiology. Hormonal/oxidative stress, muscle damage, glycogen metabolism. (E)
Thomas J. Martinek, Community Youth Sport Development. Psycho-social dynamics of teaching and coaching, teacher education, research design and statistics. (E)
Joseph W. Starnes, Exercise Physiology. Cardiac function and metabolism, exercise-induced cardioprotection, statins, aging. (E)
Kathleen Williams, Motor Behavior. Coordination and control of movement in aging adults, evaluation and validation of movement sequences. (E)

Associate Professors
Paul G. Davis, Exercise Physiology. Exercise and metabolic health, lipoproteins and other cardiovascular disease risk factors, obesity (Director of Graduate Study). (E)
William B. Karper, Exercise Physiology. Exercise effects on ill/disabled children and adults, older adults and chronic pain conditions. (E)
Christopher K. Rhea, Applied Neuromechanics. Nonlinear dynamics of gait and posture, virtual reality applications for locomotor rehabilitation. (E)
Scott E. Ross, Athletic Training/Applied Neuromechanics/Sports Medicine. Research interests include balance assessment and rehabilitation, ankle instability, stochastic resonance stimulation (Department Chair). (E)

Assistant Professors
Erin J. Reifsteck, EdD in Kinesiology Online/Sport and Exercise Psychology. Psychosocial approaches to physical activity and health promotion.

Academic Professional Professor
Pamela Kocher Brown, EdD Online/Curriculum and Pedagogy Studies in Physical Education. Sociohistorical perspectives, activities program (Director of EdD in Kinesiology Online). (E)
**Academic Professional Associate Professor**
Aaron B. Terranova, Athletic Training/Sports Medicine. Job satisfaction, intention to leave, clinical education (Director of Undergraduate Studies). (E)

**Academic Professional Assistant Professors**
Anne O. Brady, Exercise Physiology. Impact of body composition on physical function in older adults; clinical exercise physiology.
Donna Duffy, Curriculum and Pedagogy Studies in Physical Education.

**Adjunct Professors**
Lavon Williams, Sport and Exercise Psychology.

**Adjunct Assistant Professors**
Kenneth P. Barnes, Athletic Training.
John R. Cone, Applied Neuromechanics/Exercise Physiology.
Francis J. Haran, Applied Neuromechanics.
John C. Lalonde, Athletic Training.

**Graduate Programs**
- Master of Science in Athletic Training (MSAT), (50)
- Doctor of Education (EdD) in Kinesiology (online), (54)
- Master of Science/ Doctor of Philosophy (MS/PhD) in Kinesiology, (78)
- Doctor of Philosophy (PhD) in Kinesiology, Applied Neuromechanics, Exercise Physiology, Curriculum and Pedagogy Studies in Physical Education and Sport and Exercise Psychology optional concentrations, (60)

**Kinesiology, MS (36)**
The MS in Kinesiology offers both a 36-hour thesis option and 36-hour course work only option. Concentrations in applied neuromechanics, exercise physiology, curriculum and pedagogy studies in physical education, community youth sport development, and sport and exercise psychology are offered in the thesis option. Concentrations in community youth sport development, exercise physiology, motor behavior, curriculum and pedagogy studies in physical education, sport and exercise psychology, and sports medicine are offered in the course work only option. For both options, a minimum of 24 hours must be completed in the department.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit supplementary application materials required by the department.

**Degree Requirements for Both Options**

**Breadth Requirement (0-6)**
To enhance their knowledge of the field of Kinesiology, students who do not have an undergraduate major or minor in Kinesiology will consult with their advisor to select appropriate courses from at least 2 of the 8 disciplinary areas (Applied Neuromechanics, Community Youth Sport Development, Exercise Physiology, Motor Behavior, Curriculum and Pedagogy Studies in Physical Education, Sport and Exercise Psychology, Sports Medicine, Sociohistorical Studies) outside the student's own concentration area.

**Thesis Option (36)**
Research Techniques Requirement (3)
   HHS 625  Research Methods in the Health and Human Sciences (3)
   or
   KIN 611  Research Methods for Kinesiology (3)
Research and Thesis (6)
   KIN 699  Thesis (1-6)
Remaining 21-27 Hours
   With approval of the advisor, the student selects 21-27 hours of course work that constitute a specialized knowledge base relevant to the student’s academic interests and goals. For those seeking a concentration in applied neuromechanics, community youth sport development, exercise physiology, curriculum and pedagogy studies in physical education, or sport and exercise psychology, the electives are designated below.

Applied Neuromechanics Concentration
Concentration Core (9)
   Acceptable courses include:
      KIN 643  Mechanical Analysis of Motor Skills (3)
      KIN 647  Motor Development and Human Movement (3)
      KIN 661  Movement Theory (3)
      KIN 702  Research Seminar in Applied Neuromechanics (1)
      KIN 719  Muscular Aspects of Exercise Physiology (3)
      KIN 729  Learning and Performance of Physical Skills (3)
      KIN 730  Neural Aspects of Motor Control (3)
Concentration Electives (12-18)
   With approval of the advisor, the student selects 12-18 hours of elective course work.

Community Youth Sport Development Concentration
Core Required Courses (8)
   KIN 519  Mentoring in Community Youth Development Programs (2)
   KIN 520  Physical Activity Programs for Underserved Youth (3)
   KIN 521  Evaluation of Physical Activity Programs in Youth Development (3)
Concentration Electives (13-19)
   With approval of the advisor, the student selects 13-19 hours of elective course work.

Exercise Physiology Concentration
Core Required Course (3)
   KIN 670  Physiology of Exercise (3)
   Students must receive a B or better in KIN 670 to satisfy degree requirements. KIN 670 may be taken a maximum of 2 times to achieve this outcome. Withdrawal from the program will be recommended if the student fails KIN 670 the first time the course is taken. The student may appeal this decision to the Graduate Faculty in Exercise Physiology. If a B or better is not earned after taking the course twice, the student will be automatically withdrawn with no opportunity to appeal.
Concentration Core (6)
   Acceptable courses include:
      KIN 570  Development and Implementation of Fitness Programs (3)
      KIN 576  Nutrition and Physical Fitness (3)
      KIN 579  Exercise and Older Adults (3)
      KIN 650  Scientific Factors Affecting Human Performance (3)
KIN 667  Exercise Electrocardiography and Cardiopulmonary Medications (3)
KIN 668  Advanced Exercise Assessment (3)
KIN 669  Advanced Exercise Prescription (3)
KIN 675  Applied Human Work Physiology (3)
KIN 679  Exercise and Older Adults: Advanced (3)
KIN 696  Laboratory Technology in Kinesiology (1 or 2)
KIN 718  Cardiovascular Aspects of Exercise Physiology (3)
KIN 719  Muscular Aspects of Exercise Physiology (3)
KIN 724  Physical Activity and Health (3)

**Concentration Electives (12-18)**
With approval of the advisor, the student selects 12-18 hours of elective course work.

**Curriculum and Pedagogy Studies in Physical Education**

**Core Required Course (3)**

KIN 731  Curriculum Development in Kinesiology (3)

Core Grade Requirement for Curriculum and Pedagogy Studies in Physical Education M.S. students: Students must receive a B or better in KIN 731 to satisfy degree requirements. KIN 731 may be taken a maximum of 2 times to achieve this outcome. Withdrawal from the program will be recommended if the student fails KIN 731 the first time the course is taken. The student may appeal this decision to the Graduate Faculty in Curriculum and Pedagogy Studies in Physical Education. If a B or better is not earned after taking the course twice, the student will be automatically withdrawn with no opportunity to appeal.

**Concentration Core (6)**

Acceptable courses include:

KIN 570  Development and Implementation of Fitness Programs (3)
KIN 571  Physical Education for Individuals with Special Needs (Advanced) (3)
KIN 606  Workshops in Physical Education (1-3)
KIN 613  The Meaning and Significance of Physical Education (3)
KIN 617  Current Theories and Practice of Teaching Sports (3)
KIN 646  Theoretical Considerations of Physical Education for Children (3)
KIN 654  Seminar in Curriculum Development in Physical Education (3)
KIN 656  Psycho-Social Aspects of Teaching Physical Education and Sport (3)
KIN 657  Teacher Education in Physical Education (3)
KIN 658  Multiculturalism and Physical Education Curriculum (3)
KIN 663  Supervision of Physical Education (3)
KIN 731  Curriculum Development in Kinesiology (3)
KIN 732  Analysis of Teaching and Learning (3)
KIN 735  Program Evaluation and Evidence-Based Practice in Physical Activity Programs (3)

**Concentration Electives (12-18)**
With approval of the advisor, the student selects 12-18 hours of elective course work.

**Sport and Exercise Psychology Concentration**

**Core Required Course (3)**

KIN 644  Psychology of Sport and Exercise (3)

Core Grade Requirement for Sport and Exercise Psychology M.S. students: Students must receive a B or better in KIN 644 to satisfy degree requirements. KIN 644 may be taken a maximum of 2 times to achieve this outcome. Withdrawal from the program will be recommended if the student fails KIN 644 the first time the course is taken. The student may appeal this decision to the Graduate Faculty in Sport and Exercise Psychology. If a B or better is
not earned after taking the course twice, the student will be automatically withdrawn with no opportunity to appeal.

**Concentration Core (6)**

Acceptable courses include:

- KIN 635 Gender Issues in Kinesiology (3)
- KIN 645 Exercise Psychology (3)
- KIN 695 Independent Study (1-3)
- KIN 724 Physical Activity and Health (3)
- KIN 743 Psychological Aspects of Sport Injury (3)
- KIN 744 Applied Sport Psychology (3)
- KIN 745 Seminar: Social Psychology and Physical Activity (3)
- KIN 746 Practicum in Applied Sport and Exercise Psychology (1-3)
- KIN 748 Advanced Topics in Sport Exercise and Psychology (3)

**Concentration Electives (12-18)**

With approval of the advisor, the student selects 12-18 hours of elective course work.

**Course Work Only Option (36)**

**Research Techniques Requirement (3)**

- KIN 601 Applying Research to Professional Practice (3)

**Integrative Experience (Capstone)**

With approval of the advisor, the student selects one of the following (if a course option is selected, the hours are included in electives):

- KIN 695 Independent Study (1-3)
- KIN 713 Internship in Kinesiology (3-6)
- KIN 714 Field Practicum in Kinesiology (3-6)

**Comprehensive Examination**

The student’s advisor and two other Graduate Faculty members, in consultation with the student, develop one comprehensive examination question that requires integration of various bodies of knowledge related to the student’s course of study. The question should also be related to the student’s particular professional focus. The student may use the full range of available scholarly resources including discussion with faculty in developing the answer. The completed answer must be submitted within six weeks after receiving the question. All three faculty members evaluate the questions using “pass” and “not pass” standards.

**Electives (27-33 hours minimum)**

With approval of the advisor, the student selects a minimum of 27-33 hours of course work that constitutes a specialized knowledge base relevant to the student’s academic interests and goals. For those seeking a concentration in community youth sport development, exercise physiology, motor behavior, curriculum and pedagogy studies in physical education, sport and exercise psychology, or sports medicine, the specific course requirements follow.

**Community Youth Sport Development Concentration**

**Core Required Courses (8)**

- KIN 519 Mentoring in Community Youth Development Programs (2)
- KIN 520 Physical Activity Programs for Underserved Youth (3)
- KIN 521 Evaluation of Physical Activity Programs in Youth Development (3)

**Concentration Core (12)**

- CED 610 Helping Relationships (3)
- ENT 540/BUS 540/PCS 540/CST 540/SWK 540/WGS 540 Social Entrepreneurship: Justice and a Green Environment
HEA 671  Immigrant and Refugee Health (3)
KIN 519  Mentoring in Community Youth Development Programs (2)
KIN 695  Independent Study (1-3)
PSC 520  Urban Political System (3)
PSC 612  Organizational Behavior and Leadership (3)
PSC 620  Urban and Regional Development Policy (3)
SOC 621  Advanced Topics in Juvenile Delinquency (3)
SOC 643  Urban Sociology (3)
SOC 653  Deviance and Social Control (3)
SWK 527  Human Services for Immigrants and Refugees (3)
SWK 584  Social Services for Children (3)
TED 545  Diverse Learners (3)

**Concentration Electives (7-13)**
With approval of the advisor, the student selects 7-13 hours of elective course work.

**Integrative Experience (Capstone) (3-6)**
In this concentration area, students must select one of the following as their integrative (capstone) experience:
- KIN 622  Internship in Community Youth Sport Development Programs (6)
- KIN 713  Internship in Kinesiology (3-6)
- KIN 714  Field Practicum in Kinesiology (3-6)

**Exercise Physiology Concentration**

**Core Required Course (3)**
- KIN 670  Physiology of Exercise (3)

Students must receive a B or better in KIN 670 to satisfy degree requirements. KIN 670 may be taken a maximum of 2 times to achieve this outcome. Withdrawal from the program will be recommended if the student fails KIN 670 the first time the course is taken. The student may appeal this decision to the Graduate Faculty in Exercise Physiology. If a B or better is not earned after taking the course twice, the student will be automatically withdrawn with no opportunity to appeal.

**Concentration Core (12 hours minimum)**
Acceptable courses include:
- KIN 570  Development and Implementation of Fitness Programs (3)
- KIN 576  Nutrition and Physical Fitness (3)
- KIN 579  Exercise and Older Adults (3)
- KIN 650  Scientific Factors Affecting Human Performance (3)
- KIN 667  Exercise Electrocardiography and Cardiopulmonary Medications (3)
- KIN 668  Advanced Exercise Assessment (3)
- KIN 669  Advanced Exercise Prescription (3)
- KIN 675  Applied Human Work Physiology (3)
- KIN 679  Exercise and Older Adults: Advanced (3)
- KIN 696  Laboratory Technology in Kinesiology (1 or 2)
- KIN 718  Cardiovascular Aspects of Exercise Physiology (3)
- KIN 719  Muscular Aspects of Exercise Physiology (3)
- KIN 724  Physical Activity and Health (3)

**Concentration Electives (12-18)**
With approval of the advisor, the student selects 12-18 hours of elective course work.

**Motor Behavior Concentration**

**Concentration Core (12)**
Acceptable courses include:

- KIN 643  Mechanical Analysis of Motor Skills (3)
- KIN 647  Motor Development and Human Movement (3)
- KIN 651  Motor Behavior and Aging (3)
- KIN 661  Movement Theory (3)
- KIN 695  Independent Study (1-3)
- KIN 719  Muscular Aspects of Exercise Physiology (3)
- KIN 729  Learning and Performance of Physical Skills (3)
- KIN 730  Neural Aspects of Motor Control (3)

**Concentration Electives (15-21)**

With approval of the advisor, the student selects 15-21 hours of elective course work.

**Curriculum and Pedagogy Studies in Physical Education**

**Core Requirement (3)**

- KIN 731  Curriculum Development in Kinesiology (3)

Core Grade Requirement for Curriculum and Pedagogy Studies in Physical Education M.S. students: Students must receive a B or better in KIN 731 to satisfy degree requirements. KIN 731 may be taken a maximum of 2 times to achieve this outcome. Withdrawal from the program will be recommended if the student fails KIN 731 the first time the course is taken. The student may appeal this decision to the Graduate Faculty in Curriculum and Pedagogy Studies in Physical Education. If a B or better is not earned after taking the course twice, the student will be automatically withdrawn with no opportunity to appeal.

**Concentration Core (12)**

Acceptable courses include:

- KIN 570  Development and Implementation of Fitness Programs (3)
- KIN 571  Physical Education for Individuals with Special Needs (Advanced) (3)
- KIN 606  Workshops in Physical Education (1-3)
- KIN 613  The Meaning and Significance of Physical Education (3)
- KIN 617  Current Theories and Practice of Teaching Sports (3)
- KIN 646  Theoretical Considerations of Physical Education for Children (3)
- KIN 654  Seminar in Curriculum Development in Physical Education (3)
- KIN 656  Psycho-Social Aspects of Teaching Physical Education and Sport (3)
- KIN 657  Teacher Education in Physical Education (3)
- KIN 658  Multiculturalism and Physical Education Curriculum (3)
- KIN 663  Supervision of Physical Education (3)
- KIN 732  Analysis of Teaching and Learning (3)
- KIN 735  Program Evaluation and Evidence-Based Practice in Physical Activity Programs (3)

**Concentration Electives (12-18)**

With approval of the advisor, the student selects 12-18 hours minimum of elective course work.

**Sport and Exercise Psychology Concentration**

**Core Required Course (3)**

- KIN 644  Psychology of Sport and Exercise (3)

Core Grade Requirement for Sport and Exercise Psychology M.S. students: Students must receive a B or better in KIN 644 to satisfy degree requirements. KIN 644 may be taken a maximum of 2 times to achieve this outcome. Withdrawal from the program will be recommended if the student fails KIN 644 the first time the course is taken. The student may appeal this decision to the Graduate Faculty in Sport and Exercise Psychology. If a B or better is not earned after taking the course twice, the student will be automatically withdrawn with no opportunity to appeal.

**Concentration Core (6 hours minimum)**
Acceptable courses include:

KIN 635  Gender Issues in Kinesiology (3)
KIN 645  Exercise Psychology (3)
KIN 695  Independent Study (1-3)
KIN 724  Physical Activity and Health (3)
KIN 743  Psychological Aspects of Sport Injury (3)
KIN 744  Applied Sport Psychology (3)
KIN 745  Seminar: Social Psychology and Physical Activity (3)
KIN 746  Practicum in Applied Sport and Exercise Psychology (1-6)
KIN 748  Advanced Topics in Sport Exercise and Psychology (3)

**Concentration Electives (18-24)**

With approval of the advisor, the student selects 18-24 hours of elective course work.

**Sports Medicine Concentration**

**Concentration Core (12 hours minimum)**

Acceptable courses include:

KIN 576  Nutrition and Physical Fitness (3)
KIN 638  Therapeutic Modalities (4)
KIN 640  Rehabilitation Techniques for Athletic Injuries (4)
KIN 643  Mechanical Analysis of Motor Skills (3)
KIN 670  Physiology of Exercise (3)
KIN 708  College Teaching in Kinesiology (1)
KIN 709  Mentored Teaching in Kinesiology (1-3)
KIN 720  Pathophysiology and Pharmacology (3)
KIN 725  Management and Professional Issues in Athletic Training (3)
KIN 730  Neural Aspects of Motor Control (3)
KIN 743  Psychological Aspects of Sport Injury (3)

**Concentration Electives (15-21)**

With approval of the advisor, the student selects 15-21 hours of elective course work.

**Athletic Training, MSAT, (50)**

The 50-hour, entry-level Master of Science in Athletic Training, accredited by the Commission on Accreditation of Athletic Training Education (CAATE), provides academic and clinical instruction sufficient for eligibility to sit for the National Athletic Trainers’ Association Board of Certification (BOC) Examination.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Admission to the MSAT is competitive, limited, and not guaranteed to those who meet the minimum requirements. In addition to the admission requirements set forth by The Graduate School, applicants must also submit supplemental materials to the department as well as the Director of the Athletic Training Education Program as described at http://kin.uncg.edu/academic-programs/graduate/areas-of-study/athletic-training/application-process/. The following prerequisites are required for admission eligibility and must be verifiable during the application process:

Satisfactory completion (C or better) of prerequisite course work in human anatomy (lecture and lab), human physiology (lecture and lab), exercise physiology, biomechanics/kinesiology, and nutrition. A minimum of 200
hours of clinical observation/experience under a Certified Athletic Trainer within 2 years prior to program application.

The application deadline is January 15 of each calendar year after which qualified applicants will be invited by the Program Director to an on-campus visit for a personal interview at the applicant’s expense. Students must also verify that they can comply with the program’s technical standards. Detailed information regarding the application process, technical standards, expenses, prerequisites, and post-admission requirements are available at http://kin.uncg.edu/academic-programs/graduate/areas-of-study/athletic-training/application-process/.

Degree Requirements
Core Requirements (6)
- KIN 642 Optimizing Athletic Performance (3)
- KIN 720 Pathophysiology and Pharmacology (3)
Research Techniques (3)
- KIN 601 Applying Research to Professional Practice (3)
Athletic Training Requirements (29)
- KIN 536 Anatomical Basis of Athletic Injury (2)
- KIN 634 Athletic Training Foundations (3)
- KIN 636 Athletic Injury Evaluation (4)
- KIN 638 Therapeutic Modalities (4)
- KIN 640 Rehabilitation Techniques for Athletic Injuries (4)
- KIN 704 Athletic Training Seminar (3)
- KIN 705 Applied Rehabilitation Concepts (3)
- KIN 721 General Medical Conditions (3)
- KIN 725 Management and Professional Issues in Athletic Training (3)

Integrative Clinical Experience (12)
- KIN 620 Athletic Training Clinical Experience (Fall I) (3)
- KIN 620 Athletic Training Clinical Experience (Spring I) (3)
- KIN 620 Athletic Training Clinical Experience (Fall II) (3)
- KIN 620 Athletic Training Clinical Experience (Spring II) (3)

Note: KIN 620: Taken four times for 3 hours in each semester of the student’s program of study

Non-credit Professional Development Requirements
In addition to the 50 credit hours of course work, students are required to gain approximately two weeks of clinical experience during assigned pre-season athletic practices during August of each year in the program. Students are also required to attend weekly in-services and journal club sessions during each of the fall and spring semesters in the program.

Kinesiology, EdD (online) (54)
The EdD in Kinesiology (online) is an interdisciplinary degree program specifically for practicing professionals who have a minimum of three years professional experience in Kinesiology or related fields, and desire a doctorate focused on scholarship and professional practice in leadership, advocacy and teaching. The EdD in KIN (online) requires a minimum of 54 semester hours (42 of coursework and 12 hours of dissertation). Our aim is to bring together a community of scholars to develop action-oriented leaders in the field of Kinesiology.

Of the 54 hours of required course work, a minimum of 24 hours must be completed in KIN, excluding dissertation hours.
Application and Admission
In addition to the application materials required by The Graduate School, applicants must submit supplementary application materials required by the department and described in detail at http://kin.wp.uncg.edu/graduate-2/requirements-and-guidelines-for-application-for-graduate-study/.
Most applications are reviewed in the spring for fall admission. The application deadline to receive full consideration for admission is January 15; however, applications will be accepted through mid-April.

Degree Requirements

Campus Visits
Students will make three required visits to campus as part of this program to foster a sense of community with their peers and the UNCG faculty, to familiarize them with the technology, to complete the oral portion of their preliminary examination and dissertation proposal, and to complete their dissertation defense, while also fulfilling their residency requirement.

Required on-campus visits:
- Orientation (summer prior to YR 1 coursework; 3 day)
- Completion of comprehensive exam and dissertation proposal (YR 3 May/June; 5 day)
- Dissertation defense (YR 4 May/June; 3 day)

Course Requirements
- Program Leadership in Kinesiology 6-9 hours
- Interdisciplinary Concepts 6-9 hours
- Research/Inquiry/Problem Solving 9 hours
- Coursework in Support of Dissertation 6 hours
- Practicum/Independent Study and Electives 9-15 hours
- Dissertation 12 hours

Program Leadership in Kinesiology (6-9 hours minimum; KIN 750 required)
Coursework that supports leadership, teaching and advocacy in kinesiology and related fields. Students select 6-9 hours from the following. Other courses may be acceptable with advisor and committee approval.
- KIN 706 Online Pedagogy in Kinesiology and Related Professions (3)
- KIN 715 Professional Ethics in Health and Human Sciences (3)
- KIN 735 Program Evaluation and Evidence-Based Practice in Physical Activity Programs (3)
- KIN 750 Seminar in Kinesiology (3)
- KIN 762 Program Design in Kinesiology and Related Professions (3)

Interdisciplinary Concepts in Kinesiology (6-9 hours minimum)
Courses spanning the kinesiology disciplinary areas. Students select 6-9 hours from the following. Other courses may be acceptable with advisor and committee approval.
- KIN 722 Physical Activity and Health (3)
- KIN 729 Motor Learning and Performance (3)
- KIN 731 Curriculum Development in Kinesiology (3)
- KIN 732 Analysis of Teaching and Learning (3)
- KIN 745 Social Psychology and Physical Activity (3)

Research/Inquiry/Problem-Solving (9 hours; KIN 701, 723, and 716 required)
With the approval of the advisory committee, students select at least 9 hours from the following. Other courses may be acceptable with advisor and committee approval.
- KIN 701 Research Topics in Kinesiology (3)
- KIN 716 Mixed Methods in Kinesiology Research (3)
KIN 717  Qualitative Methods in Kinesiology (3)
KIN 723  Statistical Methods for Kinesiology (3)

Course Work in Support of Dissertation (6 hours; KIN 751 and 798 required)
Students complete 6 hours of course work relevant to the dissertation and ultimate professional goals. Other courses may be acceptable with advisor and committee approval.
KIN 751  Advanced Research Seminar in Kinesiology (3)
KIN 798  Doctoral Seminar in Grant Writing (3)

Practicum/Independent Study and Electives (9-15 hours)
Students select 9-15 hours of additional courses. These courses may be from any of the above categories or other courses approved by the advisory committee. At least 3 hours must be selected from the following.
KIN 695  Independent Study (1-3)
KIN 713  Internship in Kinesiology (3-6)
KIN 714  Field Practicum in Kinesiology (3-6)
KIN 722  Problems Seminar (3)
KIN 795  Independent Doctoral Research (1-6)

Dissertation (12)
KIN 799  Dissertation (1-12)

Kinesiology, MS/PhD, (78)
The combined MS/PhD track in Kinesiology consists of a minimum of 78 semester hours beyond the baccalaureate degree. It is anticipated that the Plan of Study for the MS/PhD Track will reasonably span 5 years. By the end of Year 2, students will enroll in a minimum of 6 hours of integrative/research related activity to meet the requirements of the MS degree if they choose not to continue on to completion of the PhD degree. For those students already enrolled in the MS degree, it is expected their MS course work will already include many of the foundational courses for their discipline. In this case, additional course work in Years 3 and 4 will primarily consist of intensive research and dissertation credit hours. Specific course work will be determined by the student’s advisor and advisory committee, consistent with each sub-discipline. A general outline of requirements is below:

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit supplementary application materials required by the department.

Exceptional students who have an appropriate baccalaureate degree and who demonstrate superior ability and a high level of motivation and dedication to research and learning are eligible to apply directly into the MS/PhD track. Current master’s degree students in kinesiology who wish to pursue the PhD may apply once they have completed at least 18 credits of foundational course work in their discipline, have demonstrated dedication to research, and have not yet formally proposed their thesis. Students must apply for admittance to the MS/PhD and must identify one of the possible concentration areas (Applied Neuromechanics, Exercise Physiology, Curriculum and Pedagogy Studies in Physical Education, Sport and Exercise Psychology, or Kinesiology.)

Degree Requirements
Requirements (78 Hours Minimum)
• Breadth Requirement (0-6). Please see description under MS degree requirements.
• Integrative experience (6)
• Research methods (3)
• Research tools and statistics (12)
• Independent doctoral research (KIN 795) or equivalent (minimum of 6)
• Electives in major concentration area (33)
• Dissertation (12)

Items 1-3 plus 15-21 hours of electives are required to complete the MS degree. (See the requirements for the MS Thesis and Non-Thesis options.) Items 1-7 are required to complete the MS/PhD. A minimum of 9 credits must be in courses numbered 750 and above.

Program Progression

Year One:
18 hours of course work, to include courses related to the research process
Benchmark: Preliminary screening (early/mid semester 2)

Year Two:
18 hours of course work, to include courses related to the research process
Benchmark: Oral and written demonstration of research competence (end of semester 2)

Years Three and Four:
Completion of remaining course work
Benchmark: Comprehensive examination (oral and written)

Year Five:
12 hours dissertation
Benchmark: Completion of and oral defense of dissertation

Required Benchmarks

Continued progression in the MS/PhD track is contingent on satisfactory progress through each year of study. Progress will be formally assessed each Spring as follows:

Year One:

Preliminary Screening (Early/Mid Spring)
The preliminary screening will consist of a formal evaluation of the scholarly work completed from the time of admission through the completion of 18 hours of course work (counting work in progress in a current term). This screening must occur during the second semester of study, so that a decision can be made prior to admission and graduate assistantship decisions for the upcoming Fall. An advisory committee consisting of a minimum of 3 members (the student’s advisor, Director of Graduate Study, and at least one other) will conduct the first year preliminary screening review. The intent is to determine relatively early in students’ academic careers whether or not they display the high quality of academic achievement necessary to pursue and successfully complete the doctoral degree. Excellent students will be encouraged to continue in the program. Students who do not meet the requirements will be strongly urged through counseling by their advisory/dissertation committee to complete the MS degree level and pursue other intellectual/career avenues.

In order to progress to Year 2, all members of the student’s preliminary screening committee must review all criteria and confirm satisfactory progress in the preliminary evaluation.

Year Two:

Research Competence (End of Spring Semester)
Students will be expected to be actively engaged in research from the beginning of their studies in Year 1. In Year 2, students will be expected to complete a comprehensive research project by the end of their second year of study. This project should encompass all aspects of the research process, including the following:
• Conception and design of the project
• Acquisition and reduction of the data
• Analysis and interpretation of the data
• Written summary of the work (e.g. Submission ready manuscript)
• Oral presentation of the work

To progress to Year 3, the student’s MS/PhD advisory committee must approve the work.

**Year Three:**

**Comprehensive Examination**

When the student has completed a minimum of ¾ of the course work (60) contained in the program of study and completed the research skill requirements, they are then eligible to take the comprehensive examinations. Each doctoral student is required to pass the doctoral preliminary examinations which consist of both a written and oral examination, per the guidelines of The Graduate School and the Department of Kinesiology.

For more information, please visit http://kin.wp.uncg.edu/graduate-2/graduate-prospective-overview/.

Kinesiology, PhD, (60)
The PhD in Kinesiology requires a minimum of 60 semester hours. Some students are required to take additional hours beyond the minimum. Students may choose to take a general course of study in kinesiology or choose from four concentration areas: applied neuromechanics, exercise physiology, curriculum and pedagogy studies in physical education, and sport and exercise psychology. Students must complete a minimum of 24 hours in kinesiology, excluding dissertation hours.

**Application and Admission**

In addition to the application materials required by The Graduate School, applicants must submit supplementary application materials required by the department.

**Degree Requirements**

**Collateral Expertise**

The student is expected to work on research projects beyond those required in courses and to demonstrate to the faculty of the Department that progress in these endeavors is satisfactory.

**Research Techniques (12)**

With the approval of the Advisory Committee, the student selects a minimum of 12 hours of course work focused on research techniques.

**Dissertation (12)**

KIN 799 Dissertation (1-12)

**Electives (36)**

With the approval of the Advisory Committee, the student selects at least 36 hours of course work tailored to meet his/her particular academic goals. This should include course work in a specialized knowledge base and course work in other areas of kinesiology and/or other departments. For those seeking a concentration in applied neuromechanics, exercise physiology, curriculum and pedagogy studies in physical education, or sport and exercise psychology the 36 hours are designated as follows.

**Applied Neuromechanics Concentration**

**Concentration Core (24)**

KIN 643 Mechanical Analysis of Motor Skills (3)
KIN 702 Research Seminar in Applied Neuromechanics (1)
KIN 708 College Teaching in Kinesiology (1)
KIN 709 Mentored Teaching in Kinesiology (1-3)
KIN 719 Muscular Aspects of Exercise Physiology (3)
KIN 730  Neural Aspects of Motor Control (3)
KIN 795  Independent Doctoral Research (1-6)
KIN 798  Doctoral Seminar in Grant Writing (3)

**Concentration Electives (12)**
With approval of the advisor, students must complete a minimum of 12 hours of course work in other areas of kinesiology.

**Exercise Physiology Concentration**

**Concentration Core (9)**
- KIN 670  Physiology of Exercise (3)
- KIN 718  Cardiovascular Aspects of Exercise Physiology (3)
- KIN 719  Muscular Aspects of Exercise Physiology (3)

**Concentration Electives (12)**
- KIN 576  Nutrition and Physical Fitness (3)
- KIN 650  Scientific Factors Affecting Human Performance (3)
- KIN 667  Exercise Electrocardiography and Cardiopulmonary Medications (3)
- KIN 668  Advanced Exercise Assessment (3)
- KIN 669  Advanced Exercise Prescription (3)
- KIN 675  Applied Human Work Physiology (3)
- KIN 679  Exercise and Older Adults: Advanced (3)
- KIN 696  Laboratory Technology in Kinesiology (1 or 2)
- KIN 701  Research Topics in Kinesiology (3)
- KIN 724  Physical Activity and Health (3)

**Required Research prior to Dissertation (6 hours minimum)**
- KIN 695  Independent Study (1-3)
- KIN 795  Independent Doctoral Research (1-6)

**Additional Electives (9)**
With approval of the advisor, students must complete a minimum of 9 hours of course work in other areas of kinesiology.

**Curriculum and Pedagogy Studies in Physical Education Concentration**

**Concentration Core (18)**
Acceptable courses include:
- KIN 570  Development and Implementation of Fitness Programs (3)
- KIN 571  Physical Education for Individuals with Special Needs (Advanced) (3)
- KIN 606  Workshops in Physical Education (1-3)
- KIN 613  The Meaning and Significance of Physical Education (3)
- KIN 617  Current Theories and Practice of Teaching Sports (3)
- KIN 646  Theoretical Considerations of Physical Education for Children (3)
- KIN 654  Seminar in Curriculum Development in Physical Education (3)
- KIN 656  Psycho-Social Aspects of Teaching Physical Education and Sport (3)
- KIN 657  Teacher Education in Physical Education (3)
- KIN 658  Multiculturalism and Physical Education Curriculum (3)
- KIN 663  Supervision of Physical Education (3)
- KIN 735  Program Evaluation and Evidence-Based Practice in Physical Activity Programs (3)
- KIN 707  Critical Analysis of Professional Literature in Pedagogical Kinesiology (3)
- KIN 731  Curriculum Development in Kinesiology (3)
- KIN 732  Analysis of Teaching and Learning (3)
KIN 734  Measurement Theory Applied to Pedagogical Kinesiology (3)
KIN 749  PE Learning and Motivation Advanced Seminar (3)
KIN 785  Curriculum Theory in PE Advanced Seminar (3)

**Concentration Electives (18)**

With approval of the advisor, the student must complete 18 hours of 600-to 700-level elective course work that complements the specialized knowledge base relevant to the student’s academic interest and career goals.

**Sport and Exercise Psychology Concentration**

**Concentration Core (9)**

Specialization area courses relate to the student’s research focus and sport/exercise psychology interests. Course work should include advanced sport/exercise psychology courses (e.g., KIN 744, KIN 745, advanced topics).

Acceptable courses include:

- KIN 635  Gender Issues in Kinesiology (3)
- KIN 644  Psychology of Sport and Exercise (3)
- KIN 645  Exercise Psychology (3)
- KIN 695  Independent Study (1-3)
- KIN 724  Physical Activity and Health (3)
- KIN 743  Psychological Aspects of Sport Injury (3)
- KIN 744  Applied Sport Psychology (3)
- KIN 745  Seminar: Social Psychology and Physical Activity (3)
- KIN 746  Practicum in Applied Sport and Exercise Psychology (1-3)
- KIN 748  Advanced Topics in Sport Exercise and Psychology (3)
- KIN 795  Independent Doctoral Research (1-6)

**Concentration Electives (27)**

With approval of the advisor, students must complete a minimum of 27 hours of elective course work.

**Residency**

The Department does not recognize summer session as part of the residency requirement for PhD students. Two consecutive 15-week semesters of study in which a student is enrolled for a minimum of 6 hours of course work each term is needed to satisfy the residency requirement. Course work taken in summer sessions may, of course, be included in a student’s program.

**Formal Reviews and Examinations**

The student must pass each of the reviews and examinations listed below. See this catalog and the KIN Graduate web site for details.

- Approval of Plan of Study
- Preliminary examination
- Dissertation proposal approval
- Advancement to candidacy
- Final oral examination

**KIN – Kinesiology Graduate Courses**

**KIN 519 Mentoring in Community Youth Development Programs (2:1:2)**

Service learning experience mentoring an elementary or middle school youth in a community youth sport program. On campus seminars required.

*Offered*

Fall & Spring

*Notes*
May be repeated for credit.

**KIN 520 Physical Activity Programs for Underserved Youth (3:3)**
Overview of community-based programs designed to meet the needs of underserved youth; roles of universities and community agencies in such programs; development of leadership skills.

*Offered*
Spring

**KIN 521 Evaluation of Physical Activity Programs in Youth Development (3:3)**
Examination of traditional and nontraditional strategies for effective youth program evaluation; attention to analysis and interpretation of data used in conducting such evaluations.

*Prerequisite*
KIN 520

*Offered*
Spring

**KIN 531 Issues in Competitive Sports for Children and Youth (3:3)**
In-depth examination of significant issues related to competitive sports in the lives of today's children and youth. Special attention given to studying the roles and responsibilities of the adults involved.

*Prerequisite*
Permission of instructor

**KIN 532 Women in Sport and Physical Activity (3:3)**
Examination of women's experiences in sport and physical activity. Consideration of historical, biological, psychological, and socio-cultural perspectives.

*Prerequisite*
Junior standing or higher in Kinesiology or Women’s and Gender Studies, or permission of instructor

**KIN 536 Anatomical Basis of Athletic Injury (2:1:3)**
Focus on the link between anatomical structure, function, and athletic injury evaluation. The functional consequence of injury and rehabilitation on anatomical structures will also be addressed.

*Prerequisite*
Undergraduate anatomy and physiology

*Offered*
Summer

**KIN 545 Psychology of Coaching (3:3)**
Overview of sport psychology principles applied to the teaching and coaching of sport activities.

*Prerequisite*
PSY 121 or permission of instructor

**KIN 550 Sports Clinic (1)**
Designed to improve teaching and coaching techniques in various sports utilizing current game strategies.

**KIN 560 Aquatic Therapeutic Modalities (3:2:2)**
Mobility assessment and identification of contraindications for movement therapies used in therapeutic aquatics; development of techniques and protocols to increase mobility/decrease pain in persons with disability/injury.

*Offered*
Fall

Notes
KIN 459 or KIN 550 recommended

KIN 565 History of the Olympic Games (3:3)
Development of the Olympic Games movement in both the ancient world and modern era. Consideration of cultural, philosophical, political, economic, and performance perspectives.

Offered
Spring

KIN 570 Development and Implementation of Fitness Programs (3:3)
Preparation in planning, designing, developing, organizing, programming, implementing, directing, and evaluating fitness programs.

Prerequisite
Grade of C or higher in KIN 468; 2.50 GPA; KINE major with Fitness Leadership concentration or permission of instructor.

Corequisite
KIN 469

Offered
Fall

KIN 571 Physical Education for Individuals with Special Needs (Advanced) (3:3)
Advanced study of physical education for persons with mental and physical disabilities. Clinical experience is provided.

Prerequisite
KIN 381 or permission of instructor

KIN 576 Nutrition and Physical Fitness (3:3)
Metabolism during exercise, ergogenic aids, nutrients’ effects on performance, and body composition alterations during training. Gender and age-specific needs and responses to exercise and dietary intake.

Cross Listed Courses
Same as NTR 576

Prerequisite
Grade of C (2.0) or better in BIO 277, NTR 213, and NTR 413 or equivalent required. KIN 375 recommended.

KIN 578 Needs Assessment of Persons with Disabling Conditions (3:3)

Prerequisite
Permission of instructor

KIN 579 Exercise and Older Adults (3:3)
Basic principles underlying exercise/aging. The delivery of exercise information and the conduct of exercise programs for older adults.

Prerequisite
Junior admission only by permission of instructor
KIN 589 Experimental Course
This course number reserved for experimental courses. Refer to the Course Schedule for current offerings.

KIN 595 Kinesiology Internship (3:1:10 or 6:1:20)
A supervised field experience in qualified agencies. Application process is required for permission to register. Course involves specific assignments, supervision, seminars on campus, and evaluation of student’s performance.
Prerequisite
KIN 471; completion of all KIN major core courses and additional concentration courses; 2.50 overall GPA; KIN major or permission of instructor
Notes
An application process must be completed prior to registration. Course may be repeated for credit if taken for three (3) credits; total hours for course may not exceed six (6) credits

KIN 601 Applying Research to Professional Practice (3:3)
This course is designed for future practitioners in health and physical activity to gather, read, interpret, assess, and apply research to their fields.

KIN 606 Workshops in Physical Education (1–3)
Practices, problems, and new approaches in physical education. Individual study and writing.
Notes
May be repeated for credit.

KIN 611 Research Methods for Kinesiology (3:3)
Concepts and methods of research for kinesiology; formulation of problems, design and methodologies, evaluation of research, development of research proposals.

KIN 612 Research in Kinesiology II: Advanced Topics (3:3)
Examination of selected strategies, methods, statistical or interpretative analytic processes used in kinesiology research.
Prerequisite
KIN 611 or permission of instructor
Notes
May be repeated for credit when topic varies.

KIN 613 The Meaning and Significance of Physical Education (3:3)
Integration and application of principles related to the art and science of human movement as a foundation for a practical philosophy of contemporary physical education.

KIN 614 Qualitative Inquiry in Health and Human Performance (3:3)
Concepts and methods of qualitative research in health and human performance. Philosophical and practical approaches to collection, management, analysis, and presentation of qualitative data.

KIN 617 Current Theories and Practice of Teaching Sports (3:3)
Contemporary approaches to sports analysis and sports teaching in instructional physical education.

KIN 620 Athletic Training Clinical Experience (3:0:20)
Supervised field experience in an assigned athletic training clinical setting. Students are required to complete 300 clock hours under the supervision of an approved clinical instructor.
Prerequisite
Admission to the MSAT degree program

Notes
Must be taken four times.

KIN 622 Internship in Community Youth Sport Development Programs (6:1:15)
Supervised field experience in qualified agencies. Course involves specific assignments, seminars on campus, and evaluation of student's performance.

Prerequisite
KIN 520, KIN 521

Offered
(Fall & Spring & Summer)

Notes
Grade: Satisfactory/Unsatisfactory, S/U

KIN 630 Sport and Society: Social Inequalities (3:3)
Survey of current theories and research in the sociological study of sport, physical activity, and exercise; focus on sport and major social institutions, social inequalities, and social change.

Prerequisite
KIN 330, introductory sociology, or permission of instructor

KIN 632 Sport and Society: Global and Ethnic Relations (3:3)
Structural and ideological dimensions of international, national, and local sport. Analysis of the political economy of sport, including colonialism, neo-colonialism, national identities, and social movements.

Prerequisite
KIN 630 or permission of instructor

KIN 634 Athletic Training Foundations (3:2:4)
Introduction of concepts and skills related to the prevention and treatment of athletic injuries, and management of life-threatening and catastrophic injuries.

Prerequisite
Admission to MSAT degree program or permission of instructor

KIN 635 Gender Issues in Kinesiology (3:3)
Interdisciplinary seminar emphasizing psycho-social issues and feminist perspectives on gender relations in sport and physical activity. Topics include historical, biological, psychological and socio-cultural influences and interrelations.

KIN 636 Athletic Injury Evaluation (4:3:3)
Recognizing and evaluating orthopedic injuries commonly sustained in the athletic environment. Additional topics include the body's pathological response to injury, methods of documentation, and development of psychomotor competencies in orthopedic evaluations.

Prerequisite
Admission into the MSAT degree program or permission of instructor

Corequisite
Admission into the MSAT degree program or permission of instructor

KIN 637 Athletic Injury Evaluation Laboratory (1:0:3)
Laboratory course focused on the development of psychomotor competencies in orthopedic injury evaluation.

**Prerequisite**
Admission to MSAT degree program or permission of instructor

**Notes**
A $25 lab fee for supplies required.

**KIN 638 Therapeutic Modalities (4:3:3)**
Theoretical foundation of therapeutic modalities as a component of athletic injury reconditioning programs. Theory and clinical aspects of delivery of therapeutic modalities are examined.

**Prerequisite**
Admission into the MSAT degree program or permission of instructor

**Corequisite**
Admission into the MSAT degree program or permission of instructor

**KIN 639 Therapeutic Modalities Laboratory (1:0:3)**
Laboratory course focused on the development of psychomotor competencies in therapeutic modalities.

**Prerequisite**
Admission to MSAT degree program or permission of instructor

**Notes**
A $25 lab fee for supplies required.

**KIN 640 Rehabilitation Techniques for Athletic Injuries (4:3:3)**
Awareness, understanding, and application of principles and skills pertaining to rehabilitation of injuries in physically active populations.

**Prerequisite**
Admission into the MSAT degree program or permission of instructor

**Corequisite**
Admission into the MSAT degree program or permission of instructor

**KIN 641 Rehabilitation Techniques Laboratory (1:0:3)**
Laboratory course focused on the development of psychomotor competencies in therapeutic exercise and rehabilitation techniques.

**Prerequisite**
Admission to MSAT degree program or permission of instructor

**Notes**
A $25 lab fee for supplies required.

**KIN 642 Optimizing Athletic Performance (3:2:3)**
Exploration of sports nutrition, ergogenic aids, and strength and conditioning principles within the context of sport injury and rehabilitation.

**Prerequisite**
Admission to MSAT degree program or permission of instructor

**KIN 643 Mechanical Analysis of Motor Skills (3:3)**
Mechanical principles applied to the teaching and analysis of selected sports activities; evaluation of modern biomechanical techniques.

**KIN 644 Psychology of Sport and Exercise (3:3)**
Theories and research related to sport psychology; individual differences, motivation and social influence processes related to sport and exercise behavior.

**Prerequisite**
Introductory psychology or permission of instructor

**KIN 645 Exercise Psychology (3:3)**
Examination of the effects of exercise on various factors (e.g., stress, mood) and the effects of psychological variables (e.g., biofeedback, motivation) on exercise.

**Prerequisite**
KIN 644, KIN 575 or permission of instructor

**KIN 646 Theoretical Considerations of Physical Education for Children (3:3)**
Theories upon which the current physical education program for children ages 4-12 are based. Relationship between theory and practice and implications for teacher education.

**KIN 647 Motor Development and Human Movement (3:3)**
Changes of motor behavior over time and factors that affect these changes. Ability to observe movement and interpret it developmentally. Laboratory experiences.

**KIN 650 Scientific Factors Affecting Human Performance (3:3)**
Assessment and analysis of human performance through the application of basic principles and current research in biomechanics and exercise physiology.

**KIN 651 Motor Behavior and Aging (3:3)**
Changes in motor behavior at the upper end of the life span, focuses on improvement/maintenance of quality of life and activities of daily living.

**KIN 653 History of American Sport and Exercise Science (3:3)**
Study of development of sport and exercise science in the U.S. with special emphasis on the evolving institutional involvement of schools and colleges.

**KIN 654 Seminar in Curriculum Development in Physical Education (3:3)**
Current theories and research in curriculum and instruction in the field of physical education.

**Prerequisite**
KIN 731, ELC 615, or permission of instructor

**KIN 656 Psycho-Social Aspects of Teaching Physical Education and Sport (3:3)**
Social and psychological factors that influence instructional interactions and the perceptions of teachers, coaches and students.

**Prerequisite**
Previous teaching experiences or permission of instructor

**KIN 657 Teacher Education in Physical Education (3:3)**
Theoretical and practical dimensions of teacher education programs in physical education as reflected in current texts, accreditation standards, and research in teaching and teacher education. Limited field work included.

**KIN 658 Multiculturalism and Physical Education Curriculum (3:3)**
Cultures, cultural influence, race, gender and class roles, as they intersect with physical ability in physical activity, hidden curriculum issues, diverse cultures as curricular resources, culturally relevant pedagogy in PE.

**KIN 661 Movement Theory (3:3)**
The theoretical structure of human movement; opportunity for developing an individual theory of movement.

**KIN 663 Supervision of Physical Education (3:3)**
Current theoretical approaches to supervision with practice using teacher behavior observation tools and techniques to supervise undergraduate student teachers in physical education and health settings.

**KIN 667 Exercise Electrocardiography and Cardiopulmonary Medications (3:3)**
Electrocardiography and mechanisms/side effects of cardiopulmonary medications most likely encountered in clinical exercise settings. Particularly appropriate for students interested in cardiopulmonary rehabilitation and clinical exercise testing.

*Prerequisite*
KIN 375 or equivalent or permission of instructor. Coreq. KIN 670 or permission of instructor

**KIN 668 Advanced Exercise Assessment (3:2:2)**
Exercise testing for cardiorespiratory fitness and disease diagnosis. Knowledge of ECG interpretation and cardiorespiratory pharmacology applied to clinical exercise testing. Also covers body composition and musculoskeletal fitness testing.

*Prerequisite*
KIN 468 or equivalent, KIN 670, or permission of instructor

**KIN 669 Advanced Exercise Prescription (3:3)**
Prescription of exercise for healthy, at-risk, and diseased individuals. Covers exercise prescription objectives for American College of Sport’s Medicine’s Exercise Specialist and Health Fitness certifications.

*Prerequisite*
KIN 670 or permission of instructor

**KIN 670 Physiology of Exercise (3:3)**
In-depth study of the physiological basis of human physical performance with emphasis on the acute response and chronic adaptations of the body to exercise.

*Prerequisite*
KIN 375 or permission of instructor

**KIN 675 Applied Human Work Physiology (3:3)**
Physiological factors which influence the exercise and performance capabilities of humans.

*Prerequisite*
KIN 375 or equivalent, or by permission of instructor

**KIN 679 Exercise and Older Adults: Advanced (3:3)**
Scientific and theoretical bases of exercise/aging and guidelines regarding leadership and planning of exercise programs.

*Prerequisite*
Previous course work in motor development, motor learning and exercise physiology

**KIN 695 Independent Study (1–3)**

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Intensive study in an area of special interest in physical education.

Prerequisite
Demonstrated competency for independent work and permission of departmental academic adviser and the instructor

**KIN 696 Laboratory Technology in Kinesiology (1:0:3 or 2:0:6)**
Cost, function, and operation of laboratory equipment used in the area of exercise science (e.g., oxygen consumption, cinematography, body composition, kinetic analysis, specific computer applications, and timing techniques).

Prerequisite
KIN 670 or KIN 718 and KIN 643

**KIN 699 Thesis (1–6)**

**KIN 700 Special Topics in Kinesiology (3)**
Advanced study in special topics from the various subspecialties within the field of kinesiology.

Prerequisite
Prerequisites and defined research competencies will vary according to topic

Notes
May be repeated for credit when topic varies.

**KIN 701 Research Topics in Kinesiology (3:3)**
Intensive examination of specific topics; critical review of current literature.

Prerequisite
Prerequisites and defined research competencies will vary according to topic

Notes
May be repeated for credit when topic varies.

**KIN 702 Research Seminar in Applied Neuromechanics (1:1)**
Exploration of the assessment of neuromechanical function of the extremities and its relationship to performance, joint instability, and injury risk.

Prerequisite
Graduate student in KIN with an applied neuromechanical focus or permission of instructor

Notes
May be repeated for a total of 3 hours credit when topic varies. Grade: Satisfactory/Unsatisfactory, S/U

**KIN 703 Teaching Undergraduates in Health and Human Sciences (3:2:3)**
Analysis and application of innovative approaches to undergraduate course design, teaching, and evaluation in Health and Human Sciences.

**KIN 704 Athletic Training Seminar (3:3)**
Study course for the National Athletic Trainers’ Association Board of Certification (BOC) examination involving review examinations and projects on the 5 BOC practice domains for athletic training.

Prerequisite
Admission into the MSAT degree program or permission of instructor

Corequisite
Admission into the MSAT degree program or permission of instructor
KIN 705 Applied Rehabilitation Concepts (3:0:10)
Capstone experience involving the supervision of a comprehensive orthopedic rehabilitation project and writing a final document to summarize patient outcomes.
Prerequisite
Admission into the MSAT degree program or permission of instructor
Corequisite
Admission into the MSAT degree program or permission of instructor

KIN 706 Online Pedagogy in Kinesiology and Related Professions (3:2:3)
Online course design in Kinesiology and related professions using evidence-based best practices. Creation of online course and its modules using a collaborative, learner-centered approach to online instruction.

KIN 707 Critical Analysis of Professional Literature in Pedagogical Kinesiology (3:3)
Analysis, synthesis, and critique of scientific, critical, post-modern, poststructural, and phenomenological literature in pedagogical kinesiology.
Prerequisite
KIN 731, KIN 654, or permission of instructor

KIN 708 College Teaching in Kinesiology (1:1)
Introduction to issues and methods for teaching kinesiology in higher education. Seminar and online discussion format.
Prerequisite
Permission of instructor
Notes
Grade: Satisfactory/Unsatisfactory, S/U.

KIN 709 Mentored Teaching in Kinesiology (1–3)
Mentored teaching experience in kinesiology developed by student and faculty mentor, beyond graduate assistantship.
Prerequisite
Permission of instructor
Notes
May be repeated for a maximum of 6 credits. Grade: Satisfactory/Unsatisfactory, S/U.

KIN 710 Sport and Feminisms (3:3)
Emergence of U.S. feminist theories, including U.S. Third World feminisms. Application of feminisms to sport as cultural practice.
Prerequisite
Undergraduate/graduate feminist theory course or permission of instructor

KIN 711 Experimental Course (3:3)
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

KIN 712 Current Research and Issues in Sport and Exercise Psychology (1:1)
Exploration of current research and issues within sport and exercise psychology; emphasis on developing a broad understanding of sport and exercise psychology scholarship and its relationship to Kinesiology. May be repeated for a total of 3 hours credit when topic varies. (Graded on S-U basis)
KIN 713 Internship in Kinesiology (3–6)
Supervised field experience appropriate to the student’s interests and background in selected settings during the final phases of the student’s curricular plan.
Prerequisite
Permission of instructor in addition to the following: cumulative GPA of 3.0 or better; completed Core Required Course(s) or Core Requirement for concentration area with grade of B or better. KIN 713A - For internships that are not in preventative or clinical settings. No additional prerequisites. KIN 713B - For internships in preventative or clinical settings. Additional prerequisite: Grade of P in KIN 471.
Notes
May be repeated once for credit. Grade: Satisfactory/Unsatisfactory, S/U

KIN 714 Field Practicum in Kinesiology (3–6)
Developing, implementing, and/or evaluating a focused set of professional activities in a field setting. Requires guidance, approval, and evaluation by one faculty member.
Notes
May be repeated for a maximum of 9 credits. Grade: Satisfactory/Unsatisfactory, S/U.

KIN 715 Professional Ethics in Health and Human Sciences (3:3)
A view of professional ethics in health and human sciences through the lens of Boyer’s model of scholarship (discovery/integration, application, teaching/learning).

KIN 716 Mixed Methods in Kinesiology Research (3:3)
An overview of mixed method approaches to research in kinesiology with an emphasis on practical application.

KIN 717 Qualitative Research Methods in Kinesiology (3:2:3)
Research design and methods for health and human science settings including data source sampling; collection/analysis of artifact, observation, interview, focus group data; within case analysis, writing case reports.
Notes
Formerly KIN 615.

KIN 718 Cardiovascular Aspects of Exercise Physiology (3:3)
Effects of acute and chronic exercise on heart function and size, peripheral vasculature, hemodynamics and cardiac output.
Prerequisite
KIN 670 or permission of instructor
Notes
Formerly KIN 678.

KIN 719 Muscular Aspects of Exercise Physiology (3:3)
Effects of acute and chronic exercise on muscular mechanics, blood supply, size of muscle, fiber types, fatigue and physical performance.
Prerequisite
KIN 670 or permission of instructor
Notes
Formerly KIN 677.

KIN 720 Pathophysiology and Pharmacology (3:3)
In-depth study of the pathophysiology and pharmacologic treatment of major illnesses, injuries, and diseases observed in clinical settings.

**Prerequisite**

KIN 375 and BIO 111 or equivalent or permission of instructor

**KIN 721 General Medical Conditions (3:2:4)**

Lecture and laboratory experiences to develop clinical skills in assessment and management of general medical situations common to athletic training.

**Prerequisite**

Admission to MSAT degree program or permission of instructor, Coreq. 720

**Notes**

Lab fee for supplies required.

**KIN 722 Problems Seminar (3:3)**

Specific course title identified each semester by subscript, e.g., Problems Seminar: Tension and Relaxation Theories Applied to Sports.

**Prerequisite**

Previous course work in appropriate content areas

**Notes**

May be repeated for credit when topic varies. Formerly KIN 676.

**KIN 723 Statistical Methods for Kinesiology (3:3)**

Basic statistics with applications for kinesiology.

**Notes**

Formerly KIN 610.

**KIN 724 Physical Activity and Health (3:3)**

Health benefits and risks of physical activity/exercise. Course content parallels the 1996 U.S. Surgeon General’s report Physical Activity and Health with updated referencing.

**Prerequisite**

KIN 375 or equivalent or permission of instructor

**Notes**

Formerly KIN 665.

**KIN 725 Management and Professional Issues in Athletic Training (3:3)**

The administration and organization of athletic training health care programs and facilities. Current issues in athletic training professional conduct and practice will also be discussed.

**Prerequisite**

Admission to MSAT degree program or permission of instructor

**KIN 729 Learning and Performance of Physical Skills (3:3)**

Application of principles of learning to the learning and performance of physical skills, including the social, emotional, and personality factors affecting skill acquisition.

**Prerequisite**

General and developmental psychology (9 hrs.), or permission of the instructor

**Notes**

Formerly KIN 648.
KIN 730 Neural Aspects of Motor Control (3:3)
Multi-disciplinary seminar exploring theories and mechanisms of neuromuscular control of human movement.
Prerequisite
Undergraduate survey course in motor learning/control or permission of instructor

KIN 731 Curriculum Development in Kinesiology (3:2:3)
Modern principles and practices in curriculum construction and current theories of curriculum development in Kinesiology.

KIN 732 Analysis of Teaching and Learning (3:3)
Introduction to quantitative and qualitative methods for evaluating teaching and learning including techniques of classroom observation, classroom climate analysis, and student engagement. Extends the research competencies of those interested in pedagogical assessment.

KIN 733 Practicum in Supervision of Physical Education (1–3)
Individually directed experiences in the organization and evaluation of field experiences in teacher education.
Prerequisite
KIN 663 or permission of instructor

KIN 734 Measurement Theory Applied to Pedagogical Kinesiology (3:3)
Measurement theory necessary to the planning, construction, and use of tests in physical education and athletics.
Prerequisite
KIN 723 or equivalent or permission of instructor

KIN 735 Program Evaluation and Evidence-Based Practice in Physical Activity Programs (3:1:3)
Concepts, processes and methods, results interpretations, and issues in the evaluation of in physical activity programs/interventions; reflection and critique of different evaluation philosophies, theories, methods, and policy ramifications in program evaluation.

KIN 738 Sport-based Youth Development (3:3)
Current principles, practices, and research related to programs that promote youth development outcomes through sport participation.

KIN 743 Psychological Aspects of Sport Injury (3:3)
Psychological factors and intervention strategies as they relate to the risk, experience, and treatment of athletic injuries from a biopsychosocial perspective.
Prerequisite
KIN 644 or permission of instructor

KIN 744 Applied Sport Psychology (3:2:2)
Current research in applied sport psychology; sport-specific individual differences, motivational approaches, and interventions.
Prerequisite
KIN 644

KIN 745 Seminar: Social Psychology and Physical Activity (3:3)
Current theories, research methodologies and findings related to the social psychological aspects of sport and exercise behavior; emphasis on application in professional practice.
Prerequisite
KIN 644 or permission of instructor

Offered
Spring

KIN 746 Practicum in Applied Sport and Exercise Psychology (1–3)
Skill development and application of theory to practice in applied sport psychology through supervised work in a laboratory and/or field setting.

Prerequisite
KIN 744 or equivalent and permission of instructor

Notes
May be repeated for up to 10 credit hours. No more than 6 credit hours can count toward degree requirements. Lab fee required each semester. Grade: Satisfactory/Unsatisfactory, S/U.

KIN 748 Advanced Topics in Sport Exercise and Psychology (3:3)
Advanced study in special topics within a field of sport and exercise psychology.

Prerequisite
KIN 644 or equivalent and permission of instructor

Notes
May be repeated for credit when topic varies for a maximum of 12 credits.

KIN 749 PE Learning and Motivation Advanced Seminar (3:3)
Comprehensive analysis and critical examination of learning and achievement motivation theories and constructs, instructional strategies, and curriculum designs in physical education and other physical activity settings.

KIN 750 Seminar in Kinesiology (3:3)
Integrative seminar focusing on major issues confronting the field of kinesiology, and applying concepts to professional practice and higher education.

Notes
Formerly KIN 649.

KIN 751 Advanced Research Seminar in Kinesiology (3:3)
Integrative seminar focusing on development, refinement, and presentation of research.

Prerequisite
KIN 611 or permission of instructor

Notes
Formerly KIN 713. Grade: Satisfactory/Unsatisfactory, S/U.

KIN 754 Applied Sport Psychology Issues and Practice (3:3)
Theories and research underlying applied sport psychology. Consideration of issues in educational sport psychology practice.

Prerequisite
KIN 644, KIN 744

KIN 762 Program Design in Kinesiology and Related Professions (3:3)
Methods for designing academic programs in Kinesiology and related fields. Leadership skills, strategic planning, and implementing a program are the focus of this class.
KIN 785 Curriculum Theory in PE Advanced Seminar (3:3)
In-depth examination and critical analysis of the evolution of physical education curriculum theory discourses in the United States from 1900 to the present.
Prerequisite
KIN 731, KIN 654, or permission of instructor. May be repeated when topic varies.

KIN 795 Independent Doctoral Research (1–6)
In-depth study of a problem in exercise and sport science. May include a synthesis/review of literature, scientific investigation, or design, implementation, or evaluation of project.
Prerequisite
Prior approval of graduate faculty member who will supervise and evaluate the project
Notes
Grade: Satisfactory/Unsatisfactory, S/U.

KIN 798 Doctoral Seminar in Grant Writing (3:3)
The grant writing process, including the procedures and technical strategies for developing and submitting a grant proposal for funding.
Prerequisite
Minimum second year doctoral candidate in HHS or permission of instructor. Coreq. KIN 695 with faculty advisor or course instructor for individualized mentoring of the grant writing project
Notes

KIN 799 Dissertation (1–12)

KIN 801 Thesis Extension (1–3)

KIN 802 Dissertation Extension (1–3)

KIN 803 Research Extension (1–3)
The Department of Nutrition graduate programs leading to the Master of Science (MS) and the Doctor of Philosophy (PhD) degrees in nutrition both offer specializations in community nutrition and nutrition education, human/clinical nutrition, and cellular and molecular nutrition. Background courses in general chemistry, organic chemistry, biochemistry, mammalian physiology, and general nutrition are required for all degree programs. Upon entry, a Plan of Study is developed by students and their advisors or Advisory Committees to develop strengths in the area of interest the student has chosen.

The accreditation agency of the Academy of Nutrition and Dietetics is the Accreditation Council for Education in Nutrition and Dietetics (ACEND). ACEND is recognized by the US Department of Education as a Title IV Gatekeeper. This recognition affirms that ACEND meets national standards and is a reliable authority on the quality of nutrition and dietetics education programs. ACEND is also a member of the Association of Specialized and Professional Accreditors (ASPA) and abides by its code of good practice. The address and online number of ACEND are: 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (800) 877-0877, ext. 5400.

Accreditation(s)
ACEND

Faculty

Professors
Joseph Lee Beverly, Effects of nutrients on central nervous system function, hypothalamic mechanisms of glucose homeostasis, and hypothalamic mechanisms regulating energy balance and feeding behavior. (E)
Deborah E. Kipp, Effects of nutritional and hormonal imbalances, particularly iron and prolactin, on bone formation. (E)
Zhanxiang Zhou, The role of trace elements and bioactive components on treating alcoholic and nonalcoholic liver disease. (E)

Associate Professors
Jigna Dharod, Relationship between food insecurity and obesity in the first 1000 days of life, role of social capital and personal skills (cooking, food budgeting, management skills) and past living experiences on nutrition and health (Director of Graduate Study). (E)
Keith Erikson, Micronutrients and brain development, function, and neurotoxicity. (E)
Lauren Haldeman, Design of theory-based nutrition interventions for low-income audiences, effects of food insecurity and psychosocial correlates (health beliefs, attitudes, and barriers) on eating behaviors and dietary quality. (E)
Ron F. Morrison, Transcriptional control of adipocyte differentiation and gene expression, obesity, diabetes, cellular and molecular mechanisms coupling growth arrest and cell differentiation, cell cycle, cancer (Chair of Department). (E)
Lenka H. Shriver, Child nutrition and childhood obesity, children's physical activity and fitness, body composition, dietary habits and eating attitudes of athletes. (E)

Assistant Professors
Natasha Brown, Examine urban-rural differences in how extended family members influence children’s dietary and physical activity behaviors.

Adjunct Associate Professor
Karen S. Katula, Control of cell division, regulation of human cyclin B gene transcription, antioxidant regulation of gene expression and cell cycle. (E)

Graduate Programs
- Post-Baccalaureate Certificate, Didactic Program in Nutrition and Dietetics, (14) (on moratorium)
- Post-Baccalaureate Certificate, Dietetic Internship, (15)
- Master of Science (MS) in Nutrition, (37 hours for thesis option), (40 hours for non-thesis option)
- Doctor of Philosophy (PhD) in Nutrition, (63)

Policy on Professional Impairment
Nutrition faculty are responsible not only for the development of their students, but also to the profession and to the public. The faculty have a responsibility to teach and supervise their students, which is typically done in the context of an amicable relationship. However, they also have a responsibility to protect the public from incompetent professionals and to maintain the standards of the profession. Unfortunately, it is possible that not all students are capable of becoming competent professionals who will maintain standards of the profession. In these cases, faculty are obliged to take action when they have determined the student is professionally impaired. Students who experience continued serious difficulties and do not function effectively in academic and/or interpersonal situations will be counseled early, made aware of career alternatives, and if necessary, dropped from the program.

Definition of Professional Impairment
Professional impairment has been “defined broadly as an interference in professional functioning that is reflected in one or more of the following ways:

• An inability and/or unwillingness to acquire and integrate professional standards into one’s repertoire of professional behavior.
• An inability to acquire professional standards skills in order to reach an acceptable level of competency.
• An inability to control personal stress, psychological dysfunction, and/or excessive emotional reactions that interfere with professional functioning.” (Lamb et al. 1987. Professional Psychology: Research and Practice 18: 597-603)

Examples of behaviors which may be evidence of professional impairment include the following. The list contains examples, and is not intended to be definitive.

• Violation of professional standards or ethical codes.
• Inability or unwillingness to acquire and manifest professional skills at an acceptable level of competency.
• Behaviors that can reasonably be predictive of poor future professional functioning, such as extensive tardiness or poor compliance with supervisory requirements.
• Personal unsuitability to the profession, e.g., substance abuse, chronic and disabling physical problems.
• Interpersonal behaviors and intrapersonal functioning that impair one’s professional functioning such as psychopathology, inability to exercise good judgment, poor interpersonal skills, and pervasive interpersonal problems.

Possible Actions to Follow Manifestations of Professional Impairment
This list contains examples, and is not intended to be definitive. These actions are not hierarchical and need not be applied in each case.

• A formal reprimand.
• An unsatisfactory grade (U) in a practicum course with the requirement that the course be repeated, whether it was an elective or required practicum.
• Personal therapy.
• Leave of absence.
• Required additional practicum or course work.
• Increased supervision (e.g., more frequent supervision, more than one supervisor).
• Formal probation.
• Recommendation of withdraw from the program or changing to another program.
• Recommendation of formal dismissal from the program by the Vice Provost for Graduate Education.

**Due Process; Evaluation of Professional Impairment**

There is a written policy on professional impairment that is systematically distributed to all NTR graduate students, with signatures evidencing student review of the policy. Copies of this will be included in each student’s folder.

All students will receive written notification of problems, including written descriptions of specific incidences that may evidence professional impairment, from the Director of the Graduate Program in Nutrition. Such written notification will be placed in the student’s departmental file.

The student evidencing professional impairment will usually be given an opportunity for remediation (although individual circumstances may not allow this, and this is not legally required), with specific descriptions of problems, suggestions for remediation, time limit, and notice of consequences if remediation is not successful, all noted in writing. Such written evaluation will also be placed in the student’s departmental file.

When the judgment is made that serious professional impairment exists and that the consequences to the student are major, the student may request a hearing in which the student may present his or her view of the situation. The hearing will be convened by the Director of the Graduate Program in Nutrition and will include a member of the Graduate Committee in Nutrition, the member(s) of the faculty who are making judgments of serious professional impairment, the student’s adviser, and the departmental chairperson.

Following a hearing, the student will receive written notification within one week that includes: the nature of the problem, opportunities for revision, if any, the basis for the decision, and the opportunity for appeal. Such written evaluation will also be placed in the student’s departmental file.

After receiving written notification, the student may request an appeal within 14 days to the Chairperson of the Department of Nutrition. The appeal panel will include some persons who are different from those making the original decision, such as a faculty member within the department or school, a faculty representative of the Graduate School, and a member of the faculty selected by the student.

The results of the hearing and appeal will be forwarded to the Chairperson of the Department of Nutrition, who may accept, reject, or modify the recommendations. If the Department Chairperson accepts the recommendation to change the student’s program of study, or dismiss the student from the program, this recommendation will be forwarded to the Vice Provost for Graduate Education who, upon further consideration, will notify the student in writing.

**Didactic Program in Nutrition and Dietetics, PBC (On Moratorium), (14)**
The PBC, Didactic Program in Nutrition and Dietetics is currently not accepting applications. The Didactic Program in Nutrition and Dietetics Post Baccalaureate Program provides an opportunity for students who have received a Bachelor’s degree from a nationally accredited university to earn a Didactic Program Verification Statement. The Didactic Program Verification Statement ensures that a student has obtained and demonstrated the fundamental core knowledge requirements and skills required by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) to apply to an accredited Dietetic Internship. Successful completion of the prerequisite and co-requisite courses along with the 14 credit hours of core courses in the Didactic Program
in Nutrition and Dietetics Post Baccalaureate Program cover the core knowledge requirements to obtain a Didactic Program Verification Statement. Completion of this program does not guarantee placement in an accredited Dietetic Internship.

**Program Requirements**

**Core Courses**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CED 610</td>
<td>Helping Relationships</td>
<td>3</td>
</tr>
<tr>
<td>NTR 560</td>
<td>Advanced Nutrition</td>
<td>4</td>
</tr>
<tr>
<td>NTR 607</td>
<td>Nutrition Education</td>
<td>3</td>
</tr>
<tr>
<td>NTR 573</td>
<td>Medical Nutrition Therapy</td>
<td>4</td>
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Dietetic Internship, PBC, (15)

The Post-Baccalaureate Certificate -Dietetic Internship requires 15 student credit hours. Courses fulfilling the certificate program may be used to meet the requirements in a degree program in accordance with the policies of The Graduate School.

The Dietetic Internship at UNCG is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND). ACEND is a specialized accrediting body of the Academy of Nutrition and Dietetics with oversight by the United States Department of Education. The address and phone number of ACEND are: 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (800) 877-0877, ext. 5400.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The Certificate program for the Dietetic Internship is designed for students with a bachelor’s degree from an accredited college or university who have completed the Didactic Program in Dietetics, as required by The Academy of Nutrition and Dietetics, and wish to become eligible to take the national registration examination to become a registered dietitian (RD). To be eligible for the Dietetics Internship, completion of the undergraduate program must be within five years of application to the internship. Varied work experiences in dietetics and/or foodservice management are preferred. The selection process is very competitive. Due to the limited number of placements that can be made for a given year, not all applicants who meet the minimum requirements may be selected.

A separate application to the DI program is required and students must apply to such programs following the American Dietetic Association’s computer matching application process. After selection into the program at UNCG, students must then submit an application to The Graduate School as well as all required application materials. In addition to these materials, applicants must provide an ADA Verification Form from their undergraduate institution and a personal essay stating their interests and experience in dietetics.

A limited number of positions in the DI program are set aside for graduate students who wish to complete both the graduate degree and DI program. Students who are eligible for these positions must complete the application form but do not have to participate in the computer matching process. Students interested in this option must contact the Director of the Dietetic Internship at UNCG for more information.

**Certificate Requirements**

**Required Courses (15)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTR 602</td>
<td>Supervised Preparation for Professional and Community Engagement</td>
<td>3</td>
</tr>
</tbody>
</table>
NTR 693  Supervised Preparation for Practicum in Clinical Dietetics (3)

*Note: NTR 602 and NTR 693 must be completed with a grade of B or better prior to enrollment in the following:*

- NTR 606a  Practicum in Clinical Dietetics (3-6)
- NTR 606b  Practicum in Clinical Dietetics (3-6)
- NTR 606c  Practicum in Clinical Dietetics (3-6)

**Additional Information**

Students will receive a certificate from The Graduate School upon completion of the required course of study and are eligible to take the national certification examination for the credential of Registered Dietitian.

**Nutrition, MS, (37-40)**

The MS in Nutrition offers a thesis option (37 hours minimum) and a non-thesis option (40 hours minimum). The thesis option is research-based and designed to prepare students for research, administration and practitioner positions in nutrition, or for progression to the PhD program. A written thesis is required for graduation. The non-thesis option is designed to prepare students for consulting, administrative, and practitioner positions in nutrition. A comprehensive examination must be passed. The registered dietitian (RD) credential must be obtained for a career in dietetics.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a letter of intent that includes research and professional objectives and that identifies faculty with research interests most central to student research and career interests.

Prerequisites for admission to the graduate program in nutrition include: 2-3 semesters of biology (general biology with lab, human physiology) and 3-4 semesters of chemistry (inorganic chemistry with lab, organic chemistry with lab, biochemistry).

**Thesis Option (37 hours minimum)**

At least 26 hours must be in 600-level courses. The minimum requirements include:

**Required Core (15 hours minimum)**

- NTR 609  Seminar in Nutrition
- NTR 625  Gene Expression and Protein Metabolism (2)
- NTR 626  Energy, Carbohydrate, Lipid Metabolism (2)
- NTR 627  Antioxidants and Bioactive Food Components (2)
- NTR 628  Vitamins and Minerals (2)
- and one of the following options:
  - STA 571  Statistical Methods for Research I (3)
  - STA 661  Advanced Statistics in the Behavioral and Biological Sciences I (3)
  - STA 580  Biostatistical Methods (3)
  - ERM 517  Statistical Methods in Education (3)
  - ERM 680  Intermediate Statistical Methods in Education (3)
  - HEA 604  Public Health Statistics (3)

**Research Techniques (9 hours minimum)**

- NTR 673  Nutrition Research Methodology (3)
At least 6 hours in one or more of the following research courses:

- NTR 601 Directed Study in Nutrition (1-6)
- NTR 623 Current Trends in Nutrition (3)
- NTR 653 Problems in Food and Nutrition (2-4)
- NTR 670 Research Skill Development (2-6)

**Electives (7 hours minimum)**

With approval of the Graduate Advisory committee, a student will select one 3-hour course from other NTR courses at the 500 or 600 level and at least 4 additional hours in either NTR or other science courses at the 500 or 600 level.

**Thesis (6) (Capstone Experience)**

- NTR 699 Thesis (1-6)

**Non-thesis Option (40 hours minimum)**

At least 26 hours must be in 600-level courses. The minimum requirements include:

**Required Core (14 hours minimum)**

- NTR 609 Seminar in Nutrition
- NTR 625 Gene Expression and Protein Metabolism (2)
- NTR 626 Energy, Carbohydrate, Lipid Metabolism (2)
- NTR 627 Antioxidants and Bioactive Food Components (2)
- NTR 628 Vitamins and Minerals (2)

and one of the following options:

- STA 571 Statistical Methods for Research I (3)
- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
- STA 580 Biostatistical Methods (3)
- ERM 517 Statistical Methods in Education (3)
- ERM 680 Intermediate Statistical Methods in Education (3)
- HEA 604 Public Health Statistics (3)

**Research Techniques (6 hours minimum)**

- NTR 673 Nutrition Research Methodology (3)

At least 3 hours in one or more of the following research courses:

- NTR 601 Directed Study in Nutrition (1-6)
- NTR 623 Current Trends in Nutrition (3)
- NTR 653 Problems in Food and Nutrition (2-4)
- NTR 670 Research Skill Development (2-6)

**Electives (20 hours minimum)**

The student will select at least 20 hours from other 500-or 600-level courses in NTR, other science courses, HEA, or CED, as approved by the student’s advisory committee. 15 elective hours will come from the DI course requirements. For those students who are completing the Dietetic Internship requirements as part of their graduate program of study

- NTR 602 Supervised Preparation for Professional and Community Engagement (3)
- NTR 693 Supervised Preparation for Practicum in Clinical Dietetics (3)

Nine elective hours will be designated from the Supervised Practice component requirement:

- NTR 606a Practicum in Clinical Dietetics (3-6)
- NTR 606b Practicum in Clinical Dietetics (3-6)
- NTR 606c Practicum in Clinical Dietetics (3-6)

Successful completion of these courses is required for the student to be eligible to take The Academy of Nutrition and Dietetics national examination to become a registered dietitian (RD).

**Comprehensive Examination (Capstone Experience)**
The written examination is offered at specific times each year. Please consult with the Director of Graduate Study for the dates.

**Nutrition, PhD, (63)**
The PhD in Nutrition requires a minimum of 63 semester hours. The focus of the doctoral program is the development of critical thinking, problem solving, communication, and organizational skills and the application of these skills to a nutrition-related research problem. The research goal of the department is to optimize human health. This is done through a wide variety of research approaches. Program strengths include nutritional assessment and intervention, nutritional biochemistry, molecular roles of nutrients, nutrition and disease, community nutrition, nutrition education, and life-span nutrition. Graduates of the doctoral program are prepared for careers in research, teaching at the college or university level, consulting, and management.

At least 75% of all course work, exclusive of dissertation hours, must be at the 600 or 700 level. Students entering the PhD program with a Master of Science degree may be granted a waiver for some requirements if they have successfully completed equivalent course work. This decision will be made after evaluation by the student’s major advisor and the doctoral Advisory/Dissertation Committee.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a letter of intent that includes research and professional objectives and that identifies faculty with research interests most central to student research and career interests.

While the PhD program primarily admits students with a Master’s degree, the graduate committee will consider baccalaureate students with exceptional academic and undergraduate research experiences.

**Degree Requirements**

**Required Core Courses (16)**
- NTR 609 Seminar in Nutrition
- NTR 625 Gene Expression and Protein Metabolism (2)
- NTR 626 Energy, Carbohydrate, Lipid Metabolism (2)
- NTR 627 Antioxidants and Bioactive Food Components (2)
- NTR 628 Vitamins and Minerals (2)

**Research Techniques (21 hours minimum)**
With approval of the Advisory/Dissertation Committee, a student will select a minimum of one statistics course (3-4), NTR 673 (Nutrition Research Methodology -3), and two or three additional courses for developing technical competency to enhance research skills and competitiveness (8 hours minimum). Students will also take at least 6 hours in one or more of the following research courses:
- NTR 601 Directed Study in Nutrition (1-6)
- NTR 623 Current Trends in Nutrition (3)
- NTR 653 Problems in Food and Nutrition (2-4)
- NTR 670 Research Skill Development (2-6)

**Electives (8 hours minimum)**
With approval of the Advisory/Dissertation Committee, a student will select 6 hours from other NTR courses at the 500-700 level and an additional 2 hours minimum in NTR or a supporting program at the 500-700 level.

**Comprehensive Examination**
The student will consult with his/her Advisory/Dissertation Committee about the specific format of the written and oral sections of this examination.

**Research and Dissertation (18 hours minimum)**

- NTR 790  Doctoral Research (1-6)
- NTR 799  Dissertation Problem (1-12)

**For Students Who Completed their MS at UNCG**

Students who have completed their MS degree in the Department of Nutrition at UNCG will have already completed the majority of the Required Core Courses, Nutrition Research Methodology, and at least one statistics course. Therefore, their program of study will include primarily Research Techniques credits and Research and Dissertation credit hours. Credit received for courses taken as part of the MS degree cannot be counted towards the PhD degree. The majority of credit hours must be at the 600-700 level. Their minimal course work is shown below.

**Required Core Courses (6)**

- NTR 609  Seminar in Nutrition

**Research Techniques (14 hours minimum)**

- NTR 601  Directed Study in Nutrition (1-6)
- NTR 623  Current Trends in Nutrition (3)
- NTR 653  Problems in Food and Nutrition (2-4)
- NTR 670  Research Skill Development (2-6)

Statistics courses

**Electives (8 hours minimum)**

With the approval of the Advisory/Dissertation Committee, a student will select 6 hours from other NTR courses at the 500-700 level and an additional 2 hours minimum in NTR or a supporting program at the 500-700 level.

**Research and Dissertation (18 hours minimum)**

- NTR 790  Doctoral Research (1-6)
- NTR 799  Dissertation Problem (1-12)

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**NTR – Nutrition Graduate Courses**

**NTR 500 Supervised Professional Experience (1–4:0:3–12)**

Supervised professional experience in selected commercial or industrial organizations, public or private agencies in accordance with the major course of study of the student.

**NTR 531 Nutrition and Human Metabolism (4:4)**

Structure, function, and metabolism of nutrients and related compounds; integration of nutrient metabolism at the cellular level with total body function; practical application of basic principles of nutrient metabolism.

*Prerequisite*

Grade of C or better in BIO 277, NTR 413, and CHE 103 or CHE 111, CHE 104 or CHE 114, CHE 110 or CHE 112, CHE 205 or CHE 351 and CHE 352, CHE 206 or CHE 354 or their equivalents as determined by the instructor

*Offered*

Spring

**NTR 534 Nutrition and Human Metabolism Laboratory (2:1:3)**

Analytical procedures, their rationale and interpretations, applicable to the study of human metabolism.

*Prerequisite*

General chemistry and organic chemistry with labs; NTR 531 (may be taken concurrently)

**NTR 543 Maternal and Infant Nutrition (3:3)**
Nutritional needs of pregnant and lactating women, and infants; methods of evaluating nutritional status of these groups; effects of nutrition on pregnancy outcome and infant development.

Prerequisite
Grade of C (2.0) or better in NTR 213 or equivalent, and BIO 277 or equivalent

**NTR 550 Nutrition Assessment (3:2:3)**
Assessment of nutritional status of healthy and ill persons before initiation of medical nutrition therapy.

Prerequisite
Grade of C (2.0) or better in BIO 277; NTR 213, NTR 313, NTR 413

Offered
Fall

**NTR 553 Child and Adolescent Nutrition (3:3)**
Nutritional needs of children and adolescents; methods of evaluating nutritional status of these groups; effects of nutrition on development.

Prerequisite
Grade of C (2.0) or better in NTR 213 or equivalent, and BIO 277 or equivalent

**NTR 560 Advanced Nutrition (4:4)**
Biochemical and physiological aspects of nutrient metabolism and utilization. Nutrient requirements for maintenance, growth, pregnancy, lactation, work, and aging.

Prerequisite
Grade of C or better in NTR 313, NTR 413, NTR 531, and BIO 277, or equivalents as determined by the instructor

Offered
Fall

**NTR 573 Medical Nutrition Therapy (4:3:3)**
Clinical aspects of nutrition. Development and use of therapeutic diets to combat nutritional diseases and physiological disorders.

Prerequisite
Grade of C or better in NTR 313, NTR 413, NTR 531, NTR 550, NTR 560, and BIO 277

Offered
Fall

**NTR 576 Nutrition and Physical Fitness (3:3)**
Metabolism during exercise, ergogenic aids, nutrients' effects on performance, and body composition alterations during training. Gender and age-specific needs and responses to exercise and dietary intake.

Cross Listed Courses
Same as KIN 576

Prerequisite
Grade of C (2.0) or better in BIO 277, NTR 213, and NTR 413 or equivalent required. KIN 375 recommended.

Offered
Fall

**NTR 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**NTR 601 Directed Study in Nutrition (1–6)**
Prerequisite
Permission of graduate faculty member

Notes
May be repeated for credit. Grade: Satisfactory/Unsatisfactory, S/U.

NTR 602 Supervised Preparation for Professional and Community Engagement (3:2:2)
Preparation for clinical supervised practice experiences in dietetics; helping relationships skills, human resource management, marketing strategies for revenue generating services in dietetics, appropriate professional conduct in patient care.
Prerequisite
Admission into the DI program or NTR 573 and NTR 560

Offered
Fall

NTR 606a Practicum in Clinical Dietetics (3–6)
For Dietetic Internship students only. Practical experience in the professional areas of dietetics: management, clinical, and community.
Prerequisite
Grade of B or better in NTR 693.

Notes
Required for Dietetic Internship students. Combination of credit not to exceed 9 s.h

NTR 606b Practicum in Clinical Dietetics (3–6)
For Dietetic Internship students only. Practical experience in the professional areas of dietetics: management, clinical, and community.
Prerequisite
Grade of B or better in NTR 693.

Notes
Required for Dietetic Internship students. Combination of credit not to exceed 9 s.h

NTR 606c Practicum in Clinical Dietetics (3–6)
For Dietetic Internship students only. Practical experience in the professional areas of dietetics: management, clinical, and community.
Prerequisite
Grade of B or better in NTR 693.

Notes
Required for Dietetic Internship students. Combination of credit not to exceed 9 s.h

NTR 607 Nutrition Education (3:3)
Philosophy, principles, methods, and materials involved in nutrition education. Emphasis on development of nutrition education curriculum and programs in school and community.
Prerequisite
NTR 550 or equivalent or permission of instructor

NTR 609 Seminar in Nutrition

NTR 609a Seminar in Nutrition (1)
Review, analysis and presentation of recent research findings and issues in food and nutrition.
Notes
May be repeated for credit when topic varies. Enrollment for two credits requires presentation of seminar. NTR 609a, 1 hour credit, graded S-U; NTR 609b, 2 hours credit, graded by letter grade.

NTR 609b Seminar in Nutrition (2)
Review, analysis and presentation of recent research findings and issues in food and nutrition.

Notes
May be repeated for credit when topic varies. Enrollment for two credits requires presentation of seminar. NTR 609a, 1 hour credit, graded S-U; NTR 609b, 2 hours credit, graded by letter grade.

NTR 619 Nutrition Consultation Methods (3:2:3)
Exploration of techniques and constraints for interviewing and eliciting change through nutritional consultation.
Prerequisite
NTR 573, NTR 560 or permission of instructor

NTR 623 Current Trends in Nutrition (3:3)
Emphasis on current trends in nutrition research/education from a molecular, cellular and/or human perspective.
Prerequisite
Senior or graduate level course in nutrition or permission of instructor

Notes
May be repeated for credit when topic varies.

NTR 625 Gene Expression and Protein Metabolism (2:4)
Prerequisite
Previous course in general nutrition, biochemistry and mammalian physiology and unconditional admission to the graduate program in Nutrition or other life sciences, or permission of instructor

Offered
Fall

NTR 626 Energy, Carbohydrate, Lipid Metabolism (2:4)
Analysis of energy intake and metabolism; carbohydrate and lipid absorption, transport, and tissue-specific utilization. Clinical applications. Critical analysis of recent literature.
Prerequisite
NTR 625, previous course in general nutrition, biochemistry and mammalian physiology, and unconditional admission to the graduate program in Nutrition or other life sciences; or permission of instructor

NTR 627 Antioxidants and Bioactive Food Components (2:4)
Metabolism and function of selected bioactive food components, such as flavonoids, stanols and sterols, anthocyanins, carotenoids, polyphenolics, indole-3-carbinol. Clinical applications. Critical analysis of recent literature.
Prerequisite
NTR 625, previous course in general nutrition, biochemistry and mammalian physiology, and unconditional admission to the graduate program in Nutrition or other life sciences; or permission of instructor

NTR 628 Vitamins and Minerals (2:4)
Metabolism functions of selected vitamins. Regulation of selected trace metals emphasizing nutrient-gene interactions. Clinical applications. Critical analysis of recent literature.

**Prerequisite**
NTR 625, previous course in general nutrition, biochemistry and mammalian physiology, and unconditional admission to the graduate program in Nutrition or other life sciences; or permission of instructor

**NTR 643 Nutrition and Aging (3:3)**
Explore the nutritional issues associated with aging and the older adult (65 years+). Theories of aging; aging and chronic diseases; effects of aging on nutrient requirements; nutrition programs and services.

**Prerequisite**
NTR 213, BIO 277 or equivalent, or permission of instructor

**NTR 645 Teaching Practicum in Nutrition (3:3)**
Provides a supervised, structured learning experience in teaching for graduate students in the Department of Nutrition. Professors provide guidance for graduate students during the experience.

**Prerequisite**
Admission to the graduate program in nutrition or permission of instructor.

**NTR 653 Problems in Food and Nutrition (2–4)**
Individual student problems related to food and nutrition.

**Prerequisite**
Permission of instructor

**Notes**
May be repeated for credit. Formerly NTR 666. Grade: Satisfactory/Unsatisfactory, S/U.

**NTR 670 Research Skill Development (2–6)**

**Notes**
May be repeated for credit. Grade: Satisfactory/Unsatisfactory, S/U.

**NTR 673 Nutrition Research Methodology (3:3)**
Diverse research techniques used in cellular, small animal, and human experimental studies in nutritional sciences. Orientation to research methodologies, grant proposal writing, ethical use of human (IRB) and animal (IACUC) models, and policy in nutrition.

**Prerequisite**
NTR 531 or equivalent as determined by the Department

**NTR 676 Nutrition and Physical Performance (3:3)**
Effects of nutrition on physical performance, alterations in nutrient metabolism from increased activity, interaction of diet and exercise on aging and disease processes, training and competition diets examined.

**Prerequisite**
Course work in biochemistry and physiology required, 531, 560 or equivalent courses, BIO 277

**NTR 693 Supervised Preparation for Practicum in Clinical Dietetics (3:3)**
Development of nutritional therapies for certain disease conditions. Evaluation of the physiological and biochemical bases for such therapies.

**Prerequisite**
Admission to DI program or NTR 573 and permission of instructor

**Offered**
Fall

NTR 695 Nutritional Genomics (3:3)
Comprehensive evaluation of principles and applicability of methodologies used to evaluate the regulation of gene expression in the field of nutrition science.  
Prerequisite
Permission of instructor
Notes
May be repeated for credit.

NTR 696 Nutritional Proteomics (3:3)
Comprehensive evaluation of principles and applicability of methodologies used to evaluate protein expression and function in the field of nutrition science.  
Prerequisite
Permission of instructor
Notes
May be repeated for credit.

NTR 699 Thesis (1–6)
Notes
Required of all candidates for the Master of Science degree. Credit may be divided over two or more semesters. Grade: Satisfactory/Unsatisfactory, S/U.

NTR 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

NTR 790 Doctoral Research (1–6)
Individual work on problems related to student’s primary area(s) of specialization. Empirical research or critical reviews and integrations of literature.  
Prerequisite
Approval of graduate faculty member
Notes
May be repeated for credit. Grade: Satisfactory/Unsatisfactory, S/U.

NTR 799 Dissertation Problem (1–12)
Prerequisite
Completion of oral and written comprehensive examinations
Notes
Required of all candidates for the Doctor of Philosophy degree. May be repeated for credit. Grade: Satisfactory/Unsatisfactory, S/U.

NTR 801 Thesis Extension (1–3)

NTR 802 Dissertation Extension (1–3)

NTR 803 Research Extension (1–3)
PEACE AND CONFLICT STUDIES, DEPARTMENT OF
210 McIver Building • 336-334-4781 • pacs.uncg.edu

Administration
Thomas Matyók, Department Chair and Director of Graduate Study

Online Options
Both the certificate program and the master’s program are available online; all web-based courses run parallel to residential courses on campus and the curriculum is identical. Classes are conducted asynchronously via web connection. Lectures, discussions, assignments, supplementary materials, feedback, and assessments are accessed online. See the program website for more information.

Faculty
Associate Professors
Emily M. Janke, Community engagement, community-university relationships and partnerships, institutional culture and change strategies, and the role of reciprocity, communication and tension in win-win negotiations and collaborative relationship.
Thomas G. Matyók, Joint civil-military interaction, conflict analysis, religion and conflict, post-conflict reconciliation, human security policy (Chair of Department and Director of Graduate Study).

Assistant Professors
Ali Askerov, Peace studies, international relations, political history, public international law, and political ideas.
Jeremy Rinker, Violent conflict and nonviolent conflict transformation, non-governmental organizations working on international development, humanitarian aid, and restorative justice.

Graduate Programs
• Post-Baccalaureate Certificate in Peace and Conflict Studies, (18)
• Master of Arts (MA) in Peace and Conflict Studies, Professional Conflict Practice, Education, and International Peace Development concentrations, (39)
• Dual degree program in MA in Peace and Conflict Studies and Politics and Public Administration from the University of Konstanz

Peace and Conflict Studies, PBC, (18)
The Post-Baccalaureate Certificate in Peace and Conflict Studies prepares students for the changing nature of professional development, organizational knowledge and change through scholarship and research. The certificate program can be beneficial to those who have already received a graduate degree in their current area but would like to specialize in conflict studies. It is also appropriate for those who possess an undergraduate degree and are seeking to obtain broad knowledge of the conflict and peace studies field or for professionals who have already earned a graduate degree in their professional field and would benefit from research and theory and additional practice skills in a range of conflict studies.

The certificate requires 18 semester hours. A maximum of 6 semester hours from graduate courses taken in or transferred from other programs may be applied to the requirements of the certificate program upon the approval of the Department Chair and in accordance with policies of The Graduate School. Courses taken for the certificate program may be used to meet requirements in a degree program in accordance with the policies of The Graduate School.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
Certificate Requirements
Certificate students should work with their adviser to design their own program based on the following courses.

**Suggested Certificate Curriculum (Total 18 credit)**

**Required Courses (6)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 600</td>
<td>Fundamentals of Conflict Transformation and Peace Studies</td>
<td>3</td>
</tr>
<tr>
<td>PCS 601</td>
<td>Global Intercultural Conflict Transformation</td>
<td>3</td>
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</tbody>
</table>

**Core Courses (6)**

Take 2 of the following 3 courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 605</td>
<td>Skills and Techniques of Conflict Transformation</td>
<td>3</td>
</tr>
<tr>
<td>PCS 606</td>
<td>Organizational Conflict: Theories and Practices</td>
<td>3</td>
</tr>
<tr>
<td>PCS 610</td>
<td>Conflict Transformation: Reconciliation and Healing</td>
<td>3</td>
</tr>
</tbody>
</table>

Two electives would then be selected from Peace and Conflict Studies courses to complete the required hours with the approval of the student’s advisor.

Peace and Conflict Studies, MA, (39)
The MA in Peace and Conflict Studies is dedicated to providing high quality, professional training in multiple conflict intervention and prevention skills such as mediation, negotiation, facilitation, restorative practices, violence prevention, and collaborative problem solving. Students engage in community-based learning through a variety of courses to build practice, intervention, and research skills. The program focuses on pragmatic approaches to solving personal and social problems in a variety of social settings. Students are exposed to an array of techniques and strategies to achieve nonviolent solutions to conflict that arises in diverse family, organizational and community environments.

The program promotes a systemic and critical perspective to the challenges facing individuals, families, organizations and communities in both a global and local analytical perspective. With an interdisciplinary commitment to social justice and human rights, we train professionals to seek collaborative, constructive and conciliatory methods for resolving human conflict. Our goal is to mold reflective conflict professionals—practitioners with a critical understanding of theory, research and a range of methods, local and global perspectives, and an appreciation of diversity, peace development and social justice.

The MA in Peace and Conflict Studies requires completion of 39 semester hours and is built on a comprehensive core curriculum of eight academic courses and seminars. Flexible course schedules in the evenings and summer allow students of all ages, challenges, job requirements, technology, and delivery needs to participate in the learning process.

**Concentrations**
The program offers three concentrations which students may choose to focus their research, theory and practice areas; concentrations are voluntary and are not required for graduation. The areas are Professional Conflict Practice, Education, and International Peace Development. Students must choose three courses from the corresponding concentration list to complete the nine semester hours.

**Online Master’s Degree**
The master’s program is available completely online and is identical in content and focus with the residential program; courses are usually offered simultaneously in residential and online formats. A few courses, such as Integrated Colloquium may be offered in combination, with residential and online students meeting on the same time and day for joint discussion, feedback and collaborative team projects. For more information, visit pacs.uncg.edu or email for information at conflictstudies@uncg.edu.
Dual Degree Option with University of Konstanz in Konstanz, Germany

The Peace and Conflict Studies Program offers a 60 credit hour dual master's degree program with the International Administration and Conflict Management Programme at the University of Konstanz in Germany. The Konstanz focus on public policy and international public administration is a valuable curricular addition for UNCG students interested in study and potential internships in international affairs, peacebuilding, and post conflict policy and administration. Students will complete 30 credit hours in courses offered at UNCG and 30 credit hours in courses offered at Konstanz. Interested students should discuss this option with their adviser upon entering the program.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application material required by The Graduate School, applicants must submit a personal essay on their interest and expectations of the MA in Peace and Conflict Studies and may be asked to complete an interview with members of the admissions committee.

Degree Requirements

Required Courses (24)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 600</td>
<td>Fundamentals of Conflict Transformation and Peace Studies</td>
<td>3</td>
</tr>
<tr>
<td>PCS 601</td>
<td>Global Intercultural Conflict Transformation</td>
<td>3</td>
</tr>
<tr>
<td>PCS 605</td>
<td>Skills and Techniques of Conflict Transformation</td>
<td>3</td>
</tr>
<tr>
<td>PCS 606</td>
<td>Organizational Conflict: Theories and Practices</td>
<td>3</td>
</tr>
<tr>
<td>PCS 607</td>
<td>Professional Seminar II: Research</td>
<td>3</td>
</tr>
<tr>
<td>PCS 609</td>
<td>Community Engaged Research</td>
<td>3</td>
</tr>
<tr>
<td>PCS 610</td>
<td>Conflict Transformation: Reconciliation and Healing</td>
<td>3</td>
</tr>
</tbody>
</table>

Integrative Colloquium (3) (Capstone Experience)

PCS 690  Integrated Colloquium (3)

The capstone course is designed to complete the integration of theory, global and cultural awareness, intervention skills, project management and public policy issues. Through individually designed capstone projects or research papers, students will analyze and synthesize what they have learned throughout the curriculum, exploring issues individually and within learning communities, to deepen their experience in the evaluation of practice and the process of ongoing knowledge building.

Electives (15)

Electives are selected with the approval of the faculty advisor to encompass a student’s selected concentration or individual pathway through the program. Fifteen semester hours are required to complete the degree. Nine semester hours of electives must be from PCS. If a student chooses to take an independent study as an elective, it must be PCS 650, Independent Study. Please consult your advisor for more information. Students pursuing an optional concentration will complete 9 of the 15 semester hours as follows:

Education Concentration (9)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 625</td>
<td>Conflict Resolution in Education: K-12</td>
<td>3</td>
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<tr>
<td>or</td>
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<tr>
<td>PCS 626</td>
<td>Conflict Resolution in Higher Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose 1-2 additional courses from the list below for a total of 9 credit hours:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCS 631</td>
<td>Crisis Management: Response and Resolution</td>
<td>3</td>
</tr>
<tr>
<td>PCS 533</td>
<td>Restorative Justice: Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCS 652</td>
<td>Conflict Resolution in Groups</td>
<td>3</td>
</tr>
</tbody>
</table>
International Peace Development Concentration (9)
Choose three courses (9 total credit) form the course list below:
- PCS 505/SWK 505 Environmental Justice: Interdisciplinary Response for Sustainability (3)
- PCS 517 Peacebuilding Challenges in a Complex World (3)
- PCS 676 Peace Development and Community Building (3)
- PCS 677 International Human Rights Advocacy (3)
- PCS 579/SWK 579 Gender and Peacebuilding (3)
- PCS 685 Resolving Conflict in Health Care Systems: Achieving Peace through Health (3)

Professional Conflict Practice Concentration (9)
Choose three courses (9 total credit) form the course list below:
- PCS 631 Crisis Management: Response and Resolution (3)
- PCS 533/SWK 533 Restorative Justice: Theory and Practice (3)
- PCS 645 Conflict Practice (3)
- PCS 647 Moving Conflict through Negotiation and Mediation (3)
- PCS 652 Conflict Resolution in Groups (3)
- PCS 685 Resolving Conflict in Health Care Systems: Achieving Peace through Health (3)

PCS -Peace and Conflict Studies Graduate Courses

PCS 505 Environmental Justice: Interdisciplinary Response for Sustainability (3:3)
Interdisciplinary exploration of models that address social, economic, environmental justice concerns and their impact on community, economic, and environmental sustainability.
Cross Listed Courses
SWK 505

PCS 517 Peacebuilding Challenges in a Complex World (3:3)
Introduction to the interdisciplinary theory, research, and intervention strategies used in peacebuilding operations.

PCS 533 Restorative Justice: Theory and Practice (3:3)
Examines the principles and practice of restorative justice, evaluating the potentials and limitations of restorative methods and interventions in the US and internationally.
Cross Listed Courses
SWK 533

PCS 540 Social Entrepreneurship: Justice and a Green Environment (3:3)
Interdisciplinary engagement of social entrepreneurship as model for change on an issue of environmental sustainability. Exploration of models that respond to social, economic, environmental, and justice issues.
Cross Listed Courses
Same as BUS 540, CST 540, ENT 540, SWK 540, WGS 540
Prerequisite
Upper-division undergraduate or graduate student status

PCS 556 Sports, Conflict, and Peacebuilding (3:3)
The role that sports play in reflecting political, religious, ethnoracial, and social class conflicts is explored. The possibilities for using sports to teach skills for peaceful transformation are examined.

PCS 579 Gender and Peacebuilding (3:3)
Examines the role of gender, sex, diversity, and power relations in the creation and resolution of conflict and building of peace.
Cross Listed Courses
SWK 579

Prerequisite
PCS 600 and PCS 601 or permission of instructor

PCS 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

PCS 600 Fundamentals of Conflict Transformation and Peace Studies
Introduction to the interdisciplinary theory, research conflict analysis and intervention strategies which form the foundation of peace and conflict studies.

PCS 601 Global Intercultural Conflict Transformation (3:3)
Explores multiple dimensions of diversity in creating and resolving conflicts. Students will explore their own culture beliefs and values as well as diverse conflict models and systems around the world.

PCS 605 Skills and Techniques of Conflict Transformation (3:3)
Theory and practice to develop a foundation of interpersonal skills and techniques needed by conflict professionals such as communication, negotiation, mediation, assessment, and presentation. Service learning project required.

PCS 606 Organizational Conflict: Theories and Practices (3:3)
Theories, methods, and practices in assessing and transforming conflict in modern organizations
Prerequisite
PCS 600 and PCS 601 or permission of instructor

PCS 607 Professional Seminar II: Research (3:3)
Introductory research seminar. Within the context of the theory underlying peace and conflict studies, students are exposed to research design, interviewing skills, and data analysis methods.
Prerequisite
PCS 600

PCS 609 Community Engaged Research (3:3)
After exploration of qualitative, quantitative, mixed-method, and action research philosophy and methods. Teams of students design an action research proposal.
Prerequisite
PCS 607 or permission of instructor

PCS 610 Conflict Transformation: Reconciliation and Healing
Explore nonviolent responses to conflict and violence that are oriented to the restoration of relationships damaged by crime, war, community, and workplace violence.

PCS 615 War in the Modern World: What is it Good For? (3:3)
War and morality are concerns within the theoretical framework of peace and conflict studies, providing the base for practice as viewed within an historical and cultural context.

PCS 625 Conflict Resolution in Education: K-12 (3:3)
Explores conflict resolution theory, practice, and programming in educational settings and community organizations. Peer, professional, and systemic conflicts will be examined.
Prerequisite
PCS 600 or permission of instructor
PCS 626 Conflict Resolution in Higher Education (3:3)
Explores conflict resolution theory, practice, and programming in higher education settings. Student, staff, faculty, administrative, and organizational conflicts will be examined.

PCS 627 Seminar in Contemporary Issues in Peace and Conflict Studies (3:3)
An investigation of current Global North and Pan-Western peace and conflict models and their impact on human security and humanitarian assistance.

PCS 631 Crisis Management: Response and Resolution (3:3)
Overview of critical incident response, management and resolution in relation to individual, family, community, and organizational perspectives.

PCS 645 Conflict Practice (3:3)
Supervised application of dispute resolution programs and practices with Campus Conflict Resource Center and other CIVIC Project programs. Field experience required.
Prerequisite
PCS 605 or PCS 647 or permission of instructor

PCS 647 Moving Conflict through Negotiation and Mediation (3:3)
Engage with negotiation and mediation practices for transforming conflict. Build from negotiation and mediation theory to strategies and tactics. Learn and apply skills.
Prerequisite
None for certificate or master’s students; permission of instructor for non-majors
Corequisite
None for certificate or master’s students; permission of instructor for non-majors

PCS 650 Independent Study (3:3)
Intensive study guided by the graduate faculty

PCS 652 Conflict Resolution in Groups (3:3)
Examines the range of practices of group facilitation with a focus on current theories and techniques of professional facilitation in conflict resolution practice and training.

PCS 665 Role of Religion in Peace and Conflict (3:3)
Overview of conflict analysis and intervention strategies in religious communities and organizations. Analyze and implement models of reconciliation and forgiveness.

PCS 676 Peace Development and Community Building (3:3)
Approaches to community and peacebuilding, with emphasis on understanding power and conflict, are taught within a global context. Strategies are developed for building peace and community through civic engagement.
Prerequisite
PCS 600 and PCS 601, or permission of instructor

PCS 677 International Human Rights Advocacy (3:3)
Course will explore international human rights norms, laws, theory and practice, with an emphasis on analytical and advocacy skills. Current debates in the field will be explored with implications for policy.

PCS 685 Resolving Conflict in Health Care Systems: Achieving Peace through Health (3:3)
Peace building and conflict resolution in health care and humanitarian initiatives; human rights and social justice perspective.
PCS 690 Integrated Colloquium (3:1.5:4.5)
Final capstone course in which students integrate theory, research, and practice skills through an integrative project and electronic portfolio. (Research or Field Hours required).

Prerequisite
PCS 600, PCS 601, PCS 602, PCS 605, PCS 606, PCS 607, PCS 609, PCS 610

Notes
Successful completion required for graduation.

PCS 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

PCS 803 Research Extension (1–3)
PUBLIC HEALTH EDUCATION, DEPARTMENT OF
437 Coleman Building • 336-334-5532 • phe.uncg.edu

Administration
Tracy Nichols, Department Chair
Kelly Rulison, Director of Graduate Study

Faculty

Professors
Daniel L. Bibeau, Effectiveness of health coaching in healthcare and higher education settings. (E)
William Dudley, Quality of life in chronic disease, health behavior change, research design, statistical methods. (E)
James M. Eddy, Worksite health promotion; distance education; design, implementation, and evaluation of health education programs; health behavior theory (Dean, UNCG Online). (E)
Tracy Nichols, Women's health, marginalized motherhoods, qualitative methodology, research poetics (Chair of Department). (E)
Paige Hall Smith, Women's health, violence against women, healthy sexuality, breastfeeding. (E)

Associate Professors
Kay A. Lovelace, Public health systems and services research including public health infrastructure, workforce development, inter-organizational relationships, and determinants of evidence-based public health strategies to address population health, health disparities and the social determinants of health. (E)
Sharon D. Morrison, Global health, HIV/AIDS, immigrant and refugee health, health literacy. (E)
Michael A. Perko, Worksite health promotion and sports performance enhancers and athletes. (E)
Kelly L. Rulison, Adolescent social networks, health risk behaviors (e.g., substance use, delinquency) diffusion of intervention effects, prevention science, longitudinal research design and methodology (Director of Graduate Study). (E)
Mark Schulz, Bicycling and the built-environment, injury prevention, bicycling. (E)
Robert W. Strack, Photovoice methodology, policy/advocacy, program planning/evaluation, health issues of adolescents. (E)
Amanda E. Tanner, Sexual and reproductive health, HIV/AIDS, adolescent health, community-based participatory research. (E)
David Wyrick, Athlete health and wellness, drug and alcohol prevention, intervention development, college health promotion. (E)

Assistant Professors
Jennifer Toller Erausquin, HIV prevention, social determinants of health, quantitative methodology, structural interventions.
Jeffrey J. Milroy, Adolescent health, athlete health and wellness, college health (alcohol and other drug use prevention, physical activity & sexual health promotion), prevention science (program/intervention development and evaluation).
Erica Payton, Health disparities, health equity, firearm violence prevention, cardiovascular health and community engagement, associations between chronic exposure to violence and cardiovascular outcomes.

Graduate Programs
• Master of Public Health (MPH) in Community Health Education, (45)
• Doctor of Philosophy (PhD) in Community Health Education, (66-90)
Community Health Education, MPH, (45)
The Master of Public Health requires 45 semester hours and consists of 39 semester hours of course work and a 6 hour internship/practicum in a community setting. The professional preparation program is for qualified students from a variety of academic and professional backgrounds who are interested in careers that involve the development and management of population-based health promotion and disease prevention activities within communities. In the program students receive academic preparation in the profession of Health Education and skill development in the traditional public health fields of epidemiology, statistics, environmental health, and health policy with course work and volunteer experiences emphasizing the development of practitioner competencies. The degree program prepares graduates for careers in public health and health care settings at local, state, regional, or national levels.

The MPH program is accredited by the Council on Education for Public Health (CEPH) and the professional requirements are based on the recommendations of the Joint Commission of the Society of Public Health and the American Association for Health Education. Graduates of the program are eligible to sit for the national Health Education credentialing exam for the profession and become a Certified Health Education Specialist (CHES), or with a qualifying experience, a Master’s Certified Health Education Specialist (MCHES). By the end of the program students will have preparation in the Core Areas of Public Health and in the Seven Areas of Responsibility for Health Education Specialists (assessment, program planning, implementation, evaluation, administration and management, resource, and communication and advocacy).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the minimum admission materials required by The Graduate School, applicants should submit a description of work experiences and a written statement of professional goals.

Applicants can enroll as either full-time or part-time students. All required courses except the internship are offered in the evenings. Full-time students are expected to take four courses each fall and spring semester for two years. Part-time students usually take two courses each fall and spring semester, and one course each summer, over three years.

Degree Requirements
Core Courses (18)
- HEA 601 Principles of Community Health Education (3)
- HEA 602 Epidemiology (3)
- HEA 604 Public Health Statistics (3)
- HEA 608 Environmental Health (3)
- HEA 612 Management of Community Health Organizations (3)
- HEA 645 Health Policy (3)

Required Professional Courses (9)
- HEA 603 Community Health Analysis (3)
- HEA 609 Community Health Interventions (3)
- HEA 625 Community Health Education Program Evaluation (3)

Electives (9)
Each student will take three elective courses chosen in consultation with his/her advisor.

Capstone Experience (9)
In addition to the field-based learning experiences in courses throughout the program, students are required to integrate and synthesize their acquired skills and knowledge in an applied situation that approximates some aspect
of professional practice in community health education. This is done through an internship/practicum in a community health agency. Prior to the internship/practicum, students plan their work in an applied program planning class.

- **HEA 648** Applied Program Planning (3)
- **HEA 650** Community Health Internship/Practicum (6)

Community Health Education, PhD, (66-90)
The Department’s Ph.D. in Community Health Education is designed to engage doctoral students in an active learning environment that prepares them academically and professionally to conduct significant public health research and advanced practice. Graduates of the doctoral program take roles as researchers, academics, and public health leaders and professionals committed to social change and to facilitating the resolution of public health outcomes important to the community and field. The Ph.D. in Community Health Education requires 66 semester hours beyond an appropriate master’s degree (90 semester hours without a qualifying master’s degree). Students who enter with a master’s degree are required to earn a minimum of 51 hours of course credit and 15 hours of dissertation credit. The department’s faculty have a strong base in approaches that embrace the social ecological framework and are committed to community engaged interaction and research.

The educational objectives of the Ph.D. program are to:

- Provide an ecological perspective of health and the related advanced theory important in preparing students for careers in practice-based research.
- Prepare students to function as leaders in community-based prevention research in academic, research, or public health organizations.
- Provide experiences to ground students’ research in the problems and issues facing public health education practitioners and policymakers.
- Provide research experiences designed to develop the technical, conceptual, and communications skills required for independent research.

Assessment of courses or experiences applicable to the degree occurs at the time of admission into the program. The student’s doctoral program committee will work with each candidate to develop a course of study within the framework of the program and informed by the student’s personal interests, past course work, and professional experiences.

**Application and Admission**
In addition to the minimum admission materials required by The Graduate School, applicants should submit a description of work experiences and a written statement of research and professional goals. In this statement, identify at least 2-3 faculty members with whom you would like to work. For best consideration, materials should be provided by December 2nd although strong students will be considered on a rolling basis until the class is filled. Admission is for the Fall only and applicants can be admitted as either full-time or part-time students.

**Degree Requirements**
Entering doctoral students who have not completed one or more of the public health or health education core courses must complete these courses as part of their program in addition to the minimum 66 credit hours.

**Profession Core**

**Public Health Core (0-15)***
- **HEA 601** Principles of Community Health Education (3)
- **HEA 602** Epidemiology (3)
- **HEA 604** Public Health Statistics (3)
- **HEA 608** Environmental Health (3)
- **HEA 645** Health Policy (3)

*May be waived with accredited MPH/MS degree; or related degree.*
Health Education Core (3-12)
- HEA 603 Community Health Analysis (3)
- HEA 609 Community Health Interventions (3)
- HEA 625 Community Health Education Program Evaluation (3)
- HEA 758 Advanced Theoretical Basis for Community Health Education (3)
- HEA 603, HEA 609, and HEA 625 may be waived with accredited MPH/MS in H.E./H.E. related degree.

Professional Development (9)
- HHS 750 Professional Development Seminar (3)
- HEA 760 Teaching in Community Health Education (3)
- and at least one of the following grant writing courses:
  - HEA 701/ENT 701 Promoting and Protecting Health through Entrepreneurship (3)
  - KIN 798 Doctoral Seminar in Grant Writing (3)
  - HHS 702 Professional Grant Writing for Community Organizations (3)

Research Core
- Foundations (6)
  - HEA 751 Foundations of Research for Public Health Education (3)
  - HEA 759 Community-Based Health Education Research (3)
- Methods (18)
  - HEA 752 Quantitative Methods in Public Health (3)
  - HEA 753 Qualitative Methods in Public Health (3)
  - HEA 765 Advanced Program Evaluation in Public Health Education (3)
- And at least three additional methods courses from the following lists:
  - Students should work with Advisor and committee to select coursework complementary of expected dissertation method needs. Additional methods courses taken beyond required may count as part of elective requirements.
  - HHS 650 Applied Multiple Regression (4)
  - ERM 680 Intermediate Statistical Methods in Education (3)
  - ERM 681 Design and Analysis of Educational Experiments (3)
  - ERM 682 Multivariate Analysis (3)
  - ERM 731 Structural Equation Modeling in Education (3)
  - ERM 732 Hierarchical Linear Modeling (3)
  - ERM 668 Survey Research Methods in Education (3)
  - ERM 728 Exploratory and Confirmatory Factor Analytic Methods for Scale Construction (3)
  - STA 571 Statistical Methods for Research I (3)
  - STA 572 Statistical Methods for Research II (3)
  - STA 575 Nonparametric Statistics (3)
  - STA 580 Biostatistical Methods (3)
  - STA 670 Categorical Data Analysis (3)
  - STA 676 Sample Survey Methods (3)
  - NUR 701 Statistical Applications for Nursing Research I (3)
  - NUR 702 Statistical Applications for Nursing Research II (3)
  - HDF 756 Advanced Research Design in Human Development and Family Studies (3)
  - SOC 618 Advanced Data Analysis (3)
  - PSY 609 Statistical Methods in Psychology I (4)
  - PSY 610 Statistical Methods in Psychology II (4)
  - PSC 503 Survey Methods for Policy Research (3)
Qualitative and Mixed Methods

- NUR 703 Qualitative Methods for Nursing (3)
- TED 738 Mixed Methods Research Design in Curriculum and Instruction
- ELC 767 Qualitative Data Collection and Analysis (3)
- ELC 664 Foundations of Interpretive Inquiry (3)
- CST 602 Engaging Communication Research Methodology (3)
- ERM 750 Case Study Methods in Educational Research (3)

Electives (15)

The following list provides examples of possible electives. Elective choices should be made under the advisement of the student's doctoral program committee. A minimum 6 semester hours of HEA courses is required. Additional Methods or Professional Development courses taken above those required may be counted toward elective requirements.

- HEA 612 Management of Community Health Organizations (3)
- HEA 617 Conflict Resolution and Coalition Building (3)
- HEA 622 Social Epidemiology (3)
- HEA 640 Global Health Issues (3)
- HEA 662 Gender and Health (3)
- HEA 666 Health Communication
- HEA 671 Immigrant and Refugee Health (3)
- HEA 676 Problems Seminar (3)
- HEA 725 Advanced Community Health Projects (1-6)
- HEA 735 Topics in Community Health Research (3)
- ERM 667 Foundations of Educational Measurement Theory (3)
- HDF 755 Advanced Theory in HDFS (3)
- KIN 745 Seminar: Social Psychology and Physical Activity (3)
- NTR 643 Nutrition and Aging (3)
- PSC 620 Urban and Regional Development Policy (3)

Dissertation (15)

- HEA 799 Doctoral Dissertation Research (1-15)

HEA - Public Health Graduate Courses

HEA 589 Experimental Course

This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

HEA 600 Contemporary Problems in Health (3:3)

Current personal, community, and world health problems through critical analysis of literature and research.

HEA 601 Principles of Community Health Education (3:3)

Factors affecting health and disease, principles underlying health education practice, and the role of health education in health promotion and disease prevention.

Prerequisite

Admission to the MPH program or permission of instructor

Offered

Fall

HEA 602 Epidemiology (3:3)

Disease etiology and identification of risk factors, utilizing epidemiologic and biostatistical concepts and methods. Applications of epidemiology and biostatistics to assess the efficacy of community health programs.
Offered
Spring

**HEA 603 Community Health Analysis (3:3)**
Assessment of community structure, residents, organizations and associations, to determine health-related capacities, needs, and interests. Emphasizes the use of both primary and secondary data sources for community analysis.

*Prerequisite*
Admission to the MPH program or permission of instructor

*Offered*
Fall

**HEA 604 Public Health Statistics (3:3)**
Investigation of data sources and methods used to gather, analyze and interpret health data; emphasis on computer applications.

*Prerequisite*
Admission to the MPH program or permission of instructor

*Offered*
Fall

**HEA 606 Workshops in Health Education (1–3)**
Current and comprehensive health or health education concerns of schools and society.

*Notes*
No more than 3 hours of this course may be applied to a graduate degree program.

**HEA 608 Environmental Health (3:3)**
Analysis of local, national, and international environmental issues influencing the health of individuals and communities; air and water quality, waste management, disease control, occupational settings, population, and environmental planning.

*Offered*
Fall

**HEA 609 Community Health Interventions (3:3)**
Overview of theories, successful intervention strategies, and methods of implementation across the social ecology and their application to the development of health education programs.

*Prerequisite*
HEA 601, HEA 603, HEA 604, HEA 608

*Prerequisite OR Corequisite*
HEA 602

*Offered*
Spring

**HEA 612 Management of Community Health Organizations (3:3)**
Analysis and skill development in management of community health organizations, including self-reflection, planning, staffing, marketing, building and managing agency and community teams. Literature reviews, community interviews, case study and experiential analysis. Spring

*Prerequisite*
Admission to a graduate degree program or permission of instructor

*Offered*
Spring
HEA 616 Workplace Health Promotion (3:3)
Public and private worksite health promotion programs. Skills and knowledge to oversee the planning, implementation, and evaluation of these programs. Links to employee benefits and successful programs to be critically examined.
Prerequisite
Admission to a graduate degree program or permission of instructor

HEA 617 Conflict Resolution and Coalition Building (3:3)
Theory, analysis, and skill development in conflict resolution, negotiation, and coalition building for health education and human service professionals.
Prerequisite
Admission to a graduate degree program or permission of instructor

HEA 620 School Health Programs (3:3)
The components of comprehensive school health programs, review of research and evaluation literature. The role of school health coordinators or administrators is examined in the context of North Carolina schools.
Prerequisite
HEA 601, HEA 602 or permission of instructor

HEA 622 Social Epidemiology (3:3)
Content, methods and theory of social epidemiology.
Prerequisite OR Corequisite
HEA 602, HEA 604

HEA 625 Community Health Education Program Evaluation (3:3)
Issues, problems, and techniques involved in evaluation of community health education programs.
Prerequisite
HEA 601, HEA 602 and completion of or concurrent enrollment in HEA 603, or permission of instructor
Offered
Fall

HEA 635 Health Education in the Community and School (3:3)
Planning, preparation, and presentation of health education information and programs for school and community groups.
Prerequisite
Permission of instructor

HEA 640 Global Health Issues (3:3)
Examine global health issues with an analysis of the determinants of health status in selected world regions and analyze global prevention efforts. Study of international organizations’ roles and programs.

HEA 645 Health Policy (3:3)
Health policy process in the US; examination of historical and current health policy issues, and survey of methods for analyzing health policy options.
Prerequisite
Admission to a graduate degree program or permission of instructor
Offered
Spring

HEA 648 Applied Program Planning (3:3)
Methods and models of planning health education programs for various settings.
Prerequisite
GPA of 3.0 or better, HEA 609 and HEA 645, or permission of instructor

Offered
Fall

**HEA 650 Community Health Internship/Practicum (6)**
Supervised experience in the observation, delivery, and evaluation of health education services in community settings.

**Prerequisite**
GPA of 3.0 or better and HEA 648, or permission of instructor

**Offered**
Spring

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U.

**HEA 660 Human Sexual Relationships (3:3)**
The development of human sexuality and ensuing interpersonal relationships and sexual behavior in today’s society.

**Offered**
Summer

**HEA 662 Gender and Health (3:3)**
Health issues and health problems with respect to gender differences, similarities and historical conceptions.

**Prerequisite**
Admission to a graduate degree program or permission of instructor

**HEA 665 Violence and Public Health (3:3)**
The origins and epidemiology of violence, factors influencing our social response to violence and role of public health professionals in a community response. Literature and field-based analysis.

**Prerequisite**
Admission to a graduate degree program or permission of instructor

**HEA 666 Health Communication (3:3)**
Overview of theory, practice of designing/implementing/evaluating public health communication campaigns and programs. Focus on audience, message, and channel factors; mass media, social marketing and risk communication strategies.

**Prerequisite OR Corequisite**
HEA 601 or permission of instructor

**HEA 670 Adolescent Health (3:3)**
Survey of adolescent health problems and needs. Focus on epidemiological trends, behavioral and social etiological factors, and public health interventions to reduce specific adolescent health problems.

**HEA 671 Immigrant and Refugee Health (3:3)**
Overview of health status of immigrant and refugee populations. Focus on migration, resettlement, adaptation, epidemiological, behavioral, cultural, socioeconomic, legal, and political factors impacting health, and interventions to address needs.

**Prerequisite**
Admission to a graduate program in public health education or permission of instructor

**HEA 676 Problems Seminar (3)**
Specific course title identified each semester by subscript, e.g., Problems Seminar: Professional Literature in Health Education.

Prerequisite
Previous course work in appropriate content areas or permission of instructor

Notes
May be repeated for credit.

**HEA 680 Community Health Seminar (3:3)**
Culminating experience to help students synthesize and integrate community health education knowledge, theory, and principles.

Prerequisite OR Corequisite
HEA 648, HEA 650 or permission of instructor

Offered
Spring

**HEA 695 Independent Study (1–3)**
Intensive study in an area of special interest in health education.

Prerequisite
Demonstrated competency for independent work and permission of departmental academic advisor and the instructor.

Notes
May be repeated for credit.

**HEA 697 Community Health Field Project (1–3)**
Supervised community health education field project including a major literature-based paper.

Prerequisite
HEA 601, HEA 602, HEA 603 and HEA 625, or permission of instructor

Notes
May be repeated for up to 6 credit hours.

**HEA 698 School Health Field Project (1–3)**
Supervised school health setting project including a major literature-based paper.

Prerequisite
HEA 601, HEA 602, HEA 620 and a related research or evaluation course or permission of instructor

Notes
May be repeated for up to 6 credit hours.

**HEA 699 Thesis (1–6)**

Prerequisite
Permission of instructor and application due March 15 prior to final year of study.

Notes
May be repeated for up to 6 credit hours, minimum of 3 credit hours required for graduation.

**HEA 701 Promoting and Protecting Health through Entrepreneurship (3:3)**
Introduction to Federal Small Business Research grant mechanisms for entrepreneurial research. Preparation of a grant proposal for submission to NIH, CDC, or Department of Education.

**Cross Listed Courses**
ENT 701

**HEA 702 Professional Grant Writing for Community Organizations (3:3)**
Theoretical and applied avenues to learning Professional Grant Writing for Health and Human Service Organizations in the Community.

**Prerequisite**
Enrolled graduate students in the School of HHS, or Permission of Instructor.

**Notes**
Cross listed with HHS 702.

**HEA 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**HEA 725 Advanced Community Health Projects (1–6)**
Scholarly inquiry project developed by the student with faculty guidance.

**Prerequisite**
Permission of instructor

**Notes**
May be repeated for a maximum of 6 credit hours. Grade: Satisfactory/Unsatisfactory, S/U.

**HEA 735 Topics in Community Health Research (3:3)**
Specific course title identified each semester offered by subtitle (e.g., Organizational Behavior, Women and Girls Health, Applied Research in Communities). May be repeated for credit when topic varies.

**Prerequisite**
Permission of instructor

**Notes**
Formerly PSY 683.

**HEA 751 Foundations of Research for Public Health Education (3:3)**
Central issues in the philosophy of social and behavioral science with application to public health. Assumptions, models, and methodologies necessary to pursue research in community health education.

**Prerequisite**
Admission to PhD program or permission of instructor

**HEA 752 Quantitative Methods in Public Health (3:3)**
Research methods and ecologic, experimental, and observational research designs in community health education. Topics include advanced study designs, reliability, validity, generalizability, bias, sampling and power.

**Prerequisite**
HEA 751

**HEA 753 Qualitative Methods in Public Health (3:3)**
Competing paradigms in qualitative research, integration of qualitative and quantitative methods, sampling, data collection and analysis in qualitative research for public health.

**Prerequisite**
HEA 751, HEA 752 or permission of instructor

**HEA 755 Community Research Practicum (3:1:6)**
Supervised practicum experiences in developing, conducting, funding, and disseminating community-based participatory research in public health education.

**Prerequisite**
Admission to PhD program or permission of instructor

**Notes**
Must be taken 2 times for credit.
HEA 758 Advanced Theoretical Basis for Community Health Education (3:3)
Examination of theories used by health educators to conduct research in organizational, community, or individual change and improvement in health and quality of life.
Prerequisite
HEA 609, HEA 751, HEA 752, or permission of instructor

HEA 759 Community-Based Health Education Research (3:3)
Foundational work in research methods applied to the challenges inherent in the development of skills associated with community-based participatory research of health promotion programs.
Prerequisite
Permission of instructor

HEA 760 Teaching in Community Health Education (3:3)
Introduction to principles and practices of good undergraduate teaching in public health. Includes course planning, teaching techniques, assessment strategies, legal and ethical issues, and supervised practice.
Prerequisite
Permission of instructor

HEA 765 Advanced Program Evaluation in Public Health Education (3:3)
Advanced education in program evaluation, evaluation designs, and their application to complex public health interventions. Emphasis on evaluation practices relevant for Community-Based Participatory Research programs in public health education.
Prerequisite OR corequisite
HEA 602, HEA 604, HEA 622, HEA 751, HEA 752, HEA 753

HEA 799 Doctoral Dissertation Research (1–15)

HEA 801 Thesis Extension (1–3)

HEA 802 Dissertation Extension (1–3)

HEA 803 Research Extension (1–3)
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Administration
Melissa R. Floyd-Pickard, Department Chair
Jeffrey Shears, Director of Graduate Study

About
The Joint Master of Social Work (MSW) program represents the efforts of faculty at North Carolina Agricultural and Technical State University (NCA&TSU) and The University of North Carolina at Greensboro (UNCG). This is a single academic program with participation in instruction by faculty from each department. Instruction is conducted on the campuses of both universities. The program is accredited by The Council on Social Work Education and the curriculum has been designed by the joint faculty to provide students with a multicultural clinical social work education. The model for the curriculum is based on contemporary, state-of-the-art theory and practice methods. The curriculum is organized by foundation, concentration, and field instruction. The primary purpose of the MSW program is to prepare students for multicultural clinical social work practice.

Each MSW student completes 1008 hours of internships in community agencies. A 42-credit hour Advanced Standing option is available for highly qualified students who have graduated from a CSWE-accredited BSW Program; these students complete a 672-hour advanced internship.

Faculty

Professors
Tanya Coakley, Foster care and child welfare.
Melissa Floyd-Pickard, Mental health and psychiatric social work (Chair of Department). (E)
Elizabeth W. Lindsey, Services to individuals and families, homelessness, strength based practice. (E)
John Rife, Social and economic impacts of unemployment and income deficiency upon older workers, families and the homeless, and evaluation of model programs to serve these populations. (E)
Jeffrey Shears, Men (fathering, multicultural issues, HIV and AIDS) and quantitative research with an emphasis on data sharing among social service agencies (Director, Joint Master of Social Work Program; Joint appointment with NC A&T).
Robert J. Wineburg, Relationship between federal domestic social welfare policy and local service provision, the involvement of religious organizations in local social service delivery and policy development. (E)

Associate Professors
Elisabeth P. Hurd, Families and children, interpersonal violence, law and social work, program evaluation. (E)
Kelly Jay Poole, Health, mental health and clinical social work practice.
Tyreasa Washington, African American kinship care children and families, mental health and social and academic competence among African American children, child welfare (including fatherhood research).

Assistant Professors
Yarneccia D. Dyson, HIV and STI prevention, healthy equity/social determinants of health and access of marginalized communities, women’s studies and community engagement/community-based participatory research.
Meredith C.F. Powers, Professional socialization of social workers, ecological justice, university-community partnerships for sustainability.
Danielle Swick, Evidence-based practice, school-based intervention research, child and adolescent mental health, community-engagement in research, quantitative analysis.

Academic Professional Assistant Professors
Alicia Kaplan, Child welfare, trauma, clinical social work practice.
Daniel Rhodes, Community mental health, immigrant and refugee populations, conflict resolution, restorative justice, peace and social justice issues, Engaged Buddhism, ecopsychology, international social work and social development.
Michael Thull, Mental health, gender/sexuality, crisis intervention, disaster mental health.

Lecturer
Fran Pearson, Health disparity and clinical social work.

Adjunct Faculty from North Carolina A & T State University
Arnold Barnes, Associate Professor
Sharon Parker, Associate Professor
Wayne Moore, Professor

Graduate Programs
• Master of Social Work (MSW) offered jointly with North Carolina A&T State University, (60), and Advanced Standing Option, (42)
• Post-Baccalaureate Certificate in Gerontology (16) (see Gerontology Program)
• Master of Science in Gerontology (31) (see Gerontology Program)

The Joint Master of Social Work (MSW)

Program Goals
Four program goals reflect the mission of the Joint Master of Social Work program in three complementary areas: the provision of a quality master’s level social work curriculum; service to the people of North Carolina; and scholarship.
• Create an intentional learning community which recognizes, understands, supports, and honors diversity and difference, especially for students from oppressed groups.
• Prepare graduates to engage in culturally-competent, effective, ethical, multicultural clinical social work practice.
• Prepare graduates to be leaders who collaborate with consumers and colleagues to promote social and economic justice and improve the lives of the people of North Carolina.
• Conduct and disseminate community-engaged scholarship which contributes to the knowledge base of the profession and promotes effective social work practice.

Curriculum Plan
The Joint Master of Social Work program with the Department of Sociology and Social Work at NCA&TSU offers two-year, three-year, and advanced standing program options. Students in the full-time two-year and three-year options complete 60 hours of course work. The advanced standing option requires 42 hours in one calendar year. Admission, program, course, and curriculum requirements are the same for the two-year and three-year options. All students must complete courses in the prescribed sequence in order to progress successfully to completion of the degree program.

The curriculum design of the program provides students with a theoretical and applied education in social work to enhance and promote multicultural clinical social work education. The program is organized to ensure that all students, as advanced social work practitioners, will be prepared to independently engage in clinical social work practice with individuals, families, and small groups, and to work effectively within organizations and communities around issues of social justice and access to services.

Foundation Year Curriculum
In the foundation curriculum, students complete 30 semester hours of course work. Students complete courses in social work and social welfare policy, social work practice and human diversity, social work practice with individuals, social work practice with groups, and family theory and intervention. Students also complete courses on foundations of clinical social work practice, social work and social justice, social work research methods, and
two foundation field instruction and seminar courses. The purpose of the foundation course work is to prepare students for the advanced concentration curriculum.

**Advanced Concentration Curriculum**
In the advanced concentration curriculum, students complete an additional 30 semester hours of course work. Students complete two courses in advanced social work clinical practice, an advanced research course, and a course on organizational practice. They also complete two semesters of advanced field instruction and field seminar. Students also complete two graduate-level electives, which must be approved by the student’s educational advisor.

**Advanced Standing Option**
Advanced Standing students have been admitted into Advanced Standing with a BSW degree and complete 42 hours of graduate course work to obtain the MSW. They begin their graduate course work in the summer taking 12 hours of course work. This course work builds a content bridge between BSW course work and the advanced year curriculum of the MSW program.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

A Joint Admissions Committee comprised of faculty members from UNCG and NCA&TSU use a common evaluation system to review applications and recommend applicants for admission. The review process ensures a consistent and fair evaluation of applicants.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement, a case analysis, a Volunteer/Work Experience form, and show evidence of a liberal arts foundation that includes 18 credit hours of Social and Behavioral Sciences (political science, psychology, anthropology, economics, ethnic/global studies, history and sociology); 6 credit hours of Humanities; 3 credit hours of Human Biology or Human Development; and 3 credit hours of Statistics.

Applicants must demonstrate intellectual and personal qualifications considered essential to the successful practice of social work, such as sensitivity and responsiveness in relationships, concern for the needs of others, adaptability, good judgment, creativity, integrity, and skill in oral and written communication.

The MSW program does not grant academic credit for life or work experience. Only students who have been admitted to the program may take social work courses. Specific policies governing student progression in the program may be found in the JMSW Student Handbook and in the JMSW Field Instruction Manual.

Applicants to the Advanced Standing option must have earned a Bachelor of Social Work degree from a Council on Social Work Education accredited program, have a GPA in social work courses of 3.5 or better, and provide a recommendation from his/her BSW field supervisor (as one of the three recommendations required).

**School Social Work Licensure**
Students intending to become licensed at the graduate level for school social work by the North Carolina Department of Public Instruction need to complete the Licensure Program, which has been developed with the School of Education.

In addition to completing the requirements for the JMSW Program, the student must be admitted to the Teacher Education Program and successfully complete SWK 651. The advanced year field instruction (SWK 640 and 647) must be taken in a school social work setting. Graduate licensure in school social work is granted by the North...
Carolina Department of Public Instruction. Students interested in school social work licensure should contact the school social work coordinator in the Department of Social Work.

**Two-Year Option**

**Year One: Foundation Courses (30)**

**First Semester (Fall 15)**
- SWK 600 Field Instruction and Seminar I (3)
- SWK 621 Foundations of Social Work and Social Policy (3)
- SWK 622 Social Work Practice with Individuals (3)
- SWK 623 Social Work with Groups (3)
- SWK 624 Social Work Practice and Human Diversity (3)

**Second Semester (Spring 15)**
- SWK 608 Field Instruction and Seminar II (3)
- SWK 609 Family Theory and Intervention (3)
- SWK 618 Social Work and Social Justice (3)
- SWK 619 Foundations of Clinical Social Work Practice (3)
- SWK 626 Social Work Research Methods (3)

**Year Two: Advanced Curriculum (30)**

**First Semester (Fall 15)**
- SWK 634 Research Designs and Data Analysis for Social Work Practice (3)
- SWK 640 Field Instruction III (5)
- SWK 641 Field Seminar III (1)
- SWK 652 Advanced Clinical Social Work Practice I (3)
- One 3 hour elective

**Second Semester (Spring 15)**
- SWK 644 Organizational Context of Clinical Social Work Practice
- SWK 647 Field Instruction IV
- SWK 648 Field Seminar IV
- SWK 653 Advanced Clinical Social Work Practice II
- Two 3 hour electives

**Three-Year Option**

**Year One (18)**

**First Semester (Summer 6)**
- SWK 621 Foundations of Social Work and Social Policy (3)
- SWK 618 Social Work and Social Justice (3)

**Second Semester (Fall 6)**
- SWK 622 Social Work Practice with Individuals (3)
- SWK 624 Social Work Practice and Human Diversity (3)

**Third Semester (Spring 6)**
- SWK 619 Foundations of Clinical Social Work Practice (3)
- SWK 623 Social Work with Groups (3)

**Year Two (18)**

**First Semester (Fall 9)**
- SWK 600 Field Instruction and Seminar I (3)
- SWK 609 Family Theory and Intervention (3)
- One 3 hour elective

**Second Semester (Spring 9)**
- SWK 608 Field Instruction and Seminar II (3)
- SWK 626 Social Work Research Methods (3)
One 3 hour elective

Year Three (24)
First Semester (Fall 12)
- SWK 634  Research Designs and Data Analysis for Social Work Practice (3)
- SWK 640  Field Instruction III (5)
- SWK 641  Field Seminar III (1)
- SWK 652  Advanced Clinical Social Work Practice I (3)

Second Semester (Spring 12)
- SWK 644  Organizational Context of Clinical Social Work Practice (3)
- SWK 647  Field Instruction IV (5)
- SWK 648  Field Seminar IV (1)
- SWK 653  Advanced Clinical Social Work Practice II (3)

Advanced Standing Option
The 42 hour Advanced Standing Option is designed to allow highly qualified students to earn the Master of Social Work degree in one calendar year by building on knowledge and skills previously attained through Bachelor of Social Work course work.

Required Summer Bridge Courses (12)
Summer Session I (6)
- SWK 623  Social Work with Groups (3)
- SWK 624  Social Work Practice and Human Diversity (3)
Summer Session II (6)
- SWK 626  Social Work Research Methods (3)
- SWK 631  Social Work with Individuals and Families: Theory and Practice (3)

Upon successful completion of the above courses during the summer, Advanced Standing students admitted during summer will join the ongoing MSW full-time two-year class in Year 2: Advanced Year Curriculum. At that time Advanced Standing students will take the following courses:

Year 2: Advanced Curriculum (30)
First Semester (Fall -15)
- SWK 634  Research Designs and Data Analysis for Social Work Practice (3)
- SWK 640  Field Instruction III (5)
- SWK 641  Field Seminar III (1)
- SWK 652  Advanced Clinical Social Work Practice I (3)
  One 3 hour elective
Second Semester (Spring -15)
- SWK 648  Field Seminar IV (5)
- SWK 644  Organizational Context of Clinical Social Work Practice (3)
- SWK 647  Field Instruction IV (1)
- SWK 653  Advanced Clinical Social Work Practice II (3)
  One 3 hour elective

SWK -Graduate Courses in Social Work

SWK 505 Environmental Justice: Interdisciplinary Response for Sustainability (3:3)
Interdisciplinary exploration of models that address social, economic, environmental justice concerns and their impact on community, economic, and environmental sustainability.

Cross Listed Courses
PCS 505
SWK 510 Selected Topics in Social Work (3:3)
Opportunity for students to study in depth topic of special interest.
Prerequisite
Permission of instructor
Notes
May be repeated for credit when topic varies.

SWK 520 Methods and Practice of Family and Marital Therapy (3:3)
Systems/communications approach to marital and family therapy. Students develop ability to apply concepts to understand and intervene in family systems. Related therapeutic concepts and techniques also discussed.
Prerequisite
Permission of instructor

SWK 522 Comparative Study of Cross-cultural Social Work Practice (3:3)
Compares social work, social service programs, and social policies of the U.S. with those of selected other countries throughout the world, emphasizing services for families, children, and vulnerable populations.
Prerequisite
For undergraduates: SWK 215, SWK 310, SWK 311, SWK 315, SWK 325, SWK 351
Offered
Summer
Notes
May be repeated for credit when topic varies.

SWK 527 Human Services for Immigrants and Refugees (3:3)
A perspective on the history of immigration, its role in the U.S.A., immigrants in North Carolina, their process of integration, cross-cultural competency, and the challenges in services delivery to immigrants.
Offered
Fall

SWK 530 Social Agency Program Development (3:3)
Organization of new agencies or those initiating additional services. Needs assessment, resource development, grant writing, agency operations, and relationships with funding agencies.

SWK 533 Restorative Justice: Theory and Practice (3:3)
Examines the principles and practice of restorative justice, evaluating the potentials and limitations of restorative methods and interventions in the US and internationally.
Cross Listed Courses
PCS 533

SWK 540 Social Entrepreneurship: Justice and a Green Environment (3:3)
Interdisciplinary engagement of social entrepreneurship as model for change on an issue of environmental sustainability. Exploration of models that respond to social, economic, environmental, and justice issues.
Cross Listed Courses
Same as BUS 540, CPS 540, CST 540, ENT 540, WGS 540
Prerequisite
Upper-division undergraduate or graduate student status

SWK 550 Social Services in Health Care (3:3)
Examination of social services in health care settings. Emphasis on organizational context, interdisciplinary cooperation, and skill required for work in primary care setting.
SWK 551 Special Problems in Social Work (1–3)
Intensive, independent study of specialized topics.
Prerequisite
Requires written plan, permission of sponsoring instructor, and approval of department head.

SWK 554 Mental Health Social Work (3:3)
This course will provide knowledge and skills necessary for practicing effective social work with people who have mental illness and their families.

SWK 555 Substance Abuse and Social Work Practice (3:3)
Introduction to the issues of substance abuse and addiction and their impact on clients and their families. Social work assessment and intervention methods will be taught.

SWK 570 Social Services for the Aging (3:3)
Systematic study of social work approaches to providing services to the aging. Focus on current policies, services, and models of practice.

SWK 579 Gender and Peacebuilding (3:3)
Examines the role of gender, sex, diversity, and power relations in the creation and resolution of conflict and building of peace.
Cross Listed Courses
PCS 579
Prerequisite
CPS 600 and CPS 601 or permission of instructor

SWK 582 School Social Work (3)
Examination and understanding of school social work services with emphasis on professional standards, cultural sensitivity, accountability, and program planning.

SWK 584 Social Services for Children (3:3)
Designed for practitioners and students to provide knowledge for working with children and to teach strategies, techniques, and skills for effective treatment.

SWK 585 Social Work with Families in Crisis (3:3)
Social work practice with families in crisis, with a focus on problems currently faced by families and strategies to help them.

SWK 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SWK 600 Field Instruction and Seminar I (3:1:16)
Application of theories and concepts to professional social work practice within a field agency. Seminar assists students to integrate theory and classroom learning into agency practice. (Graded on S-U basis)
Prerequisite
Admission to the JMSW Program

SWK 608 Field Instruction and Seminar II (3:1:16)
Application of theories and concepts to professional social work practice within a field agency. Seminar assists students to integrate theory and classroom learning into agency practice. (Graded on S-U basis)
Prerequisite
SWK 624
SWK 609 Family Theory and Intervention (3:3)
Introduction to family treatment. Course will include assessment and intervention with families using the structural, strategic, solution-focused, object relations and narrative theoretical intervention approaches.
*Prerequisite*
SWK 624

SWK 618 Social Work and Social Justice (3:3)
Examines social work's historical and current commitment to social justice, focusing on clinical practice and initiatives to address disparities in funding, clinical trials, consumer access, treatment, and provision of services.
*Prerequisite*
SWK 624

SWK 619 Foundations of Clinical Social Work Practice (3:3)
Introduction to clinical practice theories and skills including human development and personality theories, strength-based perspectives, and an overview of diagnosis and assessment in the service planning process.
*Prerequisite*
SWK 624

SWK 621 Foundations of Social Work and Social Policy (3:3)
Explores the history and development of social welfare institutions and social work. Examines the relationships between social problems, social policies, and social work practice from historical and contemporary perspectives.
*Prerequisite*
Admission to the MSW program

SWK 622 Social Work Practice with Individuals (3:3)
Introduction to direct social work practice. Students gain knowledge, skills and values necessary to provide a wide scope of developmental, preventive and therapeutic services to individuals.
*Prerequisite*
Admission to the MSW program

SWK 623 Social Work with Groups (3:3)
Advanced course designed to teach group process and strategies, techniques, and skills for working with groups such as support groups and task groups in human services settings.
*Prerequisite*
Admission to the MSW program

SWK 624 Social Work Practice and Human Diversity (3:3)
Examines cultural and social diversity; addresses theoretical and practical dimensions of social work practice with oppressed people of color, women, the aged, the sexually diverse, and the physically disabled.
*Prerequisite*
Admission to the MSW program

SWK 626 Social Work Research Methods (3:3)
Research methodology as it relates to the professional practice of social work. Examines quantitative and qualitative methods as means for solving social problems.
*Prerequisite*
SWK 624

SWK 631 Social Work with Individuals and Families: Theory and Practice (3:3)
Emphasis on the practice of social work in assessment and intervention using personality theory, family theory and the family life cycle, and social work theory.

Prerequisite
Admission to the Advanced Standing program option

**SWK 632 Social Work with Groups, Communities, and Organizations (3:3)**
Emphasis on the practice of social work with groups and within communities and organizations through the examination and application of an advanced generalist framework.

Prerequisite
Admission to the Advanced Standing program option

**SWK 634 Research Designs and Data Analysis for Social Work Practice (3:3)**
Advanced skills in (a) conceptualizing research problems, (b) completing research in the social work domains: needs assessment, program evaluation, and single subject research, and (c) using inferential skills for data analysis.

Prerequisite
SWK 626

**SWK 640 Field Instruction III (5:0:24)**
Application of theories and concepts to the role of a professional social work practitioner within a field agency. Taken concurrently with SWK 641 Field Seminar III. (Graded on S-U basis)

Prerequisite
SWK 626
Corequisite
SWK 641 and SWK 652

**SWK 641 Field Seminar III (1:1)**
Field seminar to be taken concurrently with SWK 640 Field Instruction III; assists student to integrate theory and classroom knowledge into their agency field practice.

Prerequisite
SWK 626
Corequisite
SWK 640

**SWK 644 Organizational Context of Clinical Social Work Practice (3:3)**
Focuses on a range of organizational and professional issues social workers encounter as clinicians, service providers, and administrators in diverse clinical settings, with emphasis on culturally responsive social work practice.

Prerequisite
SWK 626

**SWK 647 Field Instruction IV (5:0:24)**
Application of theories and concepts to the role of a professional social work practitioner within a field agency. Taken concurrently with SWK 648 Field Seminar IV. (Graded on S-U basis)

Prerequisite
SWK 626
Corequisite
SWK 648 and SWK 653

**SWK 648 Field Seminar IV (1:1)**
Field seminar to be taken concurrently with SWK 647 Field Instruction IV; assists students to integrate theory and classroom knowledge into their agency field practice.
Prerequisite
SWK 626
Corequisite
SWK 647

SWK 650 Clinical Assessment in Social Work (3:3)
Skill-building for competency-based assessment and diagnosis using a biopsychosocial social work framework to assess client strengths and disorders.

SWK 651 Advanced School Social Work (3:3)
Skill-building for social work practice in the schools with emphasis on culturally sensitive student assessment and intervention, and professional standards and accountability.
Prerequisite
SWK 624 and SWK 626 or permission of instructor
Corequisite
SWK 640 or SWK 647 or permission of instructor

SWK 652 Advanced Clinical Social Work Practice I (3:3)
The first of two advanced level courses in clinical social work practice, this course will focus on building competencies in clinical assessment and diagnosis of mental and substance abuse disorders.
Prerequisite
SWK 626
Corequisite
SWK 640

SWK 653 Advanced Clinical Social Work Practice II (3:3)
This second advanced clinical practice course will focus on expanding competencies in clinical assessment and diagnosis of mental and substance abuse disorders, as well as applying culturally responsive clinical interventions.
Prerequisite
SWK 652
Corequisite
SWK 647

SWK 654 Special Topics in Social Work (3:3)
Opportunity for students to study in depth topic of special interest. JMSW students only or with permission of instructor. Course may be repeated for a maximum of 6 credit hours.

SWK 681 Family-Centered Interdisciplinary Practice: System of Care (3:3)
System of Care has core values/principles, infuses service planning/delivery. Students develop competencies: 1) family-centered; 2) client partnerships; 3) community services; 4) cultural competency; 5) interagency collaboration. Participatory research with families included. (Same as PSY 681)
Cross Listed Courses
PSY 681
Prerequisite
Exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, or permission of instructor

SWK 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

SWK 803 Research Extension (1–3)
NANOSCIENCE AND NANOENGINEERING, JOINT SCHOOL OF
2907 East Lee Street, Greensboro, NC 27401 • 336-285-2800• jsnn.ncat.uncg.edu/

Administration
James Ryan, Dean
Daniel Herr, Chair
Hemali Rathnayake, Director of Graduate Study

About
The Joint School of Nanoscience and Nanoengineering (JSNN) is a collaboration of North Carolina A&T State University and The University of North Carolina at Greensboro. JSNN’s research and educational programs focus on the emerging areas of nanoscience and nanotechnology. The strengths of the two universities in the basic sciences and in engineering make them ideal partners for this new, interdisciplinary school. JSNN faculty and students will be able to access laboratories and classrooms at NC A&T, UNCG as well as the leading edge JSNN faculty at the Gateway University Research Park.

Nanotechnology is often referred to as convergent technology because it utilizes knowledge from a diverse array of disciplines including biology, chemistry, physics, engineering, and technology. Nanotechnology is rapidly becoming a large part of the world’s economy, generating an array of materials, technologies, and new products. JSNN’s Professional Master of Science in nanoscience and PhD in nanoscience degree programs have been developed to meet the need for trained professionals in the emerging high technology industries using nanotechnology.

JSNN has six research focus areas—nanobioscience, nanometrology, nanomaterials (with special emphasis on nanocomposite materials), nanobioelectronics, nanoenergy, and computational nanotechnology. These technical areas will afford numerous opportunities for collaboration with industrial partners.

Faculty
Professors
Daniel Herr, Nanoenergy, nanobioelectronics, designed materials and assembly, and optimization (Chair of Department). (E)
James Ryan, Thin films, nanoelectronics, semiconductor process technology (Dean). (E)

Associate Professors
Christopher Kepley, Nanomedicines, nanoimmunology, fullerenes, understanding ways to inhibit inflammatory diseases, designing new nano-based diagnostics and theranostics for human disease. (E)
Dennis R. LaJeunesse, Biomimetic/bio-composite materials, mitochondrial morphology and muscle structure/function, modeling viral disease using the drosophila model system. (E)
Hemali Rathnayake, Organic materials (OLEDs, OPVs, and OTEGs), nanomaterials and polymer chemistry (Director of Graduate Study). (E)
Joseph Starobin, Application of methods of theoretical, mathematical and computational physics to cardiovascular research; electrophysiological data collection with MEMS and nano-enabled sensors. (E)
Jianjun Wei, Functional nanomaterials, nanolasmonics & nanophotonics, bioelectronics & biomimetics, electron transfer studies, and applications in bio/sensing, biomedicine, energy and environments. (E)

Graduate Programs
• Professional Master of Science in Nanoscience (MS), (30); (Thesis Concentration, 30 hours)
• Doctor of Philosophy in Nanoscience (PhD), (60)
• Accelerated BS in Physics to PhD in Nanoscience
Mission Statement
The mission of the Nanoscience Department in the Joint School of Nanoscience and Nanoengineering is to prepare students from a variety of backgrounds to conduct interdisciplinary fundamental, applied, and translational Nanoscience research, and support a collaborative research environment that leverages transdisciplinary research platforms.

Professional Master of Science in Nanoscience (MS), (30)
The 30-hour, non-thesis, online MS in Nanoscience follows the Professional Science Master’s degree model, featuring coursework in nanosciences and business and an internship to provide practical experience. It is designed for students with strong backgrounds in technical fields who seek additional specialized training to qualify them for positions in companies that work in the field of nanotechnology.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement indicating their interest in the program and a current Curriculum Vitae.

Qualified applicants will have a BS degree in an area related to nanoscience (physics, chemistry, biology, mathematics, computer science, or engineering).

Degree Requirements
Nanoscience Survey Courses (9)
Students choose three courses to introduce them to fundamental concepts, methods, and discoveries in different areas of nanoscience. Courses include the following:
- NAN 601 Nanochemistry (3)
- NAN 602 Nanobiology (3)
- NAN 603 Nanophysics (3)
- NAN 604 Nanotechniques (3)
- NAN 605 Mathematical Methods in Nanoscience and Nanoengineering (3)

Disciplinary Foundation Courses (9)
Appropriate courses to build on the undergraduate degree ensuring appropriate depth of knowledge in the student’s discipline will be selected with the student’s program advisor. Examples of the University offering the course is indicated below.

Biology
- BIO 536 Biology of Aging (3)
- BIO 540 Genes and Signals (3)
- BIO 549 Current Topics in Biology (1-3)
- BIO 586 Cell Cycle and Cancer (3)
- BIO 587 Epigenetics (3)
- BIO 600 Introduction to Graduate Studies (1)
- BIO 707 Seminar in Environmental Health Science (2)
- BIO 731 Environmental Health Science I: Ecosystems to Individuals (3)
- BIO 549D Current Topics in Biology: Synaptic Plasticity (1-3)
- BIO 549E Current Topics in Biology: Hormones/Pheromones (1-3)

Note: All offered at UNCG

Chemistry
- CHE 555 Organometallic Chemistry (3)
<table>
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<tr>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHE 632</td>
<td>Advanced Analytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHE 633</td>
<td>Bioanalytical Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHE 641</td>
<td>Advanced Inorganic Chemistry II</td>
<td>3</td>
</tr>
<tr>
<td>CHE 660</td>
<td>Biochemical Pharmacology and Disease Targets</td>
<td>3</td>
</tr>
<tr>
<td>CHE 661</td>
<td>Advanced Physical Chemistry I</td>
<td>3</td>
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<td><strong>Note:</strong></td>
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**Computational Sciences**

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<tbody>
<tr>
<td>CSC 550</td>
<td>Combinatorics on Words</td>
<td>3</td>
</tr>
<tr>
<td>CSC 553</td>
<td>Theory of Computation</td>
<td>3</td>
</tr>
<tr>
<td>CSC 640</td>
<td>Software Engineering</td>
<td>3</td>
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<tr>
<td>CSC 650</td>
<td>Language Theory</td>
<td>3</td>
</tr>
<tr>
<td>CSC 656</td>
<td>Foundations of Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>CSC 671</td>
<td>Advanced Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSC 675</td>
<td>Principles of XML Databases</td>
<td>3</td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>All offered at UNCG</td>
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**Engineering**

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<tr>
<td>ELEN 805</td>
<td>Thin Film Technology for Device Fabrication</td>
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<tr>
<td><strong>Note:</strong></td>
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**Mathematics**

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<tr>
<td>MAT 624</td>
<td>Numerical Mathematics</td>
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<tr>
<td>MAT 695</td>
<td>Real Analysis</td>
<td>3</td>
</tr>
<tr>
<td>STA 651</td>
<td>Mathematical Statistics</td>
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<tr>
<td><strong>Note:</strong></td>
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**Nutrition**

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<tbody>
<tr>
<td>NTR 625</td>
<td>Gene Expression and Protein Metabolism</td>
<td>2</td>
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<tr>
<td>NTR 626</td>
<td>Energy, Carbohydrate, Lipid Metabolism</td>
<td>2</td>
</tr>
<tr>
<td>NTR 627</td>
<td>Antioxidants and Bioactive Food Components</td>
<td>2</td>
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<tr>
<td>NTR 628</td>
<td>Vitamins and Minerals</td>
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<td><strong>Note:</strong></td>
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**Physics**

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<tr>
<td>PHY 711</td>
<td>Experimental Course</td>
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**Technology**

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<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG 760</td>
<td>Advanced MFG Process /Computer Numerical Control</td>
<td></td>
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<tr>
<td>MFG 770</td>
<td>Managing a Total Quality System</td>
<td></td>
</tr>
<tr>
<td>MFG 780</td>
<td>Reliability Testing and Analysis</td>
<td></td>
</tr>
<tr>
<td>NAN 711</td>
<td>Experimental Course</td>
<td></td>
</tr>
<tr>
<td>MSIT 779</td>
<td>Statistical Research in Industrial Technology</td>
<td></td>
</tr>
<tr>
<td>TRAN 727</td>
<td>Global Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong></td>
<td>MFG 760, MFG 770, MFG 780, MSIT 779 and TRAN 727 offered at NC A&amp;T; all other courses offered at UNCG</td>
<td></td>
</tr>
</tbody>
</table>

**Business/Management Courses (9)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA 595</td>
<td>Selected Topics in Business Administration</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 595A</td>
<td>Special Topics</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 595B</td>
<td>Special Topics</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 595C</td>
<td>Special Topics</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 595D-J</td>
<td>Special Topics</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 595K</td>
<td>Special Topics</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 595L</td>
<td>Special Topics</td>
<td>1.5-3</td>
</tr>
<tr>
<td>MBA 701</td>
<td>Quantitative Analysis for Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>MBA 702</td>
<td>Financial and Managerial Accounting</td>
<td>3</td>
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</table>
MBA 703  Economic Policies and Impact on Global Outcomes (3)
MBA 704  Leadership Assessment and Career Enhancement (3)
MBA 706  Marketing Management (3)
MBA 707  Financial Management (3)
MBA 708  Operations for Competitive Advantage (3)
MBA 709  Human Capital in Organizations (3)
MBA 710  Ethical Leadership and Sustainable Business (3)
MBA 712  Strategic Management (3)
MBA 716  Leadership and Sustainable Business (3)
MBA 718  Global Business in Practice (3)
MBA 723  Corporate Governance (3)
MBA 724  Financial Institutions (3)
MBA 730  Marketing Research (3)
MBA 733  International Marketing Management (3)
MBA 743  Directed Studies (1.5-3)
MBA 744  Special Topics in Business Administration (1.5-3)
BUAD 705  Methods in Business Analysis
BUAD 712  Foundations of Enterprise Management

Note: All offered at UNCG; BUAD 705 and BUAD 712 offered only at NC A&T

**Internship/Project (3) (Capstone Experience)**
All students must complete a 3-hour internship in an appropriate private or public enterprise engaged in research, commercialization, or manufacturing or 3-hour project on an appropriate subject.

**MS Thesis Concentration**
The MS Thesis concentration follows 30-hour MS degree with thesis option and anticipated completing six hours of thesis credits. Both MS and BS students admitted to this program are expected to start their research project during their first year in the MS program.

**Degree Requirements:**

**Fundamentals of Nanoscience Courses/Survey Courses (12)**
Select 12 credit hours from the following listed courses.

- NAN 601  Nanochemistry (3)
- NAN 602  Nanobiology (3)
- NAN 603  Nanophysics (3)
- NAN 604  Nanotechniques (3)
- NAN 605  Mathematical Methods in Nanoscience and Nanoengineering (3)

**Disciplinary Foundation Courses (6)**
Appropriate courses to build on the undergraduate degree ensuring appropriate depth of knowledge in the student’s discipline will be selected with the student’s program advisor.

Students can select disciplinary foundational courses from the courses listed above.

**Laboratory Rotations (4)**
- NAN 611  Nanoscience Laboratory Rotation (1)

**Nanoscience Seminar Course (2)**
- NAN 621  Professional Development Seminar I (1)
- NAN 622  Professional Development Seminar II (1)
Thesis Credits (6)
  NAN 699  Thesis Course (1-6)

Nanoscience, PhD, (60)
The PhD in Nanoscience requires a minimum of 60 hours and is designed to prepare students to take positions in industrial, governmental, or academic research settings by providing a solid background in nanoscience theory and experimental techniques through course work and dissertation research. Advanced elective courses in nanoscience areas ensure students will have substantial depth of understanding in their area of interest and enable them to effectively carry out advanced nanoscience research.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement indicating their interest in the program and a current Curriculum Vitae.

Qualified applicants will have a BS degree in an area related to nanoscience (physics, chemistry, biology, mathematics, computer science, or engineering) and, as a minimum, completed calculus through differential equations.

Degree Requirements

Fundamentals of Nanoscience Courses (15)
  - NAN 601  Nanochemistry (3)
  - NAN 602  Nanobiology (3)
  - NAN 603  Nanophysics (3)
  - NAN 604  Nanotechniques (3)
  - NAN 605  Mathematical Methods in Nanoscience and Nanoengineering (3)

Laboratory Rotations (4)
In the first two semesters of study, students will rotate through four research labs (seven weeks in each lab) to become familiar with research at JSNN and to provide training in laboratory techniques needed for dissertation research. With the advice of the advisor/committee and permission of the faculty member responsible for the lab, students will select labs based on their interests.
  - NAN 611  Nanoscience Laboratory Rotation (1)

Nanoscience Seminar (2)
In the first two semesters of study, students will take professional development seminars that will expose them to a variety of research and professional development topics such as intellectual property issues, confidentiality, ethical issues in nanoscience, writing successful grant proposals, effective presentation and writing skills, etc.
  - NAN 621  Professional Development Seminar I (1)
  - NAN 622  Professional Development Seminar II (1)

Qualifying Examination
Students will take a qualifying exam on their knowledge of the fundamentals of nanoscience at the end of their first year of coursework in order to continue in the program.

Advanced Nanoscience Electives (15)
Beginning in the second year of the program, each student will choose doctoral-level elective courses from the following areas: physics, chemistry, nutrition, engineering, mathematics, computer science, biology and environmental science. Students may substitute dissertation research for two electives in the third year with the consent of the student’s advisor/committee.

Dissertation Research (24 hours minimum)
By the end of the first year, students will select a dissertation advisor with the objective of preparing a dissertation proposal by the end of the second year. Students will present their proposals to a general JSNN audience in the form of a seminar and defend the proposal in the form of an oral exam.

Dissertation research begins in the second year and students will take a minimum of 3 hours of dissertation research each semester.

Students will complete a written dissertation of their research and give a public oral presentation of the completed work. The defense must occur in the same term that the student applies for graduation.

NAN 799 Nanoscience Dissertation Research

Other Requirements

Seminars
Students are required to attend departmental and JSNN seminars so they may acquire a broad understanding of various current problems in nanoscience.

Teaching Experience
Students are required to gain the equivalent of two semesters of teaching experience, which may be met through a variety of means. Students will work with their advisor/committee to develop a suitable plan to gain appropriate teaching experience.

Accelerated BS in Physics to PhD in Nanoscience

Application and Admission
Qualified UNCG undergraduate students who are pursuing the BS in Physics may apply for admission to the Accelerated Degree Program (ADP). A cumulative undergraduate GPA of at least 3.5 based on at least 30 hours earned at UNCG is required. Students must also maintain a 3.5 GPA in the courses listed under Major Requirements and Additional Area Requirements in the Undergraduate Bulletin. Applicants will be required to take the Graduate Record Examination (GRE) during the second semester of their junior year. Applicants must have completed at least 60 semester credits before applying for admission to the ADP. During the summer after their junior year applicants will submit the Request for Accelerated Degree Program to The Graduate School, and simultaneously apply for admission to the graduate degree program.

Admitted students may apply the following 12 credits of graduate-level coursework toward completion of both the undergraduate and graduate degree, provided that they earn a grade of “B” (3.0) or better in each course and fulfill graduate-level requirements:

NAN 601 Nanochemistry (3)
NAN 602 Nanobiology (3)
NAN 603 Nanophysics (3)
NAN 605 Mathematical Methods (3)

Degree Requirements
Please consult with an advisor to determine how the courses taken at the graduate level will meet requirements in the bachelor’s degree program. All degree requirements for the PhD in Nanoscience remain the same.

NAN – Nanoscience Graduate Courses

NAN 601 Nanochemistry (3:3)
Review of materials chemistry, synthesis of nanoparticles such as carbon nanotubes and fullerenes, chemical reactions and a survey of medicinal chemistry for pharmaceutical applications.

Prerequisite
Graduate student in nanoscience or permission of instructor

NAN 602 Nanobiology (3:3)
Emphasis on cellular and intracellular mechanisms including biological self-assembly, cytoskeletal interactions, protein folding, membrane dynamics, biological energetics, and cell-cell interactions as well as biomaterials.

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**NAN 603 Nanophysics (3:3)**
Emphasis on the areas of physics critical to nanoscience including solid state physics, statistical mechanics, quantum concepts, biophysics, chemical physics, and nanodevices based on semiconductors.

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**NAN 604 Nanotechniques (3:3)**
Fundamental techniques used in nanotechnology, including methods for nanofabrication, nanocharacterization, and nanomanipulation.

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**NAN 605 Mathematical Methods in Nanoscience and Nanoengineering (3:3)**
An emphasis of this required course will be on the areas of mathematics critical to nanoscience and nanoengineering including application of differential equations to numerical and analytical modeling of nanostructures.

**Prerequisite**
Graduate student in Nanoscience or permission of instructor

**NAN 611 Nanoscience Laboratory Rotation (1:0:4)**
A 7-week laboratory rotation intended to develop skills with scientific equipment and provide initial experience with nanoscale research. Four distinct laboratory rotations are required for the PhD in nanoscience.

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**Notes**
May be repeated for credit.

**NAN 612 Food and Agricultural Nanotechnology (3:3)**

**Prerequisite**
Graduate students in the Nanoscience Master’s program, Nanoengineering Master’s and PhD program, food and agricultural science graduates and professionals, or by permission of instructor.

**NAN 620 Immunology (3:3)**
A study of the molecular and cellular basis of the immune system. Topics include the properties of antigens and immunoglobulins, the development and regulation of humoral and cell-mediated immunity, resistance and immunization to infectious diseases, allergies, and autoimmune and immunodeficiency disorders.

**Prerequisite**
UNCG graduate student in sciences

**NAN 621 Professional Development Seminar I (1:1)**
Workplace issues including ethics, confidentiality, writing and presentation skills, innovation, entrepreneurship, and emerging issues in nanotechnology.

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**NAN 622 Professional Development Seminar II (1:1)**
Workplace issues including business plans, globalization, emerging issues in nanotechnology, and further development of writing and presentation skills, innovation, and entrepreneurship.

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**NAN 625 Molecular Biology in Nanosciences (3:2:3)**
A lecture and laboratory course introducing graduate level science students to the principles and practices of molecular biology with emphasis on its application and integration with nanoscience.

**Prerequisite**
Graduate students in nanoscience or other program with permission of instructor. Must have taken Basic Biology (Biology 111-112) and chemistry classes (Chem 111-115), or equivalent.

**NAN 626 Introduction to Stem Cell Biology and Ethics (3:3)**
Fundamental issues, experimental approaches, and emerging areas in stem cell research accompanied by an understanding of the attendant ethical issues that arise from their use in healthcare applications.

**Prerequisite**
UNCG graduate student in sciences

**NAN 630 Advances in Bio-Sensors (3:3)**
Interdisciplinary cutting-edge advances in biosensors with nano-perspectives; specific emphasis on fundamentals, principles and progresses of various types of nanobiosensors, and applications in disease diagnosis, biomedicines, life science and environmental monitoring.

**Prerequisite**
NAN 601, NAN 602, NAN 603, or equivalent courses

**Corequisite**
Graduate students at UNCG or JSNN or permission of instructors

**NAN 655 Biometrics and Biomaterials 3:3**

**Prerequisite**
NAN 602, NAN 604, or permission of instructor

**Notes**
Emphasizes the biomimetic and biological materials development and characterization. Topics range from natural to synthetic biomaterials, characterization of biomaterial properties, and discovery and application of novel biologically inspired materials.

**NAN 692 Directed Studies in Nanoscience (1-4)**
This course gives students flexibility in guided readings, research, and individual project work under direction of a staff member that compliments their graduate project related to nanoscience.

**Prerequisite**
Permission of the Director of Graduate Study in Nanoscience and the professor who will supervise the study

**Notes**
Repeatable up to 4 credits.

**NAN 698 Professional MS in Nanoscience Internship (6:0:24)**

**Prerequisite**
Graduate student in nanoscience or permission of instructor

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**NAN 699 Thesis (1-6)**
**NAN 705 Macromolecular and Supramolecular Chemistry (3:3)**
This course provides the fundamental concepts of macromolecular and supramolecular chemistry, self-assembly methodologies for supramolecular architectures, synthesis of hybrid nanomaterials and their applications in nanoscience and nanoengineering.

*Prerequisite*
Nanochemistry (NAN 601) or Advanced Organic Chemistry course (CHE 553) or equivalent

**NAN 710 Scientific Integrity (1:1:0)**
Explores contemporary issues related to scientific integrity and responsible conduct in research. Case-driven topics expose students to the issues that arise in scientific research and ways to handle these issues.

*Prerequisite*
Student at UNCG or JSNN or Permission of Instructor

**NAN 711 Experimental Course (3:3)**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

*Prerequisite*
Graduate student in nanoscience or permission of instructor

**NAN 730 Nanoscale Reactions (3:3)**
A comprehensive introduction to principles, mechanisms and applications of homo-and heterogeneous chemical or physic-reactions from nano-scale perspective incorporating recent research activities from selected peer-reviewed articles.

*Prerequisite*
NAN 601, NAN 602, NAN 603 or equivalent courses

*Corequisite*
Graduate student at UNCG or JSNN or permission of instructors

*Notes*
Nanoscience, chemistry, biology and physics graduate students.

**NAN 735 Nanomaterials and Reactions by Design (3:3)**

*Prerequisite*
Graduate student in nanoscience or permission of instructor. Nanoscience graduate students must have completed JSNN's Fundamentals of Nanoscience Courses, i.e. NAN 601, 602, 603, 604 or NAN 701, or their equivalent.

*Offered*
Every odd year in Spring semester

**NAN 740 Nonlinear Waves in Biological Excitable Media (3:3)**
Dynamics of reaction-diffusion waves and implementation of theoretical methods to the analysis of these waves in cardiac muscle and nerves.

*Prerequisite*
Graduate student in nanoscience or permission of instructor

**NAN 745 Nanomaging (3:3)**
Use of nanoparticles for in vivo diagnostic medical imaging and therapy.

*Prerequisite*
Graduate student in nanoscience or permission of instructor

**NAN 750 Nanomedicine (3:3)**
General underlying mechanisms leading to inflammation, infectious disease, cancer, and autoimmune disease and the potential nanotechnology has on diagnosing, preventing, and treating these diseases.
Prerequisite
Graduate student in nanoscience or permission of instructor. Basic biology.

NAN 771 Computational Quantum Nanochemistry (3:3)
Fundamentals of computational quantum mechanics and related computational methods applicable to nanoscience. Includes hands-on computer exercises.

Prerequisite
Graduate student in nanoscience or permission of instructor

NAN 799 Nanoscience Dissertation Research (1–12)

NAN 801 Thesis Extension (1-3)

NAN 802 Dissertation Extension (1–3)

NAN 803 Research Extension (1–3)
NURSING, SCHOOL OF
112 Moore Building • 336-334-5016 • nursing.uncg.edu

Administration
Robin E. Remsburg, Dean
Lynne P. Lewallen, Associate Dean for Academic Affairs
Debra Wallace, Senior Associate Dean for Research and Innovation
Heidi V. Krowchuk, Associate Dean for Academic Programs, Director of Graduate Study for Masters Programs
Robin Bartlett, Director of Graduate Study for the PhD Program
Susan Denman, Director of Graduate Study for the DNP Program

About
The School of Nursing offers the Master of Science in Nursing degree program which is designed to prepare persons for leadership roles in nursing education and administration. The School of Nursing also offers two Doctoral degrees—the Doctor of Nursing Practice and the Doctor of Philosophy. The Doctor of Nursing Practice program is designed to prepare advanced practice clinicians and executive nurse leaders. The Doctor of Philosophy program prepares nurse scientists for roles in academia and industry. Admission by The Graduate School does not guarantee admission to a specific concentration.

Accreditation(s)
The School of Nursing master’s and DNP programs are accredited by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, (202) 887-6791. The School of Nursing affiliates with the Raleigh School of Nurse Anesthesia to offer the anesthesia concentration. This affiliated school is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs, 222 South Prospect Avenue, Suite 304, Park Ridge, IL 60068-4010, (847) 692-7050.

Faculty
Professors
Robin Bartlett, Psychosocial nursing and adolescent risk behaviors (Director of Graduate Study for the PhD program). (E)
Denise Cote-Arsenault, Women’s experiences of pregnancy after perinatal loss. (E)
Nancy Hoffart, Health services research, innovation and change. (E)
Pamela Johnson-Rowsey, Stress, Biomarkers, chronic illness, and fever. (E)
Laurie M. Kennedy-Malone, Community-gerontology nursing. (E)
Susan Ann Letvak, Gerontological nursing and the nursing workforce. (E)
Lynne P. Lewallen, Pregnancy, breast-feeding, and nursing education (Associate Dean for Academic Affairs). (E)
Robin E. Remsburg, geriatrics/gerontology, health services, long term care (Dean). (E)
Debra C. Wallace, Gerontology, minority health services and behaviors (Senior Associate Dean for Research & Innovation). (E)

Associate Professors
Leslie Davis, Cardiology and adult geriatric health. (E)
Yolanda Griffin Hyde, Adult health nursing and oncology. (E)
Heidi V. Krowchuk, Parent Child nursing (Associate Dean for Academic Programs, Director of Graduate Study for Masters Programs). (E)
Elizabeth Van Horn, Adult health nursing, recovery from traumatic injury, and family integrity.

Assistant Professors
Karen Amirehsani, Primary care.
Cynthia Bacon, Nursing Administration.
Courtney E. Caiola, Social and economic determinants of health, women living with chronic illness, structural interventions, and intersectional approaches.

Yvonne Ford, Outcome disparities in breast cancer, long-term breast cancer survivorship, qualitative methods.

Deborah Lekan, Gerontological nursing.

Stephanie Pickett, Hypertension and weight management in African Americans, community-based research.

Francine Sheppard, Gerontology, retirement, psychiatric.

Clinical Professors

Jacqueline DeBrew, Nursing education and gerontology.

Susan Denman, Primary care nursing (Director of Graduate Study for the DNP Program).

Clinical Associate Professors

Susan Kay Collins, Adult health.

Thomas McCoy, Biostatistics.

Angela Newman, Adult health.

Visiting Assistant Professors

Judith Adams, Palliative care.

Nancy Shedlick, Nurse anesthesia.

Clinical Assistant Professors

Christine Bazik, Pediatric anesthesia care and nursing education.

Megan Conner, Nurse anesthesia.

Kristin R. Curcio, Primary care nursing.

Mary Guhwe, Primary care.

Jeanne B. Jenkins, Clinical Leadership and leadership development.

Jacoba Leiper, Adult health.

Magdalene Tukov, Diabetes, Cardiovascular risk modification and obesity management in primary care.

Adjunct Instructors

Kyle Elliott, Nurse anesthesia.

Linda Stone, Nurse anesthesia.

Gloria Walters, Women and heart disease.

Graduate Programs

- Post-Baccalaureate Certificate in Nursing Administration, Nursing Education, or Nursing, (12-15)
- Master of Science in Nursing (MSN), Nursing Administration concentration (37), Nursing Education concentration (38)
- Master of Science in Nursing/Master of Business Administration (MSN/MBA) in Health Management, (62)
- Doctor of Nursing Practice (DNP), Adult/Gerontological Primary Care Nurse Practitioner concentration Post-Baccalaureate (73), Post-Master (30); Executive Leadership concentration Post-Master (30); Nurse Anesthesia concentration Post-Baccalaureate (107); Post-Master (30)
- Doctor of Philosophy (PhD) in Nursing, (57)

Enrollment Requirements for All Graduate Nursing Students

- Evidence of current liability insurance coverage appropriate to concentration or program.
- A three hour chemistry course for anesthesia concentration.
- Competency in basic health assessment prior to NUR 651, NUR 713, NUR 771, and NUR 713L.
- Completion of statistics course prior to enrollment in NUR 705.
- An approved criminal background check prior to enrollment in clinical courses, including NUR 614, NUR 651, NUR 713, NUR 771, NUR 713L, NUR 742, and NUR 790.
- Satisfactory completion of Advanced Cardiac Life Support (ACLS) for anesthesia students. All other concentrations require Basic Life Support (BLS) prior to enrollment in clinical practica.
• Evidence of all immunizations identified on Parts A and B of the UNCG Health History and Immunization Form, excluding the meningococcal vaccine.
• Other requirements, for example, influenza vaccine and drug screens, may be necessary to meet contractual agreements with affiliating clinical agencies.

Prior to enrollment in directed research, clinical courses, internships, or project/thesis/dissertation coursework, students must provide evidence of current unrestricted North Carolina licensure as a registered nurse or unrestricted RN licensure in a state covered by the multi-state Nurse Licensure Compact. Students who are residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.

Students should provide evidence of nursing licensure and BLS to the School of Nursing Office of Student Affairs and evidence of health history and immunizations to the UNCG Student Health Services. Copies of all records should be retained by the student to submit to the School of Nursing credentialing system prior to enrollment in clinical courses.

Students are responsible for all costs associated with their own health care. Students are required to have health insurance through a private source or through the option offered by the University.

Physical and/or Emotional Problems that do not Respond to Treatment
Students can be dismissed from the School of Nursing for physical and/or emotional problems that do not respond to appropriate treatment and/or counseling within a reasonable period of time.

Investigation and Evaluation

When faculty members identify a student who presents physical and/or emotional problems that do not respond to appropriate treatment and/or counseling, they immediately suspend the student from the course. Faculty notify the Course Chair and/or Program Director within the School of Nursing. Upon determination by the faculty, Course Chair and Program Director, that the physical and/or emotional problems warrant dismissal from the School of Nursing, the Dean will be notified.

The Dean, in consultation with the faculty, and upon review of the documentation, will make a decision regarding recommending dismissal of the student from the School of Nursing.

The Dean of Nursing will send to the Vice Provost for Graduate Education, written notification of the recommendation. If the Dean of Nursing recommends dismissal from the School of Nursing, the Vice Provost of the Graduate School will notify the student. Should the student wish to appeal the decision, the student will submit a written request to the School of Nursing Appeals Committee. The Dean of Nursing will provide to the committee the accumulated correspondence or documentation related to the issue.

A request for an appeal should occur within seven working days of written notification of the decision from the Vice Provost for Graduate Education.

Hearing Process

The chairman of the School of Nursing Appeals Committee will thereafter notify the student, the faculty member, Course Chair and Program Director as to the time and place for a hearing to determine whether the physical and/or emotional problems warrant dismissal.

The Committee will hold a closed hearing within ten days at which time the faculty member, Course Chair and Program Director will be present and will provide documentation and other oral or written evidence regarding the incident. The student will be present and will be given an opportunity to provide documentation and other oral or written evidence regarding the problem. The student will be allowed an advocate/support person at the hearing; however, the support cannot speak and cannot be an attorney.
Following the factual presentation, the Committee will convene in executive session to determine whether the problem warrants dismissal from the School.

The Committee shall make its recommendation in writing to the Dean of Nursing and forward pertinent documentation. The Committee may recommend dismissal from the School of Nursing major, or reinstatement in the program.

**Post Hearing Process**
The Dean of Nursing may accept, reject, or modify the Committee’s recommendation. The Dean’s decision will be made after review of the minutes of the hearing and report to the Committee. If the Dean of Nursing accepts the Committee’s recommendation to dismiss the student from the School of Nursing, the recommendation will be forwarded to the Vice Provost for Graduate Education who will notify the student. The Dean of Nursing will notify the faculty member(s) as to the determination.

A student who has been dismissed may reapply for admission to the School of Nursing.

**Policy on Unsafe Practice**
The nursing faculty of the School of Nursing have an academic, legal, and ethical responsibility to prepare graduates who are competent as well as to protect the public and health care community from unsafe nursing practice. It is within this context that students can be disciplined or dismissed from the School of Nursing for practice or behavior which threatens or has the potential to threaten the safety of a client, a family member or substitute familial person, another student, a faculty member, or other health care provider.

**Student Awareness**
All students are expected to be familiar with the principles of safe practice and are expected to perform in accordance with these requirements. Within courses, counseling and advising processes, and other instructional forums, students will be provided with the opportunity to discuss the policy and its implications.

**Definition**
An unsafe practice is defined as:
An act or behavior of the type which violates the North Carolina Nursing Practice Act, Article 9 of Chapter 90 of the North Carolina General Statutes (NCGS 90-171.37; 90-171.44).

An act or behavior of the type which violates the Code of Ethics for Nurses of the American Nurses Association.

An act or behavior which threatens or has the potential to threaten the physical, emotional, mental or environmental safety of the client, a family member or substitute familial person, another student, a faculty member or other health care provider.

An act or behavior (commission or omission) which constitutes nursing practice for which a student is not authorized or educated at the time of the incident.

**Investigation and Evaluation of an Unsafe Practice**
When an incident occurs which a faculty member believes may constitute an unsafe practice, he/she shall immediately notify the student and instruct the student to leave the clinical setting. The faculty member will notify the Course Chair and/or Program Director within the School of Nursing.

The Course Chair and/or Program Director will investigate the incident within three working days to determine whether there are grounds for believing that an unsafe practice has occurred. If the incident is minor, the
faculty member, in consultation with the person named above, may require remedial work or instruction for the student. If the incident is major, or serial in nature, the Course Chair or Program Director will notify the Dean.

The Dean, in consultation with the involved faculty members, will review the student’s clinical performance evaluation(s), academic record and potential for successful completion of the major in nursing. Based upon this careful and deliberate review, a decision to reprimand the student, require withdrawal from the clinical course, or to recommend dismissal of the student from the School of Nursing will be made. The Dean of Nursing will send written notification of the decision to reprimand or to require withdrawal from the clinical course to the student. If the Dean of Nursing recommends dismissal from the School of Nursing, the recommendation will be forwarded to the Vice Provost for Graduate Education for approval and notification of the student.

Should the student wish to appeal the decision, the student will submit a written request to the School of Nursing Appeals Committee. The Dean of Nursing will provide to the Committee the accumulated correspondence documentation related to the issue.

A request for an appeal should occur within seven working days of written notification of the decision from the Dean of Nursing or the Vice Provost for Graduate Education.

**Hearing Process**

The Chair of the School of Nursing Appeals Committee will thereafter notify the student, the faculty member, Course Chair and Program Director as to the time and place for a hearing to determine whether an unsafe act or behavior occurred and, if so, what resolution to recommend.

The Committee will hold a closed hearing within ten days at which time the faculty member, Course and Program Director will be present and will provide documentation and other oral or written evidence regarding the incident. The student will be allowed an advocate/support person at the hearing; however, the support person cannot speak at the hearing and cannot be an attorney.

Following the factual presentation, the Committee will convene in executive session to determine whether an unsafe practice occurred and to recommend a resolution to the incident. The Committee will base its recommendation on the evidence presented at the hearing.

The Committee shall make its recommendation in writing to the Dean and forward pertinent documentation. The Committee may recommend the following remedies: no finding of an act of unsafe practice; a reprimand to the student; or dismissal from the School of Nursing major.

**Post Hearing Process**

The Dean of Nursing may accept, reject, or modify the Committee’s recommendation. The Dean’s decision will be made after review of the minutes of the hearing and report to the Committee. If the Dean of Nursing accepts the Committee’s recommendation to dismiss the student from the School of Nursing, the recommendation will be forwarded to the Vice Provost for Graduate Education for approval and notification of the student. The Dean of Nursing will notify the faculty member(s) as to the determination.

A student who has been dismissed may reapply for admission to the School of Nursing.

**Appeal of Policies**

If a student wishes to appeal a policy in the School of Nursing, the student should complete a “Student Appeal Request.” The Student Appeals Committee hears student appeals. Students may obtain the request form and
discuss the appeals process with the Chair of the Committee, the Associate Dean for Academic Programs, the Director of the DNP Program or the Director of the PhD Program.

Readmission after Withdrawal
Any student who is withdrawn or withdraws from the program must apply for readmission through normal admission procedures.

Doctor of Nursing Practice, DNP
Adult/Gerontological Primary Care Nurse Practitioner Post-Baccalaureate
The Adult/Gerontological Primary Care Nurse Practitioner concentration is designed to be completed in 8 semesters beginning in the fall semester and ending in the spring semester of the third year. The concentration requires a minimum of 73 credits and 1020 advanced practice practicum hours.

Degree Requirements
Required courses (73 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 620</td>
<td>Law, Policy, and Economics of Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>NUR 705</td>
<td>Utilization of Research and Evidence Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NUR 708</td>
<td>Pathophysiology for Advanced Practice Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 709</td>
<td>Pharmacotherapeutics for Advanced Practice Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 709S</td>
<td>Pharmacology Seminar for Adult/Gerontological Nurse Practitioners</td>
<td>1</td>
</tr>
<tr>
<td>NUR 713</td>
<td>Advanced Health Assessment and Diagnostic Reasoning</td>
<td>3</td>
</tr>
<tr>
<td>NUR 713L</td>
<td>Advanced Health Assessment and Diagnostic Reasoning Skills Lab</td>
<td>1</td>
</tr>
<tr>
<td>NUR 714</td>
<td>Informatics in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>NUR 810</td>
<td>Health Promotion and Disease Prevention for Advanced Practice Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 811</td>
<td>Primary Care Management of the Adult I for Advanced Practice Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NUR 811L</td>
<td>Practicum for Primary Care Management of the Adult I for Advanced Practice Nursing</td>
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<tr>
<td>NUR 812</td>
<td>Primary Care Management of the Adult II for Advanced Practice Nursing</td>
<td>4</td>
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<tr>
<td>NUR 812L</td>
<td>Practicum for Primary Care Management of the Adult II for Advanced Practice Nursing</td>
<td>3</td>
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<tr>
<td>NUR 813</td>
<td>Primary Care Management of the Older Adult and Frail Elder</td>
<td>4</td>
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<tr>
<td>NUR 813L</td>
<td>Primary Care Management of the Older Adult and Frail Elder</td>
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<tr>
<td>NUR 814</td>
<td>Integrated Clinical Management I for the Advanced Practice Nurse in Primary Care</td>
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<tr>
<td>NUR 814L</td>
<td>Integrated Clinical Practicum in Primary Care I for the Advanced Practice Nurse</td>
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</tr>
<tr>
<td>NUR 815</td>
<td>Advanced Concepts for Professional Communication in Primary Care</td>
<td>2</td>
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<tr>
<td>NUR 815L</td>
<td>Advanced Procedures in Primary Care</td>
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<tr>
<td>NUR 816</td>
<td>Integrated Clinical Management II for the Advanced Practice Nurse in Primary Care</td>
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<tr>
<td>NUR 817</td>
<td>Advanced Practice Nursing for the DNP: Role, Theory and Practice</td>
<td>3</td>
</tr>
<tr>
<td>NUR 818</td>
<td>Biostatistics and Epidemiology Principles for Advanced Practice Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 819</td>
<td>Effective Leadership for Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Capstone sequence

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 898A</td>
<td>Applied Evidence-Based Practice &amp; Translational Methods Project I</td>
<td>1</td>
</tr>
<tr>
<td>NUR 898B</td>
<td>Applied Evidence-Based Practice &amp; Translational Methods Project II</td>
<td>1</td>
</tr>
<tr>
<td>NUR 898C</td>
<td>Applied Evidence-Based Practice &amp; Translational Methods Project III</td>
<td>1</td>
</tr>
<tr>
<td>NUR 898D</td>
<td>Applied Evidence-Based Practice &amp; Translational Methods Project IV</td>
<td>1</td>
</tr>
<tr>
<td>NUR 898E</td>
<td>Applied Evidence-Based Practice &amp; Translational Methods Project V</td>
<td>2</td>
</tr>
</tbody>
</table>

Applicants must meet the following Application and Admission Requirements:

- Current unrestricted licensure as a registered nurse in one of the 50 states or validated credentials by CGFNS for international students. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
- Baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency.
- Minimum of one year clinical nursing experience full time
• A personal statement.
• A resume.
• An interview is required for selected applicants.
• An inferential statistics course and health assessment course at the undergraduate level are required prerequisite courses for the DNP.
• A minimum of 3.2 GPA is required from the undergraduate nursing program.
• Three professional nursing references.
• Nonresidential international students are required to participate in a telephone interview.

Required Withdrawal
Withdrawal from the program will be recommended to the Graduate School if the student:
• Fails to register for two consecutive semesters in the nursing curriculum.
• Has earned a B- or below in more than 6 semester hours of course work.
• Has earned a B- or below in any AGNP specialty course.
• Has a GPA that indicates the inability to meet the 3.0 required for graduation within the required curriculum.
• Does not complete requirements for the degree within the 7 year time limit.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision.

Adult/Gerontological Primary Care Nurse Practitioner Post-Master's
The Post-Master’s DNP for the Adult/Gerontological Primary Care Nurse Practitioner is designed to be completed in 5 semesters beginning in the fall semester and ending in the spring of the 2nd year. The post-master’s DNP requires a minimum of 30 credits and 1000 advanced practice clinical hours (clinical hours obtained in the Master’s program are included in the 1000 hour total).

All degree requirements must be met within seven academic years of initial enrollment. In addition to courses required for the degree program, students may enroll in independent study courses to enhance their program of study. No foreign language is required.

Applicants must meet the following Application and Admission Requirements:
• Current unrestricted licensure as a registered nurse in one of the 50 states or validated credentials by CGFNS for international students. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse. Approved by the Board of Nursing as a Nurse Practitioner on active status in the appropriate specialty.
• Master’s degree in nursing with concentration and certification in Adult/Gerontological Nurse Practitioner from a program accredited by a nationally recognized accrediting agency, or a Master’s degree in advanced practice nursing from a program accredited by a nationally recognized nursing accrediting agency.
• National certification as AGNP or other appropriate nurse practitioner specialty as approved for admission by the Associate Dean for Academic Programs.
• Employed as an AGNP or other appropriate nurse practitioner specialty as approved for admission by the Associate Dean for Academic Programs.
• A personal statement of 400 words or less that comments on applicant’s nursing background and discusses future goals.
• A resume.
• An interview may be required.
• An inferential statistics course is a required prerequisite.
• A minimum of 3.2 GPA is required from the graduate nursing program.
• Three professional nursing references (mix of educational and professional sources).
• Nonresidential international students are required to participate in a telephone interview.

Degree Requirements

Required courses (24 credits)

- NUR 705 Utilization of Research and Evidence Based Practice (3)
- NUR 714 Informatics in Healthcare (3)
- NUR 818 Biostatistics and Epidemiology Principles for Advanced Practice Nursing (3)
- NUR 819 Effective Leadership for Practice (3)
- NUR 824 Analysis and Application of DNP Essentials: Scientific Underpinnings for Practice and Advanced Nursing Practice (2)
- NUR 825 Analysis and Application of DNP Essentials: Clinical Scholarship and Analytical Methods for Evidence-Based Practice (1)
- NUR 826 Analysis and Application of DNP Essentials: Health Care Policy for Advocacy in Health Care; and Interprofessional Collaboration for Improving Patient and Population Health Outcomes (3)

Elective (3)

Capstone Sequence

- NUR 898A Applied Evidence-Based Practice & Translational Methods Project I (1)
- NUR 898B Applied Evidence-Based Practice & Translational Methods Project II (1)
- NUR 898C Applied Evidence-Based Practice & Translational Methods Project III (1)
- NUR 898D Applied Evidence-Based Practice & Translational Methods Project IV (1)
- NUR 898E Applied Evidence-Based Practice & Translational Methods Project V (2)

Required Withdrawal

Withdrawal from the program will be recommended to the Graduate School if the student:

- Fails to register for two consecutive semesters in the nursing curriculum.
- Has earned a B- or below in more than 6 semester hours of course work.
- Has earned a B- or below in any AGNP specialty course.
- Has a GPA that indicates the inability to meet the 3.0 required for graduation within the required curriculum.
- Does not complete requirements for the degree within the 7 year time limit.

Post-Master - Executive Leadership

The Post-Master’s DNP for the Executive Leadership concentration is designed to be completed in 5 semesters beginning in the fall semester and ending in the spring semester of the second year. The concentration requires a minimum of 30 credits and 1000 clinical practicum hours.

All degree requirements must be met within seven academic years of initial enrollment. In addition to courses required for the degree program, students may enroll in independent study courses to enhance their program of study. No foreign language is required.

Applicants must meet the following application and admission requirements:

- Current unrestricted licensure as a registered nurse in one of the 50 states or validated credentials by CGFNS for international students. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
• Master’s degree in nursing with a focus in administration or leadership from a program accredited by a nationally recognized accrediting agency.
• Applicants with a Master’s degree in nursing with a focus in nursing education from a program accredited by a nationally recognized nursing accrediting agency are eligible for admission after successful completion of the UNCG School of Nursing Post-Baccalaureate Certificate in Nursing Administration.
• A personal statement of 400 words or less that comments on applicant’s nursing background and discusses future goals.
• A resume.
• An interview may be required.
• An inferential statistics course is a required prerequisite course for the Executive Leadership DNP.
• A minimum of 3.2 GPA is required from the master’s in nursing program.
• Three educational or professional nursing references.
• Nonresidential international students are required to participate in a telephone interview.

Required Withdrawal
• Withdrawal from the program will be recommended to the Graduate School if the student:
  • Fails to register for two consecutive semesters in the nursing curriculum.
  • Has earned a B- or below in more than 6 semester hours of course work.
  • Has earned a B- or below in any specialty course.
  • Has a GPA that indicates the inability to meet the 3.0 required for graduation within the required curriculum.
  • Does not complete requirements for the degree within the 7 year time limit.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision.

Degree Requirements

Required courses (24 credits)

NUR 705  Utilization of Research and Evidence Based Practice (3)
NUR 714  Informatics in Healthcare (3)
NUR 818  Biostatistics and Epidemiology Principles for Advanced Practice Nursing (3)
NUR 819  Effective Leadership for Practice (3)
NUR 824  Analysis and Application of DNP Essentials: Scientific Underpinnings for Practice and Advanced Nursing Practice (2)
NUR 825  Analysis and Application of DNP Essentials: Clinical Scholarship and Analytical Methods for Evidence-Based Practice (1)
NUR 826  Analysis and Application of DNP Essentials: Health Care Policy for Advocacy in Health Care; and Interprofessional Collaboration for Improving Patient and Population Health Outcomes (3)
NUR 827  Analysis and Application of DNP Essentials: Organizational and Systems Leadership, Information Systems/Technology, Clinical Prevention and Population Health (3)

Elective (3)

Capstone sequence

NUR 898A Applied Evidence-Based Practice & Translational Methods Project I (1)
NUR 898B Applied Evidence-Based Practice & Translational Methods Project II (1)
NUR 898C Applied Evidence-Based Practice & Translational Methods Project III (1)
NUR 898D Applied Evidence-Based Practice & Translational Methods Project IV (1)
NUR 898E  Applied Evidence-Based Practice & Translational Methods Project V (2)

Nurse Anesthesia Post-Baccalaureate

The DNP Nurse Anesthesia (CRNA) concentration for post bachelor students is designed to be completed in 9 semesters beginning in the fall semester and ending in the summer of the third year. The concentration requires a minimum of 107 credits and 3180 advanced practice clinical hours. The Nurse Anesthesia concentration is delivered through a contractual agreement with the Raleigh School of Nurse Anesthesia. Students must be admitted first to UNCG and then to the Raleigh School of Nurse Anesthesia in order to matriculate in the program.

All degree requirements must be met within seven academic years of initial enrollment. In addition to courses required for the degree program, students may enroll in independent study courses to enhance their program of study. No foreign language is required.

Applicants must meet the following Application and Admission Requirements:

- Current unrestricted licensure as a registered nurse in one of the 50 states or validated credentials by CGFNS for international students. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
- Baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency.
- Minimum of one year full time critical care clinical nursing experience.
- A personal statement of 400 words or less that comments on applicant’s nursing background and discusses future goals.
- A resume.
- An interview is required through the Raleigh School of Nurse Anesthesia application process.
- An inferential statistics course, a chemistry course, and health assessment course at the undergraduate level are required prerequisite courses.
- A minimum of 3.2 GPA is required from the undergraduate nursing program.
- Three professional nursing references (mix of educational and professional sources).
- Nonresidential international students are required to participate in a telephone interview.

Required Withdrawal

- Withdrawal from the program will be recommended to the Graduate School if the student:
  - Fails to register for two consecutive semesters in the nursing curriculum.
  - Has earned a B- or below in more than 6 semester hours of course work.
  - Has earned a B- or below in any nurse anesthesia specialty course.
  - Has a GPA that indicates the inability to meet the 3.0 required for graduation within the required curriculum.
  - Does not complete requirements for the degree within the 7 year time limit.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision. Applicants must also apply and be accepted to the Raleigh School of Nurse Anesthesia.

Degree Requirements

Required courses (107 credits)

- NUR 620  Law, Policy, and Economics of Healthcare (4)
- NUR 727  Basic Principles of Nurse Anesthesia Practice (5)
- NUR 728  Physics and Mechanics of Anesthesia Delivery Systems (2)
- NUR 729  Health Assessment for Nurse Anesthesia (2)
NUR 730  Neuropathophysiology for Nurse Anesthesia (3)
NUR 732  Advanced Principles of Nurse Anesthesia Practice (4)
NUR 751  Pharmacology of Nurse Anesthesia I (1)
NUR 752  Biochemistry for Nurse Anesthesia (1)
NUR 753  Cardiovascular Pathophysiology for Nurse Anesthesia (2)
NUR 754  Pharmacology of Nurse Anesthesia II (1)
NUR 755  Cell Pathophysiology for Nurse Anesthesia (1)
NUR 756  Respiratory Pathophysiology for Nurse Anesthesia (2)
NUR 757  Pharmacology of Nurse Anesthesia III (2)
NUR 758  Pathophysiology of Abdominal Systems for Nurse Anesthesia (2)
NUR 759  Pharmacology of Nurse Anesthesia IV (2)
NUR 771A Clinical Practicum in Nurse Anesthesia I (8)
NUR 771B Clinical Practicum in Nurse Anesthesia I (6)
NUR 772  Clinical Practicum in Nurse Anesthesia II (6)
NUR 773A Clinical Practicum in Nurse Anesthesia III (5)
NUR 773B Clinical Practicum in Nurse Anesthesia III (8)
NUR 774  Clinical Practicum in Nurse Anesthesia IV (6)
NUR 775A Clinical Practicum in Nurse Anesthesia V (7)
NUR 775B Clinical Practicum in Nurse Anesthesia V (7)
NUR 705  Utilization of Research and Evidence Based Practice (3)
NUR 714  Informatics in Healthcare (3)
NUR 797  Integrated Clinical Concepts (2)
NUR 818  Biostatistics and Epidemiology Principles for Advanced Practice Nursing (3)
NUR 819  Effective Leadership for Practice (3)

**Capstone sequence**

NUR 898A  Applied Evidence-Based Practice & Translational Methods Project I (1)
NUR 898B  Applied Evidence-Based Practice & Translational Methods Project II (1)
NUR 898C  Applied Evidence-Based Practice & Translational Methods Project III (1)
NUR 898D  Applied Evidence-Based Practice & Translational Methods Project IV (1)
NUR 898E  Applied Evidence-Based Practice & Translational Methods Project V (2)

**Nurse Anesthesia Post-Master’s**

The Post-Master’s DNP for the Nurse Anesthesia concentration is designed to be completed in 5 semesters beginning in the fall semester and ending in the spring of the 2nd year. The post-master’s DNP requires a minimum of 30 credits and 1000 advanced practice clinical hours (clinical hours obtained in the Master’s program are included in the 1000 hour total).

All degree requirements must be met within seven academic years of initial enrollment. In addition to courses required for the degree program, students may enroll in independent study courses to enhance their program of study. No foreign language is required.

**Degree Requirements**

**Required courses (24 credits)**

NUR 705  Utilization of Research and Evidence Based Practice (3)
NUR 714  Informatics in Healthcare (3)
NUR 818  Biostatistics and Epidemiology Principles for Advanced Practice Nursing (3)
NUR 819  Effective Leadership for Practice (3)
NUR 824  Analysis and Application of DNP Essentials: Scientific Underpinnings for Practice and Advanced Nursing Practice (2)
NUR 825  Analysis and Application of DNP Essentials: Clinical Scholarship and Analytical Methods for Evidence-Based Practice (1)
NUR 826 Analysis and Application of DNP Essentials: Health Care Policy for Advocacy in Health Care; and Interprofessional Collaboration for Improving Patient and Population Health Outcomes (3)

NUR 827 Analysis and Application of DNP Essentials: Organizational and Systems Leadership, Information Systems/Technology, Clinical Prevention and Population Health (3)

Elective (3)

Capstone sequence

NUR 898A Applied Evidence-Based Practice & Translational Methods Project I (1)
NUR 898B Applied Evidence-Based Practice & Translational Methods Project II (1)
NUR 898C Applied Evidence-Based Practice & Translational Methods Project III (1)
NUR 898D Applied Evidence-Based Practice & Translational Methods Project IV (1)
NUR 898E Applied Evidence-Based Practice & Translational Methods Project V (2)

Applicants must meet the following Application and Admission Requirements

- Current unrestricted licensure as a registered nurse in one of the 50 states or validated credentials by CGFNS for international students. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse. Approved by the Board of Nursing as a Certified Registered Nurse Anesthetist on active status.
- Master’s degree in nursing with concentration and certification in Nurse Anesthesia from a program accredited by a nationally recognized accrediting agency.
- National certification as a CRNA.
- Employed as a CRNA.
- A personal statement of 400 words or less that comments on applicant’s nursing background and discusses future goals.
- A resume.
- An interview may be required for selected applicants.
- An inferential statistics course is a required prerequisite.
- A minimum of 3.2 GPA is required from the graduate nursing program.
- Three professional nursing references (mix of educational and professional sources).
- Nonresidential international students are required to participate in a telephone interview.

Required Withdrawal

- Withdrawal from the program will be recommended to the Graduate School if the student:
  - Fails to register for two consecutive semesters in the nursing curriculum.
  - Has earned a B- or below in more than 6 semester hours of course work.
  - Has earned a B- or below in any nurse anesthesia specialty course.
  - Has a GPA that indicates the inability to meet the 3.0 required for graduation within the required curriculum.
  - Does not complete requirements for the degree within the 7 year time limit.

Nursing Administration, Nursing Education, or Nursing, PBC, (12-15)
At least 12 credit hours must be successfully completed during a two-year time period to earn the certificate. Credits earned in the certificate program may be used to meet requirements in a degree program in accordance with the policies of The Graduate School. Students are advised individually and select courses from one or more categories.

Please refer to the preceding enrollment requirements for all graduate nursing students.
Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision.

Applicants must have the following credentials:

- Current unrestricted licensure as a registered nurse in one of the fifty states or validated credentials by CGFNS for international applicants. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
- Baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency.

Certificate Requirements

Nursing Administration
- NUR 540 Financial Management in Healthcare (3)
- NUR 609 The Role of Nurse Leaders in Advanced Quality and Safety (4)
- NUR 641 Leadership and Management Essentials in Healthcare: Theories and Roles (4)
- NUR 644 Organizational Leadership and Management (4)

Nursing Education
- NUR 612 Theoretical Foundations for the Advanced Nurse Educator (3)
- NUR 615 Curriculum Design and Evaluation in Advanced Nursing Education (3)
- NUR 616 Pedagogical Strategies for Advanced Nursing Education (4)

Core and Support Courses
- NUR 620 Law, Policy, and Economics of Healthcare (3)
- NUR 692 Independent Study (1-3)
- NUR 705 Utilization of Research and Evidence Based Practice (3)
- NUR 714 Informatics in Healthcare (3)
- NUR 708 Pathophysiology for Advanced Practice Nursing (3)

Upon successful completion of 12 credits or greater, students receive a Post-Baccalaureate Certificate. If two or more courses are completed within the category of nursing education, the certificate will denote the specialty area. For the Nursing Administration certificate, 15 credits must be taken, and all credits must be in nursing administration. If courses are completed across several categories or within the core and support course category, a Post-Baccalaureate Certificate in Nursing will be issued.

The student will develop a program plan with the Director of Graduate Study in the School of Nursing before enrolling in courses. At least 6 credits of course work shall be completed at the 600 level. However, exceptions may be made by the Director of Graduate Study to accommodate the individual student’s learning needs and career goals.

Nursing Administration (37) or Nursing Education (38), MSN
The Master of Science in Nursing degree offers the following two concentrations.

The concentration in nursing education requires 38 credits and is designed to be completed in seven semesters, beginning in August and ending in December of the final year. Nursing administration requires 37 credits and is designed to be completed in six semesters of full-time study, beginning in August and ending in May of the final year.
Master’s programs of study may be reduced by up to 6 hours for qualified students. Requests for consideration may be submitted to the Director of Graduate Study.

All degree requirements must be met within five academic years of initial enrollment. In addition to courses required for the degree program, students may enroll in independent study courses to enhance their program of study. No foreign language is required.

Please refer to the preceding enrollment requirements for all graduate nursing students.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision.

**Applicants must have the following credentials:**

- Current unrestricted licensure as a registered nurse in one of the fifty states or validated credentials by CGFNS for international applicants. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
- Baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency.
- Minimum of one year clinical experience full time.
- A personal statement is required for consideration of admission to the Nursing Education Concentration MSN program or post-baccalaureate certificate; the Nursing Administration Concentration MSN program or post-baccalaureate certificate in nursing.
- An interview is required for selected applicants for the Nursing Education Concentration MSN program or post-baccalaureate certificate; the Nursing Administration Concentration MSN Program or post-baccalaureate certificate in nursing.
- Nonresidential international students are required to participate in a telephone interview.

**Required Withdrawal**

Withdrawal from the program will be recommended if the student:

- Fails to register for two consecutive semesters (fall and spring) in the nursing curriculum.
- Has earned a “B-or below” in more than 6 semester hours of course work.
- Has earned a “B-or below” in any nursing specialty course.
- Has earned a failing grade in any course.
- Has a GPA that indicates the inability to meet the 3.0 required for graduation.
- Does not complete requirements for the degree within the time limit (5 academic years).

**Degree Requirements**

**Nursing Administration**

**Required Courses (37 credits)**

- NUR 540 Financial Management in Healthcare (3)
- NUR 601 Critique and Utilization of Research in Nursing Administration (2)
- NUR 607 Interprofessional/Interdisciplinary Collaboration and Negotiation (3)
- NUR 609 The Role of the Nurse Leader in Advanced Quality and Safety (4)
- NUR 614 Information Technology in Nursing Administration (3)
- NUR 620 Law, Policy, and Economics of Healthcare (3)
NUR 641  Leadership and Management Essentials in Healthcare: Theories and Roles (4)
NUR 644  Organizational Leadership and Management (4)
NUR 645  Strategic Management of Health Care Organizations (4)
NUR 646  Nursing Administration Practicum (4)
NUR 705  Utilization of Research and Evidence Based Practice (3)

Note: NUR 601: Capstone Experience

Nursing Education

Required Courses (38 credits)

- NUR 612  Theoretical Foundations for the Advanced Nurse Educator (3)
- NUR 615  Curriculum Design and Evaluation in Advanced Nursing Education (3)
- NUR 616  Pedagogical Strategies for Advanced Nursing Education (4)
- NUR 620  Law, Policy, and Economics of Healthcare (3)
- NUR 651  Advanced Application of Nursing Concepts in Client Care (in clinical focus area) (4)
- NUR 653  Advanced Application of Nursing Concepts in Academic Education (in clinical focus area) (3)
- NUR 708  Pathophysiology for Advanced Practice Nursing (3)
- NUR 713  Advanced Health Assessment and Diagnostic Reasoning (3)
- NUR 713L  Advanced Health Assessment and Diagnostic Reasoning Skills Lab (1)
- NUR 709  Pharmacotherapeutics for Advanced Practice Nursing (3)
- NUR 696  Capstone Course for Advanced Nursing Education (2)
- NUR 705  Utilization of Research and Evidence Based Practice (3)

Note: NUR 696: Capstone Experience

Nursing/Business Administration, MSN/MBA (NUR), (62)

The combined MSN/MBA is offered jointly by the School of Nursing and the Bryan School of Business and Economics and requires a minimum of 62 semester hours.

Please refer to the preceding enrollment requirements for all graduate nursing students.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision.

Applicants must meet the following requirements:

- Current unrestricted licensure as a registered nurse in one of the 50 states or validated credentials by CGFNS for international students. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
- Baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency.
- Minimum of one year full time clinical nursing experience.
- Satisfactory MAT/GRE score.
- A personal statement of 400 words or less that comments on applicant’s nursing background and discusses future goals.
- A resume.
- An interview is required for selected applicants. An inferential statistics course and health assessment course at the undergraduate level are required prerequisite courses.
- A minimum of 3.2 GPA is required from the undergraduate nursing program.
• Three professional nursing references (mix of educational and professional sources).
• Nonresidential international students are required to participate in a telephone interview.

Degree Requirements

Computer Literacy
Upon entry to the MSN/MBA in Health Management degree program, students should have a working knowledge of word processing and spreadsheet applications in a PC environment. Familiarity with Excel is required.

Statistics
Completion of a statistics course prior to enrollment in NUR 705 is required. ECO 250 of Pre-MBA workshop in statistics is recommended to meet the program prerequisite for statistics.

Required Courses (62 credits)

NUR 540  Financial Management in Healthcare (3)
NUR 607  Interprofessional/Interdisciplinary Collaboration and Negotiation (3)
NUR 609  The Role of the Nurse Leader in Advanced Quality and Safety (4)
NUR 614  Information Technology in Nursing Administration (3)
NUR 620  Law, Policy, and Economics of Healthcare (3)
NUR 641  Leadership and Management Essentials in Healthcare: Theories and Roles (4)
NUR 644  Organizational Leadership and Management (3)
NUR 645  Strategic Management of Health Care Organizations (4)
NUR 646  Nursing Administration Practicum (4)
MBA 701  Quantitative Analysis for Decision Making (3)
MBA 702  Financial and Managerial Accounting (3)
MBA 703  Economic Policies and Impact on Global Outcomes (3)
NUR 705  Utilization of Research and Evidence Based Practice (3)
MBA 706  Marketing Management (3)
MBA 707  Financial Management (3)
MBA 708  Operations for Competitive Advantage (3)
MBA 712  Strategic Management (3)
MBA 717  Technology and Innovation (3)
MBA 741  Capstone Experience (3)

Required Withdrawal
Please refer to the Required Withdrawal section listed in the MSN Degree Requirements.

Nursing, PhD, (57)
The PhD in Nursing requires 57 semester hours. Up to 15 hours of credit may be transferred into the program. The Director of Graduate Study may waive up to 6 hours for successful completion of previous graduate work.

Please refer to the preceding enrollment requirements for all graduate nursing students.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

The Associate Dean for Academic Programs reviews the credentials of each applicant in collaboration with faculty from each specialty area. Exceptions to the requirements can be made on the recommendation of the faculty. The Associate Dean for Academic Programs forwards the admission recommendation to the Vice Provost for Graduate Education who makes the final decision.

Applicants must have the following credentials:
• Current unrestricted licensure as a registered nurse in one of the fifty states or validated credentials by CGFNS for international applicants. Residents of North Carolina must hold unrestricted North Carolina licensure as a registered nurse.
• Master’s degree in nursing from a school accredited by a nationally recognized accrediting agency.
• In addition to the application materials required by The Graduate School, applicants must submit a 300-word statement of research goals in doctoral program related to promotion of optimal health for ethnic minorities, women, children, or older adults.
• Selected applicants must participate in an interview with Graduate Nursing Faculty.
• Please refer to the preceding enrollment requirements for all graduate nursing students.

Required Withdrawal for PhD Students
Students will become academically ineligible to continue if any of the following occur:
• Grades of U, F, or WF for any semester hours of credit.
• Grades of C, C+, or B- in 6 semester hours.
• Degree requirements not completed within the time limit (7 academic years).

Degree Requirements
Required Courses (18)
   NUR 710  Philosophy of Knowledge Development in Nursing (3)
   NUR 712  Theory Analysis in Nursing Science (3)
   NUR 741  Nurse Scientists in Academia and Industry I (3)
   NUR 781  Health Promotion Models and Interventions (3)
   NUR 782  Health Disparities and Outcomes (3)
   NUR 783  Advanced Health Policy and Ethics (3)
Research Methodology and Statistics (15)
   NUR 701  Statistical Applications for Nursing Research I (3)
   NUR 702  Statistical Applications for Nursing Research II (3)
   NUR 703  Qualitative Methods for Nursing (3)
   NUR 704  Quantitative Research in Nursing (3)
   NUR 707  Measurement in Nursing and Healthcare Research (3)
Directed Research (3)
   NUR 790  Directed Research (3)
Cognates (6)
Electives (3)
   NUR 742  Nurse Scientists in Academia and Industry II (3)
Preliminary Examinations
Preliminary examinations are required and may be taken after the completion of ¾ of the course work.
Dissertation (12)
   NUR 799  Dissertation (1-12)

Doctor of Nursing Practice
Requirements for the Doctor of Nursing Practice
• Satisfaction of all requirements for admission to a doctoral program, including the removal of any deficiencies identified at the time of admission.
• An approved capstone committee, including one doctorally-prepared, School of Nursing graduate-approved faculty member, an expert in the field of the capstone topic, and a faculty member assigned to teach NUR 898, Applied Evidence Based Practice & Translational Methods Project I-V, to be filed in the Graduate School by the end of 18 completed semester hours.
• An approved plan of study, to be filed in the Graduate School by the end of 18 completed semester hours.
• Satisfactory documentation of research competence in lieu of a language requirement.
• Satisfaction of the residence requirement.
• Submission of a capstone project acceptable to the capstone committee, including satisfactory completion of the oral presentation of the capstone project.
• Filing of an application for graduation with the Graduate School by the end of the first week of classes of the term in which the degree will be granted and payment of the graduation fee.
• Payment of all accounts owed in the University. Diplomas and transcripts of students owing money to the University will be held until the account is cleared.
• The above requirements must be met by the deadlines stated in the Academic Calendar.

Transfer Credit
For the Doctor of Nursing Practice, credit may be given for graduate work taken at other institutions (including credit earned through the Greater Greensboro Consortium), but certain conditions must be met:
• Transfer credit may not exceed one-third of the minimum number of hours required by the student’s program.
• All credit offered in transfer must have been taken at an accredited graduate school and not have been used to complete the requirements for a degree.
• Such work must have been taken within the five-year time limit.
• The student must have earned a grade of B (3.0) or better on all transfer credit. In a four-letter grading system, only credit earned with either of the top two grades is transferable. The transfer of credit where a grade of P or its equivalent is received in a two- or three-letter grading system (such as P-F, S-U, or H-P-F) reduces hour for hour the number of C grades earned that may count toward the minimum requirement for the degree.
• The credit must be recorded on an official transcript placed on file with The Graduate School.
• The plan of study must be approved both by the student’s major department and by the Vice Provost for Graduate Education.
• It must be necessary to meet specific degree requirements.
• Hours only, not grades, may be transferred from other institutions. Quarter-hours do not transfer as semester hours. A fraction of an hour of credit will not be transferred. See sample below:
  
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• Students must secure approval from the Director of Graduate Study and the Associate Dean for Academic Programs in advance of registration at other universities. In general, however, not less than two-thirds of the total program for the Doctor of Nursing Practice Degree must be completed at The University of North Carolina at Greensboro.
• All credit to be transferred must come within the time limit described above and must be supported by placing an official copy of the transcript on file in The Graduate School. No credit will be transferred unless it is required to meet specific degree requirements.

NUR – Nursing Graduate Courses

NUR 506 Role of Nursing Administration in Quality and Safety (2:1:3)
Prepares the student to apply principles of quality and safety at the unit level.

NUR 540 Financial Management in Healthcare (3:3)
Introduction to the principles of fiscal management, health care agency accounting practices, and nurse administrator’s role in budgeting processes.

Offered
Spring
NUR 550 Pathophysiology for Advanced Nursing (3:3)
Physiological changes across the lifespan and common pathophysiological mechanisms.

Offered
Fall & Spring

Notes

NUR 551 Instructional Technologies in Nursing and Patient Education (3:3)
Selection, development, use, and evaluation of instructional media and technologies for diverse populations in nursing practice and education settings.

Offered
Fall

NUR 581 End-of-Life Care (3:3)
Critical aspects of interdisciplinary approaches to quality care at end-of-life. Includes palliative care, family, advocacy, culture, special populations, systems of care, financial issues, life threatening illnesses, and sudden death.

NUR 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

NUR 601 Critique and Utilization of Research in Nursing Administration (2:2)
Development of knowledge and skill competencies basic to the critical interpretation and utilization of research findings in nursing administration.

Prerequisite
NUR 705 and first concentration course

Notes
Grade: Satisfactory/Unsatisfactory, S/U

NUR 602 Research Methods in Nursing (3:3)
Examines the basic concepts, strategies, and procedures used in conducting and evaluating nursing research. Emphasis will be on proposal development and quantitative and qualitative analysis of data.

Prerequisite
An undergraduate statistics course

NUR 606 Advanced Quality and Safety (3:2:3)
Prepares the student to apply principles of quality and safety at the organizational level.

NUR 607 Interprofessional/Interdisciplinary Collaboration and Negotiation (3:2:3)
An integrated approach to team development and function using an interprofessional/interdisciplinary model.

NUR 609 The Role of the Nurse Leader in Advanced Quality and Safety (4:2:6)
Prepares the student to apply principles of quality and safety at the micro (unit) and macro (organizational) system level.

Notes
Effective Fall 2018.

NUR 610 Theoretical Foundations of Advanced Nursing Practice (3:3)
Role of theory in nursing is evaluated using the organizing concepts of person, environment, health, and nursing.

NUR 612 Theoretical Foundations for the Advanced Nurse Educator (3:3)
Professional development of the advanced nurse educator integrating theory, roles, and practice.
Prerequisite
NUR 616

NUR 614 Information Technology in Nursing Administration (3:2:3)
Prepares the student to apply principles and techniques of communication and computer technology in health care management settings.
Prerequisite
Enrolled in administration concentration or MSN/MBA program or permission of instructor

NUR 615 Curriculum Design and Evaluation in Advanced Nursing Education (3:3)
An exploration of nursing curriculum development and program evaluation within a broad context.
Corequisite
NUR 612

NUR 616 Pedagogical Strategies for Advanced Nursing Education (4:4)
Concepts of instructional design, media development and use, and technology in advanced nursing education. Pedagogical strategies for a variety of classroom and clinical settings.

NUR 620 Law, Policy, and Economics of Healthcare (3:3 or 4:4)
Law, health policy, and economics related to advanced nursing practice. Key topics include policy development, state and federal statues, and economics affecting delivery of nursing and healthcare.
Notes
Credit structure is as follows:
- 3:3 for master’s concentrations in Nursing Education and Nursing Administration; and DNP for Adult/Gerontological Nurse Practitioner track
- 4:4 for DNP Nurse Anesthesia track

NUR 641 Leadership and Management Essentials in Healthcare: Theories and Roles (4:3:3)
Nursing management within the health care system. Management functions of planning, organizing, and staffing studied within the framework of leadership in health care organizations.
Prerequisite
NUR 705

NUR 644 Organizational Leadership and Management (4:3:3)
Management functions of directing and controlling are studied within the framework of leadership in health care organizations.
Prerequisite
NUR 540, NUR 641, NUR 705
Corequisite
NUR 614
Notes
Effective Fall 2018

NUR 645 Strategic Management of Health Care Organizations (4:2:6)
Application of leadership and administration knowledge in a practice setting while defining self in a professional leadership role.
Prerequisite
NUR 540, NUR 644, NUR 705
Notes
Effective Spring 2020.
NUR 646 Nursing Administration Practicum (4:1:9)
Application of advanced leadership and administration knowledge in a practice setting while defining self in a professional leadership role.

Notes
Effective Spring 2020.

NUR 651 Advanced Application of Nursing Concepts in Client Care (in clinical focus area) (4:1:9)
Development of advanced clinical nursing interventions that influence health care outcomes for individuals, populations, or systems. Practicum emphasizes preparation for the direct care role of nurse educator.

Prerequisite
NUR 616, NUR 708, NUR 713, NUR 709, NUR 705

Corequisite
NUR 714

NUR 652 Advanced Application of Nursing Concepts in Professional Development (3:2:3)
Competencies in preparation for professional development roles in nursing. Seminars, conferences, and practicum emphasize staff and continuing education.

Prerequisite
NUR 616 or permission of instructor

NUR 653 Advanced Application of Nursing Concepts in Academic Education (in clinical focus area) (3:1:6)
Development of competencies in preparation for academic educator roles. Seminars, conferences, and practica emphasize nursing education in academic settings.

Prerequisite
NUR 615 and NUR 651

NUR 692 Independent Study (1–3)
Guided readings, research, and individual project work under the direction of the School of Nursing faculty.

Notes
May be used as part of minimum 36 hours required for the MSN degree. May be repeated for a maximum of 6 hours credit.

NUR 696 Capstone Course for Advanced Nursing Education (2:2)
Critical analysis and synthesis of progress and achievement toward attainment of advanced nursing competencies for the MSN degree.

Prerequisite
NUR 705, NUR 612, NUR 651

Corequisite
NUR 653

Notes
Grade: Satisfactory/Unsatisfactory, S/U

NUR 698 Advanced Nursing Project (1–6)
Scholarly inquiry project developed by the student with faculty guidance.

Prerequisite
NUR 705

Notes
Advanced nursing project or NUR 699 required for the MSN May be repeated for a maximum of 6 hours credit.
Grade: Satisfactory/Unsatisfactory, S/U

NUR 699 Thesis (1–6)
Individual guidance and direction in research to address a clinical or nonclinical problem.

**Prerequisite**
NUR 705

**Notes**
Thesis or NUR 698 required for the MSN May be repeated for a maximum of 6 hours credit. Grade: Satisfactory/Unsatisfactory, S/U

**NUR 701 Statistical Applications for Nursing Research I (3:3)**

**Prerequisite**
Admission to PhD in nursing and completion of a course in inferential statistics, or permission of instructor

**NUR 702 Statistical Applications for Nursing Research II (3:3)**
Advanced statistics for nursing and health care research, including general linear model, multifactoral ANOVA, multiple regression. Emphasis on selection and conduct of analysis and interpretation of results.

**Prerequisite**
NUR 701 or permission of instructor

**NUR 703 Qualitative Methods for Nursing (3:3)**
Philosophy, theory, and methods of qualitative research with an emphasis on the application to nursing and health research.

**Prerequisite**
NUR 702 and NUR 712, or permission of instructor

**NUR 704 Quantitative Research in Nursing (3:3)**
Theoretical foundations, design, and techniques of quantitative research for nursing and health care.

**Prerequisite**
NUR 702 and NUR 712, or permission of instructor

**NUR 705 Utilization of Research and Evidence Based Practice (3:3)**
Provides an overview of the components of the research processes, utilization of research, and translation of evidence into advanced nursing practice.

**Prerequisite**
Admission to DNP or MSN program or permission of instructor; an undergraduate course in statistics.

**NUR 707 Measurement in Nursing and Healthcare Research (3:3)**
Measurement of biophysical, psychomotor, cognitive and system-level phenomena for nursing and health research. Reliability, validity, item analysis, norms, selection and development of measures.

**Prerequisite**
NUR 704, or permission of instructor.

**NUR 708 Pathophysiology for Advanced Practice Nursing (3:3)**
Examination of physiological changes, common pathophysiological and compensatory mechanisms of diseases across the lifespan.

**NUR 709 Pharmacotherapeutics for Advanced Practice Nursing (3:3)**
Advanced principles of pharmacotherapeutics of broad categories of pharmacologic agents used in young adults, adults, and older adults, including discussion of advanced nursing roles in prescription practices.
Prerequisite
NUR 708, NUR 713, NUR 713L
Corequisite
NUR 811 for A/GNP only

**NUR 709S Pharmacology Seminar for Adult/Gerontological Nurse Practitioners (1:1)**
Application of clinical pharmacology knowledge and skills to ensure safe prescribing practices for adult-gerontology nurse practitioners.
Prerequisite
NUR 708, NUR 713, NUR 713L
Corequisite
NUR 709, NUR 811

**NUR 710 Philosophy of Knowledge Development in Nursing (3:3)**
Philosophy, inquiry, and the development of knowledge within the discipline.
Prerequisite
Admission to PhD in nursing

**NUR 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**NUR 712 Theory Analysis in Nursing Science (3:3)**
Nature of theory and strategies for theory development within the discipline of nursing. Analysis and evaluation of theory related to phenomena of interest.
Prerequisite
NUR 710

**NUR 713 Advanced Health Assessment and Diagnostic Reasoning (3:3)**
This course builds upon prerequisite assessment skills and presents the advanced principles of health assessment. Methodologies of data gathering, data analysis and theoretical integration of health assessment are emphasized.
Prerequisite
Baccalaureate Level Health Assessment Course, pre-or co-requisite NUR 708

**NUR 713L Advanced Health Assessment and Diagnostic Reasoning Skills Lab (1:0:3)**
Application of advanced health assessment and diagnostic reasoning skills using laboratory exercises.
Corequisite
NUR 713, NUR 708 (AGNP only)
Note
Grade: Satisfactory/Unsatisfactory, S/U

**NUR 714 Informatics in Healthcare (3:3)**
This course is focused on information systems, application of informatics in patient care, and data management to promote quality and safety in healthcare.
Prerequisite
Admission to MSN or DNP program, or permission of instructor

**NUR 727 Basic Principles of Nurse Anesthesia Practice (5:5)**
General introduction to basics of nurse anesthesia practice, including safety, assessment, pharmacology, monitoring, charting, positioning, care plan development, sequencing, and as a foundation to more advanced anesthetic concepts and techniques.
NUR 728 Physics and Mechanics of Anesthesia Delivery Systems (2:2)
This course focuses on the application of the physical laws of gas, the study of compressed gases for clinical use, and the physical and mechanical considerations of anesthesia delivery systems.

NUR 729 Health Assessment for Nurse Anesthesia (2:2)
This course emphasizes the principles of patient assessment for nurse anesthesia practice in the pre-and perioperative periods.
Prerequisite
Admission to the Nurse Anesthesia concentration of the DNP program.

NUR 730 Neuropathophysiology for Nurse Anesthesia (3:3)
This course focuses on the anatomy, physiology, and pathophysiology of the central nervous system, and anesthesia nursing care related to persons with neurological dysfunction.
Prerequisite
Admission to the Nurse Anesthesia concentration of the DNP program.

NUR 732 Advanced Principles of Nurse Anesthesia Practice (4:4)
Principles and theories of advanced anesthesia practice necessary to effectively administer anesthesia for complex adult, obstetric, and pediatric patients.

NUR 741 Nurse Scientists in Academia and Industry I (3:3)
Integration of the nurse scientist role into an academic and industry environment.
Prerequisite
NUR 704, NUR 712
Prerequisite OR Corequisite
NUR 703, NUR 782

NUR 742 Nurse Scientists in Academia and Industry II (3:3)
Internship to apply the nurse scientist role in an academic or industry environment.
Prerequisite
NUR 741

NUR 751 Pharmacology of Nurse Anesthesia I (1:1)
Advanced knowledge of pharmacologic principles related to anesthetic medications.
Prerequisite
Admission to the Nurse Anesthesia concentration and affiliated School of Nurse Anesthesia.

NUR 752 Biochemistry for Nurse Anesthesia (1:1)
Advanced knowledge of the biochemical basis and measurement of homeostasis and nursing interventions for fluid and electrolyte imbalance.
Prerequisite
Admission to the Nurse Anesthesia concentration and affiliated School of Nurse Anesthesia.

NUR 753 Cardiovascular Pathophysiology for Nurse Anesthesia (2:2)
Advanced knowledge of pathophysiology, pharmacology, and anesthesia nursing care related to persons with cardiovascular and cellular dysfunction.
Prerequisite
NUR 730, NUR 705

NUR 754 Pharmacology of Nurse Anesthesia II (1:1)
Advanced knowledge of pharmacology of inhaled anesthetics.
Prerequisite
NUR 730, NUR 705

NUR 755 Cell Pathophysiology for Nurse Anesthesia (1:1)
Advanced knowledge of pathophysiology and anesthesia nursing care related to persons with cellular dysfunction.
Prerequisite
NUR 730

NUR 756 Respiratory Pathophysiology for Nurse Anesthesia (2:2)
Advanced knowledge of pathophysiology, pharmacology, and anesthesia nursing care related to persons with respiratory dysfunction.
Prerequisite
NUR 755
Coreq.
NUR 620

NUR 757 Pharmacology of Nurse Anesthesia III (2:2)
Advanced knowledge of pharmacology of intravenous anesthetics and adjuvant medications.
Prerequisite
NUR 753
Corequisite
NUR 620

NUR 758 Pathophysiology of Abdominal Systems for Nurse Anesthesia (2:2)
Advanced knowledge of pathophysiology and anesthesia nursing care related to persons with hepatic, renal and endocrine dysfunction.
Prerequisite
NUR 756

NUR 759 Pharmacology of Nurse Anesthesia IV (2:2)
Advanced knowledge of pharmacology of adjunctive anesthetic medications.
Prerequisite
NUR 757

NUR 771A Clinical Practicum in Nurse Anesthesia I (8:0:32)
Delivery of basic anesthesia nursing care to persons in a variety of settings.
Prerequisite
NUR 727, NUR 728, NUR 729

NUR 771B Clinical Practicum in Nurse Anesthesia I (6:0:24)
Delivery of basic anesthesia nursing care to persons in a variety of settings.
Prerequisite
NUR 771A

NUR 772 Clinical Practicum in Nurse Anesthesia II (6:0:24)
Delivery of basic anesthesia nursing care to persons in a variety of settings continued.
Prerequisite
NUR 771B

NUR 773A Clinical Practicum in Nurse Anesthesia III (5:0:20)
Delivery of basic anesthesia care to persons in a variety of settings.
Prerequisite
NUR 772

NUR 773B Clinical Practicum in Nurse Anesthesia III (8:0:32)
Delivery of basic anesthesia care to persons in a variety of settings.
Prerequisite
NUR 773A

NUR 774 Clinical Practicum in Nurse Anesthesia IV (6:0:24)
Delivery of advanced anesthesia nursing care to persons in a variety of settings.
Prerequisite
NUR 773B

NUR 775A Clinical Practicum in Nurse Anesthesia V (7:0:28)
Delivery of complex anesthesia nursing care to persons in a variety of settings.
Prerequisites
NUR 774
Notes
May not be repeated for credit.

NUR 775B Clinical Practicum in Nurse Anesthesia V (7:0:28)
Delivery of complex anesthesia nursing care to persons in a variety of settings.
Prerequisite
NUR 775A
Notes
May not be repeated for credit.

NUR 780 Special Topics in Nursing Science (1-3)
In depth topics of special interest related to nursing and health sciences.
Prerequisite
Permission of instructor.

NUR 781 Health Promotion Models and Interventions (3:3)
Current epidemiological, methodological, and theoretical approaches to health promotion across the lifespan. Intervention strategies are evaluated.
Prerequisite
NUR 702 and NUR 712, or permission of instructor

NUR 782 Health Disparities and Outcomes (3:3)
Critical analysis of health disparities and outcomes. Differences in access, use, cost, and quality of health care services; causes of health disparities; and strategies to eliminate disparities.
Prerequisite
NUR 781 or permission of instructor. Coreq. NUR 704

NUR 783 Advanced Health Policy and Ethics (3:3)
Advanced analysis and evaluation of domestic and international regulation, financing, and delivery of health care; ethical issues and stakeholders that influence policy; evaluation of policies for selected populations.
Prerequisite
NUR 782 or permission of instructor

NUR 789 Doctor of Nursing Practice Advanced Practicum (1:0:3) to (8:0:24)
Integrate evidence-based research, advanced scholarship, and translational research principles to the advanced practice setting in accomplishment of the practicum hours needed to accomplish the DNP Project.

**Prerequisite**
Admission to Post-Master's DNP Program.

**Notes**
May be repeated for credit up to 4 times to achieve required total credits for the program, 1000 post-baccalaureate advanced practicum hours, and complete the DNP project.

**NUR 790 Directed Research (3:3)**
Directed research that culminates in a scholarly product.

**Prerequisite**
NUR 704 and prior approval of graduate faculty member who will supervise and evaluate the project

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**NUR 792 Independent Study (1–3)**

**Prerequisite**
Permission of instructor, Director of Graduate Study and Dean of Graduate School

**Notes**
Grade: Satisfactory/Unsatisfactory, S/U

**NUR 797 Integrated Clinical Concepts (2:2)**
Principles and theories of advanced anesthesia practice necessary to effectively administer anesthesia for complex adult cases.

**Prerequisite**
NUR 758, NUR 774

**NUR 799 Dissertation (1–12)**
Individual direction for the completion of doctoral dissertation research.

**NUR 801 Thesis Extension (1–3)**

**NUR 802 Dissertation Extension (1–3)**

**NUR 803 Research Extension (1–3)**

**NUR 810 Health Promotion and Disease Prevention for Advanced Practice Nursing (3:3)**
Theories and application of health promotion and disease prevention from adolescence to elder adulthood for advanced practice nursing.

**NUR 811 Primary Care Management of the Adult I for Advanced Practice Nursing (4:4)**
Management of acute and chronic illness with emphasis on disease prevention and health promotion among young adults, adults, and older adults.

**Prerequisite**
NUR 708, NUR 713, NUR 713L, NUR 810

**Corequisite**
NUR 709, NUR 709S, NUR 811L

**NUR 811L Practicum for Primary Care Management of the Adult I for Advanced Practice Nursing (3:0:9)**
First in a series of clinical courses. Practicum for management of acute and chronic illness with emphasis on disease prevention and health promotion among young adults, adults, and older adults.
NUR 812 Primary Care Management of the Adult II for Advanced Practice Nursing (4:4)
Management of acute and chronic illness with emphasis on disease prevention and health promotion among young adults, adults, and older adults.

Prerequisite
NUR 811, NUR 709, NUR 709S

Corequisite
NUR 812L

Notes
Effective Fall 2018.

NUR 812L Practicum for Primary Care Management of the Adult II for Advanced Practice Nursing (3:0:9)
Practicum for the management of acute and chronic illness with emphasis on disease prevention and health promotion among young adults, adults, and older adults.

Notes
Effective Fall 2018.

NUR 813 Primary Care Management of the Older Adult and Frail Elder (4:4)
The management of older adults and frail elders by the Adult Gerontological Nurse Practitioner in primary care.

Prerequisite
NUR 709, NUR 709S, NUR 811, NUR 811L

Corequisite
NUR 813L

Notes
Effective Spring 2019.

NUR 813L Practicum for Primary Care Management of the Older Adult and Frail Elder (3:0:9)
Practicum for management of older adults and frail elders by the Adult Gerontological Nurse Practitioner in primary care.

Notes
Effective Spring 2019.

NUR 814 Integrated Clinical Management I for the Advanced Practice Nurse in Primary Care (2:2)
Emphasis is integration of adult patient management with leadership, use of data, and interprofessional collaboration in promotion of healthy lifestyles; evaluation and management of acute and chronic health problems.

Prerequisite
NUR 812, NUR 812L, NUR 813, NUR 813L

Corequisite
NUR 814L

Notes
Effective Fall 2019.

NUR 814L Integrated Clinical Practicum in Primary Care I for the Advanced Practice Nurse (3:0:9)
Practicum for integration of adult patient management with leadership, use of data, and interprofessional collaboration in promotion of healthy lifestyles; evaluation and management of acute and chronic health problems.

Notes
Effective Fall 2019.

NUR 815 Advanced Concepts for Professional Communication in Primary Healthcare (2:2)
Complex simulations providing practice in skills necessary for procedures, communication, critical decision making, and collaboration for advanced practice nursing in primary health care.

**Prerequisite**
NUR 812, NUR 812L, NUR 813, NUR 813L

**Corequisite**
NUR 815 L

**Notes**
Effective Fall 2019.

**NUR 815L Advanced Procedures in Primary Care (1:0:3)**
Complex simulations providing advanced skills in primary care procedures.

**Notes**
Effective Fall 2019.

**NUR 816 Primary Care Clinical Practicum II for the Advanced Practice Nurse (6:1:15)**
Advanced primary care practicum emphasizing the ability to manage acute and chronic complex health conditions of adults, demonstrating advanced critical decision making skills and integration of DNP essentials into advanced practice.

**Prerequisite**
NUR 814 and NUR 815

**Notes**
Effective Spring 2020.

**NUR 817 Advanced Practice Nursing for the DNP: Role, Theory and Practice (3:3)**
Theoretical application to the professional development of the DNP advanced practice nursing role in health care delivery.

**NUR 818 Biostatistics and Epidemiology Principles for Advanced Practice Nursing (3:3)**
Application of biostatistics and epidemiology for clinical decision making in advanced practice nursing. Focus on application to populations and clients across the lifespan and to settings of care.

**Prerequisite**
Admission to DNP program or permission of faculty; an undergraduate statistics course.

**NUR 819 Effective Leadership for Practice (3:3)**
Principles and theories of leadership to effectively practice in complex systems, organizations, and processes.

**Prerequisite**
Admission to DNP Program

**NUR 820 Nurse Anesthesia Research Seminar (1:1)**
This seminar course focuses on the analysis of professional issues affecting anesthesia nursing practice.

**Prerequisite or Corequisite**
NUR 620

**NUR 824 Analysis and Application of DNP Essentials: Scientific Underpinnings for Practice and Advanced Nursing Practice (2:2)**
Integration of scientific underpinnings for practice and advanced nursing practice principles applied to the role of the DNP.

**Prerequisites**
Admission to the post master’s DNP program
NUR 825 Analysis and Application of DNP Essentials: Clinical Scholarship and Analytical Methods for Evidence-Based Practice (1:1)
Analysis and integration of clinical scholarship and analytical methods for evidence-based practice applied to the role of the DNP in nursing practice.
Prerequisites
Admission to the post master’s DNP program

NUR 826 Analysis and Application of DNP Essentials: Health Care Policy for Advocacy in Health Care; and Interprofessional Collaboration for Improving Patient and Population Health Outcomes (3:3)
Analysis and integration of health care policy for advocacy in health care and interprofessional collaborations for improving outcomes applied to the role of the DNP in nursing practice.
Prerequisites
Admission to the post master’s DNP program

Analysis and integration of organizational systems leadership, information systems and technology, and clinical prevention and population health applied to the role of the DNP.
Prerequisites
Admission to the post master’s DNP program

NUR 898A Applied Evidence-Based Practice & Translational Methods Project I (1:1)
An applied evidence-based practice and translational methods project to be completed sequentially in a five-course series.
Prerequisite
Pre-or co-requisite NUR 705

NUR 898B Applied Evidence-Based Practice & Translational Methods Project II (1:1)
An applied evidence-based practice and translational methods project to be completed sequentially in a five-course series.
Prerequisite
NUR 898A

NUR 898C Applied Evidence-Based Practice & Translational Methods Project III (1:1)
An applied evidence-based practice and translational methods project to be completed sequentially in a five-course series.
Prerequisite
NUR 898B

NUR 898D Applied Evidence-Based Practice & Translational Methods Project IV (1:1)
An applied evidence-based practice and translational methods project to be completed sequentially in a five-course series.
Prerequisite
NUR 898C

NUR 898E Applied Evidence-Based Practice & Translational Methods Project V (2:2)
An applied evidence-based practice and translational methods project to be completed sequentially in a five-course series.
Prerequisite
NUR 898D
The College consists of four Schools: Music, Theatre, Dance and Art. Within these Schools, we offer nationally accredited programs and an impressive variety of degrees and certificates at the Bachelors through the doctoral level.

With around 1500 students, excellent facilities and an internationally recognized faculty of well over 100 members, the College of Visual and Performing Arts is a vibrant community of artists that produces more than 350 performances, exhibits, lectures and other events. The College is engaged with its community and committed to student success. As the largest and most comprehensive school of the visual and performing arts in North Carolina and one of the largest in the southeast and the nation, it has the capacity to provide experiences that other institutions cannot. We have a strong record of helping students develop their craft and the necessary knowledge to succeed in the highly competitive world of the arts. Because we are part of a large research university, a full range of interdisciplinary and collaborative opportunities are close at hand.

Mission statement
In accordance with the mission of the University, The College of Visual and Performing Arts seeks to enable students to understand and embrace the artistic expression of all cultures, empowering them to enrich the human experience for themselves and others. Acknowledging the enduring traditions of excellence in each discipline, the College of Visual and Performing Arts, strives to:

- Teach the imaginative, critical, aesthetic, and technical skills essential to the creative process, scholarly inquiry, and professional engagement in the continually evolving fields of the visual and performing arts.
- Promote discovery and foster inclusive learning that enriches the understanding of human diversity and global issues as they relate to the visual and performing arts.
- Provide our undergraduate students with comprehensive curricula appropriate to the various degree programs offered by the College of Visual and Performing Arts.
- Equip our graduate students to become specialists and leaders in their fields through advanced study and training.
- Present public performances, shows, and events, and provide artistic resources, education and outreach to the local, regional, national and international communities that enriches student learning, promotes faculty scholarship and creative activities, which enrich the lives of all citizens while showcasing the College and University.

Accreditation(s)
- CAEP Council for the Accreditation of Educational Professionals
- NASD National Association for Schools of Dance
- NASM National Association for Schools of Music
- NAST National Association for Schools of Theatre

VPA – College of Visual and Performing Arts Graduate Classes
VPA 555 The Alexander Technique for Performers
An active and scholarly exploration of the Alexander Technique to unlock creativity, discover freedom and ease in performance, reduce stress and tension throughout the body, and prevent performance-related injuries.

Prerequisites
Junior, senior, or graduate standing

**VPA 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**VPA 638 Exploring Performing Arts Cultures**
Music study trips. Offered only in conjunction with a specific trip.

*Prerequisites*
To be determined by needs of specific trip

**VPA 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
ART, SCHOOL OF
138 Gatewood Studio Arts Building • 336-334-5248 • art.uncg.edu

Administration
Christopher Cassidy, Director
Mariam A. Stephan, Director of Graduate Study

About
The Department of Art offers graduate work leading to a Master of Fine Arts with a major in studio arts. Only those students enrolled in a degree program with a full-time load of courses may use space, equipment, and facilities of the Art Department. Part-time students may use only the facilities directly connected with the courses in which they are enrolled.

Mission Statement
The mission of the School of Art is founded on three passionately held principles:
First, that the exploration of ideas through the visual arts is both necessary and culturally valuable;
Second, that an understanding of visual communications within contemporary society is critical for an informed world view, and;
Third, that an appreciation and knowledge of art history, past and present, is essential to both young scholars and developing artists.

In the School of Art, committed faculty, who actively exhibit and publish nationally and internationally model the high standards we hold our students to in the visual arts, art history and art education. Our students individually challenge, explore and push the boundaries of their given field, whether it be establishing an independent vision or perspective in the studio, exploring new facets of art history or developing their own voices as art educators. Through this diversity, our programs offer students a strong, self-motivated course of study where majors have meaningful contact with faculty across disciplines, methodologies and practices

Faculty

Professors
Michael Ananian, Figurative painting and drawing. (E)
A. Lawrence Jenkens, Art history of the Italian Renaissance (Associate Dean).
Billy Lee, Sculpture; drawing, design. (E)

Associate Professors
Nikki L. Blair, Ceramics and mixed media sculpture. (E)
Christopher Cassidy, Intermedia, video, installation.
George Dimock, Modern art and critical theory, with emphasis on constructions of childhood. (E)
Heather Holian, Ancient through Renaissance art history.
Eun-Hee Lim, Art education.
Amy Lixl-Purcell, Intermedia art, work with computer and electronic media and installations. (E)
Jennifer Meanley, Painting and drawing.
Sheryl Oring, Design, performance, social practice.
Elizabeth Perrill, African art history.
Mariam A. Stephan, Painting and drawing (Director of Graduate Study).
Barbara Thomas, Drawing and painting.
Lee Walton, Printmaking, performance, social practice.
Patricia Wasserboehr, Sculpture and drawing. (E)

Assistant Professors
Sunny Spillane, Art education.

Adjunct Faculty
Nancy Doll, Museum studies (Director, Weatherspoon Art Museum).
Emily Stamey, Museum studies (Curator of Exhibitions, Weatherspoon Art Museum).
Elaine D. Gustafson, Museum studies (Curator of Collections, Weatherspoon Art Museum).

Graduate Programs
- Master of Fine Arts (MFA) in Studio Arts, (60)

Master of Fine Arts (MFA) in Studio Arts, (60)

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants should have a Bachelor’s degree in a visual arts discipline and must submit a CD or DVD with 20 images of recent work. Applicants with Bachelor’s degrees in other fields will be considered for admission if their portfolio demonstrates the ability to pursue work at the graduate level.

Degree Requirements
To complete the MFA program, the student must complete 60 hours of course work in studio art, art criticism, art history and electives, pass all required examinations, and complete thesis work.

Required Core Courses (6)
- ARH 503 Perspectives in Contemporary Art
- ART 622 Drawing Marathon (3)

Studio Courses (26-30)
To be selected from the following:
- ART 520 Anatomy for the Artist (3)
- ART 525 Advanced Metal Casting (3)
- ART 529 The Multi-Media Print (3)
- ART 540 Digital Visualization and Methods (3)
- ART 545 Interactive Web Design (3)
- ART 550 Sculpture/Installation (3)
- ART 557 Site-Specific Sculpture (3)
- ART 589 Experimental Course
- ART 592 Professional Practices, Aesthetics, and Preparation for the Visual Artist (3)
- ART 620 Drawing (3)
- ART 626 Woodcut and Wood Engraving (3)
- ART 627 Lithography (3)
- ART 628 Etching (3)
- ART 629 Studio Problems in Drawing, Painting, or Printmaking (3)
- ART 631 Painting and Drawing (3)
- ART 632 Painting and Drawing (3)
- ART 633 Painting and Drawing (6)
- ART 634 Painting and Drawing (6)
- ART 635 Painting (6)
- ART 636 Painting Research Seminar (6)
- ART 637 Painting Research Seminar (6)
- ART 641 New and Expanded Media (6)
- ART 649 Studio Problems in New Media (3)
- ART 655 Sculpture (3)
- ART 656 Sculpture (3)
ART 657  Sculpture (6)
ART 658  Sculpture (6)
ART 659  Studio Problems in Sculpture (3)
ART 682  Ceramics (6)
ART 685  Photography (6)
ART 699  Thesis (1-6)
ART 711  Experimental Course

Note: ART 589, ART 711: when topic is appropriate

Art History Courses (9)
To be selected from the following:
ARH 500  Traditions of Art Criticism (3)
ARH 501  Topics in the History of Art (3)
ARH 502  Historiography and Methodology (3)
ARH 590  Museum Studies (3)
ARH 601  Public Art (3)
ARH 602  The Teaching of Art from Vasari to Albers (3)
ARH 606  A Study of the Artist (3)
ARH 618  Topics in the History of Art (3)
ARH 619  Research Problems in Art History, Art Criticism (3)

Electives (12)
Elective hours may be selected from any of the courses listed above, from other 500-and 600-level courses taught in the Department of Art, or from 500-and 600-level courses taught in related areas with the permission of the student’s advisor and the Department Head.

Admission to Candidacy
To be formally admitted to candidacy for the MFA degree, students must have successfully completed two semesters of full-time graduate work, including ART 622, removed all deficiencies, possess a B (3.0) average in all courses taken during the first two semesters, and have an overall grade record consistent with the regulations stated in The Graduate School Bulletin. In addition, the application to candidacy must be approved by a committee of the Art Department graduate faculty to be appointed by the department head. The committee will meet with students to review work and sign candidacy forms early in the fall semester of the second year of graduate work. Students are limited to two candidacy reviews. If a student is not admitted to candidacy during the first review, the review team will issue written recommendations for further studies. The second review will take place within a year of the first. Failure to pass candidacy for the second time will prohibit the student from continuing in the program.

Oral Thesis Presentation
In the spring semester of the graduating year, each MFA candidate will give a formal oral presentation to their thesis committee prior to the installation of their thesis exhibition. Thesis (2-6) (Capstone Experience)

After passing candidacy review in the fall semester of the final year, the student and the Thesis Chair consult together to name the remaining members of the committee. The Department Head and the Director of Graduate Study review the membership of the committee before the student begins thesis work. The committee consists of four to five faculty members who hold graduate faculty status in the University. Part-time faculty do not serve on thesis committees. At least one member of the committee is a studio faculty member who teaches in the same discipline as the student’s studio practice. One other member is an art historian. It is optional for the student to select a graduate faculty member from another department in the University. This faculty member should pursue scholarly research that relates to the student’s field of interest. Thesis Chairs are selected from the studio art or art history faculty.
Early in the final semester of thesis work, the student arranges a meeting with the thesis committee to discuss all aspects of final thesis work, including the thesis paper, the oral presentation, the comprehensive art history exam, and the thesis exhibition. The thesis paper should be five to ten pages in length, conform to Graduate School requirements, and be signed by all committee members before it is electronically submitted to The Graduate School.
School. The body of work submitted for the thesis exhibition must receive final approval of all thesis committee members.

**ARE - Art Education Graduate Courses**

**ARE 563 Trends and Teaching in Art: Special Populations (3:2:1)**
Curricular and instructional principles, processes and designs applicable to special populations in various school, institutional, or community settings.

*Prerequisite*
Completion of ARE 363, student teaching, or equivalent or permission of instructor

**ARE 565 Issues in Art Education (3:3)**
Exploration of issues in art or education which affect the teaching of art.

*Prerequisite*
Graduate status or permission of instructor

*Notes*
May be repeated once for credit when topics vary.

**ARH - Art History Graduate Courses**

**ARH 500 Traditions of Art Criticism (3:3)**
A study of the major critical traditions from the Italian Renaissance to the present, aiming to define the role of criticism in the production and reception of works of art.

*Prerequisite*
Completion of 15 or more undergraduate hours in art history, Graduate status in the Art departments, or written permission of the instructor.

**ARH 501 Topics in the History of Art (3:3)**
Special topics in the history of art, ancient to contemporary.

*Prerequisite*
Completion of 15 or more undergraduate hours in art history, Graduate status in the Art departments, or written permission of the instructor.

**ARH 502 Historiography and Methodology (3:3)**
Case studies in the development of art history as a discipline and applied practice of methodologies developed for art-historical analysis.

*Prerequisite*
Graduate status in the Art Department, completion of 15 or more undergraduate hours in art history, or written permission of the instructor

*Offered*
Fall

**ARH 503 Perspectives in Contemporary Art (3:3)**
Seminar on artists whose work or writings have raised critical questions relevant to recent art. Open to MFA students and qualified undergraduates.

*Prerequisite*
Graduate status in the Art Department, or completion of 15 or more undergraduate hours in art history, or written permission of instructor.

**ARH 504 Salon to Biennale and Beyond (3:3)**
A seminar on the development and transformation of art worlds and urban spaces with a specific focus on the development of Salons, Biennales, World’s Fairs, and Art Fairs.

*Prerequisite*
Graduate status in the Art Department, or completion of 15 or more undergraduate hours in art history, or written permission of instructor.

**ARH 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**ARH 590 Museum Studies (3:3)**
A study of the diverse operations and institutional missions of art museums, including management, governance, development, collections management, education, and curatorial activities.
*Prerequisite*
Junior standing and permission of instructor

**ARH 600 Writing Art Criticism (3:3)**
Examination of the assumptions and methods of modern and contemporary art criticism through a close reading of texts and the writing of original criticism.

**ARH 601 Public Art (3:3)**
Study of traditional monuments, such as the pyramids, Michelangelo’s David, and recent large-scale works, including the Vietnam Memorial, with attention to questions of site, scale, purpose, and audience.

**ARH 602 The Teaching of Art from Vasari to Albers (3:3)**
A study of ways in which artists have taught art to other artists from the Renaissance of Michelangelo to the Modern period of such artists as De Kooning.

**ARH 606 A Study of the Artist (3:3)**
Study of the biography, development, and critical evaluation of one artist, such as Michelangelo, Rembrandt, Rodin, Cézanne, Picasso, Matisse, or Pollock.
*Notes*
May be repeated for credit when topic varies.

**ARH 618 Topics in the History of Art (3:3)**
Special topics in the history of art, ancient to modern.
*Prerequisite*
Permission of instructor
*Notes*
May be repeated for credit when topic varies.

**ARH 619 Research Problems in Art History, Art Criticism (3:3)**
Independent research in art history or criticism.
*Notes*
May be repeated for credit.

**ARH 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**ART -Studio Art Graduate Courses**
**ART 501 Topics in the History of Art**

**ART 520 Anatomy for the Artist (3:1:6)**
Visual analysis of the human form with an emphasis on the skeleto-muscular system.
*Prerequisite*
ART 220 or permission of instructor

**ART 525 Advanced Metal Casting (3:1:6)**
Advanced theory and practice of metal casting.

*Prerequisite*
ART 353 or permission of instructor

**ART 529 The Multi-Media Print (3:1:6)**
Experimental forms of image making utilizing diverse sources of technical and aesthetic references including electronic media, photography, monoprints, collagraphy, 3-D constructions, and traditional printmaking methods and processes.

*Prerequisite*
ART 326 or ART 328 or ART 329, ART 240 or ART 241

*Offered*
Fall & Spring

*Notes*
May be repeated for credit with permission of instructor

**ART 540 Digital Visualization and Methods (3:2:3)**
Studio investigation of the ways that digital methods expand and change the visual vocabulary and methods. Emphasis on refining personal artistic vision and establishing connections between traditional and digital methods.

*Prerequisite*
ART 240 or ART 241 and ART 340, ART 341 or ART 344, senior status or MFA status, or permission of instructor

**ART 545 Interactive Web Design (3:2:3)**
Development of Web graphics and interactive Web-based environments that demonstrate an understanding of navigation, usability, and functionality within a creative framework.

*Prerequisite*
ART 240 or ART 241, ART 345, or permission of instructor

*Offered*
Fall

**ART 550 Sculpture/Installation (3:1:6)**
Investigation of the sculptural possibilities of a space through art making, conceptual development, and personal research with a focus on contemporary and historical issues.

*Prerequisite*
ART 355, ART 356, ART 481, or permission of instructor

*Offered*
Occasionally

**ART 557 Site-Specific Sculpture (3:1:6)**
Provides opportunity to make site-specific sculptures; process of making work in the public arena from initial conception, interaction with jury committee to completed sculpture.

*Prerequisite*
ART 355, or permission of instructor

*Offered*
Spring

**ART 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
ART  590 Museum Studies

ART 592 Professional Practices, Aesthetics, and Preparation for the Visual Artist (3:3)
Emerging artists participate in their community and acquire the skills of career professionals. Students will engage in critical dialog related to gallery lectures, exhibitions, and symposia, and prepare to exhibit, present, and document their studio work.
Prerequisite
Graduate students: full time graduate status; undergraduates: completion of 50 sh toward studio major, or permission of instructor.
Offered
Fall & Spring

ART 600 Writing Art Criticism

ART 605 Perspectives in Contemporary Art

ART 618 Topics in the History of Art

ART 620 Drawing (3:2:4)
Drawing from observation, memory, imagination. Drawing as a record of the reflection and invention by which visual ideas are explored and developed.
Prerequisite
Admitted to MFA in studio arts or permission of instructor
Notes
May be repeated once for credit when instructor changes.

ART 622 Drawing Marathon (3:1:6)
Four two-day sessions of intensive drawing from figure, interior, still life, and imagination using a variety of materials. Emphasis on longer periods of uninterrupted drawing.
Prerequisite
Admitted to MFA in studio arts or permission of instructor
Notes:
May be repeated for credit when topic varies.

ART 626 Woodcut and Wood Engraving (3:2:4)
Aesthetic and technical exploration of relief methods in woodcut.
Prerequisite
Admitted to MFA in studio arts or permission of instructor
Notes
May be repeated for credit when topic varies.

ART 627 Lithography (3:2:4)
Aesthetic and technical exploration of planographic methods in lithography.
Prerequisite
Admitted to MFA in studio arts or permission of instructor
Notes
May be repeated for credit when topic varies.

ART 628 Etching (3:2:4)
Aesthetic and technical exploration of intaglio methods in etching.
Prerequisite
Admitted to MFA in studio arts or permission of instructor

Notes
May be repeated for credit when topic varies.

**ART 629 Studio Problems in Drawing, Painting, or Printmaking (3)**

Independent work in drawing, painting, or printmaking.

*Prerequisite*
Admission to candidacy and permission of instructor

*Notes*
May be repeated for credit.

**ART 631 Painting and Drawing (3:3:6)**

Creative work in painting and drawing with an emphasis on observation.

*Prerequisite*
6 semester hours undergraduate painting and drawing or a working knowledge of painting and drawing techniques

*Notes*
May be repeated for credit when topic varies.

**ART 632 Painting and Drawing (3:3:6)**

Creative work in painting and drawing with an emphasis on observation.

*Prerequisite*
6 semester hours undergraduate painting and drawing or a working knowledge of painting and drawing techniques

*Notes*
May be repeated for credit when topic varies.

**ART 633 Painting and Drawing (6:3:9)**

Creative work in painting and drawing with an emphasis on observation.

*Prerequisite*
6 semester hours undergraduate painting and drawing or a working knowledge of painting and drawing techniques

*Notes*
May be repeated for credit when topic varies.

**ART 634 Painting and Drawing (6:3:9)**

Creative work in painting and drawing with an emphasis on observation.

*Prerequisite*
6 semester hours undergraduate painting and drawing or a working knowledge of painting and drawing techniques

*Notes*
May be repeated for credit when topic varies.

**ART 635 Painting (6:3:9)**

Advanced practice and theory of painting with an inclusive interpretation of painting.

*Prerequisite*
Admitted to MFA in studio arts or permission of instructor

*Notes*
May be repeated for credit.

**ART 636 Painting Research Seminar (6:3:9)**

Research and study on selected painting problems.

*Prerequisite*
Admitted to MFA in studio arts or permission of instructor
ART 637 Painting Research Seminar (6:3:9)
Research and study on selected painting problems.
Prerequisite
Admitted to MFA in studio arts or permission of instructor

ART 641 New and Expanded Media (6:3:9)
Special studio topics in design ranging from digital photography to systems based art.
Notes
May be repeated for credit when topic varies.

ART 649 Studio Problems in New Media (3)
Independent work in digital media or photography.
Prerequisite
Admission to candidacy and permission of instructor
Notes
May be repeated for credit.

ART 655 Sculpture (3:3:6)
Advanced work in sculpture.
Prerequisite
6 semester hours undergraduate sculpture or a working knowledge of basic sculpture techniques and permission of instructor
Notes
May be repeated for credit when topic varies.

ART 656 Sculpture (3:3:6)
Advanced work in sculpture.
Prerequisite
6 semester hours undergraduate sculpture or a working knowledge of basic sculpture techniques and permission of instructor
Notes
May be repeated for credit when topic varies.

ART 657 Sculpture (6:3:9)
Advanced work in sculpture.
Prerequisite
6 semester hours undergraduate sculpture or a working knowledge of basic sculpture techniques and permission of instructor
Notes
May be repeated for credit when topic varies.

ART 658 Sculpture (6:3:9)
Advanced work in sculpture.
Prerequisite
6 semester hours undergraduate sculpture or a working knowledge of basic sculpture techniques and permission of instructor
Notes
May be repeated for credit when topic varies.

ART 659 Studio Problems in Sculpture (3)
Independent work in sculpture.
Prerequisite
Admission to candidacy and permission of instructor

Notes
May be repeated for credit.

ART 663 Practicum: Schools, Museums, or Other Settings (3)
Planned administrative or research and development activities in a school, museum, or community setting.

ART 665 Art Education (3:3)
Selected problems of curricula, administration, method, and general education.

ART 669 Special Problems in Art Education (3:3)
Independent work in Art Education for advanced graduate students.
Notes
May be repeated for credit.

ART 669 Special Problems in Art Education (3:3)
Independent work in Art Education for advanced graduate students.
Notes
May be repeated for credit.

ART 682 Ceramics (6:3:9)
Advanced work in ceramics.
Prerequisite
6 semester hours of undergraduate ceramics or a working knowledge of basic ceramic techniques and permission of instructor
Notes
May be repeated for credit when topic varies.

ART 685 Photography (6:3:9)
Advanced work in photography.
Prerequisite
6 studio hours in undergraduate photography or a working knowledge of photographic techniques or permission of instructor
Notes
May be repeated for credit when topic varies.

ART 690 Experimentation and Analysis: Studio Arts (3:1:6)
Designed to provide non-studio art majors an understanding of studio arts as creative activities.
Notes
Not open to studio arts majors.

ART 699 Thesis (1–6)
Prerequisite
Third or fourth semester MFA candidate

ART 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

ART 801 Thesis Extension (1–3)
ART 803 Research Extension (1–3)
DANCE, SCHOOL OF
323 Coleman Building • 336-334-5570 • vpa.uncg.edu/dance

Administration
Janet Lilly, Director of the School of Dance
Elizabeth J. Sullivan, Director of Graduate Study
Mila Parrish, Director of Dance Education

About
Mission statement
Within the context of UNCG's comprehensive liberal arts curriculum, the School of Dance offers bachelors and master’s degrees that provide specialized skills for a variety of careers in the evolving field of dance. The school's primary goal is to teach students the imaginative, critical, and technical skills essential to the creative process and to scholarly inquiry. Our comprehensive curricula foster inclusive learning and intellectual curiosity framed by an engagement with cultural diversity, community outreach, and global issues as related to dance. The School of Dance prepares undergraduate and graduate students for further study and successful and productive lives as artists, educators, and scholars at the state, regional, national and international levels.

Accreditation(s)
The University of North Carolina Greensboro is accredited by the National Association of Schools of Dance (NASD).

Faculty
Professors
- Jill Green, Somatics, feminist and post-positivist research, socio-cultural issues of the body, dance in higher education, and qualitative research methodology. (E)
- Janet Lilly, Choreography, contemporary technique, repertory, iyengar yoga (Director of the School of Dance).

Associate Professors
- Duane Cyrus, Dance technique, performance, and choreography. Interdisciplinary integration of theatre, technology, and dance, performing arts entrepreneurship.
- Robin M. Gee, West African and contemporary dance techniques, choreography, repertory, historical and cultural studies in dance and screen dance (Director of Undergraduate Studies).
- Mila Parrish, Dance pedagogy, dance documentation and reconstruction, community engagement and service learning, technology for dance education and Laban Movement Analysis (Director of Dance Education for the MA in Dance, Dance Education concentration). (E)
- Elizabeth J. Sullivan, Choreography, ballet and contemporary dance techniques, repertory and performance practices, development and application of alternative approaches/somatic infusion to movement technique pedagogy (Director of Graduate Study for MFA in Dance Choreography and MA in Dance Theories and Practices concentrations). (E)

Academic Professional Assistant Professor
- Melinda Waegerle, Dance education, (student teacher supervision).

Assistant Professor
- Ana Paula Höfling, Dance studies, Latin American studies, cultural studies, critical tourism studies, and Capoeira History and Practice (Dance Appreciation teaching assistant mentor).

Graduate Programs
- Master of Arts (MA) in Dance, Dance Education or Theories and Practices concentration, (36)
- Master of Fine Arts (MFA) in Dance, Choreography concentration, (60)
- Post-Baccalaureate Licensure (PBL) in Dance Education
Dance, MA - Dance Education concentration
The MA in Dance with a concentration in dance education requires 36 semester hours and is designed for public school dance educators. Entering students who already hold the North Carolina Standard Professional I license in Dance will be eligible for advanced (M) licensure upon completion of the degree.

The degree is available through a combination of online courses at UNCG, summer study on campus, and selected courses taken on campus or online from other institutions. Designed for part-time students, the degree may be completed in 3 years.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Program entry is in the summer and students are admitted in alternate (even) years. Study begins with required summer coursework.

In addition to the application materials required by The Graduate School, the School of Dance requires additional materials. Prospective students should contact the school before submitting an application.

Admission to graduate study in dance is on the basis of competence as evidenced by the undergraduate record and demonstrated proficiency and potential in the field of dance.

Degree Requirements
Required Courses (36)
With or Without Licensure
DCE 560 The Dancer’s Body (3)
DCE 614 New Media in Dance Education (3)
DCE 646 Reflective Practice in P-12 Dance Education (3)
DCE 651 Choreographic Practice (3)
DCE 654 P-12 Dance Education: Technique and Performance (1)
DCE 655 P-12 Dance Education: Choreography (1)
DCE 656 P-12 Dance Education: Critical Thinking/Literacy (2)
DCE 660 Issues in Planning the Dance Curriculum (3)
DCE 662 Practicum in Teaching Dance (taken twice) (.5-3)
Undergraduate credits in dance technique

Note: DCE 560, DCE 651: summer courses

Undergraduate Credits in dance technique: (or equivalent in approved professional study)

Additional Requirements for Students NOT seeking Licensure
DCE 698 Field Project in Dance (3-6)

Electives: (approved by advisor)
Note: Students who have not completed coursework in educational psychology and diverse learners will be required to do so for elective credit.
DCE 698 Culminating Project/Capstone Experience

Additional Requirements for Students Seeking M Licensure
One graduate course in Teacher Leadership
One graduate course in Human Development and Learning
One additional graduate course in education
DCE 693  Portfolio in K-12 Dance Education (1-6)
Graduate course in education: (approved by advisor)
DCE 693: (Culminating Project/Capstone Experience)
Reviews
Students are reviewed by the dance faculty when 9-15 hours of graduate course work are complete. Faculty assesses student progress in their degree program and makes recommendations for improvement. Students receive a letter from the Director of Dance Education reporting faculty recommendations.

Once students have completed at least two-thirds of the course work and they have achieved a minimum overall 3.0 GPA, a Portfolio and Project Proposal Review is scheduled. Students must pass this Review before they can begin their culminating projects. Guidelines are listed in the Graduate Handbook.

The final review takes place at the end of the semester when DCE 693 or 698 is completed.

Dance, MA -Theories and Practices concentration
The MA in Dance with a concentration in theories and practices requires 36 semester hours.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. Prospective students should contact the school before submitting an application.

In addition to the application materials required by The Graduate School, applicants should submit a personal statement and samples of work directly to the school. The application deadline is November 15.

Admission to graduate study in dance is on the basis of competence as evidenced by the undergraduate record and demonstrated proficiency and potential in the field of dance.

Degree Requirements

Required Courses (12-13)
- DCE 505  Choreographies and Choreographers (3)
- DCE 560  The Dancer's Body (3)
  or
- DCE 630  Advanced Body Theories and Practices in Dance (4)
  or
- DCE 660  Issues in Planning the Dance Curriculum (3)
  and
- DCE 610  Dance Studies I: Theories and Methods (3)
- DCE 611  Dance Studies II: Research Projects (3)

Electives (17-21)
Students select electives with the approval of the advisor, at least 9 hours of which are in dance. A research course outside the school is recommended.

Culminating Project (3-6) (Capstone Experience)
Students choose one of the following:
- DCE 663  PreK-12 Dance Education Practicum (3-6)
- DCE 698  Field Project in Dance (1-6)
- DCE 699  Thesis (1-6)

Reviews
Students are reviewed by the dance faculty when 12 hours of graduate course work are complete. Faculty assesses student progress within the degree program.

Once students have completed at least two-thirds of the course work and DCE 610 and have achieved a minimum overall 3.0 GPA, students select a committee of at least three members of the graduate faculty and schedule a Portfolio and Project Proposal Review. Students must pass the review before they can begin their culminating projects. Guidelines are listed in the Dance Graduate Handbook.
Dance, MFA – Choreography concentration
The MFA in Dance requires 60 semester hours and is normally completed over three years, culminating in a dance concert or project designed and carried out by the student with the support of faculty. Students develop and clarify their choreographic voices and deepen their understandings of dance making as a personal, aesthetic, cultural, and social process and product through guided investigations of choreographic methods, practices in coaching and performing movement, and theories and practices in dance research. The MFA is a terminal degree commonly held by studio teaching faculty at the university level.

Application and Admission
Prospective students should contact the school before submitting an application. For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants should submit a personal statement and samples of work directly to the school. Program entry is in the fall term and the deadline to apply is November 15th.

Admission to graduate study in dance is on the basis of competence as evidenced by the undergraduate record and demonstrated proficiency and potential in the field of dance.

Degree Requirements
Required Courses (34-35)
- DCE 505  Choreographies and Choreographers (3)
- DCE 610  Dance Studies I: Theories and Methods (3)
- DCE 611  Dance Studies II: Research Projects (3)
- DCE 621  Administration of Dance (3)
- DCE 624  Movement for Dance (1 credit, three times)
- DCE 630  Advanced Body Theories and Practices in Dance (4)
  or
- DCE 560  The Dancer’s Body (3)
- DCE 651  Choreographic Practice (3 credits, four times)
- DCE 661  Dance Pedagogy in Higher Education (2)
- DCE 662  Practicum in Teaching Dance (taken for a total of 2 credits) (.5-3)

Electives (19-20)
Students select 19-20 semester hours of electives, including 6 hours outside of the school.
  Recommended Dance Electives:
  - DCE 530  Pilates: Movement Fundamentals for Dance (1)
  - DCE 531  Capoeira History and Practice (3)
  - DCE 553  Screen Dance (3)
  - DCE 559  Laban Movement Analysis (1)
  - DCE 650  Dance Design Practicum (3)

Culminating Project (6) (Capstone Experience enrolled in over two semesters)
For a full-length concert or equivalent artistic presentation:
- DCE 697  Masters Production Project (6)

For significant research that directly informs a major choreographic work (or series of works) equivalent to half a concert:
- DCE 697  Masters Production Project (3)
- DCE 698  Field Project in Dance (1-6)
Program Progression and Reviews

The Graduate Faculty assesses student progress in their degree program in the spring semester of their first year.

After removal of all deficiencies, three semesters of choreography practice (DCE 651), and at the completion of at least 30 graduate hours, students apply for MFA candidacy. Admission is based on a variety of criteria, including a minimum overall 3.0 GPA. Students submit a portfolio of work to the Director of Graduate Study, usually by December 1 of their third semester, for review by the Graduate Committee. See the School of Dance MFA Handbook for portfolio contents and process.

When the student has been in residence for at least two semesters and passed candidacy, he/she assembles a committee of at least three members of the graduate faculty to review their culminating concert or project proposal. Proposal guidelines are included in the School of Dance MFA Handbook. Once the committee approves the proposal, the student may register for DCE 697 or DCE 698 and work towards culmination of study.

Dance, PBL
Students in the MFA or the MA in Theories and Practices may complete additional course work to be eligible for Standard Professional I licensure.

Requirements

The following courses must be completed prior to graduate admission or as part of or in addition to the degree requirements.

- Ballet
- Contemporary Dance at the intermediate level or higher
- Jazz
- African Dance
- One additional global dance form
- Choreography
- Music for dance

DCE 359 Foundations for Dance Education (2)
DCE 505 Choreographies and Choreographers (3)
DCE 662 Practicum in Teaching Dance (.5-3)
DCE 663 PreK-12 Dance Education Practicum (3-6)
ELC 401 Schooling in a Democratic Society
ERM 401 Assessment I: Accountability in Our Nation's Schools
SES 401 Understanding and Teaching Students with Disabilities in Inclusive Settings
TED 401 Child and Adolescent Development and Learning

or

TED 669 Educational Implications of Learning and Developmental Theory
TED 402 Student Engagement in the Classroom

or

TED 545 Diverse Learners
TED 403 Teaching English Learners with Diverse Abilities

or

TED 650 The Interaction of Classroom Management and Instruction
DCE 662, DCE 663: for a total of 6 semester hours

Note: Completion of these courses does not guarantee licensure. Students are advised of additional requirements for documenting the evidence required for licensure.
DCE - Dance Graduate Courses

DCE 505 Choreographies and Choreographers (3:3)
Exploration of concert dance over the twentieth and twenty-first centuries in a variety of geographic areas. Through various critical lenses, this course analyzes the choreographic production of influential dance makers.
Prerequisite
None for graduate students; DCE 305 for undergraduates.
Offered
Spring

DCE 530 Pilates: Movement Fundamentals for Dancers (1:1)
The course is designed to develop core strength, flexibility, posture, and range of motion and covers the fundamentals of Pilates with an emphasis on breathing, alignment, and core stability.
Prerequisite
Dance major or permission of instructor
Notes
May be repeated twice for credit.

DCE 531 Capoeira History and Practice (3:1:3)
Introduction to the history and practice of Brazilian capoeira, with emphasis on the style known as capoeira angola. Includes readings, discussion, film viewing and studio practice.
Prerequisite
Junior standing or above classification
Notes
May be repeated once for credit.

DCE 553 Screen Dance (3:3)
Exploration of how dance and dance film technologies work best together and why, including composing for the camera, recording dancers in action, and editing footage to create original work.
Prerequisite
DCE 253, DCE 453; Graduate dance standing or permission of instructor

DCE 555 Technology in the Creation and Preservation of Dance Works (3:3)
A study of software applications useful in the creation and/or preservation of dance works. Areas of study include sound score creation, video editing, and graphics manipulation.
Prerequisite
DCE 355, or admission to graduate study in dance, or permission of the instructor
Offered
Fall

DCE 559 Laban Movement Analysis (1:1:2)
An introduction to Laban Movement Analysis through movement integration, observation, critical research, notation and analysis. Course may be repeated once for credit.

DCE 560 The Dancer's Body (3:3)
An introduction to the study of body theories and practices in dance. Topics include somatic theory and practice, and body issues related to dance performance, choreography, and pedagogy.
Prerequisite
Two semesters of dance technique, and DCE 340 or equivalent, or permission of instructor
Offered
(Every fourth summer)
DCE 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

DCE 610 Dance Studies I: Theories and Methods (3:3)
Introduction to scholarship and research methodologies in dance studies. Students will be introduced to key theories and methodologies that have shaped the interdisciplinary field of dance research.
Prerequisite
Admission to graduate degree program in dance and completion of undergraduate dance history prerequisite

DCE 611 Dance Studies II: Research Projects (3:3)
In-depth personal inquiry into the nature and making of meaning for a selected area of concern in dance. Includes significant individual project.
Prerequisite
DCE 610 or permission of instructor
Offered
Spring

DCE 614 New Media and Technology in Dance Education (3:0:3)
Theory and practice related to teaching dance technology, including new media and interdisciplinary relationships. Includes planning, teaching, and assessing student learning in one unit of study.
Prerequisite
DCE 651 or other graduate course in choreography

DCE 620 Music for Dancers (3:3)
The relationship of sound and movement, accompaniment and dance, accompanist/composer and teacher/choreographer, and bringing these understandings to practical application.

DCE 621 Administration of Dance (3:3)
Introduction to the business of dance including aspects of building a professional practice relevant to career goals including grant writing, project development and management, public relations, and concert production and presentation.

DCE 622 Dance Criticism (3:3)
Current theories, materials, and techniques of dance criticism. Group study, choreographic evaluation, and individual projects related to critical writing in dance.

DCE 624 Movement for Dance (1:0:5)
Opportunities for dancers to practice their craft, developing working knowledge of different styles of contemporary dance, ballet, improvisation, and other movement forms. Style and emphasis will vary each semester.
Prerequisite
Graduate standing in dance
Notes
May be repeated for a maximum of six credits. Graded on -/U basis.

DCE 630 Advanced Body Theories and Practices in Dance (4:2:2)
Advanced study of body theories and practices in dance. Topics include sociocultural constructions of dancer bodies, somatic theory, body pedagogies, and somatic practices related to dance performance, choreography, and pedagogy.
Prerequisite
Two semesters of dance technique and DCE 340 or equivalent; or permission of instructor
DCE 645 Foundations for Assessment in Dance (3:0:9)
Presentation of formative and authentic/performance assessment for dance, including construction and application of assessment instruments, evaluation of instruction, and assessment-based grading.

Prerequisite
Graduate standing in dance or education.

Notes
Students must be simultaneously enrolled in OPDI 105, offered through the Online Professional Development Institute of the National Dance Education Organization, to earn UNCG credit. Students not enrolled in OPDI 105 will be withdrawn from the UNCG course.

DCE 646 Reflective Practice in P-12 Dance Education (3:3)
Planning and implementation of projects related to master’s standards for dance licensure, with ongoing reflection and dialogue.

Prerequisite
Admission to MA in dance education

Offered
Spring

DCE 650 Dance Design Practicum (3:3)
Advanced practicum in the technical, aesthetic and theoretical aspects of dance design.

Prerequisite
DCE 555 and graduate standing in dance
DCE 651 Choreographic Practice (3)

Exploration of diverse perspectives on choreography: process, period, style, and genre. Individualized problems and projects developed with each student artist.

Notes
May be repeated for credit.

DCE 654 P-12 Dance Education: Technique and Performance (1:1)
Theory and practice related to teaching dance technique and performance to school-aged populations. Includes planning, teaching, and assessing student learning in one unit of study.

Prerequisite
DCE 560 and admission to MA in dance education

DCE 655 P-12 Dance Education: Choreography (1:1)
Theory and practice related to teaching choreography to school-aged populations, with an emphasis on collaboration. Includes planning, teaching, and assessing student learning in one unit of study.

Prerequisite
DCE 651 or other graduate choreography course; admission to MA in dance education

DCE 656 P-12 Dance Education: Critical Thinking/Literacy (2:2)
Theory and practice related to teaching critical thinking and dance literacy with school-aged populations, including interdisciplinary relationships. Includes planning, teaching, and assessing student learning in one unit of study.

Prerequisite
DCE 610 and admission to MA in dance education

DCE 660 Issues in Planning the Dance Curriculum (3:3)
Curriculum planning for dance in educational settings. Involvement with issues in the field.

Prerequisite
Graduate standing in dance
Offered
Offered alternate years.
Notes
Online only.

DCE 661 Dance Pedagogy in Higher Education (2:2)
Consideration of pedagogical issues and strategies in teaching dance studio and theory courses at the undergraduate college/university level.
Prerequisite
Graduate standing in dance or permission of instructor(s)

DCE 662 Practicum in Teaching Dance (.5–3)
Observation of dance teaching and supervised practice at the university or K-12 level; some sections may include a required seminar.
Prerequisite
Graduate standing in dance; or permission of instructor and previous teaching experience; or 18 graduate semester hours in dance
Notes
May be repeated for a maximum of 6 credits. Grade: Satisfactory/Unsatisfactory, S/U

DCE 663 PreK-12 Dance Education Practicum (3–6)
Supervised teaching culminating in development of a portfolio demonstrating competencies required for Standard Professional I licensure.
Prerequisite
Admission to graduate program in dance
Notes
May be repeated for a maximum of 6 credits.

DCE 664 Action Research in Dance Education (3)
Review of recent research relevant to dance education; planning, implementation, and evaluation of action research project.
Prerequisite
DCE 611
Notes
Online only.

DCE 676 Problems Seminar (3:3)
Specific course title identified each semester by subscript, e.g., Problems Seminar: Dance as Therapy.
Prerequisite
Graduate standing in dance
Notes
May be repeated for credit when topic varies.

DCE 687 Performance Theory and Practice (2:3)
Rehearsal and performance of work designed to challenge graduate students at their level of performance. Choreography by graduate faculty.
Prerequisite
Graduate standing in dance or permission of instructor
Notes
May be taken three times for credit.
DCE 688 Practicum in Dance Performance (1–3)
Rehearsal and performance of choreography created or reconstructed by faculty or guest artist.
Prerequisite
Graduate standing in dance or permission of the instructor
Notes
One credit per 60 rehearsal hours. Only one credit per choreographer. May be repeated for three credits. Grade: Satisfactory/Unsatisfactory, S/U

DCE 688 Practicum in Dance Performance (1–3)
Rehearsal and performance of choreography created or reconstructed by faculty or guest artist.
Prerequisite
Graduate standing in dance or permission of the instructor
Notes
One credit per 60 rehearsal hours. Only one credit per choreographer. May be repeated for three credits. Grade: Satisfactory/Unsatisfactory, S/U

DCE 693 Portfolio in K-12 Dance Education (1–6)
Development of teaching portfolio to meet specific requirements for M licensure in dance. Students may substitute National Board Professional Teaching Standards portfolio with prior permission.
Prerequisite
Satisfactory completion of (a) all required courses for the MA in dance with a dance education (M license) concentration, (b) Portfolio Review, and (c) at least two years full-time (or equivalent) teaching K-12 dance.
Notes
May be repeated for a maximum of 6 semester hours. Graded S-U basis.

DCE 695 Independent Study (1–3)
Intensive study in an area of special interest in dance.
Prerequisite
Demonstrated competency for independent work and consent of academic adviser and the instructor

DCE 697 Masters Production Project (1–6)
Culminating choreography research with a performed or presented outcome. Possibilities include structured choreography, improvisation, lecture demonstration, master class, community based or historical research with performance, and digitally based projects.
Prerequisite
Admission to candidacy, successful completion of proposal
Notes
Grade: Satisfactory/Unsatisfactory, S/U

DCE 698 Field Project in Dance (1–6)
Research, development, and completion of approved project which substantially contributes to mastery in MFA or MA concentration and integrates knowledge gained through the degree program.
Prerequisite
MA students and MFA candidates with approved project proposals
Notes
Grade: Satisfactory/Unsatisfactory, S/U

DCE 699 Thesis (1–6)
Prerequisite
Satisfactory completion of portfolio review
DCE 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

DCE 801 Thesis Extension (1–3)

DCE 803 Research Extension (1–3)
MUSIC, SCHOOL OF
328 Music Building • 336-334-3640 • vpa.uncg.edu/music

Administration
Dennis AsKew, Director
Randy Kohlenberg, Director of Graduate Study

About
The School of Music was established in 1912 and became the School of Music, Theatre and Dance in 2008. The School of Music became a member of the College of Visual and Performing Arts in 2016. UNCG has long been recognized as having one of the most well recognized music institutions in the United States and has been fully accredited by the National Association of Schools of Music since 1938. The School of Music offers the only comprehensive degrees in music education and music performance in the State of North Carolina, from the undergraduate level through doctoral study. Within the School of Music, doctoral degrees are offered in music education, conducting, and performance. The School of Music offers Master of Music degrees in music composition, music education, music performance, and music theory, and also offers Post-Baccalaureate Certificates in ethnomusicology, historical keyboard performance, jazz studies, musicology, music composition, music education, and music theory, and a Post-Master’s Certificate in music theory pedagogy. Our outstanding facilities, world-class faculty, and numerous ensemble experiences provide an environment for artistic and academic success.

The Master of Music in Music Education leads to graduate licensure and emphasizes the acquisition of a fundamental knowledge of research techniques and scholarly writing standards. Students develop an in-depth understanding of the historical, philosophical, psychological and cultural aspects of music education.

The Master of Music in Performance programs offer conservatory-type performance training and complement this with academic offerings directly related to careers in performance. These students graduate with performance and entrepreneurial skills enabling entry into the profession or further studies.

The Master of Music in Music Theory program offers students an opportunity to deepen and refine their knowledge of music theory, and to continue developing their analytical, keyboard, and aural skills. Most MM students gain valuable teaching experience as graduate assistants. Students who complete this course of study are qualified to teach pre-college or community college courses, or to apply for admission to a doctoral program.

Doctor of Musical Arts students are fully prepared as artist/scholars ready to join the academy. A large faculty of outstanding artists, teachers, and researchers supports a comprehensive program of study.

The Doctor of Philosophy in Music Education prepares students for careers as public school music administrators or college-level teachers. Such development requires a comprehensive knowledge of the psychological, social and musical values in music education; theories of learning as applied to music education; historical and theoretical properties of music education; and scholarly and research techniques required for understanding and investigating problems in music and education.

Located in the artistically thriving Greensboro/Winston-Salem/High Point area, the Triad provides a wealth of cultural opportunities for our students. Students regularly perform in and attend concerts by the Greensboro Symphony Orchestra, the Greensboro Opera Company, the Winston-Salem Symphony and the Eastern Music Festival, along with a myriad of musical theatre, jazz, and chamber music ensembles.

Mission statement
We approach music as an essential part of human culture and therefore aspire to engage with the diversity of musical meanings and practices globally and locally; our student and faculty scholarship enrich understandings of music as sound, text, and activity. We engage with local, regional, national and international communities through teaching, performance, publications, lectures, conferences, symposia, festivals, and other educational and cultural programs.

Accreditation(s)
The UNCG School of Music has been fully accredited by the National Association of Schools of Music since 1938

Faculty

Professors
- Dennis W. AsKew, Tuba and Euphonium (Director, School of Music) (E).
- Marjorie Bagley, Violin. (E)
- Mary A. Barret, Oboe and English horn. (E)
- Robert Bracey, Voice. (E)
- Kelly Burke, Clarinet. (Vice Provost and Dean of the Graduate School) (E)
- Michael J. Burns, Bassoon. (E)
- T. Mark Clodfelter, Trumpet. (E)
- Joseph DiPiazza, Piano. (E)
- Mark Engebretson, Composition, Electronic Music. (E)
- Steve Haines, Jazz Studies). (E)
- Donald Hartmann, Voice. (E)
- David Holley, Voice (E).
- Randy Kohlenberg, Trombone (Director of Graduate Study) (E)
- Carla LeFevre, Voice. (E)
- John Locke, EdD, Instrumental Conducting. (E)
- David L. Nelson, Music Theory. (E)
- Scott Rawls, Viola. (E)
- John Salmon, Piano, Jazz. (E)
- Steven Stusek, Saxophone. (E)
- David Teachout, Music Education. (Director, University Teaching and Learning Commons) (E)
- Nancy Walker, Voice. (E)
- Andrew S. Willis, Piano, Fortepiano, Harpsichord. (E)

Associate Professors
- Aaron Allen, Musicology.
- Guy Capuzzo, Music Theory. (E)
- Gregory Carroll, Music theory, Composition, Music Appreciation. (E)
- Gavin D. Douglas, Ethnomusicology. (E)
- James Douglass, Collaborative Piano, Vocal Coach. (E)
- Tami Draves, Music Education.
- Chad Eby, Jazz Studies.
- Alexander Ezerman, Cello. (E)
- Kevin M. Gerald, Instrumental Conducting (Director of Orchestras). (E)
- Elizabeth L. Keathley, Music History. (E)
- Fabian Lopez, Violin. (E)
- Rebecca MacLeod, Music Education. (E)
- Constance McKoy, Music Education. (E)
- David B. Nolker, Music Education. (E)
- Clara O’Brien, Voice. (E)
- Carole Ott, Choral Conducting (Associate Director of Choral Activities). (E)
- Abigail Pack, Horn. (E)
Adam Ricci, Music Theory. (E)
Kailan R. Rubinoff, Musicology. (E)
Alejandro H. Rutty, Composition.
Patricia Sink, Music Education. (E)
Anthony Taylor, Clarinet. (E)
Joan Titus, Musicology. (E)
Jennifer S. Walter, Music Education. (E)
Robert A. Wells, Voice, Vocal Pedagogy. (E)
Welborn E. Young, Choral Conducting (Director of Choral Activities). (E)

**Assistant Professors**
Erika Boysen, Flute.
Brandon Lee, Jazz.
Eric Willie, Percussion. (E)

**Lecturers**
Dominic Amendum, Musical Theatre.
Craig Brown, Bass.
Mark Cramer, Clarinet.
Jeff Ensign, Music Theory.
Lorena Guillen, Musicology.
Greg Hyslop, Jazz Guitar.
André Lash, Organ.
Kyoo Hye Lim, Piano.
Andrea Mumm, Harp.
Rachel Niketopoulos, Alexander Technique.
Daniel Rice, Trombone.
Thomas Taylor, Jazz.
Rebecca Wilt, Vocal Coach Accompanist.
Justin Worley, Tuba, Euphonium.
Inara Zandmane, Collaborative Piano.

**Graduate Programs**
- Post-Baccalaureate Certificate in Ethnomusicology, 15 hours
- Post-Baccalaureate Certificate in Historical Keyboard Performance, 12 hours
- Post-Baccalaureate Certificate in Jazz Studies, 12 hours
- Post-Baccalaureate Certificate in Musicology (Historical), 13 hours
- Post-Baccalaureate Certificate in Music Composition, 12 hours
- Post-Baccalaureate Certificate in Music Education, 12 hours
- Post-Baccalaureate Certificate in Music Theory, 12 hours
- Master of Music (MM) in Music Composition, 33 hours
- Master of Music (MM) in Music Education, 34 hours
- Master of Music (MM) in Music Performance, 32-35 hours
- Collaborative Piano (33); Choral Conducting (32); Instrumental Conducting (32); Early Keyboard Instruments (32); Organ (34); Piano (32); Piano Pedagogy (32); String, Wind, and Percussion (32); Vocal Pedagogy (35); Voice (32); or Multiple Woodwinds (32)
- Master of Music (MM) in Music Theory, 34 hours
- Post-Master’s Certificate in Music Theory Pedagogy, 14 hours
- Doctor of Musical Arts (DMA) in Music, 90 post-baccalaureate hours
- Doctor of Philosophy (PhD) in Music Education, 69 hours
Ethnomusicology, Post-Baccalaureate Certificate (15)
The Post-Baccalaureate Certificate in Ethnomusicology provides students with global breadth and awareness of multiple music traditions, as well as theoretical principles and practical applications of ethnomusicology. Requires 15 hours.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School:
Submit a writing sample showing significant engagement with music and culture, provide a statement of intent outlining their background in ethnomusicology and their particular goals and interests, and interview with participating faculty.

**Certificate Requirements**
Options will be decided in consultation with the student’s advisor.

**Required Courses (6):**
- **ENS 677** World Music Ensemble (1) (two semesters)
- **MUS 706** Seminar in Music History: Theory and Methods in Ethnomusicology (offered once every 2 years) (3)
- **MUS 689** Practicum in Teaching Music Theory and Musicology (1)

**Two of the following courses (6):**
- **MUE 627** Issues in Multicultural Music Education (3)
- **MUS 706** Seminar in Music History (3)
- **MUS 631** Selected topics in Ethnomusicology (3)
- One 500/600-level Social Science/Humanities elective chosen in consultation with advisor (3)

Historical Keyboard Performance, Post-Baccalaureate Certificate (12)
The Post-Baccalaureate Certificate in Historical Keyboard Performance provides students guidance in playing 16th through 19th century repertoire on instruments contemporaneous with the music, supported by coursework in literature and performance practice.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School:
An earned Bachelor’s degree in Music is a prerequisite.
Students applying only for this PBC will audition for the keyboard faculty, adapting the audition requirements of the MM in Early Keyboard Instruments in consultation with the Coordinator of the Keyboard Area. Such non-degree students must also submit all application materials required by the School of Music, Theatre and Dance and the Graduate School, excluding GRE scores, by the appropriate deadline for Fall, Spring, or Summer admission. Admitted DMA students in keyboard performance may contact the Coordinator of the Keyboard Area for permission to enroll in this PBC without undergoing any additional auditions.

**Certificate Requirements**
12 Credits (must be taken at UNCG):
- **MUP 600** Recital (0)
- **MUP 613** Piano Literature I (3)
- **MUP 620** Seminar in Piano (3) (Topic must be relevant to historical keyboard studies, such as: The 18th-Century Piano, The Mozart Piano Concertos, Haydn’s Keyboard Music, The Pianist’s Bach,
Performance Practice on Historical Keyboard Instruments, Beethoven’s Late Piano Music, Chopin and the Pleyel, Iberian keyboard music of the Renaissance and Baroque, The Keyboard Prelude and Fugue in 16th- and 18th-century Germany.

MUP 653  Secondary Performance Studies (6) (in harpsichord, fortepiano, and/or organ). Registration may be for one or two hours per semester.

Exit Requirements
The student will perform a 30-minute recital of solo repertoire on an historical keyboard instrument or instruments. Degree-seeking students may, with the approval of the studio teacher, use the fulfillment of this requirement to satisfy a portion of their degree’s performance requirements.

Graduate Music Handbook
Additional policies and regulations are found in the Graduate Music Handbook located at: http://performingarts.uncg.edu/current/g-music.

Jazz Studies, Post-Baccalaureate Certificate (12)
The Post-Baccalaureate Certificate in Jazz Studies provides students and/or professionals with knowledge and skills needed to apply principles of jazz to a variety of musical careers.

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School:
An earned Bachelor’s degree in Music; in exceptional cases, a student with an undergraduate degree outside of music may be considered.
For current degree-seeking students, at least one letter of recommendation must be from a Jazz faculty member at UNCG.

Certificate Requirements
Required Courses
12 Credits (must be taken at UNCG, at least 6 at the 600-level; the coordinator of the Miles Davis Program in Jazz will advise the certificate student in course selection) from the following:
MUP 605  Principles of Jazz Theory (2)
MUP 609  Jazz Pedagogy (2)
MUP 623  Jazz Arranging I (2)
MUP 624  Jazz Arranging II (2)
MUP 653  Performance Studies (Secondary) (1-6) May be repeated for 3 additional credits
MUP 663  History of Jazz (3)
MUP 664  Jazz Improvisation I (2)
MUP 665  Advanced Jazz Improvisation (2)
ENS 648  Chamber Music: Jazz (1) (may be repeated up to three times)
ENS 695  Jazz Ensemble I (1) (may be repeated up to three times)
ENS 696  Jazz Ensemble II (1) (may be repeated up to three times)

Although not required, students are encouraged to audition for one of the jazz ensembles or jazz combos.

Exit Requirements
Completion of all course work with a grade of B or better is required. Degree-seeking students must include a member of the jazz faculty on their doctoral advisory committee or master’s comprehensive exam committee. Testing conditions will follow those outlined in the Handbook for Graduate Study in Music for the student’s degree program.

Graduate Music Handbook
Musicology (Historical), Post-Baccalaureate Certificate (13)
The Post-Baccalaureate Certificate in Musicology provides students with the opportunity to study music history in greater depth in a structured program, preparing MM and DMA students to teach courses requiring music history knowledge, and thus enhancing their marketable skills. It also prepares other graduates of BA or BM programs for further graduate study in musicology and enhances the employability of students with an interest in public sector fields and arts administration.

The objectives of the Post-Baccalaureate Certificate in Musicology are to:
- Increase cultural awareness and understanding of the Western art music tradition in relation to non-European musical traditions.
- Develop practical skills for teaching music history in the classroom.
- Develop research and writing skills in the field of music history.

The program is open to students with a BA, BM or other undergraduate four-year degrees who meet admission requirements. Additionally, it is open to UNCG students enrolled in MM, DMA and PhD programs in the School of Music, Theatre and Dance.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School:
- pass the music history diagnostic exam required of all incoming degree-seeking music graduate students.
- provide a statement of intent that outlines the candidate’s background, interests, and goals in musicology.
- provide a writing sample that demonstrates intellectual engagement with music.
- interview with participating faculty.

Students in the Musicology certificate program will work with an advisor in the musicology area who will help the student design an integrated program specific to his or her needs and interests.

Certificate Requirements
Required Courses (13 credits taken at UNCG)
- MUS 706 Seminar in Music History (3) (may be repeated with a different topic for a total of 6)
- MUS 689 Practicum in Teaching Music Theory and Musicology (1)
- Additional Musicology/Ethnomusicology courses at the 500 or 600 level (6)

Additional Musicology/Ethnomusicology: In consultation with the student’s musicology advisor, and as appropriate for the student’s plan of study, the student may substitute one relevant course outside of the area. Relevant courses could include MUE 601 or MUS 602, a language, a period or non-Western ensemble, or a 500/600 level course in such fields as History, Women’s and Gender Studies, African American Studies, Music Theory, or others.

Note: Students must maintain a minimum 3.0 GPA in courses counting for credit towards the certificate.

Music Composition, Post-Baccalaureate Certificate (12)
The Post-Baccalaureate Certificate in Music Composition provides students with knowledge and skills needed to pursue music composition within a variety of musical careers.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School:

- An earned Bachelor’s degree in Music; in exceptional cases, a student with an undergraduate degree outside of music may be considered.
- For current degree-seeking students, at least one letter of recommendation must be from a Composition faculty member at UNCG.
- The application will also contain a portfolio of scores and recordings of original compositions (normally consisting of 3-5 works).

**Certificate Requirements**

**Required Courses**

12 Credits (must be taken at UNCG, at least 6 at the 600 level; the coordinator of the Composition area will advise the certificate student in course selection, generally chosen from the following):

- MUP 600 Recital (0-1)
- MUP 611 Composition Workshop (3)
- MUP 623 Jazz Arranging I (2)
- MUP 624 Jazz Arranging II (2)
- MUP 644 Digital Music I (3)
- MUP 645 Digital Music Composition II (3)
- MUP 653 Applied Instruction in Composition (1-2) may be repeated
- MUP 655 Orchestration (3)
- MUP 676 Period Music Ensembles (1) may be repeated once for credit

**Exit Requirements**

Each certificate student must present a 30-minute recital of his or her original compositions. Degree-seeking students must include a member of the composition faculty on their doctoral advisory committee or master’s comprehensive exam committee. Testing conditions will follow those outlined in the Handbook for Graduate Study in Music for the student’s degree program. Students will be afforded two opportunities to pass the recital requirement.

**Graduate Music Handbook**

Additional policies and regulations are found in the Graduate Music Handbook located at: http://performingarts.uncg.edu/current/g-music.

**Music Education, Post-Baccalaureate Certificate (12)**

Any person with an undergraduate degree in music may apply for a Post-Baccalaureate Certificate in Music Education (12). The purpose is to provide post-baccalaureate students and/or professionals with knowledge and skills needed to apply principles of music education to a variety of music careers.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Students admitted to the MM, or DMA degree programs, excluding Music Education, may elect this program in their formal plan of study.

**Certificate Requirements**

**Required Courses (6 credits)**

Research and Assessment in Music:

- MUE 601 Research Methods in Music (3)
- MUE 605 The Measurement of Musical Behavior (3)
Foundations of Music Teaching and Learning - One course from the following (3 credits)
- MUE 618 Psychology of Music (3)
- MUE 634 Contemporary Trends in Music Education (3)
- MUE 650 Seminar in Music Education (3)
- MUE 653 Music Supervision (3)
- MUE 659 Philosophy of Music (3)

Music Education Methods and Approaches - One course from the following (3 credits)
- MUE 627 Issues in Multicultural Music Education (3)
- MUE 632 Methods and Materials of Music Reading Instruction (3)
- MUE 633 Music for Exceptional Children (3)
- MUE 645 Teaching Elementary Music: Theory and Practice (3)
- MUE 656 Advanced Choral and General Music Methods for the Adolescent (3)
- MUE 657 Advanced Instrumental Methods (3)

To acquire the Post-Baccalaureate Certificate in Music Education, all students must complete the course work, as specified, with a grade of B or better to demonstrate that they have sufficient depth and breadth of music education.

Music Theory, Post-Baccalaureate Certificate (12)
The Post-Baccalaureate Certificate in Music Theory provides students and/or professionals with knowledge and skills needed to apply principles of music theory to a variety of musical careers.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

An earned Bachelor’s degree in Music. Students admitted to the MM, DMA, or PhD in Music may elect this program in their formal plan of study. In addition to the application materials required by The Graduate School, applicants must:
- earn a passing score on the Graduate Theory Diagnostic Exam.
- provide a statement of intent that outlines their background and interest in music theory and their goals.
- interview with participating faculty.

Certificate Requirements
Four courses selected from the following:*
- MUS 508 Tonal Counterpoint (3)
- MUS 510 Advanced Tonal Analysis (3)
- MUS 707 Seminar in Musical Analysis (3)
- MUS 644 Pedagogy of Music Theory (3)
- MUS 660 Theory and Analysis of Rhythm (3)
- MUS 662 Schenkerian Analysis (3)
- MUS 664 Post-Tonal Theory (3)
- MUS 690 Current and Historical Trends in Music Theory (3)

*No more than one of the 500-level courses may be used to fulfill the requirement.

Note: MUS 707 may be taken twice with different topics to fulfill 6 credits of certificate requirements.

Music Composition, Master of Music (MM) (33)
The MM in Composition is a two-year degree, which requires 33 semester hours. At least one half the work credited toward the degree must be in 600-level courses or above. A diagnostic examination is administered prior to the first semester of enrollment. In addition to private composition study, students take courses in orchestration, electronic music, counterpoint, advanced theory and history, and electives.
Assistantships are available, as are a limited number of in-state and out-of-state tuition waivers. Graduate Assistants in Composition are routinely assigned to teach Composition Skills or Making Music with Computers, assist in activities of the Composition Studios, help maintain and organize the Electronic Music Studios, give tech support for public events, and teach or assist with Music Theory.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement. Samples of work are required and should be forwarded directly to the Music office. Some applicants may need to submit a resume/vita and/or participate in an interview or audition. Contact the Music office for more information.

**Degree Requirements**

Enrollment in MUP 651 or MUP 699 is required during the semester of the degree recital. A written Comprehensive Exam is required for graduation. A thesis is required and at least one recital is required. (Capstone Experience).

**Courses in the Major (18)**
- MUP 651 Performance Studies (9)
  (One semester of MUP 611 may be substituted for one semester of MUP 651).
- MUP 644 Digital Music I (3)
  or
- MUP 645 Digital Music Composition II (3)
- MUP 655 Orchestration (3)
- MUP 600 Recital (0)
- MUP 699 Thesis (3)

Enrollment in at least 2 semesters of MUP 651 is required before the semester of the degree recital.

**Courses in Support of the Major (12)**
- MUS 508 Tonal Counterpoint (3)
- Musicology and Ethnomusicology (3-6) (must include one course focusing on music of the past 100 years)
- Music Theory (3-6)
- Electives (3)

Upon approval of the Composition Faculty and the Director of Graduate Study in Music Performance, a course in digital media (e.g., film, video) offered in other departments such as Art or Media Studies may be used as an elective.

**Graduate Music Handbook**
Additional policies and regulations are found in the Graduate Music Handbook located at:
http://performingarts.uncg.edu/current/g-music.

**Music Education, Master of Music (MM) (34)**
The MM in Music Education requires 34 semester hours. At least one half the work credited toward the degree must be in 600-level courses or above. A diagnostic examination is administered prior to the first semester of enrollment. Students complete their MM Portfolio either during the semester or during the semester prior to the final semester or during the final semester. The portfolio demonstrates advanced competencies of teaching music.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.
Degree Requirements

Core (6)
- MUE 601 Research Methods in Music (3)
One of the following
- MUS 706 Seminar in Music History (3)
- MUS 707 Seminar in Musical Analysis (3)
- MUS 660 Theory and Analysis of Rhythm (3)
- MUS 662 Schenkerian Analysis (3)
- MUS 674 Masterpieces of Musical Styles (3)

Professional (17)
- MUE 639 Advanced Conducting (3)
- MUE 650 Seminar in Music Education (3)
- ENS 2 credit hours of ensemble
  or
- MUP 653 Performance Studies (Secondary) (1-6)
9 hours from
- MUE 605 The Measurement of Musical Behavior (3)
- MUE 633 Music for Exceptional Children (3)
- MUE 634 Contemporary Trends in Music Education (3)
  or
- MUE 653 Music Supervision (3)

Electives (9)
A minimum of two 3-hour courses is required.

Portfolio (2) (Capstone Experience)
- MUE 692a Portfolio Development in Music Education (1)
- MUE 692b Portfolio Development in Music Education (1)

Music Performance, Master of Music (MM) (32-35)
- Collaborative Piano (33); Choral Conducting (32); Instrumental Conducting (32); Early Keyboard Instruments (32);
- Organ (34); Piano (32); Piano Pedagogy (32); String, Wind, and Percussion (32); Vocal Pedagogy (35); Voice (32); or
- Multiple Woodwinds (32)

The MM in Music Performance requires 32 semester hours for all concentrations except collaborative piano, which requires 33 semester hours; organ, which requires 34 semester hours; and vocal pedagogy, which requires 35 semester hours. At least one half the work credited toward the degree must be in the 600-level courses or above. A diagnostic examination is administered prior to the first semester of enrollment.

Assistantships are available, as are a limited number of in-state and/or out-of-state tuition waivers. Graduate Assistants in Performance are routinely assigned to teach performance studies, perform in ensembles, teach required classes depending on experience, and assist with other support duties in the School.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. In addition, all students must present a performance audition and/or interview (see Auditions).

Auditions
Performance auditions/interviews are required for acceptance as a music major and for approval of the area of study. MM Auditions should be arranged in advance through the graduate music office, and are to be scheduled on regularly scheduled audition dates. Visit: https://vpa.uncg.edu/music-process for more information.

Graduate Music Handbook
Additional policies and regulations are found in the Graduate Music Handbook located at: http://performingarts.uncg.edu/current/g-music.
Degree Requirements
For all concentrations in the MM in Performance, enrollment in two semesters of MUP 651 is required before the degree recital may be scheduled. Enrollment in MUP 651 is required during the semester of the degree recital. A Final Comprehensive Evaluation (written and/or oral examination, comprehensive written document, or other format appropriate to and determined by concentration) is required for graduation. At least one recital is required for all concentrations. (Capstone Experience)

Additional degree requirements are listed by Concentration.

Ensemble Requirements
Masters students who are registered for 2 or more credits of music performance studies must audition for and perform in an ensemble each semester, as required by concentration. Students will have the opportunity to express their ensemble placement preferences, but they will be assigned according to audition results and ensemble priorities. Ensemble assignments and placement will be determined by the Director of Bands, Director of Orchestras, Director of Choral Programs and the Director of the Miles Davis Jazz Program in the consultation with the performance teachers and appropriate Area Coordinator.

Degree Requirements by Concentration

Collaborative Piano (33)
Nine hours of language are required for collaborative piano majors, one semester each of French, German, and Italian. Also required is the equivalent of MUP 170 Diction for Singers. Language and diction hours must be credited satisfactorily on a college transcript. If not, this requirement may be resolved with appropriate enrollment while working on the current degree; however, these hours will not count toward the degree.

Courses in the Major (21)
- MUP 651 Performance Studies (12)
- MUP 653 Performance Studies (harpsichord or fortepiano) (1)
- ENS 648 Chamber Music (four semesters) (4)
- MUP 600 Recital (0)

Note: two accompanying recitals are required. Recital repertoire should include representative selections from vocal, string, and wind literature. At least one work may be played on either the harpsichord or fortepiano.

Courses in Support of the Major (12)
- MUE 601 Research Methods in Music (3)
  or
- MUS 602 Seminar in Music Research and Writing (3)

One of the following
- MUS 706 Seminar in Music History (3)
- MUS 707 Seminar in Musical Analysis (3)
- MUS 660 Theory and Analysis of Rhythm (3)
- MUS 662 Schenkerian Analysis (3)

Two of the following
- MUS 665 History of Opera (3)
- MUP 626 Song Literature I (3)
  or
- MUP 634 Song Literature II (3)
- MUP 620 Seminar in Piano (3)
- MUP 621 Seminar in Vocal Literature (3)
- MUP 637 String and Keyboard Chamber Literature (3)
- MUP 697 Directed Study in Music Performance (1-6)

Electives (4)
Conducting (Choral) (32)
One semester of undergraduate conducting, two semesters of undergraduate diction including study of German and/or French diction, at least two semesters of undergraduate vocal study, and a history of participation in collegiate choral ensembles during the undergraduate degree must be satisfactorily credited on a college transcript. Deficiency in conducting study, voice study, and diction hours may be resolved with appropriate enrollment while working on the current degree; however, these hours will not count toward the degree.

Courses in the Major (17)
Performance Studies (8)
- MUP 651 Performance Studies (1-6)
Ensemble (4) by audition placement
- ENS 680 Men's Glee Club (1)
- ENS 686 Women's Chorus (1)
- ENS 681 Women's Glee Club (1)
- ENS 682 University Chorale (1)
- ENS 688 Chamber Singers (1)
Pedagogy (3)
- MUP 627 Principles of Vocal Pedagogy (3)
Secondary Keyboard or Vocal Performance Study (2)
- MUP 653 Performance Studies (Secondary) (1-6)
Recital (NC)
- MUP 600 Recital (0-1)

Courses in Support of the Major (12)
- MUE 601 Research Methods in Music (3)
  or
- MUS 602 Seminar in Music Research and Writing (3)
- MUP 622 Seminar in Choral Literature (3) (may be repeated when topic varies)
One of the following:
- MUS 707 Seminar in Musical Analysis (3)
- MUS 662 Schenkerian Analysis (3)
- MUS 664 Post-Tonal Theory (3)

Electives (3)

Conducting (Instrumental) (32)

Courses in the Major (15)
Performance Studies (12)
- MUP 651 Performance Studies (1-6)
Ensemble (placement by audition) (2)
Recital (1 hour)
- MUP 600 Recital (0-1)

Courses in Support of the Major (12)
- MUE 601 Research Methods in Music (3)
  or
- MUS 602 Seminar in Music Research and Writing (3)
  or
- MUP 683 Instrumental Literature and Performance Practice (3)
Note: (MUE 601 or MUS 602 are recommended)
Any graduate music courses not in the major [non-performance, non-ensemble] (9)

Electives (5)

Early Keyboard Instruments (32)
Note: MUP 302 or 303 Keyboard Harmony or proficiency required (no graduate credit)
Courses in the Major (16)
Performance (harpsichord or fortepiano) (12)
   MUP 651 Performance Studies (1-6)
Secondary Performance Studies (2)
   (second keyboard instrument - organ, fortepiano, harpsichord, clavichord)
      MUP 653 Performance Studies (Secondary) (1-6)
Ensemble (2)
ENS 648 Chamber Music with Harpsichord or Fortepiano (1)
Recital (0)
      MUP 600 Recital (0-1)

Courses in Support of the Major (12)
   MUE 601 Research Methods in Music (3)
   or
   MUS 602 Seminar in Music Research and Writing (3)
   MUP 613 Piano Literature I (3)
One of the following
   MUS 508 Tonal Counterpoint (3)
   MUS 707 Seminar in Musical Analysis (3)
   MUS 662 Schenkerian Analysis (3)
One of the following
   MUS 706 Seminar in Music History (3)
Music Electives (4)

Organ (34)
Courses in the Major (17)
Performance (12)
   MUP 651 Performance Studies (1-6)
Pedagogy (3)
   MUP 638 Organ Pedagogy (3)
Ensemble (2)
Recital (0)
      MUP 600 Recital (0-1)

Courses in Support of the Major (15)
   MUS 602 Seminar in Music Research and Writing (3)
Theory (6)
   MUS 508 Tonal Counterpoint (3)
   MUS 510 Advanced Tonal Analysis (3)
   MUS 508 (If tonal counterpoint is credited on the undergraduate transcript with a grade of B or better from a NASM-accredited school, they may instead take a non-restricted music elective.)
Area Literature (6)
   MUP 613 Piano Literature I (3)
   MUP 668 Organ Literature (3)
Choral Conducting (2)
   MUP 629 Choral Laboratory III (2)

Piano (32)
Courses in the Major (14)
Performance (12)
   MUP 651 Performance Studies (1-6)
Ensemble (2)
Usually selected from MUP 684 or MUP 648
Recital (0)
  MUP 600  Recital (0-1)

Courses in Support of the Major (12)
  MUE 601  Research Methods in Music (3)
  or
  MUS 602  Seminar in Music Research and Writing (3)
One of the following:
  MUP 613  Piano Literature I (3)
  MUP 614  Piano Literature II (3)
  MUP 620  Seminar in Piano (3)
One of the following:
  MUS 665  History of Opera (3)
  MUS 683  Music before 1600 (3)
  MUS 684  Music from 1600 to 1800 (3)
  MUS 685  Music of the Nineteenth Century (3)
  MUS 706  Seminar in Music History (3)
One of the following:
  MUS 508  Tonal Counterpoint (3)
  MUS 510  Advanced Tonal Analysis (3)
  MUS 707  Seminar in Musical Analysis (3)
  MUS 644  Pedagogy of Music Theory (3)
  MUS 660  Theory and Analysis of Rhythm (3)
  MUS 662  Schenkerian Analysis (3)
  MUS 664  Post-Tonal Theory (3)

Music Electives (6)

Piano Pedagogy (32)
  Note: MUP 302 or 303 Keyboard Harmony or proficiency required (no graduate credit).

Courses in the Major (20)
Performance (12)
  MUP 651  Performance Studies (1-6)
Pedagogy (6)
  MUP 612  Piano Pedagogy I (3)
One of the following
  MUP 609  Jazz Pedagogy (3)
  MUP 617  Piano Pedagogy II (3)
  MUP 620  Seminar in Piano (3)
  MUE 632  Methods and Materials of Music Reading Instruction (3)
  MUE 645  Teaching Elementary Music: Theory and Practice (3)
  MUS 644  Pedagogy of Music Theory (3)

Lecture/Demonstration and Paper (2)
  MUP 610  Lecture-Demonstration (2)

Courses in Support of the Major (12)
  MUE 601  Research Methods in Music (3)
  or
  MUS 602  Seminar in Music Research and Writing (3)
  MUP 613  Piano Literature I (3)
  MUP 614  Piano Literature II (3)
  Any graduate music course not in the major (non-performance, non-ensemble)

String, Wind, Percussion (32)

Courses in the Major (17)
Performance (12)
   MUP 651 Performance Studies (1-6)
Ensemble (by audition placement) (4)
Recital (1)
   MUP 600 Recital (0-1)
   *Note: Students may perform one additional recital to fulfill elective hours*

Courses in Support of the Major (12)
   MUE 601 Research Methods in Music (3)
   or
   MUS 602 Seminar in Music Research and Writing (3)
   or
   MUP 683 Instrumental Literature and Performance Practice (3)
   *Note: (MUE 601 or MUS 602 are recommended)*

Any graduate music courses not in the major [non performance, non ensemble] (9)

Electives (3)

Vocal Pedagogy (35)
Twelve (12) hours of language are required for voice majors—one semester each of French, German, and Italian plus a second semester of one of these three languages. These hours must be satisfactorily credited on a college transcript. In addition to diagnostic exams in history and theory required of all graduate students, voice students will be assessed on competency in written International Phonetic Alphabet and spoken pronunciation of Italian, German, French, and English. Deficiencies may be resolved with appropriate enrollment in undergraduate courses while working on the current degree; however, these hours will not count toward the degree. For graduate credit, students may resolve the deficiency by enrolling in MUP 730. Consult the Graduate Handbook in Music Performance for further information.

Courses in the Major (19)
Performance (9)
   MUP 651 Performance Studies (8)
   MUP 640 Vocal Coaching (1)
Pedagogy (6)
   MUP 627 Principles of Vocal Pedagogy (3)
   MUP 728 Advanced Vocal Pedagogy (3)
Ensemble (by audition placement) (2)
   ENS 680 Men’s Glee Club (1)
   ENS 686 Women’s Chorus (1)
   ENS 681 Women’s Glee Club (1)
   ENS 682 University Choral (1)
   ENS 688 Chamber Singers (1)
Lecture/Demonstration and Paper (2)
   MUP 610 Lecture-Demonstration (2)
Recital (0)
   MUP 600 Recital (0-1)

Courses in Support of the Major (12)
   MUE 601 Research Methods in Music (3)
   or
   MUS 602 Seminar in Music Research and Writing (3)
   MUP 626 Song Literature I (3)
   or
   MUP 634 Song Literature II (3)
One of the following in music theory
   MUS 508 Tonal Counterpoint (3)
MUS 510  Advanced Tonal Analysis (3)
MUS 707  Seminar in Musical Analysis (3)
MUS 644  Pedagogy of Music Theory (3)
MUS 660  Theory and Analysis of Rhythm (3)
MUS 662  Schenkerian Analysis (3)
MUS 664  Post-Tonal Theory (3)

One of the following
  a 600-level music history course
  a 600 level music literature course

Music Electives (4)

Voice (32)
Twelve (12) hours of language are required for voice majors—one semester each of French, German, and Italian plus a second semester of one of these three languages. These hours must be satisfactorily credited on a college transcript. In addition to diagnostic exams in history and theory required of all graduate students, voice students will be assessed on competency in written International Phonetic Alphabet and spoken pronunciation of Italian, German, French, and English. Deficiencies may be resolved with appropriate enrollment in undergraduate courses while working on the current degree; however, these hours will not count toward the degree. For graduate credit, students may resolve the deficiency by enrolling in MUP 730. Consult the Graduate Handbook in Music Performance for further information.

Courses in the Major (16)

Performance (11)
  MUP 651  Performance Studies (8)
  MUP 640  Vocal Coaching (1)
  MUP 675  Opera Performance Techniques (2)

Pedagogy (3)
  MUP 627  Principles of Vocal Pedagogy

Ensemble (by audition placement) (2)
  ENS 680  Men’s Glee Club (1)
  ENS 686  Women’s Chorus (1)
  ENS 681  Women’s Glee Club (1)
  ENS 682  University Chorale (1)
  ENS 688  Chamber Singers (1)

Recital (NC)
  MUP 600  Recital (0-1)

Courses in Support of the Major (12)

MUE 601  Research Methods in Music (3)
  or
  MUS 602  Seminar in Music Research and Writing (3)
  MUP 626  Song Literature I (3)
  or
  MUP 634  Song Literature II (3)

Music theory course (3)
  MUS 508  Tonal Counterpoint (3)
  MUS 510  Advanced Tonal Analysis (3)
  MUS 707  Seminar in Musical Analysis (3)
  MUS 644  Pedagogy of Music Theory (3)
  MUS 660  Theory and Analysis of Rhythm (3)
  MUS 664  Post-Tonal Theory (3)

One of the following
  600-level music history course, or 600-level music literature course
Music Electives (4)

*Multiple Woodwinds (three instrument track) (32)*

Courses in the Major (20)

Performance (15)
- MUP 651 Performance Studies (6-9 hours credit, principal instrument)
- MUP 653 Performance Studies (4 hour credit, secondary instrument)
- MUP 653 Performance Studies (2-5 hours credit, 3rd instrument)

Note: Proficiency must be shown in secondary instruments at the undergraduate concentration upper-division examination level (MUP 351 proficiency minimum)

Ensemble (by audition placement) (4)

Recital (1)
- MUP 600 Recital *(must include at least two instruments)*

Courses in Support of the Major (12)
- MUP 683 Instrumental Literature and Performance Practice (3)
  or
- MUE 601 Research Methods in Music (3)
  or
- MUS 602 Seminar in Music Research and Writing (3)

Note: (MUE 601 or MUS 602 are recommended)

Any graduate music courses not in the major [non-performance, non-ensemble] (9)

Music Theory, Master of Music (MM) (34)

The MM in Music Theory requires 34 semester hours. Thesis and non-thesis options are offered. At least one half the work credited toward the degree must be in 600-level courses or above. A diagnostic examination is administered prior to the first semester of enrollment. The capstone experience is a required written comprehensive examination in the final semester and a thesis or document.

Application and Admission

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must provide:
- A statement of intent that outlines their background, interest in music theory, and career goals
- A scholarly paper on music, preferably one with an analytical focus
- Applicants whose materials pass an initial screening by the music theory faculty will be invited for an interview that tests sight-reading, dictation, analysis, and keyboard skills. A diagnostic written exam is administered prior to the interview.

Degree Requirements

Core (6)
- MUS 602 Seminar in Music Research and Writing (3)
- MUS 706 Seminar in Music History (3)

Performance (2)
- PRF-type and/or ENS courses at the 600 level

Electives (3)
- Recommended:
  - MUE 618 Psychology of Music (3)
  - MUE 619 Acoustics of Music (3)

Electives should be chosen in consultation with the Director of Graduate Study.
For both the thesis and non-thesis options, a comprehensive examination with both written and oral components is required. The thesis or document is to be presented in a public forum.

**Thesis Option**

**Major Courses (18)**
- MUS 707 Seminar in Musical Analysis (3)
- MUS 644 Pedagogy of Music Theory (3)
- MUS 660 Theory and Analysis of Rhythm (3)
- MUS 662 Schenkerian Analysis (3)
- MUS 664 Post-Tonal Theory (3)
- MUS 690 Readings in Music Theory (3)

**Thesis (5)**
- MUS 699 Thesis (1-6)

**Non-Thesis Option**

**Major Courses (21)**
- MUS 508 Tonal Counterpoint (3)
  or
- MUS 510 Advanced Tonal Analysis (3)
- MUS 707 Seminar in Musical Analysis (3)
- MUS 644 Pedagogy of Music Theory (3)
- MUS 660 Theory and Analysis of Rhythm (3)
- MUS 662 Schenkerian Analysis (3)
- MUS 664 Post-Tonal Theory (3)
- MUS 690 Readings in Music Theory (3)

**Document (2)**
- MUS 698 Document in Music Theory (1-2)

**Music Theory Pedagogy, Post-Master’s Certificate (14)**

The Post-Master’s Certificate in Music Theory Pedagogy provides Ph.D. or D.M.A. music students with the knowledge and skills necessary to be successful teaching music theory and ear training in higher education.

**Application and Admission**

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must:
- Be enrolled in a doctoral degree program in music.
- Earn a passing score on the Graduate Theory Diagnostic Exam.
- Provide a statement of intent that outlines their background and interest in music theory and their goals.
- Interview with participating faculty. The interview involves an assessment of skills required for the teaching of music theory and ear training. Contact the Director of Graduate Study in Music for more information.

**Certificate Requirements**

14 total hours are required.

**Required Courses (8)**
- MUS 644 Pedagogy of Music Theory (3)
- MUS 662 Schenkerian Analysis (3)

Two semesters of MUS 689 Practicum in Theory Pedagogy

**Two of the following courses (6):**
- MUS 707 Seminar in Musical Analysis (3)
MUS 660  Theory and Analysis of Rhythm (3)
MUS 664  Post-Tonal Theory (3)
MUS 690  Readings in Music Theory (3)

Note: MUS 707 may be taken twice with different topics to fulfill 6 credits of certificate requirements.

Doctor of Musical Arts (DMA) in Music, (90 post-baccalaureate hours)
The DMA in Music requires 90 semester hours of post-baccalaureate course work; 60 hours must be completed at UNCG (the Graduate School transfer credit policy applies). A diagnostic examination is administered prior to the first semester of enrollment.

Assistantships are available, as are a limited number of in-state and/or out-of-state tuition waivers. Graduate Assistants in Performance are routinely assigned to teach performance studies, perform in ensembles, teach required classes depending on experience, and assist with other support duties in the School.

Graduate Music Handbook
Additional policies and regulations are found in the Graduate Music Handbook located at: http://performingarts.uncg.edu/current/g-music.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School (The GRE is NOT required), DMA applicants must submit a repertory list, resume, and scholarly writing sample (if required) with the pre-screening CD/DVD. Students who begin study at the master’s level at UNCG must successfully fulfill all requirements for the master’s degree and successfully present a doctoral audition/interview to be admitted into the doctoral program.

Degree Requirements
The DMA in Music requires a minimum of 90 semester hours of post-baccalaureate course work. Up to 30 hours earned in a master’s program from an accredited graduate school may be applied to the elective portion of this degree. These credits may count toward the required cognate or help to satisfy competencies with the approval of the Doctoral Advisory Committee in accordance with the academic regulations of The Graduate School. These credits may not be used to satisfy any non-elective requirements.

The plan of study is developed individually in consultation with the student’s advisory committee. At least 75% of all course work (36 credits), exclusive of the dissertation, must be at the 600 or 700 level. A diagnostic examination is administered prior to the first semester of enrollment.

The following 60 hours must be completed at UNCG (the Graduate School transfer credit policy applies):

Performance Studies (18 hours minimum)
Students registered for more than one credit of MUS 751 must simultaneously enroll for at least three credits of non-performance or ensemble music course work.

MUP 751  Performance Studies (1-6)

Reading/Writing/Speaking Intensive Courses (9 hours minimum)
One musicology/ethnomusicology course

MUS 706  Seminar in Music History (3)
One music theory course
MUS 707 Seminar in Musical Analysis (3)
MUS 660 Theory and Analysis of Rhythm (3)
MUS 662 Schenkerian Analysis (3)
MUS 664 Post-Tonal Theory (3)

One other course chosen from the above listed courses OR the following:
MUE 605 The Measurement of Musical Behavior (3)
MUE 618 Psychology of Music (3)
MUE 627 Issues in Multicultural Music Education (3)
MUE 633 Music for Exceptional Children (3)
MUE 634 Contemporary Trends in Music Education (3)
MUE 645 Teaching Elementary Music: Theory and Practice (3)
MUE 646 Music Experiences: Birth through Kindergarten (3)
MUE 650 Seminar in Music Education (3)
MUE 653 Music Supervision (3)
MUE 658 Topics in Music Technology for Educators (1)
MUE 659 Philosophy of Music (3)
MUE 678 Orff in the Music Classroom (3)
MUE 740 Music Education in Society
MUE 750 Doctoral Seminar
MUP 750 College Teaching: The Tenure Track (3)

Electives (21 hours minimum)

Required Competencies
Satisfactory completion of competencies is determined by the Doctoral Advisory Committee.

- Area Literature
- Area Pedagogy
- Language (if required by area, See Music Graduate Handbook for details)
- Research (Students who have not earned a B or higher in a bibliography/research course at the master’s level from a NASM accredited school must take MUE 601 or MUS 602.)

Required Cognates
All students are required to develop a cognate that comprises 12 credit hours from any one area of study. These credits may come from the master’s degree, the required doctoral courses, or any other courses taken at UNCG as electives. If a student applies for and completes one of our PBCs, PMCs, or doctoral minors, this fulfills the cognate requirement. For more information on our certificate programs, please see the appropriate section in the Graduate Bulletin. Satisfactory completion of cognates is determined by the Doctoral Advisory Committee.

Dissertation (12 hours minimum)
The dissertation for the Doctoral of Musical Arts degree comprises 3 major sections: 1) a performance section; 2) a written section; and 3) an oral defense.

MUP 799 Dissertation

- Performance. Three recitals are required for all DMA students to fulfill the performance portion of the DMA Dissertation.
- Doctoral Document. The written portion of the dissertation is a document that represents original scholarship, is carried out at the highest level of scholarship, and is relevant to the particular major field’s repertory, pedagogy, history, or practice. (see the Guide for the Preparation of Theses and Dissertations).
- Defense of the Document: The doctoral candidate who has successfully completed all other requirements for the degree must defend the dissertation orally (Final Oral Examination). See the Graduate Music Handbook for Defense options.

Required Examinations
Diagnostic, Continuation Jury, Preliminary (written and oral), Final Oral (defense of the document)
Doctor of Philosophy (PhD) in Music Education, (69)
The PhD in Music Education requires 69 semester hours. At least 75% of all course work, exclusive of the dissertation, must be at the 600 or 700 level. A diagnostic examination is administered prior to the first semester of enrollment. A cognate, or cognates, in any area approved by the student’s advisory/dissertation committee and The Graduate School may be elected as specified in The Graduate School Bulletin.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Degree Requirements
Music Education (18)
Select from
- MUE 605 The Measurement of Musical Behavior (3)
- MUE 618 Psychology of Music (3)
- MUE 619 Acoustics of Music (3)
- MUE 633 Music for Exceptional Children (3)
- MUE 634 Contemporary Trends in Music Education (3)
- MUE 645 Teaching Elementary Music: Theory and Practice (3)
- MUE 650 Seminar in Music Education (3)
- MUE 653 Music Supervision (3)
- MUE 750 Doctoral Seminar
- MUE 797 Directed Study in Music

Research (12)
- ERM 680 Intermediate Statistical Methods in Education (3)
- ERM 681 Design and Analysis of Educational Experiments (3)
- MUE 601 Research Methods in Music (3)
- MUE 701 Research Methods in Music II (3)

Professional Education or Other Fields (9)
Areas of study: History and philosophy, curriculum and pedagogy, administration, psychology and human development, computer science and information management

Music Electives (12)
Note: Workshop credits applied toward the PhD are limited to 3 hours.

Music History and/or Theory (6)

Dissertation (12)
- MUE 799 Dissertation

Research and Teaching Skills Proficiencies
Completed on an independent basis during course of study before comprehensive examination.

Required Examinations

MUE - Music Education Graduate Courses

MUE 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MUE 601 Research Methods in Music (3:3)
Writing skills, materials, and procedures utilized in music research; measurement, experimental design, theories/procedures for evaluation, statistics, computer applications, and initiation of scholarly research. Offered
Fall and Summer (review this as you begin to bring the program online)
MUE 605 The Measurement of Musical Behavior (3:3)
Review of standardized music tests and an examination of methods for developing tests related to the measurement of musical behavior.
Offered
Spring, Summer (review this as you begin to bring the program online)

MUE 618 Psychology of Music (3:3)
The physical and psychological aspects of music involving human behavior.
Offered
Fall and Summer (Adjust this to every other year) (review this as you begin to bring the program online)

MUE 619 Acoustics of Music (3:3)
Designed to develop an understanding of the production, transmission, and reception of musical sounds.
Offered
Even Spring

MUE 627 Issues in Multicultural Music Education (3:3)
Overview of historical, philosophical, cultural, and pedagogical issues in multicultural music education. Emphasis on the development of knowledge that will inform and enhance instructional practice.
Offered
Even Spring and Summer

MUE 632 Methods and Materials of Music Reading Instruction (3:2:2)
Overview of methods and materials for music reading instruction. Emphasis on connections between language and music reading. Involves weekly online sessions, individual projects, and two related workshops.
Offered
Online Spring

MUE 633 Music for Exceptional Children (3:3)
Review of the learning styles of exceptional children and the implications for providing realistic musical activities in the classroom. Emphasis will be placed on developing musical skills with special learners.
Offered
Even Fall and Summer
Notes
Non-music majors may enroll.

MUE 634 Contemporary Trends in Music Education (3:3)
Current philosophies and concepts influencing contemporary music education practices, methods, and material. Investigation into social psychology of music as applied to existing music instruction in public schools.
Offered
Odd Fall

MUE 639 Advanced Conducting (3:3)
Advanced conducting skills including baton technique, score reading, rehearsal techniques, score analysis, repertoire, programming, and interpretation.
Prerequisite
Graduate standing in any Music Degree Program
Offered

MUE 645 Teaching Elementary Music: Theory and Practice (3:3)
Emphasis on strategies and materials for developing children’s musicianship and problem-solving skills.

**Prerequisite**
Music teaching experience in elementary school or the equivalent of MUE 465 Student Teaching in Music

**Offered**
Odd Spring

**MUE 646 Music Experiences: Birth through Kindergarten (3:3)**
Comprehensive overview of music experiences for children from birth to seven years. Developmentally appropriate teaching materials, methods, approaches, and strategies for preschool caregivers, general educators, and music educators are emphasized.

**Offered**
Odd Summer

**MUE 650 Seminar in Music Education (3:3)**
Salient philosophies, practices, and methods involving music education as considered in a social context; challenges in dealing with elementary and secondary students and opportunities for music education in the community. Individual research project required.

**Offered**
Fall and Summer

**MUE 653 Music Supervision (3:3)**
Philosophical foundations of music education as related to the development of supervisory and administrative programs. Basic concepts of music education and means for evaluation of music education curricula.

**Offered**
Odd Spring and Summer

**MUE 656 Advanced Choral and General Music Methods for the Adolescent (3:3)**
Examination of contemporary research and pedagogy with an emphasis on developing appropriate instructional strategies for use with adolescent students in choral and general music classrooms.

**Offered**
Even Fall

**MUE 657 Advanced Instrumental Methods (3:3)**
Overview of current practice in learning and teaching music with emphasis on the development of practical strategies for implementation within the instrumental music classroom.

**Offered**
Odd Fall

**MUE 658 Topics in Music Technology for Educators (1:0:1)**
Advanced study of music technology with an emphasis on integration into the music classroom.

**Offered**
Summer as needed

**Notes**
May be repeated when topic varies.

**MUE 659 Philosophy of Music (3:3)**
Overview of historical and current philosophies of music. Specific applications will be made to various areas of expertise, including music composition, education, history, performance, and theory.

**Prerequisite**
Admission to master’s or doctoral program in music
Offered
Spring

**MUE 678 Orff in the Music Classroom (3:3)**
Practical experiences in the Orff-Schulwerk process of music teaching. Recorder proficiency, Orff instrumental technique, and orchestration for Orff instrumentarium are emphasized.
**Prerequisite**
Graduate standing in music or permission of instructor
**Offered**
Summer as needed
**Notes**
Non-music majors may enroll.

**MUE 679 Music Education Workshop (1–3)**
Activities and study involving specific experiences related to music education.
**Notes**
Credit hours, duration, and subject emphasis will vary as announced. May be repeated if topic differs; however, three semester hours are maximum credits allowed in master’s and specialists programs. Grade: Satisfactory/Unsatisfactory, S/U

**MUE 692a Portfolio Development in Music Education (1)**
Development of a portfolio that reflects the application of course work in music education to classroom teaching.
**Prerequisite**
Acceptance in MM in music education or permission of instructor
**Offered**
Fall and Spring online

**MUE 692b Portfolio Development in Music Education (1)**
Development of a portfolio that reflects the application of course work in music education to classroom teaching.
**Prerequisite**
Acceptance in MM in music education or permission of instructor
**Offered**
Fall and Spring online

**MUE 697 Directed Study in Music (1–12)**

**MUE 699 Thesis (1–6)**
Individual guidance in the development of a specific research problem.

**MUE 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**MUE 801 Thesis Extension (1–3)**

**MUP -Music Performance Graduate Courses**

**MUP 589 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**MUP 600 Recital (0–1)**
Performance of a faculty approved repertoire selection of approximately 50 minutes of music.
**Prerequisite**
Permission of instructor
Offered
Fall, Spring, and Summer
Notes
Grade: Satisfactory/Unsatisfactory, S/U

**MUP 601 Repertoire Class (0-1:0:1)**
A workshop class where pedagogy of the performance medium is discussed and works of musical literature are performed, coached, and discussed.
Corequisite
Enrollment in Performance Studies Instruction
Notes
Course may be repeated for credit.

**MUP 604 Composition Seminar (0-1:0:1)**
A workshop class where pedagogy of musical composition is discussed and recent works by student and professional composers are presented, performed, coached, and/or discussed.
Corequisite
Enrollment in Performance Studies Instruction

**MUP 605 Principles of Jazz Theory (2:2:1)**
Establishes a foundation of knowledge for the study of jazz improvisation and composition, stressing jazz nomenclature, chord/scale analysis, basic chord substitution.
Prerequisite
Undergraduate degree in music or admission to the PBC in Jazz Studies
Offered
Spring

**MUP 609 Jazz Pedagogy (2:2)**
Prerequisite
Graduate music major.
Offered
Even Fall

**MUP 610 Lecture-Demonstration (2:1)**
A research project leading to a public lecture recital.
Prerequisite
Permission of instructor
Offered
Fall and Spring
Notes
Grade: Satisfactory/Unsatisfactory, S/U

**MUP 611 Composition Workshop (3:3)**
Students will compose pieces and perform their compositions.
Prerequisite
Graduate music majors or permission of instructor
Notes
May be repeated twice for a total of 9 credit hours.
MUP 612 Piano Pedagogy I (3:3)
Survey of current piano teaching philosophies, methods, materials, and their application for private and group instruction. Supervised teaching of beginning piano students.
Offered
Fall

MUP 613 Piano Literature I (3:3)
Survey of piano literature from ca. 1760-1825, with a preliminary investigation of music for the other keyboard instruments from the earliest extant sources.
Offered
Odd Fall

MUP 614 Piano Literature II (3:3)
Survey of piano literature from ca. 1825 to the present.
Offered
Even Spring (Check all of these rotations against Dennis’ spreadsheet of course rotations)

MUP 617 Piano Pedagogy II (3:3)
Survey of intermediate and moderately advanced teaching literature with emphasis on basic pedagogical approaches to technique, style, and interpretation. Procedures for teaching functional skills. Supervised teaching experience.
Offered

MUP 620 Seminar in Piano (3:3)
Study of a particular composer or genre of piano literature emphasizing stylistic features, performance problems, pedagogy, and historical perspectives. Topic to be announced.
Prerequisite
Permission of instructor
Offered
Even Fall, Odd Spring
Notes
May be repeated once for credit when topic varies.

MUP 621 Seminar in Vocal Literature (3:3)
In-depth study of an area of vocal literature tracing the historical development and performance practice of that area. Topic to be announced.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit when topic varies.

MUP 622 Seminar in Choral Literature (3:3)
In-depth study of a limited area of choral literature, tracing its historical development and performance practice. Topic to be announced.
Notes
May be repeated once for credit when topic varies.

MUP 623 Jazz Arranging I (2:2)
Beginning study of language and techniques employed in arranging music for various jazz ensembles.
Prerequisite
Graduate standing in music or permission of instructor
Offered
Odd Fall

**MUP 624 Jazz Arranging II (2:2)**
Advanced study of techniques and disciplines employed in arranging for jazz ensembles.

*Prerequisite*
MUP 623

Offered
Even Spring

**MUP 626 Song Literature I (3:3)**
Survey of non-operatic solo vocal repertoire: Italian (Baroque and Classical), German, Nationalistic, Spanish. Brief historical study of major composers, poets, compositional style, and historical periods.

Offered
Fall

**MUP 627 Principles of Vocal Pedagogy (3:3)**
Teaching process as applied to singing. Includes historical development and an examination and comparison of concepts and approaches past and present.

*Prerequisite*
Senior or graduate standing as a voice major or principal or permission of instructor

Offered
Fall

**MUP 634 Song Literature II (3:3)**

Offered
Spring

**MUP 636 Band Literature (3:3)**
Band literature and the origins of the band emphasizing its important and expanded cultivation during the past century in the United States and Europe.

Offered
Odd Spring

**MUP 637 String and Keyboard Chamber Literature (3:3)**
Survey of string and piano chamber music literature from the seventeenth century to the present. Emphasis on historical perspectives, performance of representative works, and score analysis.

Offered
Odd Fall

**MUP 638 Organ Pedagogy (3:3)**
A study and evaluation of procedures used in the teaching of organ. Emphasis on skills and techniques through exercises and literature.

*Prerequisite*
Junior, senior, or graduate keyboard major or principal

Offered
Occasionally

**MUP 640 Vocal Coaching (1:1)**
Facilitate the progressive development of voice students through advanced and comprehensive study of repertoire and performance techniques, focusing primarily on diction, style and interpretation.

**Prerequisite**
MUP 651 or higher standing in Performance Studies and permission of Vocal Area Coordinator.

**Coreq.**
MUP 651 or MUP 751

**Offered**
Fall and Spring

**Notes**
May be repeated for credit.

**MUP 644 Digital Music I (3:2:2)**
Introductory course in electronic composition. Lecture and laboratory experience.

**Offered**
Fall

**Notes**
Open to all University students.

**MUP 645 Digital Music Composition II (3:3:3)**
Further exploration of compositional concepts dealing with MIDI, sound synthesis, multitracking, and recording techniques. Emphasis on live, interactive electronic music resources including Max/MSP, C-Sound, Reaktor, and others.

**Prerequisite**
MUP 644 or permission of instructor

**Offered**
Spring

**MUP 651 Performance Studies (1–6)**
Performance studies instruction on principal instrument, voice, composition, or conducting.

**Prerequisite**
By audition

**Notes**
Curricular Practical Training Required for F1 Visa Holders.

**MUP 653 Performance Studies (Secondary) (1–6)**
Performance studies instruction on secondary instrument, voice, composition, or conducting.

**Prerequisite**
By audition

**Notes**
Curricular Practical Training Required for F1 Visa Holders.

**MUP 655 Orchestration (3:3)**
Advanced techniques in instrumental scoring for large ensembles such as orchestra, wind ensemble, and jazz ensemble. Historical and stylistic analysis of the art of orchestration. Additional practical exercises in scoring and arranging for small and large ensembles.

**Offered**
Fall

**MUP 661 Entrepreneurial Career Development in Music (3:3)**
Focus on the entrepreneurship knowledge, skills, and career development to enable students to become the architect of his/her future.
Cross Listed Courses

ENT 661

MUP 663 History of Jazz (3:3)
Chronological survey of jazz music and jazz history. Introduction to standard reference works and investigation of socio-cultural aspects.
Offered
Even Spring

MUP 664 Jazz Improvisation I (2:2:1)
An introduction to jazz improvisation using modal forms, blues, and ii-V-I progressions.
Prerequisite
Undergraduate degree in music or admission to the PBC Jazz Studies

MUP 665 Advanced Jazz Improvisation (2:2:1)
Continuation of Jazz Improvisation I; focus on standards through contemporary jazz performers and composers.
Prerequisite
MUP 664 Jazz Improvisation I or permission of instructor

MUP 668 Organ Literature (3:3)
Survey of organ literature from sixteenth century to present.
Notes
Open to all graduate students by permission of instructor.

MUP 675 Opera Performance Techniques (2:2:2)
Techniques for the singer-actor; study of the materials and nature of music theatre; development of skills required in opera/musical theatre.
Prerequisite
MUP 375 and/or permission of instructor
Offered
Fall
Notes
May be repeated once for credit.

MUP 683 Instrumental Literature and Performance Practice (3:3)
Survey of solo and chamber literature from the 17th century to the present. Emphasis on historical perspectives, development of instrumental genres, performance practices, listening, and general score analysis.

MUP 684 Performance of Art Song Repertoire (1:0:2)
Performance-based study of art song repertoire emphasizing stylistic elements. Concentrates on one language or composer each semester, including, but not limited to, German Lieder, French Melodie, American or British song.
Prerequisite
Permission of instructor
Notes
May be repeated for credit if topic varies.

MUP 697 Directed Study in Music Performance (1–6)
Supervised advanced research requiring a written document or composition.
Prerequisite
Permission of supervising professor; Director of Graduate Study, and School of Music Director
MUP 699 Thesis (1-6)
Individual guidance in the development of a specific performance or composition project.

MUP 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MUP 728 Advanced Vocal Pedagogy (3:3)
Practical application of proven pedagogical techniques in a supervised teaching situation.
Prerequisite
MUP 628
Offered
Spring

MUP 730 The Study and Pedagogy of Phonetics as Applied to Singing (3:3)
The International Phonetic Alphabet as applied to the singing of English, Italian, German, and French. Emphasis on vocal interpretation of the symbolic language and functional skills of teaching.
Prerequisite
Singing experience in Italian, French, and German

MUP 748 Practicum in Instrumental Pedagogy (3:3)
Provides advanced knowledge of and practical experience in instrumental pedagogy through an interdisciplinary approach in areas of anatomy, physiology, kinesiology, pathology, technology, psychology, and applied performance.
Prerequisite
MUP 651

MUP 750 College Teaching: The Tenure Track (3:3)
Issues related to teaching performing arts in higher education. Topics include curriculum design, teaching methods, evaluation, promotion, school/departmental structure, job searching/resume preparation, copyright, publication, etc.
Prerequisite
Admission to a terminal degree program in the School of Music
Offered
Spring

MUP 751 Performance Studies (1–6)
Performance studies instruction on principal instrument, voice, composition, or conducting.
Prerequisite
By audition
Notes
Curricular Practical Training Required for F1 Visa Holders.

MUP 797 Directed Study in Music Performance (1–12)
Supervised advanced research requiring a written document or composition.
Prerequisite
Permission of supervising professor; Director of Graduate Study, and Dean, School of Music Director

MUP 799 Dissertation (1–12)

MUP 801 Thesis Extension (1–3)
MUP 802 Dissertation Extension (1–3)

MUP 803 Research Extension (1–3)

MUS – Music Studies Graduate Courses

MUS 508 Tonal Counterpoint (3:3)
Contrapuntal techniques and standard forms of the middle and late Baroque. Analysis of music by composers from Corelli to Bach, composition in representative forms, and aural training.
Prerequisite
MUS 202 and MUS 206, permission of instructor or graduate standing
Offered
Fall

MUS 510 Advanced Tonal Analysis (3:3)
Analysis of selected major compositions in the tonal repertoire. Reading and discussion of literature on theoretical concepts and on analysis and interpretation.
Offered
Spring

MUS 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MUS 602 Seminar in Music Research and Writing (3:3)
Musical bibliography encompassing a range of print and electronic sources and databases. Methods for researching and writing about music, including research papers, music criticism, and other genres.
Offered
Fall, Spring

MUS 631 Selected Topics in Ethnomusicology (3:3)
Music traditions and current issues in the field of ethnomusicology. Topics may focus on geographical areas or theoretical/methodological issues.
Prerequisite
MUE 601 or MUS 602
Notes
May be repeated for credit when topic varies.

MUS 644 Pedagogy of Music Theory (3:3)
Survey of philosophies, curricula, course content, and teaching approaches for undergraduate courses in music theory and aural skills.
Prerequisite
Passing score on graduate theory diagnostic exam
Offered
Even Fall

MUS 655 The Symphonic Tradition (3:3)
Advanced study of symphonic styles and techniques from Baroque era to present.

MUS 660 Theory and Analysis of Rhythm (3:3)
Survey of theories and analytical approaches regarding the temporal organization of music.
Prerequisite
Passing score on graduate theory diagnostic exam

Offered
Odd Fall

**MUS 662 Schenkerian Analysis (3:3)**
Theories and analytical methods of Heinrich Schenker as applied to masterworks of the tonal repertory. Selected readings from Schenkerian literature.

*Prerequisite*
MUS 508 or the equivalent; passing score on graduate theory diagnostic exam

Offered
Spring

**MUS 664 Post-Tonal Theory (3:3)**
In-depth study of theoretical and analytical approaches to post-tonal music. Readings, analyses, papers, and presentations required.

*Prerequisite*
Passing score on graduate theory diagnostic exam

Offered
Even Spring

**MUS 665 History of Opera (3:3)**
Principal opera composers and styles from Monteverdi to the present; analytical study of selected major works.

**MUS 674 Masterpieces of Musical Styles (3:3)**
In depth study of five masterpieces of music history selected from a variety of periods.

*Prerequisite*
Passing score on graduate music history diagnostic exam

**MUS 683 Music before 1600 (3:3)**
Examines musical traditions before 1600 beyond the survey level. Topics may include gender/sexuality, geography, institutions, orality, performance practice, print/manuscript culture, and/or religion.

**MUS 684 Music from 1600 to 1800 (3:3)**
Examines musical traditions ca. 1600-1800 beyond the survey level. Topics include performance practice, nationalism, gender and sexuality, religion, orality/notation, organology, and iconography.

**MUS 685 Music of the Nineteenth Century (3:3)**
Examines musical traditions ca. 1789-1914 beyond the survey level. Topics may include gender/sexuality, institutions, nationalism, nature, performance practice, and/or religion.

**MUS 686 Music of the Twentieth Century (3:3)**
Examines musical traditions from ca. 1880 to the present beyond the survey level. Topics may include music and the State, gender/sexuality, ethnicity and identity, cultural policy/politics, religion, and/or multimedia.

**MUS 687 Aural and Keyboard Skills for Music Theory (1:5:3)**
Instruction and practice leading to the development of aural and keyboard skills sufficient for instructors of music theory and ear training.

*Prerequisite*
Admission to the master’s degree program in music theory or the certificate program for music theory pedagogy

*Notes*
May be repeated for credit.
MUS 689 Practicum in Teaching Music Theory and Musicology (1:0:2)
Supervised teaching of basic music theory and aural skills, music history, music appreciation, or world music.
Prerequisite
Admission to the certificate program in music theory pedagogy or in musicology

MUS 690 Current and Historical Trends in Music Theory (3:3)
Survey of the discipline of music theory. Current and historical topics such as rhythm & meter, form, tuning & temperament, pop-rock & jazz, scale theory, and neo-Riemannian theory.
Prerequisite
Passing score on graduate theory diagnostic exam
Offered
Odd Spring

MUS 697 Directed Study in Music Studies (1–6)
Supervised advanced research requiring a written document or composition.
Prerequisite
Permission of supervising professor; Director of Graduate Study, and Dean School of Music Director

MUS 698 Document in Music Theory (1–2)
Development of research topic in music theory.
Offered
Fall and Spring
Notes
May be taken for 2 credits in one semester or 1 credit per semester for two semesters.

MUS 699 Thesis (1–6)
Individual guidance in the development of a specific research problem.
Offered
Fall, Spring, and Summer

MUS 706 Seminar in Music History (3:3)
Selected compositions, including contemporary writings about musical culture with reference to the composers.
Prerequisite
MUE 601 or MUS 602, and passing score on the graduate music history diagnostic exam; or permission of instructor
Offered
Fall, Spring, and Summer
Notes
May be repeated once for credit when topic varies.

MUS 707 Seminar in Musical Analysis (3:3)
Rotating topics in musical analysis such as a particular historical period, genre, composer, or style.
Prerequisite
Passing score on graduate theory diagnostic exam
Offered
Fall and Spring
Notes
May be repeated once for credit when topic varies.

MUS 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**MUS 797 Directed Study in Music Studies (1–12)**
Supervised advanced research requiring a written document or composition.

*Prerequisite*
Permission of supervising professor; Director of Graduate Study, and School of Music Director

**MUS 799 Dissertation (1–12)**

**MUS 801 Thesis Extension (1–3)**

**MUS 802 Dissertation Extension (1–3)**

**MUS 803 Research Extension (1–3)**

_ENS – Ensemble Graduate Courses_

**ENS 620 Flute Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 621 Oboe Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 622 Clarinet Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 623 Bassoon Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 624 Saxophone Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 630 Violin Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 631 Viola Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 632 Cello Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 633 Bass Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 634 Camerata (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 647 Casella Sinfonietta (1:0:1–2)**
Chamber literature for winds, strings and percussion from all eras, including contemporary works for this medium.

*Prerequisite*
Permission of instructor.

_Coreq._
MUP 691 or MUP 693
Notes
May be repeated when repertoire varies.

**ENS 648 Chamber Music (1:0:1)**
Group study and performance of selected chamber music literature/jazz combo literature (non-conducted) with emphasis on development of independent chamber music performance skills. Personnel and repertoire assigned by performance faculty.

Notes
May be repeated for credit when repertoire varies.

**ENS 666 Trumpet Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 667 Horn Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 668 Trombone Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 669 Tuba/Euphonium Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 670 Percussion Ensemble (1:0:3)**
Performance of literature from all eras, including contemporary works for this medium.

**ENS 676 Period Music Ensembles (1:0:2)**
Performance of conducted and non-conducted period literature for winds, string, percussion, and voice.

Prerequisite
Permission of instructor

Offered
Fall, Spring

Notes
May be repeated for credit when different repertoire is selected.

**ENS 677 World Music Ensemble (1:0:2)**
Performance of conducted and non-conducted world music literature.

Offered
Fall, Spring

Notes
May be repeated for credit when different repertoire is selected.

**ENS 680 Men's Glee Club (1:0:3)**
Choral organization for graduate men's voices.

**ENS 681 Women's Glee Club (1:0:3)**
Choral organization for women's voices.

Notes
Membership by audition.

**ENS 682 University Chorale (1:0:3)**
Mixed choral organization of approximately 50 singers.
Notes
Membership by audition.

ENS 683 Touring Opera (1:0:3)
Performance of literature from all eras, including contemporary works for this medium.
Offered
Fall

ENS 684 Opera Role (1-2:0:3-6)
Performance of literature from all eras, including contemporary works for this medium.
Prerequisite
By audition

ENS 685 Opera Chorus (1:0:3)
Performance of literature from all eras, including contemporary works for this medium.
Prerequisite
By audition
Offered
Fall & Spring

ENS 686 Women’s Chorus (1:0:3)
Choral organization for women.
Notes
Membership by audition.

ENS 688 Chamber Singers (1:0:3)
Select mixed vocal ensemble of graduate and advanced undergraduate singers.
Notes
Membership by audition.

ENS 690 Sinfonia (1:0:4)
String orchestra, performance of important works from symphonic repertoire of eighteenth, nineteenth, and twentieth centuries.

ENS 691 University Orchestra (1:0:4)
Full symphony orchestra, performing works from the symphonic repertoire of the eighteenth, nineteenth, and twentieth centuries.

ENS 692 University Band (1:0:3)
Performance of literature from all eras, including contemporary works for this medium.

ENS 693 University Wind Ensemble (1:0:4)
Performance of selected works for wind ensemble including both original and transcribed literature.
Notes
Advanced performers only. Membership by audition.

ENS 694 Symphonic Band (1:0:4)
Performs literature from all eras, including contemporary works for this medium.
Notes
Open to all University students.
ENS 695 Jazz Ensemble I (1:0:3)
Performance of literature encompassing all of the jazz idioms with emphasis on contemporary composition.

**Prerequisite**
Membership by audition.

**Offered**
Fall & Spring

**Notes**
May be repeated for credit.

ENS 696 Jazz Ensemble II (1:0:3)
Performance of literature encompassing all of the jazz idioms with emphasis on contemporary composition.

**Prerequisite**
Membership by audition.

**Offered**
Fall & Spring

**Notes**
May be repeated for credit.

ENS 697 Pep Band (1:0:3)
The pep band performs music in a variety of styles, drives sports crowds to enthusiastic support of our Athletic teams, and provides in-game leadership in school spirit.
THEATRE, SCHOOL OF
202 Taylor Building • 336-334-5576 • vpa.uncg.edu/theatre

Administration
John Poole, Director of the School of Theatre
Deb Bell, Director of Graduate Study

About
The School of Theatre offers one graduate degree: the MFA in drama (with concentrations in acting, design, directing, and theatre for youth). The MFA is a terminal master’s degree designed to develop individual artistry and provide advanced, specialized training in acting, design, directing, and theatre for youth. The MFA is accredited by the National Association of Schools of Theatre.

The School offers a rich and varied curriculum that combines theory and practice and demands the development of skills and talents. Curricular offerings are matched by an extensive co-curricular program that includes opportunities to participate in the School’s extensive theatre production program, which includes UNCG Theatre, N.C. Theatre for Young People, Studio Theatre, Workshop Theatre, and a professional summer theatre workshop. Students may also be provided production opportunities at Triad Stage, an equity regional theatre in Greensboro.

Office, classroom, laboratory, studio, and performance space is used in the Taylor, UNCG Auditorium, Brown, Ferguson, and Curry buildings. The faculty of talented artists and scholars have excellent national reputations and are deeply committed to teaching and learning. Graduate students are expected to work closely with faculty on creative and research projects during their course of study.

VISIONS students are restricted from taking any 500-level course without the permission of the Director of the School of Theatre and course instructor. Only students officially admitted to the MFA program can register for 600-level courses.

In addition to the information contained in The Graduate School Bulletin, students are also required to be familiar with the policies and procedures contained in all School handbooks that can be obtained from the School’s Main Office, Room 202, Taylor Building.

Mission
The UNCG School of Theatre educates and trains students as professional artists in performance, design and technology, theatre for youth, and theatre education. Our rigorous BA, BFA, and MFA programs produce exemplary theatre artists with the knowledge, skills, and vision to work professionally in the performing arts.

Faculty
Professors
Deborah L. Bell, Costume design and history, costume historical patterning, crafts, makeup, millinery, mask making, commedia dell’arte (Director of Graduate Study). (E)
A. James Fisher, Directing, theatre history & literature, dramatic theory & criticism, American theatre. (E)
Randall J. McMullen, Scene design, scenography, drafting, scene painting. (E)
James M. Wren, Acting, directing, period acting styles. (E)

Associate Professors
Janet M. Allard, Playwriting, play script analysis.
Michael Flannery, Acting for the camera, drama appreciation.
Denise Gabriel, Dance, movement/acting.
John Gulley, Directing and acting. (E)
Christine Morris, Voice/speech and acting.
John Poole, Theatre history and criticism (Director of the School of Theatre).
Kenneth White, Lighting design, computer aided drafting, and stage management.

Lecturers
Jody Kaizen, Theatre management, arts management.
Christopher E. Haas, Technical direction and stage crafts.
Joshua T. Purvis, Theatre education, acting.

Graduate Programs
- Master of Fine Arts (MFA) in Drama: Acting, Design, Directing, and Theatre for Youth concentrations (60)

Drama, MFA - Acting, Design, Directing, and Theatre for Youth concentrations

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

Admission to the School’s degree programs is very competitive. Marginal compliance with the requirements stated below does not automatically imply admission.

In addition to the application materials required by The Graduate School, applicants must submit a detailed resume of theatre experience and participate in an interview. Acting concentration applicants are required to audition, and applicants to the design, directing, and theatre for youth concentrations must submit a portfolio. Please contact individual Theatre programs for specific program requirements. Students entering the program normally have an undergraduate degree in Theatre with a strong background in the concentration they wish to pursue. Exceptions are occasionally made for students with significant professional or practical experience. For the design concentration, an undergraduate degree in a related field may be acceptable. Students admitted without the appropriate undergraduate background will be expected to complete remedial work, in addition to normal degree requirements.

Acting Concentration
The MFA in Drama with an Acting Concentration is a 60-hour degree that may be completed in four semesters (two years) for students on assistantships. The Acting Concentration is dedicated to the development of the advanced actor for professional and academic theatre. Students take classes in voice, movement, contemporary and period scene study, acting for the camera, audition techniques, and related course work in academic and performance disciplines. The program consists of a core of acting courses and practicum experiences all students take and a series of electives the student selects in consultation with his/her advisor. Internships are required for students without experience in summer theatre or a professional equivalent.

Candidates for the degree are accepted every other year.

Major Studies (42)
- THR 532 Period Acting I (3)
- THR 539 Professional Theatre Audition Techniques (3)
- THR 600 Introduction to Graduate Study (3)
- THR 603 Acting Seminar (3)
- THR 621 Advanced Dynamics: Movement (2)
- THR 622 Advanced Dynamics: Voice (2)
- THR 631 Studies in Acting (3)
- THR 632 Contemporary Acting II (3)
- THR 633 Period Acting II (3)
THR 690  Graduate Practicum in Theatre (3)
THR 699  Master Production in Theatre (3)

Notes:
THR 621, THR 622: Required if not in an undergraduate academic background.
THR 621, THR 622: (3 sections, 2 hours each) (6)
THR 690: (2 sections, 3 hours each) (6)

Academic Studies (6)
Students must select a minimum of two courses from the following:
THR 500  Theatre History I (3)
THR 501  Theatre History II (3)
THR 502  Theatre History III (3)
THR 505  American Theatre History (3)
THR 506  Non-Western Theatre and/or Film (3)
THR 587  Theatre Field Studies (1-3)
THR 601  Drama Theory and Criticism (1-3)
THR 602  Seminar in Drama and Theatre History (3)
ENG 540  Shakespeare (3)
ENG 555  English Renaissance Drama
ENG 556  English Drama of the Restoration and Eighteenth Century
ENG 582  Modern Drama (3)
ENG 640  Studies in Shakespeare
MST 515  Film Theory (3)
MST 528  Topics in Film Studies (3)
MUS 665  History of Opera (3)

Notes:
THR 500, THR 501, THR 502: Required if not in an undergraduate academic background.

Reviews
All candidates are reviewed each semester for continuance in the program. Reviews assess the candidate's artistic and academic development and success in meeting degree requirements.

Supportive Studies (12)
Students must select a minimum of four courses from the following:
THR 510  Directing II (3)
THR 610  Applied Play Directing (3)
THR 534  Acting for the Camera (2)
THR 535  Advanced Acting for the Camera (2)
THR 596  Applied Theatre II (1-4)
THR 620  Stage Dialects (3)
THR 623  Advanced Physical Violence for the Stage
THR 695  Independent Study (1-3)
THR 696  Advanced Experimentation (3)

Notes:
THR 510: Required

Design Concentration
The MFA in Drama with a Design Concentration is a 60-hour degree that may be completed in four semesters (two years) for students on assistantships. The Design Concentration is dedicated to developing well-rounded theatre designers within a scenographic tradition. The program affords students the opportunity to develop and demonstrate competencies in the major design elements used in professional theatre production. Students take classes and execute realized productions in the areas of scenery, costume, and lighting design. They are trained as artists and artisans to work in the professional entertainment industry and higher education.
Candidates for the degree are accepted every year.

**Major Studies (45)**

- THR 503  Period Styles in Performance Design I (3)
- THR 504  Period Styles in Performance Design II (3)
- THR 600  Introduction to Graduate Study (3)
- THR 655  Scene Design Styles (3)
- THR 665  Costume Design Styles (3)
- THR 675  Lighting Design Styles (3)
- THR 656  Scene Design Application (3)
- THR 666  Costume Design Application (3)
- THR 676  Lighting Design Application (3)
- THR 651  Scene Design Seminar (3)
- THR 660  Costume Design Seminar (3)
- THR 671  Lighting Design Seminar (3)
- THR 614  Collaboration in Theatrical Production (3)
- THR 699  Master Production in Theatre (3)

**Notes**

THR 651, THR 660, THR 671: Students must take a minimum of 12 hrs. in Seminars. Two sections at 3 hours each.

**Academic Studies (6)**

Students must select a minimum of two courses from the following:

- THR 500  Theatre History I (3)
- THR 501  Theatre History II (3)
- THR 502  Theatre History III (3)
- THR 505  American Theatre History (3)
- THR 506  Non-Western Theatre and/or Film (3)
- THR 587  Theatre Field Studies (1-3)
- THR 601  Drama Theory and Criticism (1-3)
- THR 602  Seminar in Drama and Theatre History (3)
- ENG 540  Shakespeare (3)
- ENG 555  English Renaissance Drama
- ENG 556  English Drama of the Restoration and Eighteenth Century
- ENG 582  Modern Drama (3)
- ENG 640  Studies in Shakespeare
- MST 515  Film Theory (3)
- MST 520  History of Film to 1938 (3)
- MST 521  History of Film since 1938 (3)
- MST 528  Topics in Film Studies (3)
- MUS 665  History of Opera (3)

**Notes**

*THR 500, THR 501, THR 502: Required if not in undergraduate academic background.*

**Supportive Studies (9)**

Students must select a minimum of three courses from the following:

- THR 540  Advanced Stagecrafts
- THR 541  Technical Direction (3)
- THR 542  Scene Painting I (3)
- THR 544  Advanced CAD for the Theatre (3)
- THR 548  Stage Millinery and Accessories (3)
THR 549  Historical Costume Pattern Drafting and Draping (3)
THR 575  Theatrical Sound Design and Technology (3)
THR 648  Portfolio Preparation for the Theatre and Academia (3)
THR 670  Production Design for Film (3)
THR 695  Independent Study (1-3)
THR 651  Scene Design Seminar (3)
THR 660  Costume Design Seminar (3)
THR 671  Lighting Design Seminar (3)
MST 613  Advanced Media Lighting (3)
MST 614  Advanced Media Sound Production (3)

Notes:
THR 651, THR 660, THR 671: Students may take a maximum of 6 additional hours in Seminars.

Reviews
All candidates are reviewed each semester for continuance in the program. Reviews assess the candidate's artistic and academic development and success in meeting degree requirements.

Directing Concentration
The MFA in Drama with a Directing Concentration is a 60-hour degree that may be completed in four semesters (two years). Two students are accepted every other year. The Directing Concentration trains advanced directors to work professionally and to teach at the collegiate level. Students direct a production every semester and take a core group of directing and academic studies classes with additional electives chosen in consultation with their advisor. Our relationship with Triad Stage, an Equity company in Greensboro, means that directing students work closely with professional directors, designers, and actors while at UNCG.

Major Studies (39)
THR 503  Period Styles in Performance Design I (3)
THR 504  Period Styles in Performance Design II (3)
THR 600  Introduction to Graduate Study (3)
THR 603  Acting Seminar (3)
THR 610  Applied Play Directing (3)
THR 611  Advanced Play Directing (3)
THR 612  Directing Period Plays (3)
THR 613  Directing Seminar (3)
THR 614  Collaboration in Theatrical Production (3)
THR 631  Studies in Acting (3)
THR 690  Graduate Practicum in Theatre (3)
THR 699  Master Production in Theatre (3)

Notes:
THR 690: (3 sections, 2 hours each) (6)

Academic Studies (12)
Students must select a minimum of four courses from the following:
THR 500  Theatre History I (3)
THR 501  Theatre History II (3)
THR 502  Theatre History III (3)
THR 505  American Theatre History
THR 506  Non-Western Theatre and/or Film (3)
THR 587  Theatre Field Studies (1-3)
THR 601  Drama Theory and Criticism (1-3)
THR 602  Seminar in Drama and Theatre History (3)
ENG 540  Shakespeare (3)
ENG 555  English Renaissance Drama
ENG 556  English Drama of the Restoration and Eighteenth Century
ENG 582  Modern Drama (3)
ENG 640  Studies in Shakespeare
MST 515  Film Theory (3)
MST 528  Topics in Film Studies (3)
MUS 665  History of Opera (3)

Notes:
THR 601: Required courses
THR 506: Required if not in undergraduate academic background

Supportive Studies (9)
Students must take the following courses:
THR 584  Theatre Management (3)
Two additional courses in consultation with advisor

Reviews
All candidates are reviewed each semester for continuance in the program. Reviews assess candidates artistic and academic development and their success in meeting degree requirements.

Theatre for Youth Concentration
The MFA in Drama with a Theatre for Youth Concentration is a 60-hour degree. The program follows the guidelines established by the American Alliance for Theatre and Education and seeks to train theatre artists to take leadership roles in the growing field of theatre for youth. Students will have classes in process drama, theatre for youth, puppetry, and directing, as well as having the opportunity to select electives from a variety of courses. There is a heavy emphasis on directing; directing projects are required each semester. The student and advisor work closely together to develop an individualized program of courses and experiences tailored to meet specific career goals. Internships are required and are individually arranged by the student and advisor.

Candidates are accepted every other year.

Major Studies (39)
THR 515  Drama in Education (3)
THR 516  Puppetry (3)
THR 517  Theatre in Education (3)
THR 600  Introduction to Graduate Study (3)
THR 610  Applied Play Directing (3)
THR 611  Advanced Play Directing (3)
THR 613  Directing Seminar (3)
THR 614  Collaboration in Theatrical Production (3)
THR 615  Advanced Drama in Education (3)
THR 617  Trends in Theatre for Young Audiences (3)
THR 690  Graduate Practicum in Theatre (3)
THR 699  Master Production in Theatre (3)

Notes:
THR 690: (2 sections, 3 hours each) (6)

Academic Studies (12)
Students must select a minimum of four courses from the following:
THR 500  Theatre History I (3)
THR 501  Theatre History II (3)
THR 502  Theatre History III (3)
THR 505  American Theatre History (3)
THR 506  Non-Western Theatre and/or Film (3)
THR 587  Theatre Field Studies (1-3)
THR 601  Drama Theory and Criticism (1-3)
THR 602  Seminar in Drama and Theatre History (3)
THR 680  Seminar in Playwriting (3)
ENG 540  Shakespeare (3)
ENG 555  English Renaissance Drama
ENG 556  English Drama of the Restoration and Eighteenth Century
ENG 582  Modern Drama (3)
ENG 640  Studies in Shakespeare
MST 515  Film Theory (3)
MST 528  Topics in Film Studies (3)
MUS 665  History of Opera (3)

Notes:
THR 601, THR 680: Required Courses.
THR 500, THR 501, THR 502: Required if not in undergraduate academic background.

Supportive Studies (9)
Students must select a minimum of three courses from the following:
THR 584  Theatre Management (3)
THR 621  Advanced Dynamics: Movement (2)
THR 622  Advanced Dynamics: Voice (2)
THR 631  Studies in Acting (3)
THR 695  Independent Study (1-3)

Notes:
THR 584, THR 631: Required courses

Reviews
All candidates are reviewed each semester for continuance in the program. Reviews assess the candidate’s artistic and academic development and success in meeting degree requirements.

THR – Theatre Graduate Courses

THR 500 Theatre History I (3:3)
Specific conditions under which the great plays of the world have been produced. I: Origins to Renaissance; II: Early Modern to Realism; III: Modernism to Postmodernism.

THR 501 Theatre History II (3:3)
Specific conditions under which the great plays of the world have been produced. I: Origins to Renaissance; II: Early Modern to Realism; III: Modernism to Postmodernism.

THR 502 Theatre History III (3:3)
Specific conditions under which the great plays of the world have been produced. I: Origins to Renaissance; II: Early Modern to Realism; III: Modernism to Postmodernism.

THR 503 Period Styles in Performance Design I (3:3)
Study of period style and how it is used in performance design. First semester: architecture, decor, and fashion from antiquity to Renaissance. Second semester: architecture, decor, and fashion from Renaissance to present.
Prerequisite
Admission to BFA/MFA design program or permission of instructor

THR 504 Period Styles in Performance Design II (3:3)
Study of period style and how it is used in performance design. First semester: architecture, decor, and fashion from antiquity to Renaissance. Second semester: architecture, decor, and fashion from Renaissance to present.
Prerequisite
Admission to BFA/MFA design program or permission of instructor
THR 505 American Theatre History (3:2:3)
Development of Theatre in America from its beginnings to the present. Includes consideration of theatre artists and companies, audiences, performance spaces, production and business practices, plays, and playwrights.
Prerequisite
Junior standing or permission of instructor

THR 506 Non-Western Theatre and/or Film (3:2:3)
Dramatic literature, theatre, and/or film in India, China, Japan, and Africa. Subject varies with instructor.
Distribution
GE Marker: GN
Notes
May be repeated for up to six (6) semester hours depending on course content.

THR 510 Directing II (3:3)
An intermediate directing course that involves the student in the theory and practice of contemporary plays.
Prerequisite
Two theatre courses, THR 201 and THR 410 or permission of instructor

THR 515 Drama in Education (3:2:2)
Research and literature of drama strategies and techniques for children, ages 5 through 14. Practice in leading groups of children in drama in educational settings.
Notes
Current Professional Liability Insurance is required.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 516 Puppetry (3:2:2)
Scope and development of puppetry throughout the world. Practical experience in the design, making, and performing of puppets.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 517 Theatre in Education (3:2:2)
Research and literature of theatre-in-education pedagogy and methodology. Practice in facilitating theatre in education in the community.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 531 Acting V (3:1:4)
Study and practice of the stylistic demands of the comedy of manners from the English Restoration through Noel Coward.
Prerequisite
THR 331, THR 332 and admission to appropriate School of Theatre degree program or permission of instructor

THR 532 Period Acting I (3:1:4)
Study and practice of Shakespearean acting styles. Performance emphasizing manners, movement, and vocal delivery of the Elizabethan period.
Prerequisite
THR 331, THR 332 and admission to appropriate School of Theatre degree program or permission of instructor
THR 534 Acting for the Camera (2:1:3)
An introductory examination and exploration of the technique of acting for the camera. Students will refine and adjust the way they work, but the core technique remains the same.

Prerequisite
Admission to appropriate degree program or permission of instructor

Notes
For advanced undergraduates and graduate students in Theatre.

THR 535 Advanced Acting for the Camera (2:1:3)
An advanced study of performance for the camera. Camera scene study will continue with added emphasis on clarity of intention and accuracy of repetition.

Prerequisite
THR 534

THR 539 Professional Theatre Audition Techniques (3:3)
Audition theory, techniques, and practice for theatre, television, and films.

Prerequisite
THR 231, THR 232 and admission to appropriate degree program or permission of instructor

THR 540 Advanced Stagecrafts (3:2:3)
Study of advanced scenic construction, property construction, and rigging techniques for the stage. Supervised laboratory work in wood, plastics, metal, and other materials.

Prerequisite
THR 140 and admission to appropriate degree program or permission of instructor

THR 541 Technical Direction (3:3)
Theatrical technical direction with emphasis on organizational, managerial, and problem-solving duties and responsibilities. Lecture combined with practical projects.

Prerequisite
THR 140, THR 444 and junior standing or senior standing or graduate standing or permission of instructor

THR 542 Scene Painting I (3:1:4)
Tools, materials, and techniques of scene painting.

Prerequisite
THR 140, THR 351 and admission to appropriate degree program or permission of instructor

THR 543 Scene Painting II (3:1:4)
Advanced problems in scene painting.

Prerequisite
THR 140, THR 351, THR 542 and admission to appropriate degree program or permission of instructor

THR 544 Advanced CAD for the Theatre (3:1:6)
Continuation of THR 444 concentrating on 3-D virtual modeling and visualization and its use in theatre.

Prerequisite
THR 444 or permission of instructor

THR 548 Stage Millinery and Accessories (3:1:4)
Historical millinery and accessories in relation to stage adaptation; design and construction techniques.

Prerequisite
Admission to appropriate degree program or permission of instructor
THR 549 Historical Costume Pattern Drafting and Draping (3:1:6)
Historical pattern-making techniques for stage costumes; theory and practice in costume construction.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 552 Multi-Set Design Techniques (3:1:6)
Advanced problems in scene design for multi-set productions in performance.
Prerequisite
THR 351 and admission to appropriate School of Theatre degree program or permission of instructor

THR 575 Theatrical Sound Design and Technology (3:3)
An introduction to the theory, aesthetics, and technology of theatrical sound design.
Prerequisite
THR 140 and admission to appropriate School of Theatre degree program or permission of instructor

THR 581 Advanced Oral Interpretation (3:3)
Audiences, materials, and procedures of readers’ theatre. Practice in advanced principles of oral interpretation of literature.
Prerequisite
THR 381 or graduate standing

THR 584 Theatre Management (3:3)
Theatre organization and operation. Practical problems of financing, promoting, and staffing various theatre programs.
Prerequisite
Drama major and admission to appropriate degree program or permission of instructor

THR 586 Stage Management (1–2)
The role of the stage manager. Supervised participation as a stage manager in the theatre production program.
Prerequisite
THR 140 or permission of instructor
Notes
May be repeated for a total of three credits.

THR 587 Theatre Field Studies (1–3:3)
Guided off-campus study in the Theatre disciplines. Travel required. Site and topic will vary from semester to semester.
Notes
May be repeated for up to four (4) semester hours.

THR 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

THR 595 Directing Practicum (1:0:3)
Practice in directing the play; preparations of a 25-minute play or excerpt, and presentation in the Workshop Theatre.
Prerequisite
THR 410 and admission to appropriate School of Theatre degree program or permission of instructor
Notes
May be repeated for a total of two semester hours.
THR 596 Applied Theatre II (1–4:0:3–12)
Intensive experience in one or more areas of theatre production.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 600 Introduction to Graduate Study (3:3)
Development of research and writing skills, introduction to grant writing, and professional presentations. Consideration of issues in teaching.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor
Notes
Required of MEd and MFA degree candidates.

THR 601 Drama Theory and Criticism (1–3)
Major concepts representative of Aristotelian drama and the chief artistic and philosophical trends underlying much of contemporary or non-Aristotelian drama.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor
Notes
May be repeated for a maximum of 3 hours credit.

THR 602 Seminar in Drama and Theatre History (3:3)
Investigation of special topics in drama and theatre history. Topics vary each semester.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor
Notes
May be repeated twice for credit when topic varies.

THR 603 Acting Seminar (3:3)
Historical and theoretical perspectives related to acting. Topics vary each semester.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor
Notes
May be repeated for a maximum of 9 hours credit.

THR 610 Applied Play Directing (3:1:4)
Guided study and practice in developing directorial approaches and techniques through scene work and the production of a complete play.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 611 Advanced Play Directing (3:3)
Problems of play directing emphasizing the use of modified proscenium, arena, thrust, and experimental forms of stages.
Prerequisite
Admission to appropriate School of Theatre degree program or permission of instructor

THR 612 Directing Period Plays (3:3)
Theories of directing and their application in the direction of period plays.
Prerequisite
THR 610 or THR 611 and admission to appropriate School of Theatre degree program or permission of instructor

**THR 613 Directing Seminar (3:3)**
Investigation in the art of directing. Topics vary each semester.

*Prerequisite*
THR 610 or THR 611 and admission to appropriate School of Theatre degree program or permission of instructor

*Notes*
May be repeated for credit.

**THR 614 Collaboration in Theatrical Production (3:3)**
An examination of the creative working relationship between the director and designers in theatre production. Students learn to effectively articulate, experiment with, synthesize, and integrate best practices in theatrical collaboration.

*Prerequisite*
Admission to appropriate School of Theatre graduate degree program or permission of instructor

**THR 615 Advanced Drama in Education (3:3)**
Current trends in advanced philosophies in drama in education and aesthetic education. Practical experience arranged with classes in local schools.

*Prerequisite*
THR 515 and admission to appropriate School of Theatre degree program or permission of instructor

**THR 617 Trends in Theatre for Young Audiences (3:3)**
Focus on analysis of nationally successful Theatre for Youth companies. Exploration of seasons, budgets, and outreach components of various companies.

*Prerequisite*
THR 517, THR 584, THR 615

**THR 620 Stage Dialects (3:3)**
Stage dialects most frequently used by the actor: Standard British, Cockney, Irish, Scots, French, German, Italian, Russian, Japanese, Brooklynese, American Southern.

*Prerequisite*
Admission to appropriate School of Theatre degree program or permission of instructor

**THR 621 Advanced Dynamics: Movement (2:2:3)**
Movement laboratory for the advanced actor.

*Prerequisite*
Admission to appropriate degree program: MFA in Drama, Acting Concentration

*Notes*
May be repeated for a total of six credits.

**THR 622 Advanced Dynamics: Voice (2:2:3)**
Voice and speech training to develop skills necessary for performance.

*Prerequisite*
Admission to MFA in Drama, Acting Concentration

*Notes*
Three consecutive semesters to be repeated for a total of six credits.

**THR 623 Advanced Physical Violence for the Stage**
Advanced study and practice in the mechanics of stage violence. Designed for graduate actors, this course will focus on safe performance techniques for violence in period and contemporary texts.
Prerequisite
Admission to MFA in Drama, Acting Concentration

**THR 631 Studies in Acting (3:3)**
Special studies and practices in acting techniques. Emphasis on contemporary drama.
**Prerequisite**
Admission to appropriate School of Theatre degree program or permission of instructor

**THR 632 Contemporary Acting II (3:1:4)**
Contemporary ensemble acting techniques and their application to ensemble style and playing.
**Prerequisite**
Admission to appropriate School of Theatre degree program or permission of instructor

**THR 633 Period Acting II (3:1:4)**
Study and practice of acting styles from the periods of Classical Greek, Roman, Medieval, Restoration/Georgian, Victorian/Edwardian drama.
**Prerequisite**
Admission to appropriate School of Theatre degree program or permission of instructor

**THR 648 Portfolio Preparation for the Theatre and Academia (3:3)**
This course guides students in developing the materials and skills necessary to present their education and experience to employers in the most effective manner, including resumes, cover letters and portfolios.

**THR 651 Scene Design Seminar (3:2:3)**
Topics in scene design. Topics may include conceptual development, drawing and rendering techniques, model building, and generation of computer graphics.
**Prerequisite**
Admission to MFA in Drama, Design Concentration
**Notes**
This course may be repeated once for 3 credits when topic varies.

**THR 655 Scene Design Styles (3:2:3)**
Topics in Scene Design Applications. Topics may include study of theatrical genres and variations in physical space and relationship to audiences.
**Prerequisite**
Admission to MFA in Drama, Design Concentration

**THR 656 Scene Design Application (3:2:3)**
Topics in Scene Design Applications. Topics may include design conceptualization and development, professional standards for drafting and elevations, rendering and models.
**Prerequisite**
THR 655 and admission to MFA in Drama, Design Concentration

**THR 660 Costume Design Seminar 3:2:3**
Topics in costume design. Topics may include conceptual development, drawing and rendering techniques, and generation of computer graphics.
**Prerequisite**
Admission to MFA in Drama, Design Concentration
**Notes**
This course may be repeated once for 3 credits when topic varies.
THR 665 Costume Design Styles (3:2:3)
Topics in Costume Design Styles. Topics may include varying dramatic genres, studies of costume style presentation appropriate for performance trends.
Prerequisite
Admission to MFA in Drama, Design Concentration

THR 666 Costume Design Application (3:2:3)
Topics in Costume Design Applications. Topics may include design conceptualization and development, as well as professional standards for illustrating action figures, specific fabrics, and developing costume production charts.
Prerequisite
THR 665 and admission to the MFA in Drama, Design Concentration

THR 670 Production Design for Film (3:2:3)
History, theory and practice of production design in film from 1895 to the present.

THR 671 Lighting Design Seminar (3:2:3)
Topics in lighting design. Topics may include technology of moving fixtures, techniques of image and effect projection, and techniques of lighting for film.
Prerequisite
Admission to MFA in Drama, Design Concentration or permission of instructor
Notes
May be repeated once when topic varies for a total of 6 credit hours.

THR 675 Lighting Design Styles (3:2:3)
Advanced problems of lighting design for theatrical productions in performance. Studies can include studio design exploration in the different genres of plays, musicals, and opera.
Prerequisite
Admission to MFA in Drama, Design Concentration or permission of instructor

THR 676 Lighting Design Application (3:2:3)
Creative topics in lighting design emphasizing collaborative approaches to produced work for public performance.
Prerequisite
THR 675 and admission to MFA in Drama, Design Concentration or permission of instructor

THR 680 Seminar in Playwriting (3:3)
Theory and practice of writing plays for stage production.
Prerequisite
Permission of instructor
Notes
May be repeated once for credit.

THR 682 Seminar in Teaching Methods for Theatre Education (3:3)
Explores current pedagogical practices, issues, and trends in the K-12 theatre arts classroom.
Prerequisite
Must hold Standard I ("A" level) licensure or permission of instructor

THR 685 Seminar in Scenography (3:2:3)
Scenographic theory and practice for performance design.

THR 690 Graduate Practicum in Theatre (3:0:9)
Guided practice under rigorous artistic standards in carrying out major responsibilities in UNCG Theatre or Theatre for Youth major productions.

*Prerequisite*
Admission to appropriate School of Theatre degree program and permission of instructor

**THR 691 Graduate Practicum in Costume Design (2:0:2)**
Guided practice under rigorous artistic standards in carrying out major costume design responsibilities in the School of Theatre’s production season or other faculty approved venues.

*Prerequisite*
Admission to appropriate School of Theatre degree program

**THR 692 Graduate Practicum in Lighting Design (2:0:2)**
Guided practice under rigorous artistic standards in carrying out major lighting design responsibilities in the School of Theatre’s production season or other faculty approved venues.

*Prerequisite*
Admission to appropriate School of Theatre degree program

**THR 693 Graduate Practicum in Scene Design (2:0:2)**
Guided practice under rigorous artistic standards in carrying out major scene design responsibilities in the School of Theatre’s production season or other faculty approved venues.

*Prerequisite*
Admission to appropriate School of Theatre degree program

**THR 694 Theatre Education Cumulative Portfolio (1:0:3)**
Faculty supervised facilitation of preparation and presentation of a cumulative portfolio, containing artifacts demonstrating achievement of core competencies for a master teacher.

*Prerequisite*
Completed degree course work or within three semester hours of completion of all other degree course work (36 semester)

**THR 695 Independent Study (1–3)**

*Prerequisite*
Admission to appropriate School of Theatre degree program or permission of instructor, major advisor and School Director

**THR 696 Advanced Experimentation (3:1:4)**
Preparation for the evaluation of experiences in the creative processes of theatre, broadcasting, or film. Analysis, documentation, and critical evaluation of the specific experience.

*Prerequisite*
Admission to appropriate School of Theatre degree program or permission of instructor

**THR 698 Graduate Internship (3)**
Field experience in local production companies, post-production houses, television stations or professional theatre companies. Academic supervision provided by faculty and directed activity in the field provided by site supervisor.

*Prerequisite*
Second or third year standing in the graduate program

**THR 699 Master Production in Theatre (3:0:9)**
Research, development, and execution in acting, directing, or design of a major theatrical production.

*Prerequisite*
Admission to appropriate School of Theatre degree program or permission of instructor
THR 711 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
APPLIED ARTS AND SCIENCES PROGRAM
915 Northridge Street • 336-315-7044 • mals.uncg.edu

Administration
Kathleen Forbes, Program Director

About
The Master of Arts in Applied Arts and Sciences encourages innovative graduate studies across traditional disciplinary boundaries. It seeks to establish an intellectual community whose members, both students and faculty, are eager to employ the arts and sciences in ways that will enrich their understanding of themselves and of the world surrounding them. Interdisciplinary seminars, course work, and symposia are intended to nurture this intellectual community. The MA in Applied Arts and Sciences and the Post-Baccalaureate Certificate can serve to enhance career opportunities as well as provide personal enrichment. More information is available at The Graduate School or UNCG Online: The Division of Online Learning.

Faculty

Professors
Robert Cannon, Microbiology, biology of Acetobacter, a cellulose synthesizing microbe (Director of Graduate Study; Department of Biology).
Larry Lavender, Choreography, dance criticism, aesthetics, creative process (Department of Dance).
Hephzibah Roskelley, Rhetoric and composition, reading theory, pedagogy, American literature (Department of English).
Stephen Ruzicka, Ancient history, Greek, Roman, Persian (Department of History).

Associate Professors
James A. Anderson, East Asia, China, Vietnam (Department of History).
Jeffrey W. Jones, Russia (Department of History).
Bennett Ramsey, Systems theory and thinking, social ethics, contemporary religion and politics (Department of Religious Studies).

Graduate Programs

• Post-Baccalaureate Certificate in Global Studies, (15)
• Master of Arts (MA) in Applied Arts and Sciences, (33)

Global Studies, PBC, (15)
The online Post-Baccalaureate Certificate in Global Studies seeks to instill in students a solid knowledge of particular cultures, while also providing training in the analysis of global trends. Students will learn how to make connections between their knowledge of a particular part of the world and the larger trends and issues that affect all societies. Fifteen (15) semester hours must be successfully completed during a three-year period to earn the certificate.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a personal statement elaborating how the certificate will further their personal and professional goals.

Certificate Requirements

Required Courses (9)
MAS 610 Culture and Ideas (3)
MAS 620  Human Nature and Society (3)
MAS 630  Scientific Reasoning (3)

Electives (6)
In consultation with the program director, students choose 6 hours of electives from the following courses:

Subtopics for MAS 610
- The Islamic World: Perceptions and Realities
- Global Arts: Windows into the Hearts of Other Cultures
- Current Problems in the Middle East: An Historical Perspective
- The Dragon Awakes: Charting the Course of Modern China
- Cultural Identities: Contemporary Non-Western Literature
- Voices from Latin America: Why Don’t They Like Us?
- Religion and Ecology
- The Reel World: Contemporary Issues on Screen

Subtopics for MAS 620
- Dangerous Minds: Understanding Terrorism
- Global Human Rights
- Emerging Powers

Applied Arts and Sciences, MA (33)
The MA in Applied Arts and Sciences is an interdisciplinary degree consisting of 33 hours of graduate course work.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a three- to four-page essay describing their academic background and interest in applied arts and sciences and the program.

Degree Requirements

Required Core Seminars (9)

MAS 610  Culture and Ideas (3)
MAS 620  Human Nature and Society (3)
MAS 630  Scientific Reasoning (3)

Electives (18)
In consultation with the program director, a student may choose 18 hours of 500- to 600-level electives.

Thesis Option (6)
MAS 699  Thesis (1-6)

Non-Thesis Option (6)
6 additional hours in one of the core seminar areas and a Portfolio, Capstone Experience.

MAS -Master of Arts in Applied Arts and Sciences Graduate Courses

MAS 589 Experimental Course
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

MAS 610 Culture and Ideas (3:3)
Artistic, literary, philosophical, or religious traditions, works of particular thinkers, and historical discourse on intellectual issues.

Prerequisite
Admission to the MALS program

Notes
May be repeated for credit when topic varies.

**MAS 620 Human Nature and Society (3:3)**
Issues concerning human nature, society, or political life through works or problems from the various social sciences.

*Prerequisite*
Admission to the MALS program

*Notes*
May be repeated for credit when topic varies.

**MAS 630 Scientific Reasoning (3:3)**
Reflections on scientific reasoning and/or investigations of particular problems to illustrate scientific reasoning.

*Prerequisite*
Admission to the MALS program

*Notes*
May be repeated for credit when topic varies.

**MAS 650 Independent Study (1–3)**
Guided readings, research and individual project work on an interdisciplinary topic under direction of a faculty member.

*Notes*
May be repeated for a maximum of 6 hours credit when topic varies.

**MAS 699 Thesis (1–6)**

**MAS 711 Experimental Course**
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**MAS 801 Thesis Extension (1–3)**

**MAS 803 Research Extension (1–3)**
TUITION AND FEES
The tuition and academic fees paid by UNCG students only partially cover the cost of the education they receive. The remaining costs are met by funds from the State of North Carolina, from the UNCG Excellence Fund, and from alumni, friends, corporations, foundations, and the federal government. The figures listed below are proposed graduate tuition and fees per credit hour for the 2017-2018 academic year. Tuition and fees are due in full upon registration each semester. All students are responsible for payment of tuition appropriate to residence status. Payment of fees is a prerequisite to completion of registration. UNCG reserves the right to make changes in these charges without advance notice.

### Fall 2017 Tuition and Fees

#### UNDERGRADUATE

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<th>T305 TRANSPORTATION</th>
<th>T306 SECURITY</th>
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**GRADUATE**

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- **TUITION DIFFERENTIALS ARE CHARGED FOR SPECIFIED COURSES / PROGRAMS:**
- **SG Fee**
- **Athletic Fee**
- **Nurse Anesthesia (DNP)**
- **Doctor of Nursing Practice (DNP)**
- **MS Genetic Counseling**
- **MBA & MSA Courses**
- **Outside NC**

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* Outside NC means distance education is received outside North Carolina.*

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**Payment of fees is a prerequisite to completion of registration. UNCG reserves the right to make changes in these charges without advance notice.**
TUITION DIFFERENTIALS

**TUITION DIFFERENTIALS ARE CHARGED FOR SPECIFIED COURSES / PROGRAMS:**

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DISTANCE LEARNING CHARGES PER CREDIT HOUR

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* *Outside NC* means distance education is received outside North Carolina.

MISC. FEES - Special One-Time

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<tr>
<td>Open Water Diver Scuba Course</td>
<td>375.00</td>
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<tr>
<td>Advanced Open Water Diver Scuba Course</td>
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<tr>
<td>Exercise Physiology Course</td>
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<tr>
<td>Studio Usage Fee (Visual and Performing Arts)</td>
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<td>Traditional BSN Program Fee</td>
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<td>MSN/DNP Adult Gerontology NP Program Fee</td>
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<td>MSN/DNP RN Anesthetist Program Fee</td>
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<td>RN to BSN Program Fee</td>
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<td>MSN-Education Program Fee</td>
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<td>MSN Administration Program Fee</td>
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<td>Nursing PhD Program Fee</td>
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<td>Studio Art Program Fee</td>
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<td>Art History Program Fee</td>
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<td>Beyond Academics Program Fee</td>
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<tr>
<td>Dance Student Fee</td>
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<td>Theatre Student Fee</td>
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<tr>
<td>Student Liability Insurance Fee</td>
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LATE FEES AND INTEREST ON PAST DUE BALANCES

Interest and Late Payment Penalty will be assessed on all past due student accounts. The Late Payment Penalty is a 10% one-time charge and the interest charge is 5% annually (G.S. 105-241.21) assessed monthly on the unpaid balance.

Click here to Visit the Cashiers Web Page for information on the following:

- Graduate Tuition and Fees for the 2017-2018 Academic Year
- Student Credit Policy
- Refund Policy for Student Fees and Charges
- Special Fees
- Use of the University Libraries
- Residence Status for Tuition Purposes
- Faculty/Staff Tuition Waivers
RESEARCH CENTERS AND INSTITUTES

Center for Biotechnology, Genomics and Health Research
3701 MHRA Building
(336) 334-5715
biotech.uncg.edu

The mission of the Center for Biotechnology, Genomics and Health Research is to increase knowledge, build capacity, and disseminate information in the health, biomedical, and biotechnological sciences to the Triad community. To fulfill this mission, CBGHR leads and facilitates interdisciplinary projects in order to understand and address important problems in health research and practice.

Center for Business and Economic Research
401 Bryan Building
(336) 334-5338
cber.uncg.edu

CBER performs high-quality applied research in economic policy and business practice, drawing on the expertise of the faculty of the Bryan School of Business and Economics. CBER’s goal is to use sound and objective research to serve the Triad community, and to assist in the economic development of our region.

CBER’s work includes economic-impact analyses, industry studies, regional economic profiles, feasibility studies, opinion surveys, program assessments, and updates of current economic conditions. CBER produces the DHG Triad Business Index, a monthly report on the regional economy, available at http://dhgtbi.uncg.edu/, as well as the Guilford Business Index available at http://www.uncg.edu/bae/cber/. In addition, CBER researchers write frequent articles in newspapers and magazines and give numerous speeches in the community.

Center for Community-Engaged Design
102 Gatewood Studio Arts Building
(336) 334-5320
uncg.edu/iar/cc-ed

The Center for Community-Engaged Design is an interdisciplinary research center that fosters community/university partnerships for meaningful research and design of the built and natural environments. Housed in the Department of Interior Architecture at the University of North Carolina at Greensboro, CC-ED collaborates with community partners, non-profit organizations, and municipal departments to address design-related projects in underserved areas and for underrepresented populations in the Piedmont-Triad area. Through community-engaged processes of research, service, visioning, teaching, and learning, CC-ED brings innovative design thinking and methodologies to bear in areas where resources are most limited.

Center for Geographic Information Science
3605 MHRA Building
(336) 708-7053
www.uncg.edu/geo/cgis/

The Center for Geographic Information Science (CGISc) is an educational research entity that relies on theories, concepts, and applications to solve, analyze, and model the geographic aspects of human and natural phenomena. CGISc welcomes collaboration and partnerships with government agencies, non-profit organizations and private corporations. The contributions of both graduate and undergraduate students are central to the center’s activities.
Research activities are supported by faculty, staff, students, and partners from various specialized fields such as geographic information systems, remote sensing and image processing, cartography, engineering, and mathematics. The Center is well equipped with computers, specialized hardware, and a full range of geospatial software.

CGISc has worked on a wide range of projects of various size and scope with numerous partners. Check out our Projects page for a detailed list of past and ongoing projects.

Center for Housing and Community Studies
320 Graham Building
(336) 334-3731
chcs.uncg.edu

The UNCG Center for Housing and Community Studies will stimulate the development and facilitation of interdisciplinary and community-based housing and community research, evaluation, and practice in the context of institutional and community collaborations. Through multidisciplinary and community-engaged research the Center for Housing and Community Studies provides data, analysis, planning and evaluation that aids non-profit and governmental agencies in providing fair, affordable, and healthy housing and building safe and sustainable communities for all.

Natural Products and Drug Discovery Center
405 Science Building
(336) 334-5474
uncg.edu/che,npddc/

Natural products research examines plants, microorganisms, and other elements of the natural world to identify potentially beneficial chemical entities, such as anticancer agents, antibiotics, and agrochemicals. Studying the activities of these substances allows researchers to optimize their effectiveness and develop similar materials (analogues) with ideal biological properties. Natural products research provides insight into the effectiveness of herbal remedies, basic biological processes, and more. By leveraging expertise across disciplines, the Natural Products and Drug Discovery Center looks at the larger picture and pursues richer and more fruitful discoveries.

Center for New North Carolinians
915 W. Lee St.
(336) 334-5411
cnnc.uncg.edu

The Center for New North Carolinians (CNNC) is committed to advancing the capacity of immigrants and refugees by building bridges between immigrant populations and existing communities throughout the state of North Carolina. This is done via community-based outreach and advocacy, educational programming, research and evaluation, immigrant and refugee leadership development, cultural brokering, and educational opportunities for faculty and students. The CNNC was established in 2001 and currently serves clients from over 31 countries including but not limited to Bhutan, Burma, Central African Republic, Cuba, Democratic Republic of Congo, El Salvador, Eritrea, Ethiopia, Iraq, Mexico, Sudan, Syria, and Vietnam. Several ongoing projects include: AmeriCorps ACCESS Project, Community Centers, Thriving at Three, Immigrant Health ACCESS Project, Interpreter ACCESS Project, Microenterprise for Refugees in the Triad, Latino Community Coalition of Guilford, and Research Fellows.
Center for the Health of Vulnerable Populations
233 McIver Building
(336) 334-3701
nursing.uncg.edu/research/CHVP/index.php

The mission of the Center for the Health of Vulnerable Populations (CHVP) is to improve the knowledge of health disparities and vulnerable populations through research, collaboration and education. This includes initiatives to alleviate those disparities, thus improving the health, access, quality of care and quality of life of vulnerable populations. Strategies are designed to address the NIH Roadmap, Healthy People 2020, and Healthy Carolinians 2020 through partnerships with community stakeholders. To fulfill the mission, the Center 1) promotes and enhances research on aging, culture, disease processes, ethnicity, health care delivery, disparities, health education, health policy and health risks and behaviors; 2) fosters collaborative research within the School, across the University and state, and involving community and international partners; 3) disseminates research information to teachers, researchers, business leaders, health care providers, policy makers, the public and the international community; and 4) develops new knowledge that contributes to better health, fewer health disparities and improved health care for vulnerable populations.

The CHVP activities include research training, research studies, grantsmanship, and outreach health education community partnerships.

Center for Translational Biomedical Research
6500 Laureate Way, Suite 4226
Kannapolis, NC 28081
(704)250-5810
cctbr.uncg.edu

The UNCG Center for Translational Biomedical Research (CTBR) is housed in the UNC Nutrition Research Building at the North Carolina Research Campus (NCRC) in Kannapolis, NC, about 70 miles southwest of Greensboro. Scientists at the Center are conducting studies to understand the molecular mechanisms of disease pathogenesis and progression, identify biomarkers for diagnosis, and discover novel interventions for disease prevention and treatment. The current research activities at the Center focus on metabolic diseases, including steatohepatitis and diabetes mellitus. These studies entail molecular biology, metabolomics and proteomics approaches. Graduate students who are interested in joining the Center are encouraged to apply through graduate programs of the Department of Nutrition and the Department of Chemistry & Biochemistry.

Center for Women’s Health and Wellness
Mail: 401 Coleman Building
Room: 126 Coleman Building
(336) 334-4736
www.uncg.edu/hhs/cwhw

The mission of the Center for Women’s Health and Wellness is to help bring about a world where adults and children, of all gender identities and expressions, are able to live safe, healthy, productive and meaningful lives at home, school, work, and in their communities. We are particularly interested in advancing the health, wellness and quality of life of girls, women and LGBTQI individuals. Our goals are to: (1) develop an interdisciplinary program of research and community-engaged scholarship; and (2) connect research to practice through research dissemination, community education and service. The Center’s work is organized to provide interdisciplinary, community-informed solutions to specific social issues that build on the strengths of our university, faculty, students, and community partners. The Center is currently comprised of programs that focus our work in four areas: preventing and responding to gender-based violence; advancing girls and women in sport and physical
activity; advancing breastfeeding and reproductive health; and advancing the health, wellness and quality of life of LGBTQI populations. Administratively the Center is housed within the School of Health and Human Sciences.

Center for Youth, Family, and Community Partnerships
1001 Lee St.
(336) 334-3659
cyfcp.uncg.edu

The Center for Youth, Family, and Community Partnerships (CYFCP) is dedicated to building the capacity of families, service providers, researchers, teachers, and communities to promote the social, emotional, and cognitive well-being of children. In partnership with colleagues from across the University and the community, the Center:
carries out basic, applied, and action research;
translates research into effective programs and practice;
infuses community perspectives into university research and teaching;
facilitates strategic problem-solving processes; and
promotes programs, practices, and policies that are likely to yield positive outcomes for children and their families.

With funding from federal, state, local, and foundation grants, the Center’s current initiatives focus on family-centered, system of care approaches to mental health service delivery and training of service providers, parenting, early childhood mental health and readiness, youth violence prevention and intervention, community health, and community-based evaluation.

Institute for Community and Economic Engagement
3710 MHRA
(336) 256-2578
communityengagement.uncg.edu

Collaborators working with the Institute for Community and Economic Engagement (ICEE) focus on infusing community engagement into the strategic goals of the university and issues of importance to communities across the Piedmont Triad, state, nation, and world. ICEE supports, elevates, and amplifies the efforts of faculty, staff, student, and community colleagues from across all sectors as they employ teaching, learning, research, creative activity, and service in pursuit of these goals.

The institute serves as a central communication hub for community engagement activities, relationships, resources, scholarship, best practices, and outcomes. ICEE works campus-wide with academic affairs, student affairs, and administrative offices to integrate community engagement into core academic work and systems to advance institutional and community aims.

ICEE activities fall into six strategic areas. 1) The institute enhances the pursuit of scholarly agendas and practices of community engagement. 2) It promotes community engagement as a strategy to achieve key institutional goals among departments, programs, offices and units that offer student teaching and learning opportunities. 3) It tracks and assesses the broad range of community-engaged activities, programs, and initiatives across the university; 4) It works to expand UNCG’s capacity to identify and establish mutually beneficial community-university partnerships. 5) It strengthens UNCG’s reputation as a collaborative, inclusive, responsible, and effective member of the communities of which it is a part. 6) It supports initiatives to grow community engagement relationships and community-engaged scholarship.
The Institute to Promote Athlete Health and Wellness
437 Coleman Building
(336) 334-9727
athletewellness.uncg.edu/

The Institute to Promote Athlete Health & Wellness is at the forefront of excellence in health promotion for athletes of all ages and levels of competition. The Institute’s vision is to improve the health and wellness of athletes through the translation of prevention research to effective policies and practices. Areas of focus include, but are not limited to (a) alcohol and other drug education/prevention, (b) the prevention of interpersonal violence, (c) the promotion of effective stress management, decision making, and communication skills and (d) the promotion of healthy relationships and emotional health. Their mission is to work collaboratively with a variety of organizations to provide educational resources and support through evidence-based programming, training, research, and evaluation to effectively promote athlete health and wellness thereby fostering lifelong athlete development. The Institute accomplishes this by providing valuable technical and research/evaluation support for organizations that serve athletes.

North Carolina Entrepreneurship Center
1718 MHRA Building
(336) 256-8649
ncec.uncg.edu

The North Carolina Entrepreneurship Center (NCEC) is a campus-wide, cross-disciplinary center that has community engagement building student and community connections as its primary focus.

Our mission is to help entrepreneurs start and grow their businesses, and to serve as a catalyst for the creation of sustainable and globally competitive enterprises in the Piedmont Triad, North Carolina, and beyond.

NCEC offers a range of outreach, instructional, and research opportunities including seminars, workshops and conferences featuring entrepreneurship education for students and faculty. It also offers extra-curricular entrepreneurial opportunities including public forums to educate the campus and community about entrepreneurship; lectures by visiting experts in various types of entrepreneurship; and business idea competitions and programs that create diverse opportunities for growing the entrepreneurial mindset.

The SERVE Center at UNCG
Dixon Building
Gateway University Research Park
5900 Summit Avenue
Brown Summit, NC
(336) 315-7400 or (800) 755-3277
www.serve.org

The SERVE Center at UNCG is an educational research and evaluation, technical assistance, training, and dissemination center. Since 1991, we have worked with educators and policymakers in the Southeast and nationally on improving educational outcomes. Our research and evaluation projects have ranged from large-scale experimental designs to small-scale qualitative studies on topics extending from early childhood to high school reform. We have conducted over 200 program evaluations for states, districts, schools, and other organizations. Our work is funded by a variety of sources including contracts (with federal entities, states, districts, schools, and others) and competitive grant awards. Key aspects of current work are:
• Services for at-risk students. A cornerstone of SERVE’s work in helping to improve services in this area is the operation of the National Center for Homeless Education (NCHE funded by the U.S. Department of Education). NCHE at SERVE Center operates as a national information clearinghouse and technical assistance provider to support the implementation of the McKinney-Vento Act (Title X, Part C of the No Child Left Behind Act). SERVE Center also operates the North Carolina state homeless education program.

• Evaluating high school reform. Through funding from the Institute of Education Sciences, SERVE is conducting a seven-year experimental study of the impact of early college high schools in North Carolina. We are also evaluating the scale-up of this reform model nationally (serving as project evaluators for two U.S. Department of Education Investing in Innovation projects that seek to apply early college high school principles to traditional high schools).

• Program evaluation services. SERVE provides a variety of research and evaluation services to states, districts, higher education institutions, and nonprofit agencies. For example, we currently have contracts to evaluate the Read to Achieve and the 21st Century Community Learning Programs in North Carolina and various other K-12 curriculum and teaching enhancement projects.

FINANCIAL SUPPORT
Students receiving financial support from the University through a non-service fellowship or a service appointment are required to maintain enrollment in a minimum of six semester hours in a graduate degree program for the duration of the award (excluding summer). They must have been admitted to the University unconditionally and have maintained a B (3.0) average. Service hours may not exceed 20 hours per week in total.

Full-time graduate students may not be employed for more than 20 hours per week inclusive of assistantship hours. Normally, a student who has a fellowship or service appointment will not work outside the University. Under extraordinary circumstances, with the recommendation of the department and approval of the Vice Provost for Graduate Education, a student who has a fellowship or service appointment may be granted special permission to work outside the University.

UNCG Fellowships and Assistantships
Highly competitive, a select number of non-service fellowships and scholarships are awarded on merit. Outstanding students may be nominated by their departments for these highly competitive awards. For a complete listing of fellowships awarded annually by UNCG, please refer to the UNCG Financial Aid Directory. Please contact the department or program of interest for more information.

Assistantships are work-related financial stipends requiring 20 hours of weekly work. This may involve teaching, research, or employment in a university office or a community-based organization. Assistantships are available through The Graduate School upon recommendation of the department. Prospective students who wish to be considered for an award should indicate such an interest on the admission application. If already enrolled, students should notify the Director of Graduate Study of their major department and make application by letter addressed to the department.

Stipends vary by program, level of degree, assigned responsibility, and workload. Stipends are paid as scheduled by employers. Students are reminded to make financial arrangements accordingly. Please contact the department or program of interest for more information.

Tuition Waivers.
Some assistantships may be augmented by a tuition waiver. An in-state waiver covers in-state tuition. Out-of-state waivers reduce out-of-state tuition to in-state costs. Students are responsible for all fees. Please contact the department or program of interest for more information.
Need-Based Grants.
There are a limited number of need-based grants (Graduate Minerva Awards) for incoming master’s students. You must submit a FAFSA form to be considered. Free Application for Federal Student Aid (FAFSA): web fafsa.edu.gov

Non-UNC Greensboro Scholarships, Fellowships and Grants.
Many organizations and institutions, both in the public and private sector, award monies to students for graduate studies. Please contact the department or program of interest for more information.

Veteran’s Benefits.
Information on educational benefits can be found at the Veterans Resource Center:
phone (336) 334-5632, e-mail veterans@uncg.edu, web veterans.uncg.edu

University of North Carolina Campus Scholarships
UNC General Administration funds the UNC Campus Scholarships, which are intended to encourage greater diversity on the campus. Full-time doctoral students at UNCG who are residents of North Carolina and have demonstrated financial need are eligible for these awards. A portion of the UNC Campus Scholarship fund is earmarked for Native American students who meet eligibility requirements.

Student Loans and Campus Jobs
Information on student loan applications and procedures is available on request to the Financial Aid Office. Financial Aid Transcripts and the Free Application for Federal Student Aid are required. All financial aid awarded to UNCG graduate students is coordinated through the Financial Aid Office, which handles disbursements to students in conjunction with the Cashiers and Student Accounts Office. Financial aid budgets for federal loans are based on the cost of attendance, which includes actual tuition and fee charges.

ACADEMIC PROGRAM INVENTORY AND CIP CODES
Academic Program Inventory and CIP Codes
The following is a reference list of currently active UNCG graduate degree programs, as approved by UNC General Administration and Board of Governors. For information about the complete UNC program inventory and CIP codes, visit the UNC General Administration Program and Degree Finder:
https://www.northcarolina.edu/apps/programs/index.php

APPENDICES
Appendix A: Academic Integrity Policy
The Academic Integrity Policy was created by faculty based on the core values and ideals of practice as recommended by the Center for Academic Integrity. The UNCG Faculty Senate reviewed and approved the Academic Integrity Policy. Students are responsible for becoming familiar with the Academic Integrity Policy in all its aspects and for indicating their knowledge and acceptance of the Policy by signing the Academic Integrity pledge for all major work submitted. Specific information on the Academic Integrity Policy and obligations of faculty and students may be found on the UNCG web site, Academic Integrity Policy, or by calling the Office of the Dean of Students at (336) 334-5514.

Appendix B: UNCG Graduate School Guidelines
Best Practices in Advising and Mentoring Graduate Students
Relationships between faculty advisors/mentors and graduate students are integral to graduate education at UNCG. The University has recognized this by adopting formal policies and procedures that govern these relationships, which conveys general expectations for both faculty and graduate students. Many departments have also developed their own guidelines. In addition, there are policies that govern particular dimensions of these relationships:
• Academic progress, grade appeals, or any other issue related to a graduate student’s formal academic program. See the Graduate School Bulletin.
• Academic misconduct. See the Dean of Students website.
• Protected-class discrimination, sexual harassment, or undue favoritism. Such grievances follow the University Policy Manual and are filed with the Dean of Students.

Because many elements of the advising and mentoring relationship are too complex and differentiated to be effectively codified on a campus-wide basis, the Vice Provost for Graduate Education requested that the Graduate Studies Committee and the Graduate Student Association develop and endorse a set of “Best Practices” aimed specifically at faculty in their roles as advisors and mentors to Graduate Students. These are intended to supplement and clarify, rather than replace, existing policies at the College and departmental levels.

One goal of the document is to inform faculty of the behaviors and attitudes that the University community endorses and expects them to aspire to in their roles as advisors and mentors. The document does not enumerate faculty requirements or responsibilities in these activities, however, because the effective implementation of best practices is often specific to departments and/or disciplines and therefore should be tailored to each individual situation. The document is designed, instead, to elicit reflection and discussion that leads to improvement in the quality and effectiveness of faculty advising and mentorship of graduate students within the UNCG community.

A second goal is to provide graduate students with a realistic and balanced view of the behaviors and attitudes they should expect from a faculty advisor or mentor as well as behaviors and attitudes that should be expected of graduate students themselves. A careful reading of the document will reveal that there are often inherent trade-offs between individual elements of best practices; that different combinations of best practices must be implemented for different students; and that advising and mentoring is only one of many claims on a faculty member’s scarce time and resources. Graduate students should also learn that these best practices can be effective only when advisees and mentees are responsive and responsible in their own behaviors and attitudes towards their faculty counterparts.

Despite all efforts to the contrary, problems, tensions, and misunderstanding will sometimes arise between faculty advisors/mentors and graduate students. A third goal of this document is to provide a general set of guidelines that can be used by both faculty and graduate students to identify, discuss and resolve issues that arise between an individual faculty advisor/mentor and an individual student. UNCG provides a framework to assist in the resolution of these matters that is described in the Student Grievance and Appeals Policies and Procedures. The best practices described here are divided into five areas:

- Best practices in the general conduct of mentors and advisors.
- Best practices for mentors and advisors within thesis and dissertation committees.
- Best practices for mentors and advisors in the Professional Development of Students.
- Best practices for mentors and advisors when Administering Financial Support.
- Best practices for graduate students when interacting with mentors and advisors.

This structure has been adopted to provide clarity and focus. Some relationships between advisors or mentors and graduate students involve all four dimensions; in other cases only one or two will pertain. But faculty should recognize and embrace their collective responsibility to assure that each relevant dimension is recognized and addressed for every student.

A. Best Practices in the General Conduct of Mentors and Advisors

In academic units, faculty advisors support the academic promise of graduate students in their program. In some cases, academic advisors are assigned to entering graduate students to assist them in academic advising and other matters. In other cases, students select faculty advisors in accordance with disciplinary interest or research expertise. Advising is manifold in its scope and breadth and may be accomplished in many ways. A student’s academic performance and a faculty member’s scholarly interests may coincide during the course of instruction and research. While advisors help guide students to choose appropriate coursework and assist them in understanding the requirements of the university, a mentor takes a more holistic approach to assisting the
student. This includes helping the student assimilate into the culture of the profession by engaging in activities that might not be a formal part of the curriculum of the program. The mentor helps the student plan a trajectory that will lead to a professional identity that will culminate in successful placement in the job market. Often this may lead to a life-long interest in the graduate’s professional career. Through interaction with the student during his or her academic career, advisors often transition into becoming mentors. Students are encouraged to seek out mentoring relationships with faculty as they progress through their academic studies. Often a circle of mentors is needed to guide the student through the various stages of academic and professional development and may include persons outside the university along with family.

**Investment of Time**
The consensus among excellent mentors is that mentoring requires a significant time commitment on the part of both the mentor and the mentee. Faculty should develop reasonable expectations for themselves in terms of time and effort. By making a commitment to devote time to their students, they are helping to ensure success. Faculty should strive to find ways that maximize efficiency and thus save time but not at the expense of a student’s progress. Also, faculty should expect mutual commitment: time put into advising and mentoring should correspond with the time the student devotes to his/her work. If a faculty member believes an issue is beyond his or her capability or training, he or she should refer a student to an appropriate person or service or work together to investigate possible solutions. Faculty should not impede a graduate student's progress toward the degree in order to benefit from the student's proficiency as a teaching or research assistant. They should refrain from requesting students to do personal work (mowing lawns, baby-sitting, typing papers, etc.) without appropriate compensation. In the classroom, lab, or studio, faculty should strive to create supervisory relations with students that stimulate and encourage them to learn creatively and independently.

**Frequent and Consistent Communication**
- Faculty should communicate face-to-face with students as much as possible, especially for difficult conversations. For communication between regular meetings or on last-minute issues, e-mail and phone conversations are entirely acceptable, but there is no substitute for face-to-face communication. It is prudent for both parties to follow-up “in-person” meetings with written summaries and confirmations. This technique allows both parties to clarify, summarize, and document all important interactions.
- Faculty should clarify expectations and requirements early and explicitly, preferably in writing, including relevant department procedures. Students should acknowledge expectations and requirements. Faculty should provide clear maps of the requirements that each student must meet, including course work, languages, research tools, examinations, and thesis or dissertation, and they should help students to delineate the amount of time expected to complete each step.
- Faculty should be as transparent as possible as often as possible, explaining to students the context of their progress within the program and how their progress affects or is affected by departmental decisions, especially regarding budget considerations, appointments, and long-term strategic planning. Such transparency can avoid misunderstandings based on assumptions and can help a student plan and be motivated to make progress.
- Faculty should acknowledge student contributions to research presented at conferences, in professional publications, or in applications for copyrights and patents.
- Faculty should stay in contact with their colleagues about graduate students. The graduate studies committee chair, department chair, and TA supervisors or administrators may have valuable information about a student or an important process that can save time.
- Faculty should address problems when they arise. The mentoring relationship is a relationship like any other, involving both satisfying and difficult interactions. Sometimes a face-to-face conversation between regular meetings is necessary and useful to address specific problems, real or perceived.
- Early communication regarding potential problems and written documentation of all related interactions is essential. All communication, especially written, should be deliberate and considerate. Remember that e-mail is a public record. Do not hesitate to contact the Graduate School (336-334-5596) or University Counsel (336-334-3067) with questions or concerns.
**Intellectual ownership**

Intellectual ownership of joint projects, particularly between faculty members and students, should be clear and explicit to everyone involved in a project before the project is undertaken. As the faculty-graduate student relationship matures and intensifies, direct collaborations may evolve which entail the sharing of authorship or rights to intellectual property developed in research or other creative or artistic activity. Such collaborations are encouraged and are a desired outcome of the mentoring process.

**Clear goals and reasonable expectations**

Faculty should set clear goals and outline reasonable expectations. In order to help predict and monitor a student’s academic progress, faculty should consider what work will need to be done for a student to complete his or her program, and students should be encouraged to break this work down into the number of years, then semesters, then months, that it will take to finish in a timely manner.

**Cultural differences**

Cultural differences can easily and unexpectedly lead to miscommunication about expectations and procedures. Contact the Graduate School (336-334-5596), the Office of Multicultural Affairs (336-334-5090) or the International Programs Center (336-334-5404) for assistance.

**Varieties of student goals**

Students come into graduate programs because they want to contribute something to the discipline and to society. Faculty should be aware of these external motivations and should be prepared to help students identify a variety of paths that are not limited to careers in academia.

**Valuing commitment to graduate advising and mentoring**

If programs wish to improve their advising and mentoring practices, formal recognition of the time and effort faculty spend on these duties is recommended. No matter how obvious the inherent value of good advising and mentoring, it can be difficult to make such time- and energy-intensive practices a priority if they are unrecognized by departments or administration or if they take time away from other, more professionally visible activities. However, the long-term benefits of quality mentoring to the progress of the field, to the competitiveness of the program, and to the development of individual UNCG faculty as scholars and educators are worth the investment.

- Faculty are encouraged to start conversation in their departments about how better to inform colleagues of advising responsibilities and how to recognize and support each other in these major commitments.
- Faculty should be sure to include all stakeholders in these conversations. There is often a lack of communication between the TA supervisors and faculty advisors, even when both parties are mentoring the same graduate students. Faculty should look for ways to work together closely with staff, individual advisors, TA supervisors, and Graduate Studies Committee Chairs when communicating about students.
- Faculty should encourage a departmental culture of recognition for excellence in advising and mentoring, recognizing the time and effort required to be a good advisor or mentor through such activities as a departmental or college-level awards and documented consideration of mentoring and advising activities in tenure, promotion, and hiring decisions.
B. Best Practices for Mentors and Advisors within Thesis and Dissertation Committees

Structured and predictable environments
Faculty can best foster effective communication, efficient use of time, and consistent progress by developing and maintaining a structured and predictable environment for their graduate students. When both parties have a clear idea of what to expect and when, it is easier to prepare for exchanges. Faculty should familiarize themselves with policies that affect their graduate students.

- Faculty should hold regular, frequent meetings.
- Faculty should set students’ expectations for regular meetings explicitly and from the beginning, making it clear that if a student wants him or her as an advisor, the student must commit to regular meetings as standard procedure. Faculty should explain and demonstrate the rationale and usefulness of such meetings, and they should gather feedback and assess their relevance and usefulness.
- With input from the student, faculty should develop a written plan or progress agreement document which clearly outlines goals, deadlines for each goal, and steps for achieving them.
- Faculty should help students divide larger goals and projects into small manageable tasks. For instance, students may find it useful to divide large projects into units of time worked (i.e. 2 hour blocks with a 10 minute break in between) rather than by task (i.e. finish chapter 2).
- At the end of each semester, faculty and students together should review the written plan and discuss which goals were met and unmet. Based on that discussion, they should adapt and develop goals for the next semester’s progress.
- Faculty should excuse themselves from serving on graduate committees when circumstances of undue favoritism exist (see University Policy Manual) that could result in a conflict of interest.
- Faculty should serve on graduate student committees and impartially evaluate student progress and performance in regular and informative ways consistent with the practice of the field, regardless of religion, race, gender, sexual orientation, nationality, or other criteria that are not germane to academic evaluation.

Timely and consistent written feedback
Predictable, consistent feedback encourages students to maintain an active level of production and accountability. The lack of regular and timely feedback can slow the student’s momentum and disrupt his or her progress toward the degree. Faculty should communicate clearly the turnaround time students should expect for feedback on written work; for example, four weeks is not an uncommon turnaround period for a standard dissertation chapter.

Writing groups and sponsored “boot camps”
Faculty should encourage students to seek information about Graduate School boot camps, which take place over several days or a week and offer graduate students the opportunity to write at a dedicated time and place for an extended period. Faculty mentors as well as colleagues are available to discuss writing with students. The Graduate School and a number of the academic programs also support formal and informal peer writing support groups on an ongoing basis. For more information, contact the Graduate School.

C. Best Practices for Mentors and Advisors of Students’ Professional Development

Demonstrating interest
Faculty should demonstrate interest in graduate student projects and research activities. If faculty devote time to students and communicate with them clearly and regularly, this interest will be evident. There are other things faculty can do to help advisees become well-rounded and competitive colleagues.

- Faculty should model and maintain professional and ethical standards of conduct with students, colleagues and staff at all times. Unethical behavior such as discrimination, harassment, special relationships unduly influencing advising or committee composition, personal rivalries or lack of civility is unacceptable under any circumstances.
- Review UNC’s Policy Manual
- The UNCG Office of Research Integrity web site helps faculty and students stay current on issues of conducting ethical research.
Faculty should help students locate the best resources for their graduate education progress. The following are important resources:

- The Graduate School’s Current Students’ Page for Thesis and Dissertation Manual;
- Graduation Application and Information;
- Teaching Assistant Handbook;
- Health Insurance;
- On-Campus Employment
- Workshops and Forums.

Faculty should help teach students about the importance of networking outside the lab, outside the subfield, and outside the department.

Faculty should encourage students to avoid becoming too compartmentalized and isolated during their graduate studies both in a personal and in a disciplinary sense by encouraging them to find appropriate professional and community networks and support groups. These groups may be within their graduate student cohort or department or a student or community group.

Professional development

Faculty should encourage and support the professional development of graduate students, providing them with as much information and assistance as possible regarding programmatic and professional opportunities and decisions. Such support includes networking and document/skill development. The Graduate School, Faculty Teaching and Learning Commons, Career Services Center, and The Counseling and Testing Center regularly offer free workshops and services for graduate students. If faculty are interested in similar workshops focused on a department or college’s specific needs, they should contact the Graduate School. Faculty should also:

When appropriate, encourage graduate students to participate in professional meetings or perform or display their work in public settings.
Stimulate in each graduate student an appreciation of teaching.
Create an ethos of collegiality so that learning takes place within a community of scholars.
 Prepare students to be competitive for employment that includes portraying a realistic view of the field and the market at any given time and making use of professional contacts for the benefit of their students, as appropriate.
 Assist graduate students to develop grant-writing skills, where appropriate.
 Help students develop artistic, interpretive, writing, verbal, and quantitative skills, when appropriate, in accordance with the expectations of the discipline.

Identifying areas for improvement

Although it can be difficult to discern and confront the line between (1) appropriately providing resources and help and (2) identifying a student who may lack the ability to succeed in a program, sometimes perceived shortcomings can be related to cultural or other differences. In such cases, faculty should try to identify areas that need improvement and help build up a student’s skills in those areas specifically.

- Writing style and ability is a common area of concern. The Writing Center offers support for writers at all levels to address writing development. However, every advisor/mentor should be able to assess writing “problems” and determine whether the issue involves editing and proofreading or, more broadly, the student’s ability to think and write successfully at the graduate level.
- Writing Groups offered through the Graduate School are open to MA and Ph.D. students and candidates in any discipline. Each group, led by a doctoral student, will be composed of up to eight writers who will meet three hours per week at an appointed time determined by their availability. These regular, collaborative, and collegial meetings are a great way to encourage motivation, keep in contact with other graduate students, and receive careful, individualized feedback on your work from colleagues. For more information, students look online, register online at the beginning of the fall or spring semester, or contact the Graduate School.
Resources for professional development at UNCG:

- The Graduate School’s Graduate Student Life and Professional Development Page: (workshops, programs, and resources for graduate students and faculty on topics related to the dissertation process, academic career development, careers outside academia, publication and other scholarly pursuits, IRB guidelines, and the First Friday program)
- Faculty Teaching and Learning Commons: assessment and consultation services for faculty and TAs; workshops and services on teaching techniques and portfolio development and documentation.
- Career Services Center: on-line tools; resources and personal consultation services for self and career exploration; academic and non-academic job searches; document development; interviewing and negotiation.
- Counseling Center: stress management workshops; personal and group psychological and psychiatric counseling.
- Human Resources: insurance; benefits; leave policies.
- Preparing Future Leaders Program: Preparing Future Faculty and Preparing Future Professionals prepare students for careers in academia or in business, industry, government and non-profit agencies.

D. Best Practices for Mentors and Advisors in Administering Financial Support

Clarity about funding

Faculty should inform students about how funding in individual departments operates. Graduate students should be made aware that financial support can come in the form of assistantships, scholarships, fellowships, and student loans. Financial support here refers to funding available through departments such as assistantships, fellowships, scholarships, and travel funds. Faculty members who administer financial aid should explain to students when a financial award is contingent for any reason and emphasize that these contingencies need to be taken into account in a student’s personal financial planning. Departments and faculty members should to provide students with prompt notice of funding availability and awards.

When funding is initially offered to graduate students, departments should communicate:

- How much funding is being offered?
- How long this funding should be available (i.e., for one semester, for one year).
- Expectations for receiving or continuing to receive this funding, including performance expectations and any evaluations of work that can be expected. Departments should also carefully differentiate between the expectations for different types of funding (e.g. fellowships, scholarships, assistantships, etc.).
- How stable the funding is (e.g., does it come from a relatively stable endowment or grant? Is it contingent on state funding?).

This information may be difficult to provide because of fluctuating state and university budgets, but departments should be as transparent as possible with students about both the current and the anticipated future funding situations.

Timely information about funding

Faculty should provide information about funding as soon as possible. Faculty should be cautious, however, not to offer funding to students that is not yet approved by the university. Once funding is approved and departments know how it will be allocated, students should be promptly notified via the appropriate channels.
E. Best Practices for Graduate Students When Interacting with Mentors and Advisors

Graduate student conduct

It is essential that graduate students conduct themselves in a mature, professional, and civil manner in all interactions with faculty and staff. They should recognize that

- The faculty advisor provides the intellectual and instructional environment in which the student conducts research, and may, through access to teaching and research funds, also provide the student with financial support.
- Faculty have broad discretion to allocate their own time and other resources in ways which are academically productive.
- The faculty advisor is responsible for monitoring the accuracy, validity, and integrity of the student’s research. Careful, well-conceived research reflects favorably on the student, the faculty advisor, and the University.

Students must exercise the highest integrity in taking examinations and in collecting, analyzing, and presenting research data. They should acknowledge the contributions of the faculty advisor and other members of the research team to the student’s work in all publications and conference presentations, and maintain the confidentiality of the faculty advisor’s professional activities and research prior to presentation or publication, in accordance with existing practices and policies of the discipline. Graduate students should also take primary responsibility to inform themselves of regulations and policies governing their graduate studies.

Graduate education is structured around the transmission of knowledge at the highest level. In many cases, graduate students depend on faculty advisors to assist them in identifying and gaining access to financial and/or intellectual resources which support their graduate programs. In some academic units, the student’s specific advisor may change during the course of the student’s program. The role of advising may also change and become a mentoring relationship. The reward of finding a faculty mentor implies that the student has achieved a level of excellence and sophistication in the field, or exhibits sufficient promise to merit the more intensive interest, instruction, and counsel of faculty.

To this end, it is important that graduate students:

- Devote an appropriate amount of time and energy toward achieving academic excellence and earning the advanced degree.
- Be aware of time constraints and other demands imposed on faculty members and program staff.
- Take the initiative in asking questions that promote understanding of the academic subjects and advance the field.
- Communicate regularly with faculty advisors, especially in matters related to research and progress within the graduate programs.

Endorsed by the Graduate Studies Committee March 28, 2014

Appendix C: UNCG’s Vision for Teaching and Learning

UNCG embraces student learning as its highest priority and provides exemplary learning environments. The University establishes a diverse community of learning in which individual differences are valued and interactions are encouraged in an atmosphere of mutual respect.

The faculty are committed to introducing students to the most important knowledge and research in their disciplines, fostering intellectual depth and breadth, and opening students to new possibilities for understanding themselves and the world. The faculty employ the growing body of knowledge about learning and work continually to evaluate and improve their teaching methods and materials. UNCG views learning as a shared responsibility, and accordingly:

- Maintains clear, high and consistent learning goals,
- Provides a variety of opportunities which foster intellectual growth,
• Empowers individuals to take responsibility for their own learning,
• Recognizes and supports diverse learning styles and levels of development,
• Incorporates appropriate informational and instructional technologies,
• Encourages the integration of knowledge across disciplines, and
• Utilizes assessment, evaluation and feedback to improve teaching and learning.

UNCG expects all students to communicate clearly and to make effective use of technology appropriate to their studies. Students are encouraged to be actively engaged in their education. UNCG graduates should be ready to continue as lifelong learners and to face the challenges that will confront them as responsible citizens of the state, the nation and the world.

Appendix D: Guidelines for Graduate Distance Learning Courses

In this era of rapid technological advances and the changing needs of traditional and nontraditional students, we recognize the need (and desirability) of taking courses and programs to our constituency more often and in different forms. Many distance learning courses and programs will be delivered in traditional fashion, but at distant sites; other courses will rely on Web and video technologies for most or all of their delivery. Further, it is impossible to know what additional, desirable technologies will emerge in the future. Regardless of how learning takes place, the quality of courses must be assured to students. In this light, the following assurances are warranted:

**Departmental/Unit Responsibility:**
- Academic departments will be responsible for maintaining the same high standards for all courses, regardless of the mode of delivery.
- Academic departments/units are responsible for assuring that distance learning delivery of graduate courses, including electronically delivered instruction, is comparable in quality and content to the corresponding traditional campus instruction.
- Essential student services and course-related materials (books, journals, computer facilities, laboratories and other resource material) are accessible at all sites.
- Fair and appropriate staffing policies are adopted by the delivering unit as it relates to distance and electronic instruction.
- Departments/units using distance or electronically delivered instruction will describe a process for how and when courses and programs will be evaluated. In general, courses and programs will be evaluated on schedules that are the same or similar to those used with traditionally taught courses/programs.
- Courses and programs will be assessed regularly, based on standards determined by departmental units. Delivery methods and content (as well as those aspects of courses evaluated in traditional courses) will be assessed regularly.

**Administrative Responsibility:**
- Although distance and electronically delivered courses must be identified in the UNCG database of courses, they will not be so distinguished on students’ transcripts from courses delivered in more traditional ways.
- Degree programs that require students to complete more than one-third of its hours through distance learning will consult with the Graduate Studies Committee in advance.
- Resources will be made available to assist faculty who wish to place courses/programs on the Web. In this manner, students and faculty can be assured that technologies are being used most appropriately.
- Faculty will receive the same coursework credit for courses taught through various distance delivery media as for those taught traditionally.
Faculty/Student Responsibility:

- Course/program prerequisites clearly describe any technical/technological skills necessary for course participation. Any hardware or software requirements are included in this description. This information should be included in a course syllabus or other appropriate document.
- Any required (or desirable) supplemental materials (e.g., library requirements, laboratory space/specifications, etc.) will be clearly described.
- Courses/programs employ explicit strategies that promote interaction between faculty and students and among students. Student-faculty interactions include faculty availability (“office hours”) via face-to-face, e-mail, or telephone meetings.

Student assessment will consider any limitations of the delivery method, like security, graphics resolution, audio difficulties, etc. Assessment strategies should be tailored to the specific needs of students, site and delivery mode, and should be examined during the normal course of evaluation (e.g., should not be separate from typical course evaluation procedures).

Appendix E: Policy on Discriminatory Conduct

The University of North Carolina at Greensboro is committed to the principle that educational and employment decisions should be based on an individual’s abilities and qualifications and should not be based on personal characteristics or beliefs that have no relevance to academic ability or to job performance. Accordingly, UNCG supports policies, curricula and co-curricular activities that encourage understanding of and appreciation for all members of its community. UNCG will not tolerate any harassment of, discrimination against, or disrespect for persons. UNCG is committed to equal opportunity in education and employment for all persons regardless of race, color, creed, religion, gender, age, national origin, disability, military veteran status, political affiliation or sexual orientation.

This policy applies internally as well as to the University’s relationships with outside organizations, except to the extent that those organizations, including the federal and State government, the military, ROTC, or private employers who do not yet recognize sexual orientation as protected.

The University’s educational and employment practices are consistent with Section 103 of The Code of The University of North Carolina. In addition, the University complies with North Carolina General Statutes 126-16 and 126-17, Title VII of the Civil Rights Act of 1964, as amended, the Civil Rights Restoration Act of 1988, Title IX of the Education Amendments of 1972, the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Vietnam Era Veteran’s Readjustment Assistance Act of 1974, and other Federal and State laws relating to discrimination in educational programs and employment. In accord with Executive Order 11246, the University has in place an Affirmative Action Plan which states the University’s commitment to the concept and practice of equal employment opportunity for all persons regardless of race, color, creed, religion, gender, age, national origin, disability, military veteran status, political affiliation or sexual orientation.

Any employee who believes he or she has been treated unfairly based on any of the above characteristics should contact his or her immediate supervisor, or the next level supervisor if the immediate supervisor is the subject of the allegation. Students should contact the Office of Student Affairs.

Retaliatory action of any kind will not be tolerated against any person for making a good faith report of discrimination or on the basis of that person’s participation in any allegation, investigation or proceeding related to the report of discriminatory conduct. Every UNCG employee and student is charged with the responsibility to be aware of and abide by this policy. Failure to abide by this policy may subject the violator to disciplinary action up to and including dismissal. The UNC Greensboro discriminatory conduct policy includes protection for transgendered individuals, and actual or perceived gender identity or expression, within its prohibited discriminatory conduct.
Appendix F: Drug Policy and Operational Procedures

I. Policy on Illegal Drugs and Alcohol

The University of North Carolina at Greensboro seeks to maintain an environment that supports the pursuit and dissemination of knowledge. All members of the academic community, including students, faculty, and staff members, share responsibility for protecting the academic environment by exemplifying high standards of professional and personal conduct. Use of illegal drugs by any member of the community interferes with the activities through which the goals of the University can be realized. Therefore, such practices will not be tolerated. The University will take all actions necessary, consistent with law and University policy, to eliminate the use of illegal drugs from the University community.

This policy has been developed in accord with “The University of North Carolina Policy on Illegal Drugs,” adopted by the Board of Governors January 15, 1988 and is available online through the UNC Policy Manual at http://www.northcarolina.edu/content.php/legal/policymanual/uncpolicymanual_1300_1.htm. The Policy establishes the framework for programs designed to educate the campus community on the harmful effects of illegal substances and to assist affected persons in their efforts to become rehabilitated. It also provides guidance for punishing violators.

Additionally, the service and consumption of alcoholic beverages is strictly regulated by law. All persons coming into the campus of The University of North Carolina at Greensboro are charged with compliance with these laws. Noncompliance may subject the University to legal liability. In order to ensure against violations of the law, the possession, service and consumption of alcoholic beverages on campus are subject to university policies and procedures (http://sa.uncg.edu/handbook/wp-content/uploads/alcohol3.pdf).

II. Applicability

This policy is applicable to the following: students, faculty, senior administrative officers, non-faculty EPA employees (non-faculty personnel whose employment is exempt from the State Personnel Act), and SPA employees (staff personnel whose employment is subject to the State Personnel Act).

III. Notice

Article 5 of Chapter 90 of the North Carolina General Statutes makes it a crime to possess, manufacture, sell, or deliver or possess with intent to sell or deliver a controlled substance. N.C.G.S. 90-95. As citizens, all members of the University community are expected to know and comply with these laws. The North Carolina General Statutes are readily available in the Library or online at http://www.ncga.state.nc.us/gascripts/Statutes/Statutes.asp.

This Policy shall be publicized in catalogs and other materials prepared for all enrolled and prospective students and in appropriate materials distributed to faculty members, senior administrative officers, non-faculty EPA employees, and SPA employees.

IV. Educational and Rehabilitation Programs

The University shall establish and maintain a program of education designed to help all members of the University community avoid involvement with illegal drugs.

This program shall emphasize these subjects:

- The incompatibility of the use or sale of illegal drugs with the goals of the University;
- The legal consequences of involvement with illegal drugs;
- The medical implications of the use of illegal drugs; and
- The ways in which illegal drugs jeopardize an individual’s present accomplishments and future opportunities.
The University shall provide information about drug counseling and rehabilitative services available to University students and employees either through campus-based programs or through community-based organizations.

Persons who voluntarily avail themselves of these University services or programs are assured that applicable professional standards of confidentiality will be observed.

V. Disciplinary Proceedings and Sanctions
A. Preliminary Determinations
The University will initiate a disciplinary proceeding against a student, faculty member, senior administrative officer, EPA non-faculty employee, or SPA employee whenever both of these requirements are met:

- There is a reasonable basis for believing that the person has violated this policy or North Carolina law pertaining to controlled substances; and
- The alleged conduct is deemed to harm the interests of the University.

The first requirement above, can be satisfied by either of the following:

- A conviction or a guilty plea resulting from criminal prosecution; or
- Independent evidence obtained by University officials including police officers. (See also section VIA.)

It should be noted that though an offense may be the subject of legal action by the civil authorities, University officials are nonetheless free to initiate disciplinary action that may result in additional penalties.

When the above requirements are met, the University will initiate disciplinary action against the alleged violator according to established procedures that safeguard the rights and interests of students and employees.

Procedures will vary, depending on classification of the person facing disciplinary action:

Students. Student Code of Conduct for The University of North Carolina at Greensboro, approved by the Chancellor.

Faculty Members. The University of North Carolina at Greensboro’s Regulations on Academic Freedom, Tenure, and Due Process, Section 7. Discharge or Imposition of Serious Sanction, adopted by the Board of Trustees.

Senior Administrative Officers. Policies Concerning Senior Administrative Officers of The University of North Carolina, adopted by the Board of Governors.

Non-Faculty EPA Employees. Personnel Policies for Designated Employment Exempt from the State Personnel Act, adopted by the Board of Trustees.

SPA Employees. Relevant regulations of the Office of State Personnel.

Decisions reached by these processes are reviewable according to normal appeal mechanisms.

B. Penalties for Students, Faculty, Senior Administrative Officers, and Non-Faculty EPA Employees
For these persons, the penalties to be imposed may range from written warnings with probationary status to expulsions from enrollment and discharges from employment. The following minimum penalties shall be imposed for the particular offenses described:

Manufacturing, Sale, or Delivery of Illegal Drugs
The term “trafficking” is used in its generic sense, not in its specific application to selling, manufacturing, delivering, transporting, or possessing controlled substances in specified amounts that is the subject of North Carolina General Statute 90-95(h).

For the illegal manufacture, sale, or delivery, or possession with intent to manufacture, sell or deliver, of any controlled substance identified in Schedule I, N.C. General Statutes 90-89, or Schedule II, N.C. 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, senior administrative officer, or non-faculty EPA employee shall be discharged.

For a first offense involving the illegal manufacture, sale or delivery, or possession with intent to manufacture, sale or delivery, 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, senior administrative officer, or non-faculty EPA employee shall be discharged.

**Illegal Possession of Drugs**

For a first offense involving the illegal possession of any controlled substance identified in Schedule I, N.C. General Statute 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.

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 suspension from enrollment or from employment for a period of at least one semester or its equivalent.

For second or other subsequent offenses involving the illegal possession of controlled substances, progressively more severe penalties shall be imposed, including expulsion of students and discharge of faculty members, senior administrative officers, or EPA non-faculty employees.

**Suspension Pending Final Disposition**

When a student, faculty member, senior administrative officer, or non-faculty EPA employee has been charged by the University with a violation of policies concerning illegal drugs, he/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 the Chancellor’s designee deems 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.

**Penalties for SPA Employees**

Discipline for SPA employees is prescribed in regulations published by the State Personnel Commission. Violations of this Policy and of North Carolina state law on controlled substances shall deem “personal misconduct” actionable under these rules. Penalties for offenses described herein will be in accordance with state policy.

**VI. Operational Procedures**

Under the University’s Policy on Illegal Drugs (hereafter referred to as “the Policy”), disciplinary proceedings against a student will be initiated when two requirements are met:

- There is a reasonable basis for believing that the person has violated this Policy or North Carolina law pertaining to controlled substances; and
- The alleged conduct is deemed to harm the interests of the University.

The first requirement, above, can be satisfied by either of the following:

- A conviction or a guilty plea resulting from criminal prosecution, or
- Independent evidence obtained by University officials, including police officers.

This statement establishes certain procedures and guidelines for determining when the second requirement is met.

**A. Conduct Occurring Beyond Campus Boundaries**
Alleged conduct involving the illegal use of drugs occurring beyond the boundaries of the campus may be considered harmful to the University. The Administrative Hearing Officer in the Division of Student Affairs will initiate disciplinary action when these minimal conditions are present:

- Such alleged conduct occurs during a period in which the student is actively enrolled as a student at the University; and
- Such alleged conduct has resulted in charges of possession/trafficking made by a civil authority.
- Other conduct occurring beyond the campus may also be actionable under the Policy on Illegal Drugs, depending on the circumstances.

**B. Conduct Occurring Within Campus Boundaries**

The officer will report the incident to the appropriate University office, as follows, for consideration of whether conduct action under the Policy should be taken:

All University Police and personnel encountering instances of conduct involving illegal drugs will make reports to the Associate Dean of Students for disciplinary action.

The report of drug-related behavior to the Associate Dean of Students may be accompanied by an explanation of mitigating factors. Such mitigating factors may include, but are not limited to, the isolated or singular character of the incident as evidenced by a student’s unusual conduct in comparison with what is known to be his/her normal behavior, and the absence of prior reports of similar acts by such student.

Charges will be made and hearings will be held in accord with the Student Code of Conduct published by the Division of Student Affairs and contained in the UNCG Calendar/Student Handbook and on the University’s Website (http://studentconduct.uncg.edu/).

**Appendix G: Residence Status for Tuition Purposes**

The tuition charge for persons who qualify as North Carolina residents for tuition purposes is substantially less than that for nonresidents. An interpretation of the North Carolina law (General Statute 116–143.1) governing residence classification for tuition purposes follows. A more complete explanation of the statute and the procedures under the statute is contained in A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. The Manual is the controlling administrative statement of policy on this subject. Copies of the Manual are available for inspection in the Library, and online (https://www.northcarolina.edu/sites/default/files/documents/state_residence_classification_manual.pdf).

The basis for determining the appropriate tuition charge rests upon whether a student is a resident or a nonresident for tuition purposes. Each student must make a statement as to the length of his or her residence in North Carolina, with assessment by the institution of that statement to be conditioned by the following.

**Residence**

To qualify as a resident for tuition purposes, a person must become a legal resident and remain a legal resident for at least twelve months immediately prior to classification. Thus, there is a distinction between legal residence and residence for tuition purposes. Furthermore, twelve months legal residence means more than simple abode in North Carolina. In particular it means maintaining a domicile (permanent home of indefinite duration) as opposed to “maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education.” The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification, who must show his or her entitlement by the preponderance (the greater part) of the residency information.
Initiative
Being classified a resident for tuition purposes is contingent on the student’s seeking such status and providing all information that the institution may require in making the determination. Failure to provide such information results in an out-of-state classification.

Parents’ Domicile
If an individual, irrespective of age, has living parent(s) or court-appointed guardian of the person, the domicile of such parent(s) or guardian is, prima facie, the domicile of the individual; but this prima facie evidence of the individual’s domicile may or may not be sustained by other information. Further, nondomiciliary status of parents is not deemed prima facie evidence of the applicant child’s status if the applicant has lived (though not necessarily legally resided) in North Carolina for the five years preceding enrollment or re-registration.

Effect of Marriage
Marriage alone does not prevent a person from becoming or continuing to be a resident for tuition purposes, nor does marriage in any circumstance insure that a person will become or continue to be a resident for tuition purposes. Marriage and the legal residence of one’s spouse are, however, relevant information in determining residentiary intent. Furthermore, if both a husband and wife are legal residents of North Carolina and if one of them has been a legal resident longer than the other, then the longer duration may be claimed by either spouse in meeting the twelve-month requirement for in-state tuition status.

Military Personnel
A North Carolinian who serves outside the State in the armed forces does not lose North Carolina domicile simply by reason of such service. North Carolina residents who serve outside the State may prove retention or establishment of residence by reference, as in other cases, to residentiary acts accompanied by residentiary intent.

In addition, a separate North Carolina statute (G.S. 116-143.3) affords tuition rate benefits to certain military personnel and their dependents, even though not qualifying for the in-state tuition rate by reason of twelve months legal residence in North Carolina. Members of the armed services, while stationed on active duty and concurrently living in North Carolina, may be charged the in-state tuition rate. A dependent relative of a service member stationed in North Carolina is also eligible to be charged the in-state tuition rate while the dependent relative is living in North Carolina with the service member and if the dependent relative has met any requirement of the Selective Service System applicable to the dependent relative.

Qualifying active duty military members and the dependent relatives thereof are extended a “military grace period” if the military member is reassigned outside of North Carolina or retires while the member or dependent is enrolled in an institution of higher education. During this grace period, the military member or dependent relative thereof is eligible for the in-state tuition rate as long as he or she is continuously enrolled in the degree or other program in which he or she was enrolled at the time of the reassignment or retirement. Qualifying members and dependents also remain eligible to pay the in-state rate if the active duty member receives Honorable Discharge so long as the member or dependent establishes legal residence in North Carolina within thirty (30) days and is continuously enrolled in the degree program in which he or she was enrolled at the time of the Honorable Discharge.

Additionally, any nonresident North Carolina Guard Members in reserve or active status are eligible for the in-state rate and all applicable mandatory fees.

These tuition benefits may be enjoyed only if the applicable requirements for admission have been met; these benefits alone do not provide the basis for receiving those derivative benefits under the provisions of the residence classification statute reviewed elsewhere in this summary. Application for this benefit must be made prior to the beginning of the first enrolled term for which the benefit is sought.
Grace Period
If a person (1) has been a bona fide legal resident of the required duration, (2) has subsequently lost North Carolina legal residence while enrolled at a public institution of higher education, that person may continue to enjoy the in-state tuition rate for a grace period of twelve months measured from the date on which North Carolina legal residence was lost, provided the loss of in-state residence status is not a result of institutional error. If the twelve months ends during an academic term for which the person is enrolled at a State institution of higher education, the grace period extends, in addition, to the end of that term. The fact of marriage to one who continues domiciled outside North Carolina does not by itself cause loss of legal residence marking the beginning of the grace period.

Minors
Minors (persons under 18 years of age) usually have the domicile of their parents, but certain special cases are recognized by the residence classification statute in determining residence for tuition purposes.

a) If a minor’s parents live apart, the minor’s domicile is deemed to be North Carolina for the time period(s) that either parent, as a North Carolina legal resident, may claim and does claim the minor as a tax dependent, even if other law or judicial act assigns the minor’s domicile outside North Carolina. A minor thus deemed to be a legal resident will not, upon achieving majority before enrolling at an institution of higher education, lose North Carolina legal residence if that person (1) upon becoming a legal adult “acts, to the extent that the person’s degree of actual emancipation permits, in a manner consistent with bona fide legal residence in North Carolina” and (2) “begins enrollment at an institution of higher education not later than the fall academic term following completion of education prerequisite to admission at such institution.”

b) If a minor has lived for five or more consecutive years with relatives (other than parents) who are domiciled in North Carolina and if the relatives have functioned during this time as if they were personal guardians, the minor will be deemed a resident for tuition purposes for an enrolled term commencing immediately after at least five years in which these circumstances have existed. If under this consideration a minor is deemed to be a resident for tuition purposes immediately prior to his or her eighteenth birthday, that person on achieving majority will be deemed a legal resident of North Carolina of at least twelve months duration. This provision acts to confer in-state tuition status even in the face of other provisions of law to the contrary; however, a person deemed a resident of twelve months duration pursuant to this provision continues to be a legal resident of the State only so long as he or she does not abandon North Carolina domicile.

Lost but Regained Domicile
If a student ceases enrollment at or graduates from an institution of higher education while classified a resident for tuition purposes and then both abandons and reacquires North Carolina domicile within a twelve-month period, that person, if he or she continues to maintain the reacquired domicile into re-enrollment at an institution of higher education, may re-enroll at the in-state tuition rate without having to meet the usual twelve-month durational requirement. However, any one person may receive the benefit of the provision only once.

Change of Status
A student admitted to initial enrollment in an institution (or permitted to re-enroll following an absence from the institutional program which involved a formal withdrawal from enrollment) must be classified by the admitting institution either as a resident or as a nonresident for tuition purposes prior to actual enrollment. A residence status classification once assigned (and finalized pursuant to any appeal properly taken) may be changed thereafter (with corresponding change in billing rates) only at intervals corresponding with the established primary divisions of the academic year.
Transfer Students
When a student transfers from one North Carolina public institution of higher education to another, he or she is treated as a new student by the institution to which he or she is transferring and must be assigned an initial residence status classification for tuition purposes.

Aliens
Aliens lawfully admitted into the United States for permanent residence are subject to the same considerations as citizens in the determination of residentiary status for tuition purposes. Certain classes of both resident and nonresident aliens are subject to these same considerations, but certain classes are not. More complete information on the residence classification of aliens may be obtained from the state residence classification manual.

Tuition Waivers
A separate North Carolina statute (G.S. 115B) provides tuition waivers for the following persons: 1) legal North Carolina residents who are at least age 65; 2) certain family members of deceased or totally and permanently disabled emergency workers of North Carolina; and 3) certain persons who are or were wards of the State of North Carolina. More complete information on this statute may be obtained from the Cashier’s Office.

Tuition Benefit for UNC Employees
A person who is a full-time employee of the University of North Carolina, or is the spouse or dependent child of a full-time employee of the University of North Carolina, and who is a legal resident of North Carolina, qualifies as a resident for tuition purposes without having maintained that legal residence for at least 12 months, immediately prior to his or her classifications as a resident for tuition purposes.

Full Scholarship Students
Any undergraduate student who receives full scholarship to UNCG from entities recognized by the institution under G.S. 116-143.6 may be considered residents of North Carolina for all purposes by UNCG.

“Full scholarship” is defined as funding at least equivalent to the sum of: room (on-campus, double room), board (meal plan option that offers complete meal coverage), tuition (in-state, estimated in March prior to the fall semester), and fees (required class related fees).

The full scholarship rate will be determined by the Director of Financial Aid each March prior to the effective academic year. Please contact the Financial Aid Office for additional information.

Initial Classification
Every applicant for admission is required to make a statement as to the length of his or her legal residence in North Carolina. Every applicant is classified as a resident or nonresident for tuition purposes prior to actual matriculation by the admitting office making the initial classification. Those not claiming to be residents for tuition purposes are, of course, classified as out-of-state students (nonresidents) for tuition purposes. If there is insufficient information to support an applicant’s claim to be a resident for tuition purposes, the admitting office will initially classify that applicant as a nonresident.

Subsequent Classification
A residency classification once assigned (and confirmed pursuant to any appeal properly taken) may be changed thereafter (with corresponding change in billing rates) only at intervals corresponding with the established primary divisions of the academic year. A student who, due to subsequent events, becomes eligible for a change in classification, whether from out-of-state to in-state or the reverse, has the responsibility of applying for a reclassification in the Graduate School.

Appeals
A student may appeal a residence classification assigned by the admitting office by submitting to the Graduate School a completed Residency Reclassification Application. Application forms may be obtained from the Graduate School.

It is the responsibility of the student to pay tuition at the rate charged and billed while an appeal is pending. In effect, the student who is classified as a nonresident at the time of registration pays the nonresident rate. Conversely, if a student is classified as a resident at the time of billing, he or she pays the resident rate. Any necessary adjustments in the rate paid will be made at the conclusion of the appeal.

Students or prospective students who believe that they are entitled to be classified as residents for tuition purposes should be aware that the process of requests and appeals can take a considerable amount of time and that applications for classification should not be delayed until registration. Students who wish to receive a timely review of their residence status should submit their completed Residency Reclassification Application approximately 60-90 days in advance of the term for which they are seeking a review of their residence status. Applications are reviewed in the order in which they are received; failure to submit an application in a timely manner may delay the review process.

The Graduate School’s determination of residence classification may be appealed to the Campus Residence Appeals Committee, and decisions of the Campus Residence Appeals Committee may be appealed to the State Residence Committee. A written statement of the appeals procedure is provided to every applicant or student receiving an adverse decision from the Graduate School.
Errata 1 – 2017-2018 Graduate Bulletin
Issued: 9/25/17

CHANGE 1:
LIS – Library and Information Studies Graduate Courses
Removed:
  LIS 505 Introduction to Archival Management

Added:
  LIS 658 Archival Management (3:3)
  Survey of archival management theory and practice, including the appraisal, acquisition, and organization of archival materials and the role of technology in preserving and providing access to collections.

CHANGE 2:
HIS – History Graduate Courses
Removed:
  Cross-listed course from HIS 505 Introduction to Archival Management

CHANGE 3:
THR – Theatre Graduate Courses
Added:
  THR 645 Advanced Theatre Graphics (3:2:3)
  Theatre graphics for performance design, drafting, perspective, figure drawing, and rendering.

CHANGE 4:
ENT – Entrepreneurship Graduate Courses
Added:
  ENT 511 Silver Industries (3:3)
  Overview of the longevity economy and its influence on entrepreneurial opportunities. Case illustrations highlighted. Using the entrepreneurial business model, student explore opportunities, risks, and rewards in silver industries market.
  Cross Listed Courses
  GRO 511

Removed:
  ENT 611A Silver Industries (1.5:1.5)
  Comprehensive overview of the gerontological trends and associated business consequences that characterize an aging society. Case illustrations highlighted.
  Cross Listed Courses
  GRO 611A
**CHANGE 5:**

**RESEARCH CENTERS AND INSTITUTES**

**Changed:**

Medicinal Chemistry Collaborative
405 Science Building
(336) 334-5474
mcsquared.uncg.edu

Natural products research examines plants, microorganisms, and other elements of the natural world to identify potentially beneficial chemical entities, such as anticancer agents, antibiotics, and agrochemicals. Studying the activities of these substances allows researchers to optimize their effectiveness and develop similar materials (analogues) with ideal biological properties. Natural products research provides insight into the effectiveness of herbal remedies, basic biological processes, and more. By leveraging expertise across disciplines, the Medicinal Chemistry Collaborative looks at the larger picture and pursues richer and more fruitful discoveries.

**Added:**

Institute for Data, Evaluation, and Analytics (IDEA)
1702 MHRA
(336) 256-0426
idea.uncg.edu

The Institute for Data, Evaluation, and Analytics (IDEA), formerly known as the Center for Social, Community and Health Research and Evaluation, is a "virtual organization" developed to promote and support UNCG’s wide expertise in data analytics, evaluation, and research. It provides a visible and easily accessible point of contact for the external community seeking consulting services and technical assistance. IDEA is composed of university partners (faculty, departments, other centers) spanning a wide range of skills and supported by a comprehensive array of analytical software and technology as well as a robust computing environment with data security and comprehensive backup. By working collaboratively with personnel, units, departments, investigators, other UNCG Centers, and agencies on data collection and analysis efforts, IDEA provides technical assistance to the UNCG community and to outside agencies and programs and allows UNCG and community, institution, state, national, and international partners to meet their accountability goals and objectives and to increase their capacity to serve their constituencies.

North Carolina Sales Institute
441 Bryan Building
(336) 334-4413
bryan.uncg.edu/ncsi/

The North Carolina Sales Institute provides world-class sales education and research, carried out by two separate entities within the Bryan School: the Department of Marketing, Entrepreneurship, Hospitality & Tourism (MEHT) and the Office of Executive Education. The NCSI is a coordinating mechanism that works actively to integrate the elements of credit- and non-
credit teaching, as well as research focused on sales. The target audiences are undergraduate and graduate students, current or aspiring sales professionals, and organizations in the private, public, and non-profit sectors, in the Piedmont Triad Region, the state of North Carolina, and beyond. The combination of undergraduate and graduate education and ongoing faculty scholarship, in conjunction with the membership opportunities for executive education through the Bryan School Office of Executive Education and the NCSI Sales Leadership Roundtable is unequaled by anything currently in existence in the state.
Errata 2 – 2017-2018 Graduate Bulletin
Issued: 10/5/17

CHANGE 1:
Urban and Economic Development, PBC (PSC), (18)
Corrected:
The Post-Baccalaureate Certificate in Urban and Economic Development requires 18 semester hours and is offered jointly by the departments of Political Science and Geography. It is designed to meet the training needs of those currently working in or planning to work in urban planning or community and economic development. This certificate requires courses emphasizing the knowledge and skills to prepare students to work in organizations focusing on urban planning and community economic development activities in government and nonprofit organizations.

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. In addition to the application materials required by The Graduate School, applicants must submit a personal statement.

Certificate Requirements
Required Core Courses (12)
Geography (6)—choose two of the following courses:
- GEO 502/ENT 502 Urban Planning (3)
- GEO 522 Geography of Livable Cities (3)
- GEO 602 Regional Planning (3)
Political Science (6)—choose two of the following courses:
- PSC 520 Urban Political System (3)
- PSC 620 Urban and Regional Development Policy (3)
- PSC 630 Community and Economic Development Theory and Practice (3)
Electives (6)
Select two from the following courses:
- GEO 502/ENT 502 Urban Planning (3)
- GEO 522 Geography of Livable Cities (3)
- GEO 602 Regional Planning (3)
- GEO 603 Understanding Geographic Information Systems (3)
- GEO 622 GIS Applications in Urban Planning (3)
- GEO 631 Transportation Planning (3)
- PSC 511D Strategic Planning (1)
- PSC 511G Grantwriting (1)
- PSC 511P Program Evaluation (1)
- PSC 520 Urban Political System (3)
- PSC 613 Local Government Administration (3)
- PSC 620 Urban and Regional Development Policy (3)
- PSC 630 Community and Economic Development Theory and Practice (3)

CHANGE 2:
Urban and Economic Development, PBC (GEO), (18)
Corrected:
The Post-Baccalaureate Certificate in Urban and Economic Development requires 18 semester hours and is offered jointly by the departments of Political Science and Geography. It is designed to meet the training needs of those currently working in or planning to work in urban planning or community and economic development. This certificate requires courses emphasizing the knowledge and skills to prepare students to work in organizations focusing on urban planning and community economic development activities in government and nonprofit organizations.

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For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions. In addition to the application materials required by The Graduate School, applicants must submit a personal statement.

Certificate Requirements

Required Core Courses (12)

Geography (6)—choose two of the following courses:
- GEO 502/ENT 502 Urban Planning (3)
- GEO 522 Geography of Livable Cities (3)
- GEO 602 Regional Planning (3)

Political Science (6)—choose two of the following courses:
- PSC 520 Urban Political System (3)
- PSC 620 Urban and Regional Development Policy (3)
- PSC 630 Community and Economic Development Theory and Practice (3)

Electives (6)
Select two from the following courses:
- GEO 502/ENT 502 Urban Planning (3)
- GEO 522 Geography of Livable Cities (3)
- GEO 602 Regional Planning (3)
- GEO 603 Understanding Geographic Information Systems (3)
- GEO 622 GIS Applications in Urban Planning (3)
- GEO 631 Transportation Planning (3)
- PSC 511D Strategic Planning (1)
- PSC 511G Grantwriting (1)
- PSC 511P Program Evaluation (1)
- PSC 520 Urban Political System (3)
- PSC 613 Local Government Administration (3)
- PSC 620 Urban and Regional Development Policy (3)
- PSC 630 Community and Economic Development Theory and Practice (3)
Errata 3 – 2017-2018 Graduate Bulletin
Issued: 2/15/18

CHANGE 1:
NUR – Nursing Graduate Courses

Corrected: Courses missing from list of graduate courses*

NUR 776 Primary Care Management of the Older Adult and Frail Elder (6:3:9)
The management of older adults and frail elders by the Adult Gerontological Nurse Practitioner in primary care.
Prerequisite
NUR 709, NUR 709S, NUR 777

NUR 776L Practicum for Primary Care Management of the Older Adult and Frail Elder (0)
The management of older adults and frail elders by the Adult Gerontological Nurse Practitioner in primary care (lab).

NUR 777 Primary Care Management of the Adult II for Advanced Practice Nursing (6:3:9)
Management of acute and chronic illness with emphasis on disease prevention and health promotion among young adults, adults, and older adults.
Prerequisite
NUR 733, NUR 709, NUR 709S

NUR 777L Practicum for Primary Care Management of the Adult II for Advanced Practice Nursing (0)
Management of acute and chronic illness with emphasis on disease prevention and health promotion among young adults, adults, and older adults (lab).

NUR 778 Primary Care Clinical Practicum I for the Advanced Practice Nurse (8:1:21)
Emphasis is integration of adult patient management with leadership, use of data, and interprofessional collaboration in promotion of healthy lifestyles; evaluation and management of acute and chronic health problems.
Prerequisite
NUR 776, NUR 777

NUR 779 Essential Skills for the Advanced Practice Nurse in Primary Care (2:1:3)
Complex simulations providing practice in skills necessary for procedures, communication, critical decision making, and collaboration for advanced practice nursing in primary health care.
Prerequisite
NUR 776, NUR 777

NUR 788 Primary Care Clinical Practicum II for the Advanced Practice Nurse (8:1:21)
Advanced primary care practicum emphasizing the ability to manage acute and chronic complex health conditions of adults, demonstrating advanced critical decision-making skills and integration of DNP essentials into advanced practice.
Prerequisite
NUR 778, NUR 779
CHANGE 2:
NUR – Nursing Graduate Courses
Corrected: Course title
   NUR 820 Seminar for Nurse Anesthesia Advanced Practice

CHANGE 3:
NUR – Nursing Graduate Courses
Corrected: Courses missing from list of graduate courses*
   NUR 642 Organizational Leadership and Management (4:2:6)
   Management functions of directing and controlling are studied within the framework of leadership in health care organizations.
   Prerequisite
   NUR 540, NUR 641, NUR 705
   Corequisite
   NUR 614

   NUR 643a Strategic Management of Health Care Organizations I (4:3:3)
   Application of leadership and administration knowledge in a practice setting while defining self in a professional leadership role.
   Prerequisite
   NUR 540, NUR 642, NUR 705

   NUR 643b Strategic Management of Health Care Organizations II (3:1:6)
   Application of leadership and administration knowledge in a practice setting while defining self in a professional leadership role.
   Prerequisite
   NUR 643a

*Courses will be renumbered beginning in Fall 2018 through Spring 2020; the renumbered courses appear in the 2017-2018 Graduate Bulletin with a notation indicating their effective term.
Errata 4 – 2017-2018 Graduate Bulletin
Issued: 1/17/18

**CHANGE 1:**
Computational Mathematics, PhD, (60 hours minimum)

**Corrected:** Qualifying Examinations, Preliminary Examination, Other Reviews and Examinations,
Schedule for Examinations and Projects

The PhD in Computational Mathematics requires a minimum of 60 semester hours, including 39-42 hours of course work in mathematics or related area and 18-21 hours of dissertation.

**Application and Admission**
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a 500-700 word Personal Statement to be considered for Fall admission.

Students with a master’s degree in mathematics, computer science or statistics may apply directly to the PhD program. In exceptional cases well-qualified applicants will be considered for admission directly after completing an undergraduate degree in mathematics, computer science or statistics.

**Degree Requirements**

**Course Work (39-42)**
The student selects 39-42 hours of course work in mathematics and related areas with the approval of the Director of Graduate Study. With the approval of the Director of Graduate Study, up to 18 of the 39-42 hours may be accepted from UNCG’s MA in mathematics program or from a comparable master’s program.

**Qualifying Examinations**
Qualifying examinations, covering a student’s chosen field of research and related advanced course work, must be taken after the student has removed any provisions or special conditions attached to admission; two exams should be passed prior to the beginning of the fifth semester. These examinations each cover the material of one of the following two-course sequences:

- **Analysis**
  - MAT 595 Mathematical Analysis (3)
  - MAT 596 Mathematical Analysis (3)

- **Linear Algebra**
  - MAT 727 Linear Algebra and Matrix Theory (3)
  - MAT 728 Linear Algebra and Matrix Theory (3)

- **Mathematical Statistics**
  - STA 651 Mathematical Statistics (3)
  - STA 652 Mathematical Statistics (3)

**Preliminary Examination**
The preliminary exam is held in two parts: written and oral. The exam is constructed by a committee appointed by the Graduate Director in consultation with the student’s advisor and the Department Head. The exam covers material from at least three courses in addition to the qualifying exam courses. Students have at most two attempts to pass the preliminary exam. Students must have unanimous support of the committee to pass the exam.

**Programming Project**
The student must complete a programming project of such quality that it can become part of a computer algebra system, could be distributed as a package for a computer algebra system, or yields new mathematical data.

**Dissertation (18-21)**

MAT 799  Dissertation (1-12)

**Other Reviews and Examinations**

After the student has passed both qualifying examinations, has chosen a dissertation advisor, and passed the preliminary exam, they form a dissertation committee in consultation with the Graduate Director. With the help of the supervisor, the student proposes a dissertation topic in a public oral presentation. In this presentation, the student explains his or her dissertation topic in sufficient detail to demonstrate capability to begin research.

At the conclusion of the presentation, the dissertation committee will administer an oral exam to determine the student’s competence to begin work on the dissertation. A part of the exam is the computational/programming project. This project should clearly demonstrate that the student is fully capable of handling computational aspects of the intended dissertation topic. After passing this examination, the student may then make a formal application to the Graduate School for admission to candidacy. The dissertation proposal and oral exam can be attempted at most twice.

**Schedule for Examinations and Projects**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Examination or Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4</td>
<td>2 written qualifying examinations</td>
</tr>
<tr>
<td>4-7</td>
<td>Preliminary exam, dissertation proposal, computational/programming project, (oral examination)</td>
</tr>
<tr>
<td>6-14</td>
<td>Dissertation work and defense (oral examination)</td>
</tr>
</tbody>
</table>

**CHANGE 2:**

Mathematics, MA, (30-33)

Corrected: Course number (from 698 to 687)

**Project in Mathematics (3)**

The candidate may prepare a project in mathematics based on in-depth investigation of a topic in mathematics. A project director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. Candidates may include 3 hours of project (MAT 687) in the required 30 hours. A written report and an oral examination on the project are required.

**CHANGE 3:**

**MAT – Mathematics Graduate Courses**

Corrected: Course number (from 698 to 687)

MAT 687 Project in Mathematics (3:0)

Directed research projects in Mathematics.
Errata – 2017-2018 Graduate Bulletin
Issued: 1/24/18

CHANGE 1:
Kinesiology, EdD (online) (54)
Corrected: Course number for “Physical Activity and Health” from 722 to 724
Interdisciplinary Concepts in Kinesiology (6-9 hours minimum)
Courses spanning the kinesiology disciplinary areas. Students select 6-9 hours from the following. Other courses may be acceptable with advisor and committee approval.

- KIN 724 Physical Activity and Health (3)
- KIN 729 Motor Learning and Performance (3)
- KIN 731 Curriculum Development in Kinesiology (3)
- KIN 732 Analysis of Teaching and Learning (3)
- KIN 745 Social Psychology and Physical Activity (3)

CHANGE 2:
Psychology, MA/PhD, (108)
Corrected: Course number for “Practicum in Clinical Intervention” from 642 to 742
PhD Clinical Practicum Training (18)
In addition to the 9 hours of PSY 642 taken to satisfy the MA requirements, students must complete the following:

- PSY 742 Practicum in Clinical Intervention (10) (2 of these are concurrent with PSY 762)
- PSY 762 Advanced Practicum in Clinical Psychology (6)
- PSY 763 Internship in Clinical Psychology (2) (Taken over two semesters for clinical internship year)
Errata 6 – 2017-2018 Graduate Bulletin
Issued: 2/7/18

CHANGE 1:

TABLE OF CONTENTS
Removed: Entry for PMC in Urban School Leadership and Administration from Educational Leadership and Cultural Foundations department

Urban School Leadership and Administration, PMC, (27) .................................................................................................................................................. 1

CHANGE 2:

GRADUATE DEGREE PROGRAMS
Post-Baccalaureate and Post-Master’s Certificates
School of Education
Educational Leadership and Cultural Foundations
Removed: PMC in Urban School Leadership and Administration from list of certificate programs

Post-Master's Certificate in Urban School Leadership and Administration

CHANGE 3:

Urban School Leadership and Administration, PMC, (27)
Removed: Post-Master’s Certificate in Urban School Leadership and Administration

Urban School Leadership and Administration, PMC, (27)
The Post-Master’s Certificate in Urban School Leadership and Administration requires 27 semester hours and is designed to prepare students for positions as principals or assistant principals in urban schools. The certificate meets the requirements of the state legislation that supports an alternative path to school administration licensure (also known as “add-on” principal licensure).

Application and Admission
For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions.

In addition to the application materials required by The Graduate School, applicants must submit a current resume that details all previous leadership and professional roles and a personal statement (see departmental website for topic and details). One of the required recommendations must come from a principal or education supervisor. Some applicants may be requested to participate in an interview.

Qualified applicants will have a master’s degree in education or a field closely affiliated with youth or adult development and at least 3 years of teaching or other professional educational experience (not limited to public schools).

Certificate Requirements
Required Courses (15)

ELC 660  The School Principalship (3)
ELC 670  Leadership for Teaching and Learning (3)
ELC 684  Teacher Rights, Recruitment, Retention, and Evaluation (3)
ELC 691  Urban School Organizational Leadership: Best Practices (3)
ELC 694  Cultural and Political Dimensions of Schooling (3)

Required Field Experiences (12)
Students are required to complete an internship experience in an urban educational setting equivalent to one year of full-time administrative field experience.

ELC 690 Practicum in Educational Administration (3-6)

Capstone Experience
To receive NC state licensure as a principal, students must submit a Licensure Portfolio to the department for review. The portfolio will include material drawn from the student’s course work and internship and provide documentary evidence of meeting state leadership standards. ELC faculty members will review the student’s portfolio for approval.

Prior to program completion, each student will prepare a portfolio that describes and reflects on his/her development during the certificate program. ELC faculty members will review the student’s capstone experience for approval.
Errata 7 – 2017-2018 Graduate Bulletin
Issued: 2/22/18

CHANGE 1:
TABLE OF CONTENTS
Teacher Education and Higher Education, Department of
Corrected: Entry for MEd in Student Personnel Administration in Higher Education corrected to MEd in Student Affairs Administration in Higher Education
Student Affairs Administration in Higher Education, MEd, (42) ........

CHANGE 2:
GRADUATE DEGREE PROGRAMS
School of Education
Teacher Education and Higher Education
Corrected: Entry for MEd in Student Personnel Administration in Higher Education corrected to MEd in Student Affairs Administration in Higher Education
MEd in Student Affairs Administration in Higher Education

CHANGE 3:
Mathematics, MA
Added: Teaching College Mathematics under the MA in Mathematics
Teaching College Mathematics Concentration (30)
The concentration in Teaching College Mathematics is intended for students wishing to pursue a career in teaching at the community college level. This 30-credit hour concentration is offered with a project option or an exam option. At least half of the required credits (15 out of the 30) must be taken at the 600-level or above. Candidates must complete at least 18 credits of graduate coursework with an MAT prefix. The concentration has three components: The Mathematics and Statistics core courses; Pedagogy, Educational Research, and Higher Education; and the Capstone Experience (Project or Exam).

Mathematics and Statistics Core Courses (18)
Candidates must take at least 18 credits of graduate-level courses with prefixes MAT or STA excluding MAT 503, 513, 601, 603, 699, and STA 699. These 18 credits must include at least one two-semester sequence: MAT 591 and 592, MAT 595 and 596, MAT 727 and 728, or STA 551 and 552.

Pedagogy, Educational Research, and Higher Education (9-12)
MAT 601 Seminar in the Teaching of Mathematics (1)
MAT 603 Practicum in the Teaching of Mathematics (2)
6-9 additional credits in the following courses:
MAT 503 Problem Solving in Mathematics (3)
MAT 513 Historical Development of Mathematics (3)
STA 661 Advanced Statistics in the Behavioral and Biological Sciences I (3)
STA 662 Advanced Statistics in the Behavioral and Biological Sciences II (3)
ERM 605 Educational Measurement and Evaluation (3)
ERM 667 Foundations of Educational Measurement Theory (3)
HED 600 The Community College (3)
HED 602 Theoretical Foundations of Higher Education (3)
HED 607 College Teaching and Pedagogy (3)
HED 611 Survey of Adult Education (3)
HED 661   Higher Education in the U.S. (3)
TED 667   Technology in Mathematics Education (3)

**Project Option**
Candidates who select the project option must prepare a project on the investigation of a topic in mathematics or statistics. A project director will be appointed by the Department Head in consultation with the student and the Director of Graduate Study. Candidates may include up to 3 credits of MAT 687 Project in Mathematics or STA 698 Project in Statistics in the required total for the concentration.

**Exam Option**
A candidate who does not prepare a project must pass a written comprehensive examination of his/her program. Please consult with the Director of Graduate Study for information concerning the comprehensive examination.

**CHANGE 4:**
**GRADUATE DEGREE PROGRAMS**
College of Arts and Sciences
Mathematics and Statistics
**Corrected: Entry for MA in Mathematics concentrations to add Actuarial Mathematics, Data Analytics, and Teaching College Mathematics**

MA in Mathematics (Mathematics, Applied Statistics, Actuarial Mathematics, Data Analytics, and Teaching College Mathematics concentrations)

**CHANGE 5:**
**MATHEMATICS AND STATISTICS, DEPARTMENT OF**
Graduate Programs
**Corrected: Entry for MA in Mathematics to add Teaching College Mathematics concentration**

Master of Arts (MA) in Mathematics, Mathematics, Applied Statistics, Actuarial Mathematics, Data Analytics, and Teaching College Mathematics concentrations, (30-33)

**CHANGE 6:**
**GRADUATE DEGREE PROGRAMS**
College of Visual and Performing Arts
School of Music
**Corrected: Entry for MM in Music Performance concentrations to correct Accompanying and Piano Chamber Music to Collaborative Piano**

MA in Music Performance (Collaborative Piano, Conducting/Choral, Conducting/Instrumental, Early Keyboard Instruments, Organ, Piano, Piano Pedagogy, Strings/Winds/Percussion, Vocal Pedagogy, Voice, or Multiple Woodwinds concentration)
Errata 8 – 2017-2018 Graduate Bulletin
Issued: 3/22/18

CHANGE 1:
LIBRARY AND INFORMATION STUDIES, DEPARTMENT OF
Faculty
Corrected: Added graduate faculty members missing from the faculty list for 2017-2018

Assistant Professors
April M. Dawkins, School librarianship, school libraries, information literacy, intellectual freedom, self-censorship, young adult literature.

Lecturers
Sonia Archer-Capuzzo, Information organization, information access, music libraries, music librarianship education, E-learning, LIS pedagogy, cataloging and classification, fieldwork, Lev Aronson.
Lori Special, Public libraries, community engagement, outreach, youth services, programming, customer service, management.
**Errata 9 – 2017-2018 Graduate Bulletin**

**Issued: 4/27/18**

**CHANGE 1:**
**NURSING, SCHOOL OF**
Nursing Administration or Nursing Education, MSN

**Removed:** “Master’s programs of study may be reduced by up to 6 hours for qualified students. Requests for consideration may be submitted to the Director of Graduate Study.”

**CHANGE 2:**
**NURSING, SCHOOL OF**
Nursing, PhD

**Removed:** “The Director of Graduate Study may waive up to 6 hours for successful completion of previous graduate work.”
Errata 10 – 2017-2018 Graduate Bulletin
Issued: 6/4/18

CHANGE 1:

SUMMARY OF REGULATIONS ON CERTIFICATES AND DEGREES

Doctoral Degrees

Doctor of Education

Removed: Removed “counseling and counselor education” from “An EdD may be earned in counseling and counselor education, kinesiology, and educational leadership.”