

THE UNIVERSITY OF NORTH CAROLINA

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# GREENSBORO



## THE GRADUATE SCHOOL BULLETIN

Catalog Issue for the Year 2003-2004  
Announcements for 2004-2005

# CALENDAR OF EVENTS 2004-2005

Contact the UNCG Counseling and Testing Center for exact dates of qualifying examinations.

*Students are responsible for complying with all deadlines that apply to their individual programs of study.*

## SUMMER SESSION, 2004

### FIRST TERM: May 19-June 22

- April 26, Mon. Registration begins.
- May 17, Mon. Instruction begins for MBA classes.
- May 19, Wed. Classes begin.
- May 20, Thurs. Last day to register for five-week courses.
- May 21, Fri. Last day to drop a course(s) for a refund.
- May 26, Wed. Deadline for submitting application for graduation for graduate students completing degree requirements in the 2004 Summer Session.**
- June 9, Wed. Last day to drop Section 01 course(s) without academic penalty.
- June 16, Wed. Last day to drop Section 31 and section 51 course(s) without academic penalty.
- June 22, Tues. Final Examinations.
- June 25, Fri. Instruction ends for MBA classes.

### SECOND TERM: June 24-July 29

- June 24, Thurs. Classes begin.
- June 25, Fri. Last day to register for five-week courses.
- June 26, Sat. Last day to drop a course(s) and be entitled to a refund on tuition and fees.
- June 28, Mon. Instruction begins for MBA classes.
- July 5, Mon. No classes. Administrative offices closed in observance of Independence Day.
- July 6, Tues. Final date for oral examinations for August doctoral candidates.
- July 12, Mon. Deadline for filing one copy of thesis in The Graduate School for approval.

- July 15, Thurs. Last day to drop Section 11 course(s) without academic penalty.
- July 15, Thurs. Last day to drop Section 61 course(s) without academic penalty.
- July 16, Fri. Deadline for filing one *signed* copy of dissertation in The Graduate School for approval.
- July 29, Thurs. Final Examinations.
- July 29, Thurs. Final date for complete clearance of August candidates for degrees, including receipt in The Graduate School of two FINAL copies of thesis or dissertation and payment of fees owed the University.
- August 9, Mon. Instruction ends for MBA classes.

## FALL SEMESTER, 2004

- August 10, Tues. Fall Semester opens.
- August 10-14, Tues.-Sat. Orientation, advising and registration for all students based on student population and classification.
- August 12, Thurs. Orientation for new graduate students.
- August 13, Fri. Mandatory training for Teaching Assistants.
- August 16, Mon. Classes begin (8:00 a.m.)
- August 16-20, Mon.-Fri. Late registration; schedule adjustment.
- August 20, Fri. Last day to change courses or course sections. Exceptions require approval of The Graduate School.
- August 23, Mon. Deadline for submitting application for graduation for graduate students completing degree requirements in the 2004 Fall Semester.**
- August 25, Wed. Last day to drop a course(s) and be entitled to a refund on tuition and fees.
- September 6, Mon. Labor Day holiday. Classes dismissed; offices closed.

October 4, Mon.	Founder's Day.	March 1, Tues.	Financial aid priority filing date for 2005-2006 academic year.
October 8, Fri.	Last day to drop course(s) without academic penalty.	March 5, Sat.	Instruction ends for Spring Break (1 p.m.)
October 8, Fri.	Instruction ends for Fall Break (6 p.m.).	March 14, Mon.	Classes resume (8 a.m.).
October 13, Wed.	Classes resume (8 a.m.).	March 16, Wed.	Last day to drop course(s) without academic penalty.
Oct. 27 - Nov. 12, Wed.-Fri.	Registration for continuing students for Spring Semester.	March 23, Wed.	Final date for oral examinations for May doctoral candidates.
October 29, Fri.	Final date for oral examinations for December doctoral candidates.	March 25, Fri.	Spring Holiday. Classes dismissed; offices closed.
November 12, Fri.	Deadline for filing one <i>signed</i> copy of dissertation in The Graduate School for approval.	March 29-April 15, Tues.-Fri.	Registration for continuing students for Summer and/or Fall Semester.
November 23, Tues.	Instruction ends for Thanksgiving holidays (10 p.m.).	April 6, Wed.	Deadline for filing one <i>signed</i> copy of dissertation in The Graduate School for approval.
November 29, Mon.	Classes resume (8 a.m.).	April 19, Tues.	Deadline for filing one copy of thesis in The Graduate School for approval.
November 29, Mon.	Deadline for filing one copy of thesis in The Graduate School for approval.	May 3, Tues.	Last day of classes.
December 6, Mon.	Last day of classes.	May 4, Wed.	Reading Day.
December 7, Tues.	Reading Day.	May 4, Wed.	Final date for complete clearance of May candidates for degrees, including receipt in The Graduate School of two FINAL copies of thesis or dissertation and payment of fees owed the University.
December 7, Tues.	Final date for complete clearance of December candidates for degrees, including receipt in The Graduate School of two FINAL copies of thesis or dissertation and payment of fees owed the University.	May 5-7, 9-11 Thurs.-Sat., Mon.-Wed.	Final Examinations.
December 8-10,13-15 Wed.-Fri., Mon.-Wed.	Final Examinations.	May 13, Fri.	May Commencement.
December 16, Thurs.	December Commencement.		

## SPRING SEMESTER, 2005

January 4-8, Tues. - Sat.	Orientation, advising and registration for all students based on student population and classification.
January 10, Mon.	Classes begin (8 a.m.).
January 10-14, Mon.- Wed.	Late registration; schedule adjustment.
January 14, Fri.	Last day to change courses or course sections. Exceptions require approval of The Graduate School.
January 17, Mon.	Dr. Martin Luther King, Jr. holiday. Classes dismissed; offices closed.
January 18, Tues.	<b>Deadline for submitting application for graduation for graduate students completing degree requirements in the 2005 Spring Semester.</b>
January 19, Wed.	Last day to drop a course(s) and be entitled to a refund on tuition and fees.

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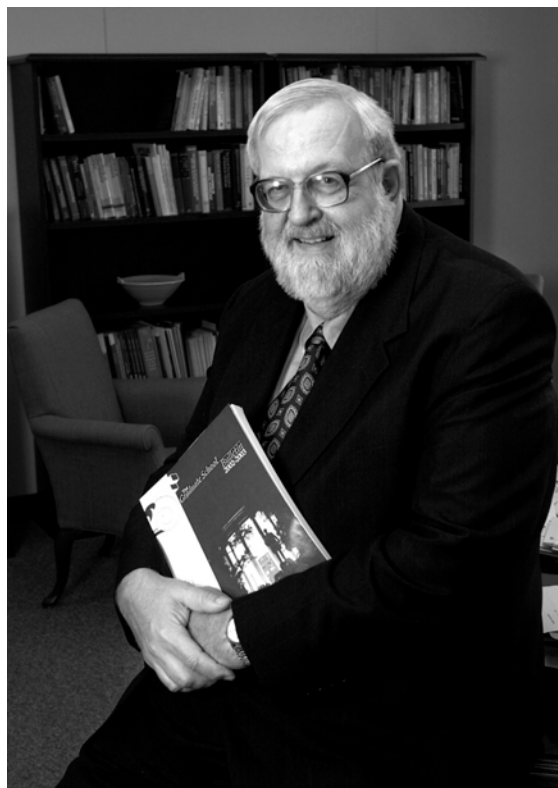
# THE GRADUATE SCHOOL

On behalf of The University of North Carolina at Greensboro, I am pleased to provide you with information about The Graduate School. In this *Bulletin* you will find descriptions of our master's, doctoral, and certificate programs and the departments offering them. The *Bulletin* also contains important academic regulations, degree requirements, and University policies. Additional information about graduate education is available at our website: [www.uncg.edu/grs](http://www.uncg.edu/grs)

Our current graduate student enrollment is nearly 3,600 in a total student population over 14,000. As one of the doctoral granting campuses in The University of North Carolina System, we are large enough to offer a wide range of graduate programs yet small enough to provide the opportunity for each student to work closely with a community of scholars in a particular field. Our outstanding faculty and University staff, excellent library, strong facilities, and other resources are here to provide every student with the sophistication and intellectual excitement that are the hallmarks of graduate education.

If you have questions about any aspect of graduate school, I invite you to call this office at (336) 334-5596.

James C. Petersen  
Dean of The Graduate School



# GRADUATE PROGRAMS

The University is organized into the College of Arts and Sciences and six professional schools: Joseph M. Bryan School of Business and Economics, School of Education, School of Health and Human Performance, School of Human Environmental Sciences, School of Music, and School of Nursing.

The Graduate School has general supervision of graduate study throughout the College and schools. The University offers three doctoral degrees in 19 areas of study, four Master of Fine Arts degrees, master's degrees in a wide variety of concentrations, and a number of Post-Baccalaureate and Post-Master's Certificates. Each of these programs, with majors, concentrations, requirements, prerequisites, faculty, and courses, are described below in the departmental listings.

The Graduate Dean 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 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.

Graduate study is offered in the following areas leading to the degrees indicated:

## COLLEGE OF ARTS AND SCIENCES

Art—M.F.A.  
 Biology—M.S.  
 Chemistry—M.S.  
 Communication Studies—M.A.  
 (Department of Communication)  
 Computer Science—M.S. (Department of  
 Mathematical Sciences)  
 Creative Writing—M.F.A. (Department of  
 English)

Drama—M.F.A. (Department of Broad-  
 casting and Cinema, and Department  
 of Theatre)  
 English—M.A., M.Ed., Ph.D., Post-Bacca-  
 laureate Certificate  
 Geography—M.A., Ph.D., Post-  
 Baccalaureate Certificate  
 History—M.A., Ph.D., Post-Baccalaureate  
 Certificate  
 Latin—M.Ed. (Department of Classical  
 Studies)  
 Mathematics—M.A., Post-Baccalaureate  
 Certificate  
 Political Science—M.A., Post-  
 Baccalaureate Certificate  
 Public Affairs—M.P.A. (Department of  
 Political Science)  
 Psychology—M.A., Ph.D.  
 Romance Languages and Literatures—  
 M.A. (French and Spanish)  
 Sociology—M.A.  
 Theatre Education—M.Ed.

## JOSEPH M. BRYAN SCHOOL OF BUSINESS AND ECONOMICS

Accounting—M.S.  
 Business Administration—M.B.A.,  
 M.S.N./M.B.A., Post-Master's  
 Certificates, Post-Baccalaureate Cer-  
 tificate  
 Economics—M.A., Ph.D.  
 Information Systems, Technology, and  
 Management—M.S., Ph.D., Post-Bac-  
 calaureate Certificate, Post-Master's  
 Certificate (Department of Informa-  
 tion Systems and Operations Manage-  
 ment)

## SCHOOL OF EDUCATION

Counseling and Counselor Education—  
 Ph.D., Ed.D.  
 Counseling and Development—M.S.,  
 M.S./Ed.S., Post-Master's Certificate  
 Curriculum and Teaching—Ph.D.



Curriculum and Instruction—M.Ed.  
(chemistry education, elementary education, English as a second language, French education, mathematics education, middle grades education, reading education, science education, social studies education, Spanish education),  
Post-Master's Certificate  
Educational Leadership—Ed.S, Ed.D.  
Educational Research, Measurement and Evaluation—M.S., Ph.D.  
Educational Supervision—M.Ed.  
Higher Education—M.Ed., Ed.S.  
Library and Information Studies—M.L.I.S.  
School Administration—M.S.A.  
Special Education—M.Ed., Ph.D., Post-Baccalaureate Alternative Initial Teacher Licensure

### **SCHOOL OF HEALTH AND HUMAN PERFORMANCE**

Dance—M.A., M.F.A.  
Exercise and Sport Science—M.S., M.Ed., Ed.D., Ph.D.  
Parks and Recreation Management—M.S. (Department of Recreation, Parks, and Tourism)  
Public Health—M.P.H.  
Speech-Language Pathology—M.A. (Department of Communication Sciences and Disorders)

### **SCHOOL OF HUMAN ENVIRONMENTAL SCIENCES**

Human Development and Family Studies—M.S., M.Ed., Ph.D.  
Interior Architecture—M.S., Post-Baccalaureate Certificate  
Nutrition—M.S., Ph.D.  
Social Work—M.S.W.  
Textile Products Design and Marketing—M.S., Ph.D.

### **SCHOOL OF MUSIC**

Composition—M.M.  
Music Education—M.M., Ph.D.  
Music Performance—M.M., D.M.A.  
(M.M. Performance Studies in accompanying; choral conducting; instrumental conducting; early keyboard instruments; keyboard, string, wind, percussion; piano pedagogy; vocal pedagogy; voice and woodwinds)  
(D.M.A. Performance Studies in accompanying and chamber music; orchestral instruments or instrumental conducting; voice, keyboard, or choral conducting)

Music Theory—M.M.  
Music Theory Pedagogy—Post-Master's Certificate (within Ph.D. or D.M.A.)

### **SCHOOL OF NURSING**

Nursing—M.S.N., M.S.N./M.B.A., Post-Master's Certificates, Post-Baccalaureate Certificates

### **SPECIAL ACADEMIC PROGRAMS**

Conflict Resolution—M.A.  
Genetic Counseling—M.S.  
Gerontology—M.S., Post-Baccalaureate Certificate  
Liberal Studies—M.A. (Division of Continual Learning)  
Women's and Gender Studies—Post-Baccalaureate Certificate

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

### **THE MASTER OF FINE ARTS DEGREE**

The M.F.A. programs offer graduate-level work in the fields of creative writing, dance, drama/film/video, and studio arts. Graduates are presumed to be professionals in composition, performance or design in the art form selected.

In addition to the major subjects, students sometimes elect a related minor. Fields available for the minor include art history, dance history, drama, literature, and music history.

The University of North Carolina at Greensboro boasts a long tradition of excellence in the creative and performing arts. The graduate programs build on the strength in the humanities which distinguished the Woman's College. They draw support from the lively artistic community of the Triad. They are shaped by an outstanding staff of resident artist-teachers.

### **ACCREDITATION**

The University of North Carolina at Greensboro is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, 30033-4007; telephone 404/679-4501) to award Bachelor's, Master's, Specialist's, and Doctor's degrees.

Teacher Education programs have been approved at the state level by the North Carolina Department of Public Instruction and at the national level by the National Council of Accreditation in Teacher Education.

Programs in the professional schools and in certain departments of the College of Arts and Sciences are also accredited by relevant professional agencies.

**LICENSURE FOR TEACHERS AND PROFESSIONAL SCHOOL PERSONNEL**

**Initial “A” Licensure**

Persons who hold a baccalaureate degree and who wish to gain North Carolina Initial “A” teaching licensure only, must contact the “A” licensure coordinator at (336) 334-5591.

**Advanced Licensure**

The Excellent Schools Act (ESA) of 1997 mandated the revision of Master of Education programs to embed (1) program characteristics specified in the ESA and (2) advanced competencies leading to advanced licensure. The previous graduate (“G”) license has not been issued since September 1, 2000. The advanced competencies (“M”) license has replaced the “G” license in all teaching fields; the only route currently available for completing “M” licensure requirements is through master’s programs. Master’s level licensure in non-teaching fields is also labelled “M” by the State Department of Public Instruction. For more specific information concerning master’s, sixth year, or doctoral level licensure, students should contact the specific school or department offering the programs. Information on application procedures may be secured from The Graduate School.

Upon completion of an advanced licensure program, students should go to The Teachers Academy (Room 319, Curry Building) to complete an application for licensure.

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**

**Middle Grades Education**

**Secondary Education**

Chemistry	Mathematics
English	Comprehensive Science
Latin	Comprehensive Social Studies

**K-12 Special Subject Areas**

Dance	Reading
French	Spanish
Music	Theatre
English as a Second Language (add on)	

**Exceptional Children (K-12)**

Cross-Categorical

**Special Service Personnel**

Media Coordinator
Media Supervisor
School Administrator
School Counselor
School Social Work
Speech-Language Pathology

**SPECIALIST IN EDUCATION (Ed.S.)**

**Special Service Personnel**

School Administrator
School Counselor

**DOCTORAL LEVEL**

**K-12 Specialties**

Music

**Special Service Personnel**

School Administrator
School Counselor



## FOR NUTRITION, SCHOOL OF HUMAN ENVIRONMENTAL SCIENCES

### Dietetic Internship (DI) Program

This program is available to individuals who have completed the course work for the American Dietetic Association approved Didactic Program in Dietetics in a university and who have an ADA Verification Form from that institution. The DI program is available for students with a bachelor's degree without pursuing another degree or for students who are pursuing a master's degree. Master's students may complete requirements for the Didactic Program in Dietetics and obtain the American Dietetic Association Verification Form while pursuing the master's degree. Post-B.S. students must apply to the DI program through the computing matching process of the American Dietetic Association. After selection (computer match) into the DI program at UNCG, all students must submit an application to The Graduate School at UNCG in order to be enrolled in the DI program. Contact the Department of Nutrition for further details.

The UNCG DI program has a limited number of positions that are set aside for graduate students who wish to complete both the graduate degree and the DI program requirements at UNCG. 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.

## POST-BACCALAUREATE AND POST-MASTER'S CERTIFICATES

Graduate certificates offer structured and applied instruction directly related to the needs of working professionals. Certain units offer certification for post-baccalaureate and post-master's study in the following specific areas:

### Business Administration

Post-Baccalaureate Certificate, Studies in Business Administration  
Post-Master's Certificate in Financial Analysis  
Post-Master's Certificate, International Studies in Business Administration  
Post-Master's Certificate, Management

### Counseling

Post-Master's Certificate, Curricular Studies in Gerontological Counseling  
Post-Master's Certificate, Curricular Studies in Marriage and Family Counseling

Post-Master's Certificate, Curricular Studies in School Counseling  
Post-Master's Certificate, Advanced School Counseling

### Curriculum and Instruction

Post-Master's Certificate, College Teaching and Adult Learning

### English

Post-Baccalaureate Certificate, Technical Writing

### Geography

Post-Baccalaureate Certificate, Geographic Information Science  
Post-Baccalaureate Certificate, Urban and Economic Development

### Gerontology

Post-Baccalaureate Certificate, Gerontology

### History/Housing and Interior Architecture

Post-Baccalaureate Certificate, Historic Preservation  
Post-Baccalaureate Certificate, Museum Studies

### Information Systems and Operations Management

Post-Baccalaureate Certificate, Information Technology  
Post-Master's Certificate, Information Technology

### Mathematical Sciences

Post-Baccalaureate Certificate, Statistics

### Music

Post-Master's Certificate, Music Theory  
Pedagogy (within the Ph.D. or D.M.A.)

### Nursing

Post-Master's Certificate, Adult Clinical Nurse Specialist  
Post-Master's Certificate, Adult Nurse Practitioner / Gerontological Nurse Practitioner  
Post-Master's Certificate, Nurse Anesthesia  
Post-Baccalaureate Certificate, Gerontological Nursing  
Post-Baccalaureate Certificate, Nursing Administration  
Post-Baccalaureate Certificate, Nursing Case Management  
Post-Baccalaureate Certificate, Nursing Education

### Political Science

Post-Baccalaureate Certificate, Nonprofit Management

### Women's and Gender Studies

Post-Baccalaureate Certificate, Women's and Gender Studies

See departmental listings for further details.

# ADMISSIONS

Persons who seek admission to graduate study at UNCG must submit a formal application. Applications may be submitted online, or materials and detailed admission requirements may be obtained by writing The Graduate School, University of North Carolina at Greensboro, Greensboro, NC 27402, by visiting The Graduate School in Room 241, Mereb E. Mossman Building, by calling (336) 334-5596, or by contacting our web site: <http://www.uncg.edu/grs>.

## ADMISSION (FULL GRADUATE STANDING)

All applicants must have obtained the following:

1. A bachelor's degree from a recognized accredited college or university.
2. Satisfactory academic standing as an undergraduate: "B" (3.0 GPA) average or better in the undergraduate major, and in courses prerequisite to the proposed graduate study.
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) or other authorized examination as required by the respective graduate degree programs. Scores are valid for five years. (See application materials.)

In addition, all applicants must submit a completed application form accompanied by two official transcripts of the student's academic records from every college and university previously attended (even if the courses from one school appear on the transcript of another), three recommendations from former professors, employers, or persons well acquainted with the student's academic potential, qualifying examination scores (#4 above), and a non-refundable \$45.00 application fee. Where a degree was earned, the official transcript must indicate the name of the degree and the date awarded. All credentials must be in English.

Because of processing requirements, an admission decision for Fall Semester cannot be guaranteed unless all credentials are received before **July 1**, for Spring Semester by **November 1**, and

for Summer Session by **April 1**. For international students the deadline for receipt of application and all supporting documents by The Graduate School is **May 15** for Fall Semester, **September 15** for Spring Semester, and **February 15** for Summer Session. Deadlines may be extended one month if international student is already in the U.S. **CHECK WITH INDIVIDUAL DEPARTMENTS AS SOME PROGRAMS HAVE EARLIER DEADLINES.**

Students are admitted to full graduate status or provisional status for a specific degree program in a specific term. If the admitted applicant does not register for the term specified in the application, 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.

Nonresident aliens must provide certification of financial support. A computer based TOEFL score of 213 is required unless the applicant is a citizen of a country, or graduate of a university, where English is the official language. IELTS scores may also be submitted.

For information about awards or stipends, see the section on Fellowships and Assistantships.

## 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 who give evidence that unavoidable extenuating circumstances affected

their undergraduate record, but that progressive improvement took place.

A graduate student admitted provisionally is not eligible for appointment to an assistantship or fellowship until full graduate standing is achieved.

## 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. 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 Bulletin* and the *Schedule of Courses*). Students enrolling in graduate courses in the Department of Art may need to provide a portfolio. Please see the Chair of the Department of Art. Students enrolling in graduate courses in the Bryan School of Business and Economics must see the appropriate graduate program director and have special permission. Visiting students who wish to enroll in M.B.A. classes must provide a letter of good standing, signed by the dean of their graduate program, prior to registration. Contact the M.B.A. office (336 334-5390) for complete information.

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 *only* for degree seeking students. Graduate credits earned as a VISIONS student are not normally applicable to a graduate degree. Should a VISIONS student wish to apply for admission to The Graduate School, and that student clearly would have qualified for admission at the time the credit was earned, subject to the written recommendation of the major department and the approval of the Dean of The Graduate School, up to **nine (9)** semester hours of such credit may be accepted toward a degree. Credit earned must fall within the timeline for completing the degree.

**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, however, 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 and meet all requirements for full admission as a Graduate Degree Student.

**VISIONS students are not eligible for financial aid.**

## 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, Student Academic Services, and the student's major advisor are required. Contact Student Academic Services (336-334-5730) for more information.

Students should be advised that approval for dual registration does not guarantee nor constitute acceptance into any graduate program.

## 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 supplied by The Graduate School 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 registration 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, do not need to be in compliance. 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**).

## ACCELERATED MASTER'S PROGRAMS

The University of North Carolina at Greensboro has accelerated programs that will allow qualified freshmen, especially those having Advanced Placement Credit, to earn both a bachelor's and a master's degree in approximately five years. Programs repre-

sent two distinct patterns. The first is undergraduate majors who continue to pursue graduate work in the same discipline as their bachelor's degree or secondly, by carefully choosing electives, may choose to complement the undergraduate major with graduate study in another area.

Although formal admission to an accelerated program is usually in the junior year, careful selection of undergraduate courses beginning in the freshmen year is essential. For general advising about accelerated programs, please contact the Office of Student Academic Services. Please see the appropriate departmental listing in the *Undergraduate Bulletin* for program details. The following accelerated master's programs are currently offered:

Accounting (B.S.)/Accounting (M.S.)  
 Anthropology (B.A.)/Economics (M.A.)  
 Anthropology (B.A.)/Business Administration (M.B.A.)  
 Biology (B.A.)/Chemistry (M.S.)  
 Business Administration (B.S.)/Business Administration (M.B.A.)  
 Chemistry (B.S.)/Chemistry (M.S.)  
 Chemistry (B.S.)/Business Administration (M.B.A.)  
 Economics (B.A.)/Economics (M.A.)  
 Economics (B.A.)/Public Affairs (M.P.A.)  
 Exercise and Sport Science (B.S.)/Exercise and Sport Science (M.S.)  
 French (B.A.)/Business Administration (M.B.A.)  
 German (B.A.)/Business Administration (M.B.A.)  
 Mathematics (B.A., B.S.)/Mathematics (M.A.)  
 Music (B.A.)/Business Administration (M.B.A.)  
 Physics (B.A.)/Business Administration (M.B.A.)  
 Political Science (B.A.)/Economics (M.A.)  
 Political Science (B.A.)/Business Administration (M.B.A.)  
 Political Science (B.A.)/Public Affairs (M.P.A.)  
 Spanish (B.A.)/Business Administration (M.B.A.)

## CROSS REGISTRATION

**Interinstitutional Registration.** The Graduate School of The University of North Carolina at Greensboro participates in an 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, whereby degree-seeking graduate students at UNCG, with the approval of the Dean of The Graduate School and upon recommendation of their advisors, may take courses at one of the above campuses.

**Greater Greensboro Consortium.** Through membership in the Greater Greensboro Consortium (GGC), UNCG also participates in an open-access agreement with the North Carolina Agricultural

and Technical State University, located in Greensboro, whereby degree-seeking students enrolled at UNCG may take courses at NCATSU, or any of the other participating GGC institutions with graduate level course offerings, such as High Point University and Elon University, upon recommendation of their advisors and with the approval of the Dean of The Graduate School.

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 Consortium agreements. Under both agreements, enrollment and payment of tuition and fees take place on the home campus. Application forms and information are available at The Graduate School and the Office of the University Registrar. Grades are recorded on the student's transcript and calculated into the student's overall GPA.

## EXTENSION CREDIT

Most off-campus and distance education courses are classified as "Extension" although some approved UNCG courses, registered and managed through the Division of Continual Learning, are actually held on campus. Continual Learning courses are identified in UNCGenie by having "D" or "X" in the campus code field. These courses carry residence credit for students admitted to UNCG.

Students wishing to take off-campus or distance learning courses should contact the Division of Continual Learning. Credit for all extension courses cannot be applied to degree requirements until the student is fully admitted to graduate status, whereupon graduate credit may be recorded, and these courses may be considered for acceptance toward a graduate degree program.

## AUDITING

Auditing a course is the privilege of being present in the classroom when space is available. No credit is involved, no examinations are required, no grades are 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. Admission is determined following the close of regular student registration. A registration for **audit** course can be changed to **credit** no later than the last date courses can be added. For auditing fees, see the section on **Special Fees** under "Auditing Fees."



# ACADEMIC REGULATIONS

## General Information

### SEMESTER HOURS

The unit of academic work is the semester hour, by which is meant one 50-minute lecture period (or at least two such periods of laboratory or field work) per week throughout one semester.

### COURSE LOADS

A full-time student load per semester is 6 semester hours. Graduate students holding service appointments are restricted in course load depending upon the extent of their service.

### POLICY ON 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 course work that is approved for their program of study and selected in consultation with the departmental Director of Graduate Study.

The policy on continuous enrollment requires that normally a student be enrolled continuously, as defined above, from the time of entry into a graduate degree program through the completion of all required course work, 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 course work as described below:

Effective with the 1998 Fall Semester, thesis or dissertation students completing their degrees must enroll in and pay tuition and fees for not less than one nor more than three hours of continuing completion of thesis/dissertation credit each semester, after consultation with, and approval by their faculty advisor. 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 dis-

sertation 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.

**Leaves of Absence:** Graduate students may step out of the University one semester in a calendar year (fall, spring, or summer) and maintain continuous status. Students who are absent for more than one semester or a summer session without an approved leave of absence must apply for readmission through The Graduate School, after first receiving the endorsement of the department's Director of Graduate Study. 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. When an absence of longer than one term is needed, students may apply for a leave of absence.

Leaves of absence may be granted for a variety of reasons including extracurricular educational activities, illness, and other personal circumstances. Students should submit requests for a leave of absence in writing to their departmental Director of Graduate Study, who will forward the request to The Graduate School with the department's recommendation. All requests for leaves of absence will be considered on a case by case basis in The Graduate School. Under normal circumstances, time devoted to a leave of absence will count toward the authorized time limit for completion of degree

requirements. Students with special circumstances should consult with the departmental Director of Graduate Study to discuss options available for revising the time frame needed to complete their plan of study.

**Readmission:** An enrolled student is eligible (if not disqualified) to stay out one semester (fall, spring, or summer) without penalty in each academic year. 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 \$45.00 application fee.

## GRADES

Beginning with courses taken in Fall 2004, plus/minus grades are incorporated into the GPA for all graduate level courses according to the following scale:

Grade	Grade Points Awarded Per Hour of Credit
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
F/WF	0.0

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.

For the completion of a graduate degree program, an overall average of B (equivalent to 3.0) is required; an average of B (3.0) or better may be required in the major field at the option of the major department. To calculate the average, all grades except S and U will be counted in all courses that are attempted and carry graduate degree credit, but no more than six semester hours of credit evaluated as C (2.0) may be applied toward the minimum hours required for the master's degree. Grades in all courses applied toward the doctorate must be B (3.0) or better, and additional hours must be taken for any hours earned with a grade of C+ (2.3) or C (2.0).

If a student receives a course grade other than I and later submits additional work to be evaluated for the course, 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.** Graduate students who must withdraw from the University may do so by dropping all courses via the Web through Campus Pipeline™/uncGenie until the last day to drop without academic penalty. Students who drop all courses are considered to be withdrawn from the University and 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 W may be granted only with the permission of the Dean of The Graduate School, or designee, 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 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.** 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 I 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 I not so 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 or dissertation in progress, a grade of IP (in progress) will be recorded each semester of registration for credit until completion of the thesis or dissertation, when a final grade of S (satisfactory) will be assigned.

**S-U Courses.** Grades for the following courses are reported as S, satisfactory, or U, unsatisfactory:

- All Practicum and Internship courses in Education and Library and Information Studies
- All Workshops and Institutes
- All thesis and dissertation courses (699, 799)
- All 800-level courses (801, 802, 803)
- Other courses as indicated in the departmental listings.

**Appeal of Grades.** Any complaint concerning a grade must be initiated with the professor assigning the grade and can be appealed to the head of the department, school, or college. Authority to change any grade, other than I, rests with the Dean of The Graduate School, subject only to the authority of the Chancellor.



## CONTINUING 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.

Students will become academically ineligible to continue in The Graduate School when any of the following are received in course work of **an approved program of study** to be applied to a degree or certificate program: (1) grades of U, F or WF are received in any 6 semester hours; (2) grades of C (2.0) are received in 9 semester hours; (3) any grade of U, F or WF is received in combination with 6 semester hours of C grades (2.0); or (4) the required 3.0 for graduation is not achieved within the minimum number of semester hours required for the degree or certificate.

A student who is dismissed for academic reasons will be eligible to apply for readmission on a provisional basis after two semesters or the equivalent, and may be readmitted only upon the recommendation of the major department head and with the approval of the Dean of The Graduate School.

For a student who has not yet attempted the minimum number of semester hours required for the degree, an exception to the regulation on academic ineligibility will be considered under either of the following circumstances: (1) where the student's average is at least B (3.0); or (2) where the major departmental representative and the Dean of The Graduate School agree that the student is in a good position to achieve an average of B (3.0) in one additional semester of study. In the case of a student who has attempted the minimum number of semester hours required for the degree, the major departmental representative and the Dean of The Graduate School will make an evaluation to determine whether the student is to be permitted to continue and, if so, what the plan of study shall be, 12 additional semester hours being the maximum allowed for achieving the required B (3.0) average.

UNCG reserves the right to deny enrollment of any student, even though the student has met the minimum grade point average required, if it is apparent from the student's academic record of required courses that the student will not be able to meet the graduation requirements.

VISIONS students will become academically ineligible to enroll at UNCG under any of the following circumstances: (1) when grades of U, F or WF (or D in an undergraduate course) are received in any 6 semester hours; (2) when grades of C (2.0) are received in 9 semester hours of **any** course work taken (graduate or undergraduate); (3) when any grade of U, F or WF (or D in an undergraduate course) is received in combination with 6 semester hours of C (2.0) grades.

## APPEAL OF REGULATIONS

Any appeal of the application of a rule or regulation is made in writing first to the head of the academic department, then to the academic dean. If unresolved, a written appeal may be made to the Graduate Studies Committee through the Dean of The Graduate School. The decision of the Committee is final, subject to the authority of the Chancellor.

## APPLYING FOR GRADUATION

Students must formally apply for graduation at 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). August and December degree recipients may participate in formal commencement exercises held in December. May degree recipients may participate in formal commencement exercises held in May. 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.

## COMMENCEMENT PARTICIPATION POLICY

Students completing all degree requirements by the end of the spring semester are encouraged to participate in the May Commencement ceremony. Students completing all degree requirements by the end of the fall semester are encouraged to participate in the December Commencement ceremony. Students completing all degree requirements by the end of the Summer Session may participate in either the May or December 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 Calendar of Events) are authorized to participate in the formal December or May Commencement ceremony.

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.

### CONTINUAL LEARNING

Through the Division of Continual Learning, The University of North Carolina at Greensboro offers graduate credit as well as a variety of special programs that extend its academic resources to meet professional and personal learning needs of individuals. These programs may be offered on or off campus and include regular University academic credit and non-credit courses in formats such as shortened courses, workshops, institutes, conferences, teleconferences, and distance learning.

The State requires that non-credit programs and selected credit courses such as Study Abroad be self-supporting; therefore, fees are assessed for the cost of such programs. Other academic credit courses or programs are assessed according to a tuition and fee schedule established by the Office of the President of The University of North Carolina.

Graduate credit for academic courses completed through UNCG extension or distance learning can be applied to a degree at UNCG only if the student has been admitted to The Graduate School before the completion of 9 cumulative semester hours of credit. Students wishing to include extension work in their program should consult their advisors. Registration is handled by the Division of Continual Learning, 1100 W Market Street, Suite 300.

### 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. Exceptions are strongly discouraged and must be approved by The Graduate School.

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

### STUDENT RESPONSIBILITIES

Each graduate student's program is planned with an advisor who is a graduate faculty member appointed by the department head or dean. The advisor 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 advisors frequently and to request their advisors to develop a tentative written plan of study. This plan is to be placed on file in The Graduate School.

The Academic Honor Policy (see **Appendix A**) 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 *Policies for Students* handbook.

### 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. Full statements of the following policies may be found in the *Policies for Students* handbook:

1. Academic Honor Policy
2. Alcohol and Drug Policy
3. Fair Use Policies for Video and Software Materials
4. Judicial Policies Related to Student Conduct
5. Policy on Discriminatory Personal Conduct Including Sexual Harassment. Grievance procedures are set forth in the *Policies for Students* handbook
6. Public Safety (including motor vehicle registration and parking regulation)
7. Student Records (academic and nonacademic)

## CONFLICT OF INTEREST:

**Student-Instructor Relationship:** It is essential to the promotion of high academic standards and maintenance of sound professional practice that the student-instructor 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 Dean of the unit/program may petition the Dean of The Graduate School.

## Post-Baccalaureate and Post-Master's Certificates

Certificate candidates must maintain a minimum grade point average (GPA) of 3.0 in all certificate course work. Only three semester hours with a grade of C (2.0) will count towards a certificate. A maximum of three semester hours of failed course work may be repeated. With the exception of internship, practicum, independent projects or clinical work, all courses for a certificate will be letter graded. A maximum of three semester hours of transfer credit will be accepted toward a certificate.

## Master's Degrees

Programs at UNCG leading to a master's degree hold the objective of a reasonable, comprehensive mastery of the subject matter of a chosen field, accomplished through study, training, and experience in research.

## SUMMARY OF REQUIREMENTS FOR MASTER'S DEGREES

1. Satisfaction of all requirements for admission.
2. Submission of plan of study to The Graduate School prior to 50% of program completion.
3. Satisfactory completion of all course requirements.
4. Achievement of the required B (3.0) average overall and in the major, if required by the department.

5. An applied knowledge of one modern foreign language, or approved option, in programs having this requirement.
6. 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 of creative work, and/or (d) integrative set of course work or internship experience.
7. 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 .
8. 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 above requirements must be met by the deadlines stated in the Calendar of Events. Some special programs may have additional requirements not listed above but explained in materials supplied by the major department or school.

## TIME LIMITS

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. If the student does not enroll in the term to which admitted, the student's admission status is subject to further review at the discretion of the head of the major department and the Dean of The Graduate School. If study for the program extends beyond three years, the student assumes the risk of having to meet new requirements.

## SEMESTER HOURS REQUIRED

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 the work credited toward the degree must be in 600-level courses or above.**

## PLAN OF STUDY

A plan of study for the master's degree (or Specialist in Education degree) must be outlined and signed by the student and head 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 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, must also be listed on the plan of study. No more than 6 semester hours of independent study may be included in the plan of study. At the discretion of the department, M.F.A. candidates may earn up to a maximum of 20% of their required hours as independent study hours. The Capstone Experience must also be indicated. Departmental forms may be used or generic forms can be obtained from The Graduate School.

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.

## INDEPENDENT STUDY

To be eligible for independent study, a student must have completed several regular courses of graduate work in a degree program and have attained at least a 3.0 average. VISIONS students are ineligible. No more than 3 semester hours of credit for independent study may be earned in any one semester, and not more than 6 semester hours of independent-study credit may be counted toward satisfying the minimum requirements for the master's degree with the exception of the M.F.A. degrees. At the discretion of the department, M.F.A. students may earn up to a maximum of 20% of their required hours as independent study credits. Students may not register for independent study as a substitute for existing courses. Application for independent study must have the approval of the instructor, the department head or dean, and the Dean of The Graduate School.

## LANGUAGE REQUIREMENTS

The Master of Arts degree in Romance Languages and Literatures requires the student to demonstrate an applied knowledge of a modern foreign

language. The Master of Arts degrees in English and history and the Master of Science degree in interior design have language options. Program that require a foreign language may allow exceptions. For example, substitutions of demonstrated skill in computer science or statistics are sometimes accepted. 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) would be posted to the student's graduate transcript. Permission will be limited to language skills courses.

## COMPREHENSIVE EXAMINATION

**In fields that require it**, the comprehensive written examination is set by the department and may be scheduled at any convenient time after two-thirds of the program have been completed. **If the examination is not passed, no more than one reexamination may be authorized by the examining committee.** In addition to the required written examination, an oral examination may be administered at the discretion of the department. If the student fails to pass the examination on the second attempt, The Graduate School will send the student a letter of dismissal.

## THESIS

**Some master's programs require a thesis; some offer a thesis or nonthesis 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 appropriate classification 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.



The thesis must conform to rules established by the Graduate Studies Committee in The Graduate School "Guide for Preparation of Theses and Dissertations." Copies of the guide may be obtained from The Graduate School 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.

Two unbound copies of the thesis, approved by the examining committee, together with two copies of the abstract of the thesis must be filed in The Graduate School by the deadline date as specified in the Calendar of Events. Maximum credit allowed for the thesis is 6 semester hours. Additional 801 hours may be required but will not count toward the degree.

## TRANSFER AND EXTENSION CREDIT

At the master's and specialists levels, credit may be given for graduate work taken at other institutions (including credit earned through the Greater Greensboro Consortium) or taken in extension at this University, but certain conditions must be met:

- (1) Ordinarily, transfer credit may not exceed one-third of the minimum number of hours required by the student's program; UNCG extension courses will be evaluated as transfer credit.
- (2) All residence or extension credit offered in transfer must have been taken at a recognized, accredited graduate school and not have been used to complete the requirements for a degree.
- (3) Such work must have been taken within the five-year time limit.
- (4) 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.
- (5) The credit must be recorded on an official transcript placed on file with The Graduate School.
- (6) It must be approved both by the student's major department and by the Dean of The Graduate School.
- (7) 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 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 in residence courses 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 towards satisfying the minimum requirements for the master's and specialists degrees.

## Specialist in Education Degree

Regulations specified above which govern the master's degrees apply also to the Specialist in Education degree.

## 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. Candidates 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 Ph.D. may be earned in economics, English, geography, history information systems, psychology, counseling and counselor education, curriculum and teaching, educational research, measurement and evaluation, exercise and sport science, music education, and three areas within human environmental sciences: human development and family studies, nutrition, and textile products marketing.

## DOCTOR OF EDUCATION

The major premise of the **Doctor of Education** degree program is that it is an all-University degree. This places special responsibility on the academic schools and departments to combine their efforts with the schools offering this program, to the end that the doctoral students receive depth in subject matter as well as professional development. Therefore, the program is purposely flexible, allowing the candidates 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 candidate will make a significant contribution through the medium of research culminating in a scholarly dissertation.

An Ed.D. may be earned in counseling and development, educational leadership, and exercise and sport science.

## DOCTOR OF MUSICAL ARTS

The **Doctor of Musical Arts** degree program is a performance 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.

## SUMMARY OF REQUIREMENTS FOR DOCTORAL DEGREES

1. Satisfaction of all requirements for admission to a doctoral program, including the removal of any deficiencies identified at the time of admission.
2. An approved advisory/dissertation committee, to be filed in The Graduate School.
3. An approved plan of study, to be filed in The Graduate School.
4. Satisfactory completion of any language requirement or approved option.
5. Satisfaction of the residence requirement.
6. Satisfactory completion of any diagnostic qualifying examination that may be required by the major department or school.
7. Satisfactory completion of all course requirements in the student's approved program of study.
8. Satisfactory completion of the preliminary written and oral examinations and any additional work that may be required as a result of these examinations.
9. An approved dissertation topic, to be filed in The Graduate School.
10. Admission to candidacy upon the satisfaction of the above requirements (formal application to be made in The Graduate School).

11. Submission of a dissertation acceptable to the advisory/dissertation committee.
12. Satisfactory completion of the final oral examination.
13. Acceptance of the dissertation by The Graduate School.
14. 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.
15. 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 Calendar of Events. Detailed explanations of these requirements follow. Some programs may have additional requirements not listed above but explained in additional 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 Office 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 course work, 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 qualifying examination scores and recommendations (explained in the application materials), final approvals of the major department or school and of the 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 examine the doctoral dissertation. This committee will be appointed by the 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, two, including the chair, must be Members of the graduate faculty and no more than one may be an Adjunct graduate faculty member. The



committee chair must be from the major department, and it is recommended that where 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 appointed by the Dean of The Graduate School to bring the number to at least four.

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 reported 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 advisory/dissertation committee if a minor is appropriate or required in his case. 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 statistics, see page 171.

## 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 the prospective holder of the doctorate to continue his 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 practicable 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 major and minor fields of study; the specific courses the student is expected to complete as a minimum requirement; and all specific core, seminar, language, and research requirements of the major department. The majority of course work must be at the 600- and 700-level. 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 course work to be taken if it believes the student shows weaknesses that might be corrected by additional formal study. No more than 15 semester hours of independent study may be included in the plan of study, exclusive of the dissertation.

The plan of study must be submitted to the Dean of The Graduate School for approval. The Dean 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 reported 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 and must be from among those languages approved by the Graduate Studies Committee. 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 candidates 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 full-time semesters (minimum 6 hours per semester) of graduate work on this campus after admission to a doctoral program. The two sessions of summer school count as one semester. Undergraduate courses taken in support of a graduate program cannot count towards residence.

## TIME LIMITS

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 from the date of the first enrollment for study following admission to the doctoral program. 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 course work to be credited to the student's doctoral program must fall within a seven-year period of time beginning with the date of first enrollment following admission to the program. 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. By mandate of the North Carolina Legislature, the Ed.D. in educational leadership has a time limit of **five** academic years for completion.

## TRANSFER CREDIT

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 recognized 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.

In no case will more than one third of non-dissertation course credit hours beyond the master's degree be transferred to a Doctor of Philosophy or Doctor of Musical Arts program. This is also the normal maximum limit allowed for transfer toward the Doctor of Education degree. For the student who has completed more than 18 semester hours on a sixth-year or post-master's program, the question will be reviewed by the student's advisory/dissertation committee and the Dean of The Graduate School. In no case will more than 24 semester hours be accepted in transfer to a Doctor of Education degree program.

The following conditions apply to transfer credit for doctoral programs:

- (1) All credit offered in transfer must have been taken at a recognized, accredited graduate school.
- (2) Such work must have been taken within the time limit described above.
- (3) 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 transferrable.
- (4) The credit must be recorded on an official transcript placed on file with The Graduate School.
- (5) The credit must be approved both by the student's doctoral advisory/dissertation committee and by the Dean of The Graduate School.
- (6) 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 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 The University of North Carolina at Greensboro.

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 EXAMINATIONS

When a student has removed any provisions or special conditions which may have been attached to admission, completed a minimum of  $\frac{3}{4}$  of the course work 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 examinations. Individual departments may have additional requirements. Each doctoral student is required to pass the doctoral preliminary examinations which consist 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 phase of the course work 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 course work is subject to examination at the time of the preliminary examinations. 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, at least one semester must elapse before re-examination is permitted. No more than one re-examination will be allowed. If the student fails to pass the examination on the second attempt, The Graduate School will send the student a letter of dismissal.

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. 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 Dean of The Graduate School, shall examine the dissertation; and no dissertation shall be accepted unless it secures unanimous approval of the advisory/dissertation committee. Two approved, unbound copies of the dissertation, together with three copies of the abstract, must be filed in The Graduate School office for final acceptance by the deadline date specified in the Calendar of Events. In final form, the dissertation must comply with the rules prescribed by the Graduate Studies Committee in the "Guide for Preparation of Theses and Dissertations." Publication of the dissertation by means of microfilming is required by The Graduate School. The candidate must pay both binding and microfilming fees.

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 on page 13.

## FINAL ORAL EXAMINATION

The doctoral candidate who has successfully completed all other requirements for the degree will be scheduled by the chair of the advisory/dissertation committee, in consultation with the other committee members, to take a final oral examination. The Graduate School will publish the dissertation title, date, time and location of the oral examination at least two weeks prior to the examination. The examination is open to all members of the University community who may wish to attend. The final oral examination is administered by the advisory/dissertation committee according to program guidelines. The examination is largely related to the dissertation field of study including courses taken here and elsewhere. Approval of the examination must be attested to by all members of the advisory/dissertation committee. The results of the examination are to be reported in writing to the Dean of The Graduate School.

# DEPARTMENTAL LISTINGS OF GRADUATE FACULTY AND COURSES OF INSTRUCTION

## GRADUATE FACULTY

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.

## COURSE NUMBERS AND CREDIT

This section sets forth UNCG's graduate degree programs and descriptions of the courses of instruction offered. Each course description 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 750-799 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. A 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. For example, (3:2:3) means a course carries three semester hour credits and meets for two lecture hours and three laboratory hours each week.

Prerequisites for a course are indicated in the course description by "Pr." followed by appropriate requirements which 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.

## DEPARTMENT OF ACCOUNTING

418 Bryan Building  
(336) 334-5647

<http://www.uncg.edu/bae/acc>

### Professors

**C. Edward Arrington**, D.B.A., Critical social theory and its relation to accounting and organizations (Head of Department).

**William A. Collins**, Ph.D., Financial accounting and reporting.

### Associate Professor

**Venkataraman M. Iyer**, Ph.D., Accounting information systems and auditing, behavioral and empirical issues related to audit firms and audit market (Director of Graduate Study).

### Assistant Professors

**Timothy B. Biggart**, Ph.D., Cost and managerial accounting, just-in-time inventory systems.

**J. William Harden**, Ph.D., Federal income taxation, multijurisdictional tax issues.

**Mary J. Lenard**, Ph.D., Accounting information systems and auditing, and the use of emerging technologies for business decision making.

**Kelly A. Richmond**, Ph.D., Managerial, cost, financial, and international accounting; research interest focuses on accounting and ethics.

**Ann Watkins**, Ph.D., CPA, Financial accounting and reporting; accounting and the public interest with emphasis on issues relating to health care financial management and audit quality.

The M.S. in accounting curriculum is designed to provide the learning strategies, intellectual foundation, attitudes, and critical thinking skills needed for lifelong learning. This degree program is primarily directed towards those students who seek a graduate professional degree and professional certification in accounting.

The degree program is available to students with diverse undergraduate degrees. Depending on the accounting and business admin-

istration background the student possesses, the length of the program will vary. For most students the program can be completed in one to two calendar years.

Students entering the Master of Science in accounting program must satisfy business foundation and accounting knowledge requirements that are based on the curriculum of the UNCG Bachelor of Science in accounting program. Individual prerequisite needs are assessed by the program committee when admission decisions are made.

The Master of Science in accounting is linked to the Bachelor of Science in accounting 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 this accelerated program.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE

The Department of Accounting offers a graduate program of study leading to a 30 hour Master of Science degree. This includes 18-21 hours of graduate level accounting courses, and 9-12 hours of graduate level electives outside accounting.

### A. Graduate Level Accounting Courses (18-21 hours)

Within the 18-21 hours of graduate level accounting courses, students are required to take the following courses (students having equivalent course work may seek waiver of any of these required courses):

- ACC 600 - Tax Research and Procedures (3)
- ACC 642 - Specialized Accounting Entities (3)
- ACC 655 - Taxation of Corporations and Shareholders (3)

and one of the following:

- ACC 631 - Advanced Auditing (3)
- ACC 638 - Information System Auditing (3)

Additional hours to complete the 18-21 hours of graduate level accounting courses are selected from the following courses:

- ACC 610 - Tax Policy and Business Planning Strategies (3)
- ACC 613 - Directed Studies in Accounting (1-3)
- ACC 621 - Accounting Internship (3)
- ACC 626 - Managerial Accounting in a High Technology Environment (3)

- ACC 628 - Accounting Information Systems (3)
- ACC 630 - Seminar in Applied Financial Accounting Issues (3)
- ACC 631 - Advanced Auditing (3)
- ACC 638 - Information Systems Auditing (3)
- ACC 645 - Seminar in Financial Accounting Theory (3)
- ACC 652 - Taxation of Estates, Gifts and Trusts (3)
- ACC 656 - Taxation of Flow-Through Business Entities (3)
- ACC 658 - Advanced Topics in Taxation (3)

### B. Electives (9-12 hours)

With prior approval by the Director of the program, a student will select 9-12 hours of graduate courses outside accounting.

### C. Concentrations

The Department of Accounting offers three elective concentrations within the Master of Science in accounting degree program. These concentrations are (1) accounting systems, (2) financial accounting and reporting, and (3) tax.

#### Accounting Systems Concentration

The concentration consists of at least 15 hours. Students are required to take the following courses (students having equivalent course work may seek waiver of any of these required courses and substitute additional courses):

- ACC 628 - Accounting Information Systems (3)
- ACC 638 - Information Systems Auditing (3)
- ISM 601 - Information Systems and Technology (1.5)
- ISM 602 - Business Data Systems (1.5)
- ISM 604 - Business Applications Programming I (1.5)
- ISM 605 - Business Applications Programming II (1.5)

Additional hours to complete the concentration are selected from the following courses:

- ACC 621 - Accounting Internship (3)
- ISM 611 - Enterprise Data Systems (3)
- ISM 612 - Information and Communications Architectures (3)
- ISM 621 - Systems Development (3)
- ISM 632 - Managing Vendor Relationships (1.5)
- ISM 633 - Enterprise Resource Planning Systems (1.5)

#### Financial Accounting and Reporting Concentration

The concentration consists of at least 15 hours. Students are required to take the following courses (students having equivalent course work may seek waiver of any of these required courses and substitute additional courses):

- ACC 630 - Seminar in Applied Financial Accounting Issues (3)
- ACC 631 - Advanced Auditing (3)
- ACC 638 - Information Systems Auditing (3)
- ACC 642 - Specialized Accounting Entities (3)



Additional hours to complete the concentration are selected from the following courses:

- ACC 621 - Accounting Internship (3)
- ACC 628 - Accounting Information Systems (3)

### Tax Concentration

The concentration consists of at least **15** hours. Students are required to take the following courses (students having equivalent course work may seek waiver of any of these required courses and substitute additional courses):

- ACC 600 - Tax Research and Procedures (3)
- ACC 655 - Taxation of Corporations and Shareholders (3)

Additional hours to complete the concentration are selected from the following courses:

- ACC 621 - Accounting Internship (3)
- ACC 652 - Taxation of Estates, Gifts and Trusts (3)
- ACC 656 - Taxation of Flow-Through Business Entities (3)
- ACC 658 - Advanced Topics in Taxation (3)
- MBA 686 - Tax Strategy (3)

## (ACC) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 589. Experimental Course.

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

## (ACC) COURSES FOR GRADUATES

### 600. Tax Research and Procedures (3:3).

*Pr. grade of C or better in 420.*

Income tax research resources and their effective use; tax research projects; IRS policies and procedures.

### 610. Tax Policy and Business Planning Strategies (3:3).

The effect of taxes on retirement and investment planning; multijurisdictional and advanced tax issues. Examination of tax policy.

### 613. Directed Studies in Accounting (1-3).

*Pr. 12 s.h. of graduate level accounting courses or permission of instructor.*

Individual study of an issue or problem of interest. Student must arrange topic and course requirements with instructor prior to registration.

### 621. Accounting Internship (3).

*Pr. grade of C or better in 318.*

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. (Graded on S-U basis)

### 626. Managerial Accounting in a High Technology Environment (3:3).

*Pr. grade of C or better in 430 or MBA 612.*

Application of cost accounting principles and procedures to business decision making in a high-technology firm setting. A team-based simulation is used as the basis for the course.

### 628. Accounting Information Systems (3:3).

*Pr. grade of C or better in 325.*

Accounting information systems and the role of the accountant in the selection and management of accounting information systems; ethical implications.

### 630. Seminar in Applied Financial Accounting Issues (3:3).

*Pr. grade of C or better in 319.*

Provides necessary background and skills to analyze and research financial accounting issues faced by the accounting profession and standard setters.

### 631. Advanced Auditing (3:3).

*Pr. grade of C or better in 440.*

Ethics, reporting, law, statistics, and audit software; directed towards professional external and internal auditing.

### 638. Information Systems Auditing (3:3).

*Pr. grade of C or better in 440.*

Theory and practice of information systems auditing; role of information systems auditor in systems development; computer based system controls.

### 642. Specialized Accounting Entities (3:3).

*Pr. grade of C or better in 319.*

Theory and practice associated with business combinations, consolidated financial statements, partnerships, international operations, bankruptcy and other accounting topics related to specialized accounting entities.

### 645. Seminar in Financial Accounting Theory (3:3).

*Pr. grade of C or better in 319.*

Normative analysis in theory development and recent transition to empirical analysis; informational and positive theory paradigms; role of regulation.

### 652. Taxation of Estates, Gifts and Trusts (3:3).

*Coreq. 600.*

Principles and procedures involved in determining federal estate tax; tax planning using gifts and trusts.

### 655. Taxation of Corporations and Shareholders (3:3).

*Coreq. 600.*

Federal taxation of business transactions affecting corporations and shareholders.

### 656. Taxation of Flow-Through Business Entities (3:3).

*Coreq. 600.*

Federal taxation of business transactions affecting flow-through business entities, including partnerships, S corporations, limited liability companies and their owners.

### 658. Advanced Topics in Taxation (3:3).

*Coreq. 600.*

Examination of advanced tax topics, including capital gain and loss provisions, depreciation recapture, passive loss restrictions, alternative minimum tax, exempt organizations, and multistate taxation.

### 699. Thesis (1-3).

### 711. Experimental Course.

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

### 801. Thesis Extension (1-3).

### 803. Research Extension (1-3).



## DEPARTMENT OF ANTHROPOLOGY

426 Graham Building

(336) 334-5132

<http://www.uncg.edu/ant/anthro.html>

### Professors

**Willie L. Baber**, Ph.D., Economic anthropology, applied anthropology, ethnicity, ethnographic methods; Caribbean and African-American societies.

**Thomas Fitzgerald**, Ph.D., Cultural and social anthropology, theory, educational anthropology; New Zealand and Cook Islands.

**Mary W. Helms**, Ph.D., Cultural anthropology, ethnohistory, political anthropology; Central America, medieval monasteries.

**Joseph Mountjoy**, Ph.D., Paleoecology, cultural frontiers, ethnoarchaeology, rock art; Mesoamerica, Eastern U.S., Andean.

**Mary K. Sandford**, Ph.D., Physical anthropology, disease and nutrition, osteology; Sudan, eastern U.S. and Caribbean.

**Roch C. Smith**, Ph.D., Romance languages and literatures (Interim Head of Department).

### Associate Professor

**Susan L. Andreatta**, Ph.D., Political ecology, applied anthropology, Caribbean and U.S., Latin America.

(No graduate degree program offered; see Master of Arts in Liberal Studies program.)

## (ATY) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 501, 502. Selected Topics in Anthropology (3:3), (3:3).

Opportunity for advanced students to study in depth a topic or issue of special interest.

### 510. Archaeology of South America (3:3).

*Pr. junior or senior standing in anthropology or archaeology, or permission of the instructor.*

Survey of the archaeology of South America from the earliest evidence of human habitation through the development of chiefdoms, states and civilizations, up to the Spanish Conquest.

### 520. Economic Anthropology (3:3).

*Pr. 212, 213, or 3 hours of social science.*

Analysis of the economic organization of tribal and peasant peoples with special attention given to their participation in a world economy; emphasis on economic models of social change.

### 524. Applied Anthropology (3:3).

Application of anthropological method and theory in situations of directed sociocultural change.

### 526. Anthropological Perspectives on Food and Agriculture (3:3).

*Pr. 213.*

Examines linkages among food producers, marketing strategies, and natural resource use in different cultures, and explores the influence of agriculture on society and the environment.

### 533. Archaeology of Mexico (3:3).

*Pr. permission of instructor.*

Investigation of the major pre-Hispanic cultural developments in Mexico with emphasis on internal culture change (from early man to the rise of great civilizations such as the Aztec and Maya) and relationships with adjacent areas.

### 547. Belief and Value Systems (3:3).

Examination of sacred and secular beliefs in cross-cultural perspective. Emphasis on symbols, ritual, and their function.

### 553. Human Identification (3:2:3).

*Pr. 253 or 3 hours of biological science.*

Forensic study of humans that includes identification of individual bones and their fragments; sex differences; age changes in bones and teeth; paleopathology.

### 555. Human Evolution (3:3).

*Pr. 253 or 3 hours of biological science.*

Study of the biological and cultural evolution of humans through time.

### 557. Primate Behavior (3:3).

*Pr. 253 or permission of instructor.*

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 paper.

### 559. Disease and Nutrition in Ancient Populations (3:3).

*Pr. 253 or FNS 213 or 3 hours of biological science.*

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.

### 576. Culture and Personality (3:3).

Cross-cultural analysis of the effect and influence of culture and group membership on the development of personality.

### 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. (Same as IAR/HIS 578)

### 583. Culture and Society (3:3).

Critical analysis of the concepts of culture and society and their employment in understanding human behavior in a cross-cultural context. Not open for credit to anthropology majors. May not be taken for credit by students who have received credit for 213.

### 585. Social Dialects (3:3).

Consideration of differences in social dialects (speech patterns) among males and females, social classes, regions, and ethnic groups. Includes attitudes about social dialects, models for describing social dialect differences, and consequences of social dialects.

**587. Foundations of Linguistic Theory (3:3).***Pr. permission of instructor.*

In-depth study of modern linguistic theory and its historical antecedents. An extensive background in a language related discipline is required. Application of linguistic theory will be included.

**589. Experimental Course.**

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

**595. Current Issues in Anthropology (3:3).***Pr. senior status in anthropology, or permission of instructor.*

Capstone seminar on current issues in the various sub-fields of anthropology, how they relate to the discipline as a whole, and their significance to anthropology's role in the modern world.

**597, 598. Special Problems in Anthropology (3), (3).***Pr. permission of faculty member with whom student wishes to work.*

Opportunity for advanced students to undertake independent study or research of special interest.

**(ATY) COURSES FOR GRADUATES****601, 602. Selected Topics in Anthropology (3), (3).***Pr. permission of instructor.*

Advanced level work on a selected topic in anthropology.

**671. Ethnographic Methods (3:3).***Pr. graduate status or advanced undergraduate in anthropology, geography, history, political science, or sociology.***711. Experimental Course.**

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

**DEPARTMENT OF ART**

162A McIver Building

(336) 334-5248

e-mail: artdept@uncg.edu

<http://www.uncg.edu/art><http://digital.uncg.edu>*Professors*

**Carl Goldstein**, Ph.D., Art history from Renaissance to modern; art criticism.

**Billy Lee**, M.F.A., Sculpture; drawing; design.

**John Maggio**, M.F.A., Tamarind Master Printer; printmaking; painting; mixed media.

*Associate Professors*

**Porter Aichele**, Ph.D., 19th and 20th century art; interdisciplinary studies pairing the visual arts with music and literature.

**Michael Ananian**, M.F.A., Figurative painting and drawing.

**George Dimock**, Ph.D., Modern art and critical theory, with emphasis on constructions of childhood.

**Andrew M. Dunnill**, M.F.A., Steel, cast metal and mixed media sculpture; drawing.

**Robert Gerhart**, M.F.A., Abstract painting; printmaking; acrylic works on paper and canvas; color theory and design.

**Mark Gottsegen**, M.F.A., Landscape, still-life, figurative and non-objective painting and drawing; materials of painting and drawing; studio health and safety (Director of Graduate Study).

**Amy Lixl-Purcell**, M.F.A., Intermedia art, work with computer and electronic media and installations.

**Roberta Rice**, Ph.D., Art education: career development, image- and writing-generative habits of artists; secondary art education practices.

**Patricia Wasserboehr**, M.F.A., Figurative sculpture and drawing; anatomy for the artist; history of sculpture; public art commissions (Head of Department).

*Assistant Professor*

**Nikki L. Blair**, M.F.A., Ceramics and mixed media sculpture.

*Lecturers*

**Nancy Doll**, M.A., Museum studies (Director, Weatherspoon Art Gallery).

**Richard Gantt**, M.A., 17th and 18th century architecture.

The Department of Art offers graduate work leading to two degrees: Master of Fine Arts with a major in studio arts, and Master of Education with a concentration in art. Graduate courses sufficient to constitute a minor in art history are also available.

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.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN STUDIO ARTS

**Requirements for admission to the M.F.A. program:** The student should have **39** hours or the equivalent of undergraduate credits in studio art and **15** hours of art history. All candidates for admission must submit slides of recent work. Candidates are also encouraged to attend a Portfolio and Interview Day following the deadline for applications.

**Requirements for completion of the M.F.A. 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.

### A. Required Core Courses (9 hours)

- ART 600 - Writing Art Criticism (3)
- ART 620 - Drawing (4)
- ART 622 - Drawing Marathon (2)

### B. Studio Courses (26-30 hours)

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 531 - Painting (3)
- ART 535 - Variable Topics in Painting (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 (when topic is appropriate)
- ART 622 - Drawing Marathon (2)
- ART 626 - Woodcut and Wood Engraving (4)
- ART 627 - Lithography (4)
- ART 628 - Etching (4)
- ART 629 - Studio Problems in Drawing, Painting, or Printmaking (4)
- ART 631, 632 - Painting and Drawing (2) (2)
- ART 633, 634 - Painting and Drawing (4) (4)
- ART 635 - Variable Topics in Painting (4)
- ART 636, 637 - Painting Research Seminar (4) (4)

- ART 641 - Design (4)
- ART 649 - Studio Problems in Design (4)
- ART 655, 656 - Sculpture (2) (2)
- ART 657, 658 - Sculpture (4) (4)
- ART 659 - Studio Problems in Sculpture (4)
- ART 682 - Ceramics (4)
- ART 685 - Photography (4)
- ART 711 - Experimental Course (when topic is appropriate)

### C. Art History Courses (9 hours)

To be selected from the following:

- ART 500 - Traditions of Art Criticism (3)
- ART 501 - Topics in the History of Art (3)
- ART 601 - Public Art (3)
- ART 602 - The Teaching of Art from Vasari to Albers (3)
- ART 605 - Perspectives in Contemporary Art (3)
- ART 606 - A Study of the Artist (3)
- ART 618 - Topics in the History of Art (3)
- ART 619 - Research Problems in Art History, Art Criticism (3)

### D. Electives (12 hours)

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.

### E. Admission to Candidacy

To be formally admitted to candidacy for the M.F.A. degree, students must have successfully completed two semesters of full-time graduate work, including ART 620 and 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.

### F. Comprehensive Examinations

**1 - Studio Comprehensive:** Once the student has passed candidacy, completed **16** hours of graduate studio work, has a B (3.0) average, has been in residency for two semesters, and has a thesis committee, a meeting is arranged to review the

student's work and consider the following options: 1) independent work to strengthen studio skills, 2) further structured course study, or 3) clearance to take the studio comprehensive. When clearance has been granted, the student should prepare a comprehensive selection of studio work to present to the committee and complete the "Application for Thesis" form, available in the Art Department office. The student is responsible for consulting with the committee chairman to arrange the date, time, and place for the studio comprehensive. Students must pass the studio comprehensive prior to beginning thesis work.

**2 - Art History Comprehensive:** This written examination is scheduled each semester and tests competence in art history with identifications of 25 specific works and three to four general essay questions.

## G. Thesis (2-6 hours)

After passing candidacy the student consults with the department head to select a thesis chair, who then selects three other members of the thesis committee. One member of this group should be from the art history faculty or from another department or school on campus if the student's minor area is other than art history. Students may undertake final thesis work (ART 699 - Thesis) only after passing the studio comprehensive and receiving the approval of their thesis committee members.

Early in the final semester of thesis work, the student should arrange a meeting of the thesis committee. At this meeting the committee should discuss all aspects of final thesis work, including the thesis paper, the oral examination, 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 submission to The Graduate School. The body of work submitted for the thesis exhibition must receive final approval of all committee members.

## \*MASTER OF EDUCATION

\*For 2004-2005, no new degree candidates will be accepted.

## (ART) COURSES FOR GRADUATES

First-year M.F.A. students enroll in scheduled courses. Second-year students may enroll in one Studio Problems course (629, 649, 659) with the prior consent of the supervising instructor.

### 520. Anatomy for the Artist (3:1:6).

*Pr. 150 or permission of instructor.*

Visual analysis of the human form with an emphasis on the skeleto-muscular system.

### 525. Advanced Metal Casting (3:1:6).

*Pr. 353 or permission of instructor.*

Advanced theory and practice of metal casting. May be repeated for credit when topic varies.

### 529. The Multi-Media Print (3:1:6).

*Pr. one of the three 200-level courses in printmaking: 226, 228, or 229 and 240.*

Experimental forms of image making utilizing diverse sources of technical and aesthetic references including electronic media, photography, monoprints, calligraphy, 3-D constructions and traditional printmaking methods and processes.

### 531. Painting (3:1:6).

*Pr. senior or graduate standing.*

Theories, methods, and studio techniques characteristic of recent trends in painting. May be repeated for credit when topic varies.

### 535. Advanced Painting (3:1:6).

*Pr. advanced undergraduate or graduate standing.*

Advanced theory and practice of painting. Wide variety of media and genres will be explored. May be repeated for credit.

### 540. Digital Visualization and Methods (3:2:3).

*Pr. 240, 340, senior status or M.F.A. status or permission of instructor.*

Studio investigation of the ways that digital methods expand and change visual vocabulary and methods. Emphasis on refining personal artistic vision and establishing connections between traditional and digital methods. May be repeated once for credit with permission of instructor.

### 545. Interactive Web Design (3:2:3).

*Pr. 240 and 340, or permission of instructor.*

Development of web graphics and interactive web based environments that demonstrate an understanding of navigation, usability, and functionality within a creative framework.

### 550. Sculpture/Installation (3:1:6).

*Pr. 355, 356, 481.*

Investigate the sculpture possibilities of a space through art making, conceptual development, and personal research with a focus on contemporary and historical issues.

### 557. Site-Specific Sculpture (3:1:6).

*Pr. 355 or permission of instructor.*

Provides opportunity to make site-specific sculpture; process of making work in the public arena from initial conception, interaction with jury committee, to completed sculpture. May be repeated for credit.

### 589. Experimental Course.

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

### 592. Professional Practices, Aesthetics and Preparation for the Visual Artist (3:3).

*Pr. full-time graduate status.*

Emerging artists participate in their community and acquire the skills of career professionals. May be repeated once for credit.



**620. Drawing (4:2:6).**

*Pr. M.F.A. candidates or permission of instructor.*  
Drawing from observation, memory, imagination.  
Drawing as a record of the reflection and invention by which visual ideas are explored and developed. May be repeated once for credit when instructor changes.

**622. Drawing Marathon (2:1:3).**

*Pr. 620.*  
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. May be repeated for credit when topic varies.

**626. Woodcut and Wood Engraving (4:2:6).**

Aesthetic and technical exploration of relief methods in woodcut. May be repeated for credit when topic varies.

**627. Lithography (4:2:6).**

Aesthetic and technical exploration of planographic methods in lithography. May be repeated for credit when topic varies.

**628. Etching (4:2:6).**

Aesthetic and technical exploration of intaglio methods in etching. May be repeated for credit when topic varies.

**629. Studio Problems in Drawing, Painting, or Print-making (4).**

*Pr. admission to candidacy and permission of instructor.*  
Independent work in drawing, painting, or print-making. May be repeated for credit.

**631, 632. Painting and Drawing (2:1:3), (2:1:3).**

*Pr. 6 semester hours undergraduate painting and drawing, or a working knowledge of painting and drawing techniques.*  
Creative work in painting and drawing with an emphasis on observation. May be repeated for credit when topic varies.

**633, 634. Painting and Drawing (4:2:6), (4:2:6).**

*Pr. 6 semester hours undergraduate painting and drawing or a working knowledge of painting and drawing techniques.*  
Creative work in painting and drawing with an emphasis on observation. May be repeated for credit when topic varies.

**635. Painting (4:2:6).**

*Pr. M.F.A. candidates or permission of instructor.*  
Advanced practice and theory of painting with an inclusive interpretation of painting. May be repeated for credit.

**636, 637. Painting Research Seminar (4:2:6), (4:2:6).**

Research and study on selected painting problems.

**641. Design (4:2:6).**

Two- and three-dimensional design emphasizing plastic qualities. May be repeated for credit when topic varies.

**649. Studio Problems in Design (4).**

*Pr. admission to candidacy and permission of instructor.*  
Independent work in design, fibers, clay, metals, or photography. May be repeated for credit.

**655, 656. Sculpture (2:1:3), (2:1:3).**

*Pr. 6 s.h. undergraduate sculpture or a working knowledge of basic sculpture techniques and permission of instructor.*  
Advanced work in sculpture. May be repeated for credit when topic varies.

**657, 658. Sculpture (4:2:6), (4:2:6).**

*Pr. 6 s.h. undergraduate sculpture or a working knowledge of basic sculpture techniques and permission of instructor.*  
Advanced work in sculpture. May be repeated for

credit when topic varies.

**659. Studio Problems in Sculpture (4).**

*Pr. 6 s.h. undergraduate sculpture or a working knowledge of basic sculpture techniques. Admission to candidacy and permission of instructor.*  
Advanced work in sculpture. May be repeated for credit.

**682. Ceramics (4:2:6).**

*Pr. 6 semester hours of undergraduate ceramics or a working knowledge of basic ceramic techniques and permission of instructor.*  
Advanced work in ceramics. May be repeated for credit when topic varies.

**685. Photography (4:2:6).**

*Pr. 6 studio hours in undergraduate photography or a working knowledge of photographic techniques or permission of instructor.*  
Advanced work in photography. May be repeated for credit when topic varies.

**699. Thesis (1-6).**

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).**

**803. Research Extension (1-3).**

A minor program may be selected from this group. Unless otherwise indicated, courses are open to M.F.A. and M.Ed. students in the Art Department or with permission of instructor.

**500. Traditions of Art Criticism (3:3).**

*Pr. junior standing or graduate status.*  
A study of the major critical traditions from the Renaissance to the present.

**501. Topics in the History of Art. (3:3).**

*Pr. junior standing or graduate status.*  
Special topics in the history of art, ancient to modern. May be repeated for credit when topic varies.

**563. Trends and Teaching in Art: Special Populations (3:2:1).**

*Pr. graduate status; completion of 363, student teaching or equivalent, or permission of instructor.*  
Curricular and instructional principles, processes, and designs applicable to special populations in various school, institutional, or community settings.

**565. Issues in Art Education (3:3).**

*Pr. graduate status or permission of instructor.*  
Exploration of issues in art or education which affect the teaching of art. May be repeated once for credit when topic varies.

**590. Museum Studies (3:3).**

*Pr. junior standing and permission of instructor.*  
Study of diverse operations and institutional missions of art museums, including management, governance, development, collections management, education, and curatorial activities.

**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.

**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.

- 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.
- 605. Perspectives in Contemporary Art (3:3).**  
Seminar on artists whose work or writings have raised critical questions relevant to recent art. May be repeated for credit when topic varies.
- 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. May be repeated for credit when topic varies.
- 618. Topics in the History of Art (3:3).**  
*Pr. permission of instructor.*  
Special topics in the history of art, ancient to modern. May be repeated for credit when topic varies.
- 619. Research Problems in Art History, Art Criticism (3:3).**  
Independent research in art history or criticism. May be repeated for credit.
- 663. Practicum: Schools, Museums, or Other Settings (3).**  
Planned administrative or research and development activities in a school, museum, or community setting.
- 665. Art Education (3:3).**  
Selected problems of curricula, administration, method, and general education.
- 669. Special Problems in Art Education (3:3).**  
Independent work in Art Education for advanced graduate students. May be repeated for credit.
- 690. Experimentation and Analysis: Studio Arts (3:1:6).**  
Designed to provide non-studio art majors an understanding of studio arts as creative activities. Not open to studio arts majors.

## DEPARTMENT OF BIOLOGY

312 Eberhart Building

(336) 334-5391

<http://www.uncg.edu/bio>

### Professors

- Robert E. Cannon**, Ph.D., Microbiology, biology of *Acetobacter*, a cellulose synthesizing microbe.
- Robert E. Gatten, Jr.**, Ph.D., Environmental and comparative physiology, energetics of amphibians and reptiles.
- Vincent C. Henrich**, Ph.D., Molecular aspects of hormonal regulation in development.
- Anne E. Hershey**, Ph.D., Aquatic ecology, lake trophic interactions, nutrient limitation and organic matter processing in arctic streams.
- Elizabeth P. Lacey**, Ph.D., Plant evolutionary ecology, parental effects, phenotypic plasticity of plants.
- W. John O'Brien**, Ph.D., Aquatic ecology, zooplankton ecology, limnology of arctic lakes.
- Parke A. Rublee**, Ph.D., Microbial food chains in aquatic ecosystems.
- Robert H. Stavn**, Ph.D., Aquatic ecology, optical oceanography, ecology, zooplankton and lake optics.
- Patricia A. Sullivan**, Ph.D., Blood cell biology, biomedical ethics.

### Adjunct Professors

- Timothy Johnston**, Ph.D., Comparative studies of behavioral development and evolution, and the history of developmental theories in psychology and biology.
- Cheryl Logan**, Ph.D., Animal communication, behavioral endocrinology, reproductive functions of mockingbird song and male-female interactions during breeding.

### Associate Professors

- Karen S. Katula**, Ph.D., Gene regulation, cell cycle control.
- Bruce K. Kirchoff**, Ph.D., Evolution of development, plant morphology and systematics, characters and character states.
- Esther M. Leise**, Ph.D., Neurobiology, settlement and metamorphosis of marine invertebrates.
- John J. Lepri**, Ph.D., Coordination of reproductive behavior and physiology of mammals, chemical senses (Head of Department).



#### *Adjunct Associate Professors*

**Michael K. McIntosh**, Ph.D., Hormonal and nutrient influence on energy metabolism and gene expression in adipocytes.

**Promod R. Pratap**, Ph.D., Biophysical dynamics of active-transport systems, kinetics of the sodium pump (Na<sup>+</sup>-K<sup>+</sup>-ATPase) in mammalian kidney.

#### *Assistant Professors*

**Amy L. Adamson**, Ph.D., Virus-host cell interactions.

**Mark D. Hens**, Ph.D., Cell and molecular biology of vertebrate development.

**Matina C. Kalcounis-Rüppell**, Ph.D., Mammary behavior, ecology and energetics.

**Dennis R. LaJeunesse**, Ph.D., Developmental genetics and cell biology.

**Paul P. Mou**, Ph.D., Landscape ecology, plant/forest ecology, ecosystem ecology, ecological modeling.

**David L. Remington**, Ph.D., Molecular genetics of plant morphological evolution, plant evolutionary genomics.

**Olav Rüppell**, Ph.D., Life history and behavior of social insects, aging and genetics of complex traits.

**Malcolm Schug**, Ph.D., Population genetics and evolutionary biology (Director of Graduate Study).

**Paul A. Steimle**, Ph.D., Molecular mechanisms of cell motility.

**John E. Tomkiel**, Ph.D., Mechanisms of chromosome segregation, *Drosophila* genetics.

The Department of Biology offers programs of study designed to prepare students for professional careers as researchers. Faculty work 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.

Reflecting the diverse interests of faculty members within the Department, students in the biology master's program have research opportunities in molecular biology, biochemistry, genetics, cell biology, developmental biology, microbiology, animal and plant physiology, invertebrate and vertebrate zoology, plant morphology and systematics, plant biotechnology, limnology, neurobiology, marine biology, molecular ecology, behavior ecology, and evolution. As a result of a

research-intensive graduate experience, successful students will emerge competitively into the life sciences workplace with specific knowledge and practical skills.

Successful applicants are expected to have a strong undergraduate background in biology and science. Scores from the Aptitude Graduate Record Examination is required for full admission. In the absence of these requirements, only provisional admission can be offered, with provisions specified at the time of enrollment.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE**

The Department of Biology offers a graduate program of study leading to a 30 hour Master of Science degree. At least 15 hours must be in 600-level courses.

### **A. Biology Electives (24-27 hours)**

Students will select between 24 and 27 hours from 500- and 600-level biology courses; up to 8 of these hours can be taken at the 500- and 600-level in other departments with the prior approval of the Director of Graduate Study.

### **B. Thesis (3-6 hours)**

BIO 699 - Thesis (3-6)

Prior to the end of the second semester of enrollment, each student is expected to identify a Thesis Advisory Committee composed of a thesis advisor and two other faculty; the composition of the committee must be approved by the Director of Graduate Study. Prior to the end of the third semester of enrollment, each student is expected to present a thesis proposal to the Department. Only after these requirements have been met can a student enroll for credit in BIO 699 - Thesis.

## **\*SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION**

**\*For 2004-2005, no new degree candidates will be accepted.**

The Department of Biology offers a graduate program of study leading to a 30-33 hour Master of Education degree. At least 21 to 24 hours must be in 500- and 600-level biology courses and 9 hours must be in professional education. This degree does not meet any teacher licensure requirements.

## A. Biology Electives (21-24 hours)

With prior approval from the Director of Graduate Study, a student will select between 21 and 24 hours from 500- and 600-level biology courses.

## B. Education Electives (9 hours)

With prior approval from the School of Education, a student will select 9 hours from 500- and 600-level education courses.

Students with an undergraduate degree who are seeking an initial "A" licensure in biology must complete the requirements for a B.A. in biology at UNCG with a biology grade point average of 2.5 or better. Course selection must be completed in consultation with the Head of the Department of Biology. Students who have already taken biology courses as part of their undergraduate program should contact the Head of the Department of Biology to determine if any of those courses meet the requirements for "A" licensure in biology at UNCG. Questions about the above requirements should be directed to the Head of the Department of Biology.

## (BIO) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

Although the department tries to offer most courses at least once every other year, staffing and enrollment limitations make it unlikely that every course will be offered according to this schedule. Consult the instructor for the equivalence of listed prerequisites.

### 501. Advanced Topics in Animal Ecology (3:3).

*Pr. a previous course in ecology.*

Directed readings into the literature of physiological ecology, growth and regulation of populations, community structure, energy flow, mineral cycling, and other areas of current research interest.

### 502. Advanced Topics in Animal Physiology (3:3).

*Pr. 277 and 355.*

Study of physiological mechanisms; selected problems from current literature.

### 503. Advanced Topics in Biochemistry (3:3).

*Pr. 535.*

Directed reading and reports from the current biochemical literature. Structure and biosynthesis of macromolecules and the composition and kinetic characteristics of biochemical pathways.

### 504. Advanced Topics in Cell Biology (3:3).

*Pr. 355.*

Advanced treatment of cell biology covering selected topics such as gene regulation, protein sorting, cell cycle control, apoptosis. Lectures and discussion of research articles.

### 505. Advanced Topics in Ecological Physiology (3:3).

*Pr. 477 or 579.*

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.

### 506. Advanced Topics in Genetics (3:3).

*Pr. 392.*

Basic mechanisms of gene action in microbes, animals, and plants.

### 507. Advanced Topics in Neurobiology (3:3).

*Pr. 477 and 479, or permission of instructor.*

Directed readings on fundamental physiological principles of nervous system functioning. Topics may include motor pattern generation, sensory transduction, sensori-motor integration, and neurohormonal modulation of behavior.

### 509. Advanced Topics in Microbiology (3:3).

*Pr. 481.*

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.

### 510. Advanced Topics in Plant Ecology (3:3).

*Pr. a previous course in ecology.*

Studies of special terrestrial communities or plant groups.

### 511. Advanced Topics in Plant Physiology (3:3).

*Pr. 424.*

The physiology of growth and development in vascular plants treated in terms of phytohormones, nutrition, theories of transport, and environmental factors.

### 512. Advanced Topics in Plant Structure and Evolution (3:3).

*Pr. 322 or 354 or 440 or permission of instructor.*

Current topics in plant structure, development and evolution. A term paper is normally required.

### 513. Advanced Topics in Reproductive Biology (3:3).

*Pr. 464, or permission of instructor.*

Directed readings and original research on reproductive biology, with emphasis on structural, regulatory, behavioral, and evolutionary aspects.

### 515. Advanced Topics in Vertebrate History (3:3).

*Pr. 271 or 453, 370, and 392, and permission of instructor.*

Directed/independent study of classification and phylogeny of particular vertebrate groups that results in a term paper.

### 522. Landscape Ecology (3:3).

*Pr. 111, 112, and 301; STA 271 recommended.*

Patch-corridor-matrix structure of landscapes and their impact on ecological processes; general approaches in landscape ecology studies. Discussion of landscape indices, spatial heterogeneity and current issues in landscape ecology.

### 523. Landscape Ecology Laboratory (1:0:4).

*Pr. 301 or equivalent. Coreq. 522.*

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.

### 526. Conservation Biology (3:3).

*Pr. 111, 112, 301, and 392; STA 271 recommended.*

Habitat and species conservation; topics include genetic diversity, demographic patterns of rare species, habitat fragmentation, design and management of nature reserves, ecological restoration.

- 527. Terrestrial Plant Ecology (3:2:3).**  
*Pr. 111, 112, and 301; STA 271 recommended.*  
 Application of principles of ecology to plants and plant communities. Experimental methods stressed in laboratory work. Two required field trips.
- 528. Microbial Ecology (3:3).**  
*Pr. 301 and either 280 or 481, or permission of instructor.*  
 Emphasis on current areas of active research with reference to applied problems.
- 529. Aquatic Ecology (3:2:3).**  
*Pr. 301; CHE 114 or permission of instructor.*  
 The geology, physics, chemistry, and ecology of lakes, including reservoirs and streams, with comparisons to the ocean.
- 535. General Biochemistry (3:3).**  
*Pr. 277 or 355 or 392, or permission of instructor.*  
 Chemical properties of major cellular compounds; biosynthesis, degradation, and function of carbohydrates, lipids, proteins, nucleic acids, vitamins, and hormones; energy metabolism; enzymatic catalysis.
- 543. Biophysics (3:3).**  
*Pr. PHY 211, 212 or 291, 292, MAT 191, BIO 355, CHE 111, 114, or permission of instructor.*  
 Cellular biophysics with emphasis on the physical properties of membranes, including membrane transport mechanisms and electrical properties of membranes. (Same as PHY 543)
- 545. General Biochemistry Laboratory (1:0:3).**  
*Pr. 535, which may be taken concurrently.*  
 Experimental work designed to complement lecture material of 535.
- 549. Current Topics in Biology (1-3).**  
*Pr. permission of instructor.*  
 Advanced topics dealing with contemporary issues in the biological sciences. Topics vary with instructors.
- 552. Metamorphosis (3:3).**  
*Pr. 355 and one 400-level course in biology.*  
 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.
- 555. Vertebrate Reproduction (3:3).**  
*Pr. 464 or permission of instructor.*  
 An advanced treatment of the diversity of vertebrate reproductive biology, with emphasis on structural, regulatory, behavioral, and evolutionary aspects.
- 560. Symbiosis (3:3).**  
*Pr. any three core courses or permission of instructor.*  
 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.
- 567. Chemical Senses (3:3).**  
*Pr. 111 and 112, and 355, and one of the following: 277, 472, 477, 479, PSY 435, PSY 436, or permission of instructor.*  
 Exploration and interactive discussion of chemosensory stimuli, chemosensory transduction mechanisms, neural processing of chemosensory information, and organismal consequences of chemoreception.
- 575. Neuroanatomical Techniques (3:2:4).**  
*Pr. 111 and 112, and 355 and one of the following: 453, 472, 477, 479, PSY 435, or permission of instructor.*  
 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.
- 578. Hormones in Action (3:3).**  
*Pr. 277, 355, 392.*  
 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.
- 579. Environmental Physiology (3:3).**  
*Pr. 341, 355 or 370; plus 277 or 477.*  
 Lectures, discussions, and student presentations on the physiology of animals as it is influenced by and is adapted to environmental conditions.
- 583. Virology (3:3).**  
*Pr. 481 or permission of instructor.*  
 Selected topics in virology. Emphasis upon new trends in the study of animal, plant, and bacterial viruses at both molecular and cellular levels.
- 584. Immunology (3:3).**  
*Pr. 481 or permission of instructor.*  
 Principles of immunology and serology covering both humoral and cellular aspects of immunobiology. Selected topics to include T and B cell, immunoglobulins, tolerance, hypersensitivity.
- 589. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 591. Population Genetics and Molecular Evolution (3:3).**  
*Pr. 392 or permission of instructor.*  
 Application of population genetics and molecular evolutionary theory to the study of natural history, natural selection, genome variation and organization, human evolution, conservation biology, and forensics.
- 595. Advanced Genetics (3:3).**  
*Pr. 392.*  
 Selected topics in genetics at an advanced level. Emphasis placed on comparative view of molecular mechanisms underlying animal and plant development.
- 596. Molecular Biological Approaches in Research (1:1).**  
*Pr. 392.*  
 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. Course may be repeated for a total of 3 hours credit.
- 597. Workshops in Biotechnology (1:0.5:3).**  
*Pr. 494 or permission of instructor.*  
 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. May be repeated for credit as long as letter suffix of course differs; workshops of a given letter may only be taken once.

**(BIO) COURSES FOR GRADUATES**

Permission of instructor required for all 600-level courses.

**601. Seminar in Animal Ecology (3:3).**

*Pr. 301.*

Literature of animal ecology including both classical and recent papers; using student presentations and class discussions, the ontogeny of some overarching ecological themes explored.

**602. Seminar in Animal Physiology (3:3).**

*Pr. 477.*

Discussion of recent breakthroughs in topics ranging from the hormonal and neural mechanisms involved in homeostasis to the interactive effects of physiology and behavior.

**603. Seminar in Biochemistry (3:3).**

*Pr. at least one previous course in biochemistry.*

Study of recent progress in biochemical research; reading, discussion, and critical evaluation of current literature.

**604. Seminar in Ecological Physiology (3:3).**

*Pr. 477, 505, or 579.*

Discussions of primary literature in the physiological ecology of animals.

**605. Seminar in Ecology (3:3).**

*Pr. previous course in ecology.*

Broad view of ecological literature and in-depth studies of selected aspects of population and community ecology.

**606. Seminar in Evolutionary Biology (3:3).**

*Pr. 392 plus 271 or 453.*

Discussion of fundamental concepts involving the interrelationships of population genetics, ecology, systematics, and neo-Darwinian evolution; review of recent literature.

**608. Seminar in Microbiology (3:3).**

*Pr. 481.*

Study of recent progress in microbiological research; reading, discussion, and evaluation of current literature.

**609. Seminar in Molecular Cell Biology (3:3).**

*Pr. 355.*

Topics in cell and molecular biology will be reviewed through discussion of research journal articles. Emphasis on modern experimental techniques and approaches.

**610. Seminar in Molecular Genetics (3:3).**

*Pr. 355 and 392.*

Recent advances in molecular genetics; reinforcing basic concepts underlying these developments and understanding their impact on the life sciences.

**612. Seminar in Plant Structure and Evolution (3:3).**

*Pr. 322, 354 or 440.*

Reading and discussion of current research in plant structure, development and evolution.

**613. Seminar in Reproductive Biology (3:3).**

*Pr. 464.*

Directed readings and original research on selected topics in reproductive biology, with emphasis on structural, regulatory, behavioral, and evolutionary aspects.

**614. Prenatal Development: Embryology and Teratology (3:3).**

*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*

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. (Same as GEN 614)

**616. Human Molecular Genetics (3:3).**

*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*

Review and extension of basic principles of molecular genetics and their application for the characterization, understanding, and treatment of genetically based disorders and susceptibilities. (Same as GEN 616)

**621. General Biology for Teachers I (3:3).**

Enrollment restricted to those seeking the M.Ed. in comprehensive science. Topics include scientific method, biochemistry, cells, cellular processes, animal development, and animal physiology.

**622. General Biology for Teachers II (3:3).**

*Pr. 621.*

Enrollment restricted to those seeking the M.Ed. in comprehensive science. Topics include botany, cell division, genetics, evolution, and ecology.

**625. Advanced Animal Behavior (3:3).**

*Pr. 435, or 436, or 438, or permission of instructor.*

Current research and theories including development and evolution of behavior, sociobiology, behavioral genetics, behavioral ecology, and the use of comparative method. (Same as PSY 625)

**649. 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. Course may be repeated for a total of 3 hours credit. (Graded on S-U basis).

**658. Molecular Diagnostics (1:0:3).**

*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*

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. (Same as GEN 658)

**695. Biological Research (3).**

Student engages in advanced biological research under the supervision of a member of the Graduate Faculty. Course may be repeated for a total of 9 hours credit. (Graded on S-U basis).

**699. Thesis (1-6).****711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).**



## DEPARTMENT OF BROADCASTING AND CINEMA

205 Brown Building  
(336) 334-5360  
<http://www.uncg.edu/bcn>

### *Professors*

**Anthony N. Fragola**, Master of Professional Writing, Scriptwriting, the auteur director, literature and film, film production, development of cinema.

**John Lee Jellicorse**, Ph.D., Film and media history, actuality genres, mass communications, media ecology (Head of Department).

### *Associate Professors*

**Matthew Barr**, M.F.A., Screenwriting, documentary production, aesthetics.

**Emily D. Edwards**, Ph.D., Video production, media writing, gender and media culture.

**Michael Frierson**, Ph.D., Animation history and methods, film history and theory, film and video production (Director of Graduate Study).

### *Assistant Professor*

**Geoffrey Baym**, Ph.D., Broadcast journalism, news discourse, critical media studies.

**Eric A. Patrick**, M.F.A., Development of digital media, sound design, editing, animation.

### *Lecturers*

**Franklin P. Donaldson, Jr.**, M.A., Radio and television production, broadcast journalism, broadcast law and management, broadcasting history.

The Department of Broadcasting and Cinema in cooperation with the Department of Theatre offers an M.F.A. in drama with a concentration in film and video production.

The Department offers a rich and varied curriculum that combines theory and practice and fosters the development of production skills. The curricular offerings are matched by a co-curricular program that includes opportunities to participate in film and video productions, internships, and the UNCG Carolina Film and Video Festival. The UNCG Carolina Film and Video 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. The Carmichael Center, originally constructed as a television and radio facility, is a building unique within the city, region, and the University of North Carolina system. The Department's faculty is composed of talented artists and scholars with excellent reputations as teachers. Graduate students work closely with faculty on creative and research projects during their course of study. Admission to the Department's degree program is competitive. The requirements stated below are minimum requirements. Marginal compliance with them does not automatically imply admission.

Visiting and non-degree seeking (VISIONS) students are restricted from taking any 500-level course without the permission of the Department Head and course instructor. Only officially admitted M.F.A. students 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 the Departmental graduate handbook, which is available from the Departmental office in Brown Building.

### **Admission Criteria**

Candidates for admission to the M.F.A. in drama with a concentration in film and video production must take the GRE, submit a portfolio consisting of a personal statement, a resume, sample of their creative work, and samples of academic papers or work-related writing. Selected candidates are also interviewed by the faculty. 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. This would naturally extend the amount of time it would take to complete the degree.



## SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN DRAMA WITH A CONCENTRATION IN FILM AND VIDEO PRODUCTION

The Master of Fine Arts in drama with a concentration in film and video production is a 60 hour degree. The program requires six regular semesters (excluding summer sessions) to complete (three years). Remedial work, if deemed necessary by the faculty, may extend the period of time it takes to complete the degree.

The M.F.A. in drama with a concentration in film and video production is designed to develop individual artistry, knowledge, and skill in film and video production or screen-writing. Students will explore the audio and visual dimensions of imaging systems.

### A. Major Studies (39 hours) (required of all students)

BCN 610 - Introduction to Graduate Study (3)  
 BCN 611 - Image and Sound Acquisition for Film and Video (3)  
 BCN 612 - Advanced Cinevideo Editing (3)  
 BCN 613 - Advanced Cinevideo Lighting (3)  
 BCN 614 - Advanced Cinevideo Sound Production (3)  
 BCN 617 - Creating Visual Narratives (3) **or**  
 BCN 526 - Actuality Genres (3)  
 BCN 618 - Writing Short Scripts (3)  
 BCN 620 - Seminar in Cinevideo Analysis (3)  
 BCN 625 - Seminar in Broadcasting and Cinema (3)  
 BCN 698 - Graduate Practicum in Film and Video (6)  
 BCN 699a - Master Production in Film and Video I (3)  
 BCN 699b - Master Production in Film and Video II (3)

### B. Academic Studies (21 hours)

Select seven additional courses from:

BCN 515 - Film Theory (3)  
 BCN 525 - Media Organization and Management (3)  
 BCN 526 - Actuality Genres (3) (if not selected in Major Studies)  
 BCN 527 - The Auteur (3)  
 BCN 528 - Studies in Media Genres (3)  
 BCN 551 - Writing the Feature Film I (3)  
 BCN 552 - Writing the Feature Film II (3)  
 BCN 553 - Advanced Media Writing (3)  
 BCN 580 - Directing for Television (3)  
 BCN 585 - Advanced Radio-TV-Film Production (3)  
 BCN 587 - Animation Production (3)  
 BCN 588 - Documentary Production (3)  
 BCN 616 - Directing for the Camera (3)  
 BCN 617 - Creating Visual Narratives (3) (if not selected in Major Studies)  
 BCN 619 - Production Law and Responsibility (3)  
 BCN 684 - Advanced Cinevideography (3)  
 BCN 690 - Independent Study (3)  
 BCN 691 - Advanced Experimentation (3)  
 BCN 695 - Client Based Film and Television (3)  
 BCN 696 - Graduate Internship (3)  
 ART 685 - Photography (4)

MUS 550 - Electronic Music (3)  
 THR 506 - Non-Western Theatre and/or Film (3)  
 THR 534 - Acting for the Camera (3)  
 THR 670 - Production Design for Film (3)

### C. Required Sequence of Courses

Courses must be taken in the semesters as listed below for a candidate to remain in the program:

#### Year One (24 hours)

##### Fall Semester

BCN 610 - Introduction to Graduate Study (3)  
 BCN 611 - Image and Sound Acquisition for Film and Video (3)  
 BCN 612 - Advanced Cinevideo Editing (3)  
 BCN 617 - Creating Visual Narratives (3) **or**  
 BCN 526 - Actuality Genres (3)

##### Spring Semester

BCN 614 - Advanced Cinevideo Sound Production (3)  
 BCN 620 - Seminar in Cinevideo Analysis (3)  
 BCN 698 - Graduate Practicum in Film and Video (3)  
 BCN Academic Studies elective one (3)

#### Year Two (24 hours)

##### Fall Semester

BCN 613 - Advanced Cinevideo Lighting (3)  
 BCN 618 - Writing Short Scripts (3)  
 BCN Academic Studies elective two (3)  
 BCN Academic Studies elective three (3)

##### Spring Semester

BCN 625 - Seminar in Broadcasting and Cinema (3)  
 BCN 698 - Graduate Practicum in Film and Video (3)  
 BCN Academic Studies elective four (3)  
 BCN Academic Studies elective five (3)

#### Year Three (12 hours)

##### Fall Semester

BCN Academic Studies elective six (3)  
 BCN 699a - Master Production in Film and Video I (3)

##### Spring Semester

BCN Academic Studies elective seven (3)  
 BCN 699b - Master Production in Film and Video II (3)

### D. Reviews

At the end of each semester, each candidate is reviewed by the faculty for continuance in the program. Reviews assess the candidate's artistic development and academic success in meeting degree requirements. The student who appears to be having academic difficulty or whose creative potential is questionable may be placed on probation or dismissed from the program as a result of these reviews.

### E. Plan of Study

Prior to completing thirty hours of the program, students must meet with the BCN Director of Graduate Study and agree upon a plan of study for

completion of the M.F.A. See “Plan of Study” in the *The Graduate School Bulletin*.

## F. 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. **This includes completion of the Master Production in Film and Video by the deadline for filing a thesis with The Graduate School.** Additionally, degree candidates must schedule and have a public screening of the Master Production by the deadline for complete clearance of candidates for degrees listed in the *Schedule of Courses*. Failure to meet these Graduate School deadlines will make a candidate ineligible for graduation that semester.

## (BCN) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 515. Film Theory (3:3).

*Pr. 101, 203, 205, 301, or graduate standing or permission of instructor.*

Study of the principal theories of film through the writings of critics, theorists, and directors.

### 525. Media Organization and Management (3:3).

*Pr. 101 or 102, 205, and 301; or graduate standing; or permission of instructor.*

Principles and practices of the organization and management of electronic media and motion pictures.

### 526. Actuality Genres (3:2:3).

*Pr. 100, 101 or 102, 203, 205, 301, or graduate standing or permission of instructor.*

History and theory of reality-based genres in cinema, radio, television, and multimedia. Study of trends and significant works from the early actuality film through postmodern news docudramas.

### 527. The Auteur (3:2:3).

*Pr. 101 (film auteur) or 102 (radio or television auteur), 203, 205, 301, or graduate standing or permission of instructor.*  
Study of the works of an individual director. Subject differs from offering to offering. May be repeated for credit.

### 528. Studies in Media Genres (3:2:3).

*Pr. 101 (film genre) or 102 (radio or television genre), 203, 205, 301, or graduate standing or permission of instructor.*  
Technical, dramatic, social, and rhetorical dimensions of a media genre. Subject differs from offering to offering. May be repeated for credit.

### 551. Writing the Feature Film I (3:3).

*Pr. 203, 350, and admission to appropriate degree program or permission of instructor.*

Advanced study of screenwriting with emphasis on the creation of a step outline for a feature length screenplay.

### 552. Writing the Feature Film II (3:3).

*Pr. 551.*

A writing workshop in which students complete the first draft and a polish of a feature-length screenplay, based on the outline from BCN 551.

### 553. Advanced Media Writing (3:3).

*Pr. 203, 204, and 301 or permission of instructor.*

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/development of new programs.

### 580. Directing for Television (3:2:3).

*Pr. 203, 205, 271, 272, 301, 371, and admission to appropriate degree program or permission of instructor.*

Fundamental principles of directing for television. Laboratory directing experience.

### 585. Advanced Radio-TV-Film Production (3:2:3).

*Pr. 203, 205, 207 or 271 and 272, 301, and admission to appropriate degree program; or permission of instructor.*

Advanced application of principles and techniques of radio, television, and film production. May be repeated for credit.

### 587. Animation Production (3:3).

*Pr. 203, 205, 271, 272, 301, 371 and admission to appropriate degree program or permission of instructor.*

Study and practice of techniques of animation.

### 588. Documentary Production (3:2:3).

*Pr. 203, 205, 271, 272, 301, 443 and 526 recommended, and admission to appropriate degree program or permission of instructor.*

Documentary construction, research, planning, and production techniques. Further development of video production skills in supervised laboratory project.

### 589. Experimental Course.

This number reserved for experimental courses. Refer to the Schedule of Courses for current offerings.

## (BCN) COURSES FOR GRADUATES

### 610. Introduction to Graduate Study (3:3).

*Pr. admission to appropriate degree program.*

Development of research and writing skills, introduction to grant writing, and professional presentations. Consideration of issues in teaching. Required of M.F.A. degree candidates.

### 611. Image and Sound Acquisition for Film and Video (3:3).

*Coreq. 612 or permission of instructor.*

Theory and practice of single camera and audio production for film and video.

### 612. Advanced Cinevideo Editing (3:2:3).

*Coreq. 611 or permission of instructor.*

Study of techniques and aesthetics of film and video editing.

### 613. Advanced Cinevideo Lighting (3:2:3).

*Pr. 611, 612, or permission of instructor. Coreq. 614.*

Physical properties of light, lighting theories, aesthetics of lighting, and advanced practical experience in lighting for single camera cinevideography.

### 614. Advanced Cinevideo Sound Production (3:2:3).

*Pr. 611, 612. Coreq. 613.*

Exploration of equipment and technique of sound design for film and video.

### 616. Directing for the Camera (3:3).

*Pr. admission to appropriate degree program.*

Development of skills required for directing film or video production.

**617. Creating Visual Narratives (3:3).***Pr. permission of instructor.*

Students are guided through a series of step-by-step innovative methodologies that result in visually dynamic scripts that prepare them to take 618, Writing Short Scripts.

**618. Writing Short Scripts (3:3).***Pr. admission to appropriate degree program or permission of instructor.*

Theory and practice of writing short scripts for film and video production.

**619. Production Law and Responsibility (3:3).***Pr. permission of instructor.*

Legal, ethical, and civic responsibilities of media producers with emphasis on creation of independent works in film and video.

**620. Seminar in Cinevideo Analysis (3:3).***Pr. 515 and admission to appropriate degree program.*

Analysis of film and video works using existing principles and theories.

**625. Seminar in Broadcasting and Cinema (3:3).***Pr. admission to appropriate degree program.*

Subject matter varies. May be repeated for credit.

**684. Advanced Cinevideography (3:3).***Pr. 611, 612, 613, and 614 and admission to appropriate degree program or permission of instructor.*

Principles and techniques of film production.

**690. Independent Study (1-3).***Pr. admission to appropriate degree program, permission of instructor, major advisor, and Department Head.***691. Advanced Experimentation (3:1:4).***Pr. admission to appropriate degree program and permission of instructor.*

Preparation for the evaluation of experiences in the creative processes of broadcasting or film. Analysis, documentation, and critical evaluation of the specific experience.

**695. Client Based Film and Television (3:0:6).***Pr. admission to appropriate degree program and permission of instructor.*

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.

**696. Graduate Internship (3).***Pr. second or third year standing in the graduate program.*

Field experience in film or video production companies, post-production houses, or television stations. Academic supervision provided by faculty and directed activity in the field provided by site supervisor.

**698. Graduate Practicum in Film and Video (3:0:9).***Pr. admission to appropriate degree program and permission of instructor.*

Guided practice in carrying out major responsibilities in sponsored or independent film/video productions.

**699a. Master Production in Film and Video I (3).***Pr. third year in M.F.A. film/video degree concentration.*

Research, development, and execution of a major work produced on film or videotape.

**699b. Master Production in Film and Video II (3).***Pr. third year in M.F.A. film/video degree concentration.*

Research, development, and execution of a major work produced on film or videotape.

**711. Experimental Course.**

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

**803. Research Extension (1-3).**

## DEPARTMENT OF BUSINESS ADMINISTRATION

366 Bryan Building

(336) 334-5691

<http://www.uncg.edu/bae/badm>*Professors***Riad A. Ajami**, Ph.D., International business.**E. Holly Buttner**, Ph.D., Female entrepreneurship, the capital acquisition process in entrepreneurship, stress management, women in management.**G. Donald Jud**, Ph.D., Financial markets and institutions, real estate, urban land economics.**Stephen R. Lucas**, Ph.D., Marketing, small business, retailing (Director, Business and Marketing Education).**Benton E. Miles**, Ph.D., Small business, marketing, promotion management, selling and sales management.**Paul M. Muchinsky**, Ph.D., Assessment, personnel selection, and job/person fit.**William L. Tullar**, Ph.D., Interview behavior and employee selection, Russian and Eastern European management and entrepreneurial activity.**Daniel T. Winkler**, Ph.D., Corporate finance, investments, market efficiency, financial education (Head of Department).*Associate Professors***Sheldon D. Balbirer**, Ph.D., Financial management, business finance (Director, M.B.A. Program).**Lew G. Brown**, Ph.D., Convenience in marketing, field-research-based marketing strategy cases, public/non-profit marketing, customer satisfaction.**Kevin B. Lowe**, Ph.D., Leadership, international human resource management, strategic human resource management, work teams.**Nicholas C. Williamson**, Ph.D., Research in indirect export channels of distribution.

**Tony R. Wingler**, D.B.A., Financial management, security analysis and portfolio management, valuation issues.

*Assistant Professors*

**Moses Acquah**, Ph.D., Organizational economics, global strategic alliances, competitive strategy in emerging economies, human factor in corporate strategy, performance in emerging economies.

**Chang Choi**, Ph.D., Foreign direct investment, international joint ventures.

**Amy Cox**, Ph.D., Relationship marketing, channels of distribution, business-to-business marketing.

**Nir Kshetri**, Ph.D., Globalization of modern information technologies, marketing of high-tech products.

**Harper A. Roehm, Jr.**, Ph.D., Consumers' responses to information technology and how interactive marketing communications affect information processing, memory, attitudes, and behavior.

**James A. Woodley**, Ph.D., International strategic alliances and international banking.

*Visiting Assistant Professor*

**Arlise P. McKinney**, Ph.D., Work motivation and job performance, psychometric properties of associated measures, relationship with academic job performance.

## BUSINESS ADMINISTRATION

### (BUS) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

**589. Experimental Course.**

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

### (BUS) COURSES FOR GRADUATES

**610. Research in Business and Marketing Education (3:3).**

Methods and techniques in business and marketing education research, bibliography, problem selection, and definition. Preparation of overview of research project.

**611. Analysis of Research (3:3).**

Intensive study, analysis, and evaluation of research in business and related fields.

**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.

**613. Independent Study in Business and/or Marketing Education (1-3).**

*Pr. demonstrated capacity for independent work and permission of instructor.*

Intensive study on some phase of business and marketing education. Regular conferences with instructor.

**614. Testing and Evaluation in Business and Marketing Education (3:3).**

Types, functions, construction, evaluation, administration, and scoring of tests in business and marketing courses. Analysis and interpretation of test results.

**615, 616. Seminar in Teaching (1:1), (1:1).**

Examination and evaluation of current research in teaching procedures. Credit for two semesters may be allowed in these courses.

**620. Major Issues in Business and Marketing Education (3:3).**

Problems and issues in business and marketing education, including philosophy, functions, and relationships.

**624. Administration and Supervision in Business and Marketing Education (3:3).**

Principles, procedures, and recommended practices in the administration and supervision of business and marketing education. Scope and nature of problems within the purview of the administrator or supervisor of business and marketing education, and bases for decision-making and action.

**625. Curriculum Problems in Business and Marketing Education (3:3).**

Evaluation of present curriculum practices and trends in terms of the functions of education and business and marketing education.

**629. The Instructional Program in Business and Marketing Education (3:3).**

The statement of objectives, selection of appropriate teaching materials, job analysis as a basis for the preparation of individualized job instruction guides, and the administration and supervision of work-based programs.

**633. Principles and Philosophy of Business and Marketing Education (2-3).**

History and concepts of workforce education in secondary and post-secondary schools; administration of federally aided programs of business education; objectives, needs, administration, and curriculum in organizing classes in business education.

**699. Thesis (1-3).**

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).**

**803. Research Extension (1-3).**

## FINANCE

### (FIN) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

**589. Experimental Course.**

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



**(FIN) COURSES FOR GRADUATES****613. Directed Studies (3).**

*Pr. MBA 630 and permission of Director of M.B.A. program and instructor who will supervise study.*

Individual study of problems in the field of finance. Regular conferences with instructor required.

**680. General Insurance (3:3).**

*Pr. MBA 630 and ECO 600, equivalent, or permission of instructor.*

Principles and practices of the insurance business and insurance institutions; insurance as a factor in the American economy.

**681. Risk Management (3:3).**

*Pr. MBA 630.*

Recognition, evaluation, treatment of pure risk, emphasizing macroeconomic effects and microeconomic solutions. Discovery of risks; evaluation of present and potential impact on society and the firm.

**682. Life and Health Insurance (3:3).**

Life and health risks and functions and uses of life and health insurance and annuities in treating such risks; principles of product design including the legal and tax parameters, marketing considerations and problems through the use of cases.

**683. Property and Casualty Insurance (3:3).**

Functions and uses of property and casualty insurance in treating risks; principles of product design including the legal and tax parameters, marketing considerations and problems.

**684. Life and Health Insurer Management (3:3).**

*Pr. 680 or permission of instructor.*

Pricing procedures including rate calculation techniques, establishing of reserves, and cash values. Regulatory requirements and financial statement analysis. Investment policies and practices of the life insurer.

**685. Property and Liability Insurer Management (3:3).**

*Pr. 680 or 683 or permission of instructor.*

Origins and development of property and liability insurer, its practical management, and problems encountered in marketing, underwriting, reinsurance, and loss settlement for different lines of insurance. Interrelationship of functions examined; product pricing and the regulatory framework.

**699. Thesis (1-3).****711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).****MANAGEMENT****(MGT) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES****589. Experimental Course.**

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

**(MGT) COURSES FOR GRADUATES****613. Directed Studies (3).**

*Pr. 12 semester hours of M.B.A. course work and permission of Director of M.B.A. program and instructor who will supervise study.*

Individual study of problems in the field of management. Regular conferences with instructor required.

**670. Entrepreneurial Management (3:3).**

*Pr. MBA 604, MBA 620, FIN 630.*

How entrepreneurial managers discover and take advantage of innovative opportunities. The entrepreneurial process, starting new ventures, and developing entrepreneurship in large corporations.

**675. Issues and Problems in Industrial Relations (3:3).**

*Pr. ECO 600 or MGT 604, or permission of instructor.*

Industrial relations institutions, their historical development and interaction. The legal environment as well as topics of current interest.

**699. Thesis (1-3).****711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).****BUSINESS ADMINISTRATION, MASTER OF**

<http://www.uncg.edu/bae/mba>

The program is designed for qualified students from any academic background. Students can complete the program in two to four years depending on their background and course load.

The Bryan School M.B.A. program 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 information technology is changing the way all organizations function. The program allows for flexibility in planning course work to meet individual needs for breadth and/or depth.

**M.B.A. Mission Statement**

The M.B.A. program of the Joseph M. Bryan School of Business and Economics provides advanced educational opportunities to prepare students for careers in a global economy. The M.B.A. faculty of the Bryan School accepts as its primary responsibility excellence in the delivery of quality instruction to provide the skills, knowledge, and analytical competence necessary to provide our



students with the opportunity to become world-class managers.

Consistent with the strategic mission of the Bryan School as a whole, and, without sacrificing excellence in other areas of our program, the M.B.A. faculty recognizes international business studies and information technology as distinct domains of excellence in our program. Excellence in these areas is pursued through the infusion of both international business issues and information technology in all courses, dedicated courses in both of these areas, and the integration of faculty research in these two areas into our teaching.

The M.B.A. program aggressively recruits qualified students from outside the Triad as well as serving professionals who reside in the Triad. Graduates of the program, irrespective of location, will be prepared to contribute to the economic and social well being of the communities in which they are a part, and to the efficient management of the firms and institutions for which they work.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF BUSINESS ADMINISTRATION**

The Bryan School of Business and Economics offers a graduate program of study leading to a 36 hour Master of Business Administration degree. Students may be required to complete up to 12 hours of basic level M.B.A. prerequisite courses, some of which may be waived based on prior academic or professional accomplishment.

A minimum of 36 hours of required foundation, strategic management core, and elective courses must be completed.

### **Admissions Requirements**

Admission to the M.B.A. program (or other approved graduate program) is a prerequisite for enrollment in course work at any level of the program and is based on a combination of the following factors: undergraduate transcript, including the grade-point average; score on the GMAT; relevant managerial experience (a record of appropriate employment indicating increasing levels of managerial responsibilities); an admission essay; letters of recommendation; and, if required, an interview. Applicants should consult the M.B.A. Office in the Bryan School of Business and Economics for specific admissions requirements.

### **Computer Literacy**

Upon entry to the M.B.A. degree program students should have a working knowledge of word processing and spreadsheet applications in a PC environment. Familiarity with Excel is preferred.

### **Options**

Both full-time and part-time program options are available. Students in the full-time program complete the program requirements during a two-year period; the part-time option may take up to five years depending on the number of credit hours taken each semester. Those students choosing the full-time option will only be admitted in the fall and must complete courses in the specified sequence in order to progress through the program.

### **Full-time Program Option:**

#### **First Year - Fall Semester (12 hours)**

##### **First Half**

MBA 600 - Business Statistics (1.5)  
MBA 602 - Presentation and Interpretation of Financial Statements (1.5)  
MBA 603 - Economic Analysis (1.5)  
MBA 609 - Management Communications (1.5) or MBA 615 - Managerial Assessment and Development (1.5)

##### **Second Half**

MBA 605 - Financial Management (1.5)  
MBA 610 - Advanced Business Statistics (1.5)  
MBA 613 - Economic Policy and the Global Environment (1.5)  
MBA 615 - Managerial Assessment and Development (1.5) or MBA 609 - Management Communications (1.5)

#### **First Year - Spring Semester (12 hours)**

##### **First Half**

MBA 604 - Organizational Behavior (1.5)  
MBA 607 - The Operations Function (1.5)  
MBA 616 - Managing in a Global Environment (1.5)  
MBA 618 - Business Processes and Technology (1.5)

##### **Second Half**

MBA 606 - Marketing Management (1.5)  
MBA 611 - Ethics, Public Policy and Business (1.5)  
MBA 612 - Cost Management Systems (1.5)  
MBA 620 - Competitive Analysis and Strategy Formulation (1.5)

#### **Second Year - Fall Semester (12 hours)**

##### **First Half**

MBA 617 - Management Science (1.5)  
MBA 624 - Strategies for Managing Human Resources (1.5)  
MBA 625 - Corporate Structure and the Finance Function (1.5)  
Elective (1.5)

## Second Half

MBA 626 - Strategic Marketing Management (1.5)  
 MBA 627 - Global Operations Strategy (1.5)  
 MBA 628 - Business Strategy and Information Technology (1.5)  
 Elective (1.5)

## Second Year - Spring Semester (12 hours)

MBA 629a - Creating and Sustaining Competitive Advantage (3) or MBA 629b - Creating and Sustaining Competitive Advantage (3)  
 Electives (9)

## Part-time Program Option:

### Basic Level M.B.A. Prerequisite Courses (12 hours)

MBA 600 - Business Statistics (1.5)  
 MBA 602 - Presentation and Interpretation of Financial Statements (1.5)  
 MBA 603 - Economic Analysis (1.5)  
 MBA 604 - Organizational Behavior (1.5)  
 MBA 605 - Financial Management (1.5)  
 MBA 606 - Marketing Management (1.5)  
 MBA 607 - The Operations Function (1.5)  
 MBA 609 - Management Communications (1.5)

## Required Courses (24 hours)

### Foundation Level (12 hours)

MBA 610 - Advanced Business Statistics (1.5)  
 MBA 611 - Ethics, Public Policy and Business (1.5)  
 MBA 612 - Cost Management Systems (1.5)  
 MBA 613 - Economic Policy and the Global Environment (1.5)  
 MBA 615 - Managerial Assessment and Development (1.5)  
 MBA 616 - Managing in a Global Environment (1.5)  
 MBA 617 - Management Science (1.5)  
 MBA 618 - Business Processes and Technology (1.5)

### Strategic Management Core (12 hours)

MBA 620 - Competitive Analysis and Strategy Formulation (1.5)  
 MBA 624 - Strategies for Managing Human Resources (1.5)  
 MBA 625 - Corporate Structure and the Finance Function (1.5)  
 MBA 626 - Strategic Marketing Management (1.5)  
 MBA 627 - Global Operations Strategy (1.5)  
 MBA 628 - Business Strategy and Information Technology (1.5)  
 MBA 629a - Creating and Sustaining Competitive Advantage (3) or MBA 629b - Creating and Sustaining Competitive Advantage (3)

## Electives (12 hours)

With prior approval by the M.B.A. Program Director or Associate Director, a student will select 12 hours of courses. Five hundred (500-), 600- and 700-level courses in other departments and schools may be taken as elective course work with the prior approval of the M.B.A. Program Director or Associate Director.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN NURSING/MASTER OF BUSINESS ADMINISTRATION

The School of Nursing and the Bryan School of Business and Economics offer a combined Master of Science in Nursing/Master of Business Administration degree. A minimum of 54 semester hours is required for this degree.

## Admissions Requirements

To be considered for admission to the M.S.N./M.B.A. program, applicants must have obtained the following:

1. A baccalaureate degree in nursing from an accredited program.
2. A minimum GPA of 3.0.
3. Current unrestricted licensure as a registered nurse in one of the 50 states or International Licensure.
4. Satisfactory score on the GRE or GMAT taken within five years.
5. A minimum of one year of clinical nursing experience, full-time.

## Computer Literacy

Upon entry to the M.S.N./M.B.A. degree program, students should have a working knowledge of word processing and spreadsheet applications in a PC environment. Familiarity with Excel is preferred.

## Statistics

Completion of a statistics course prior to enrollment in NUR 601 is required. ECO 250 or MBA 600 is recommended to meet the program prerequisite for statistics.

## Please see the School of Nursing for additional clinical nursing requirements.

## Required Courses (54 hours)

NUR 610 - Theoretical Foundations of Advanced Nursing Practice (3)  
 NUR 614 - Information Systems in Nursing Service Administration (3)  
 MBA 602 - Presentation and Interpretation of Financial Statements (1.5)  
 NUR 540 - Budget Development and Analysis of Nursing Services (3)  
 NUR 620 - Law, Policy, and Economics of Healthcare (3)  
 MBA 603 - Economic Analysis (1.5)  
 NUR 601 - Critique and Utilization of Research in Nursing (3)  
 NUR 641 - Nursing Administration (4)

MBA 604 - Organizational Behavior (1.5)  
 MBA 605 - Financial Management (1.5)  
 NUR 642 - Nursing Administration: Theoretical Applications (4)  
 MBA 606 - Marketing Management (1.5)  
 MBA 607 - The Operations Function (1.5)  
 NUR 643 - Nursing Administration Practicum (4)  
 MBA 610 - Advanced Business Statistics (1.5)  
 MBA 613 - Economic Policy and the Global Environment (1.5)  
 MBA 616 - Managing in a Global Environment (1.5)  
 MBA 617 - Management Science (1.5)  
 MBA 620 - Competitive Analysis and Strategy Formulation (1.5)  
 MBA 624 - Strategies of Managing Human Resources (1.5)  
 MBA 628 - Business Strategy and Information Technology (1.5)  
 MBA 625 - Corporate Structure and the Finance Function (1.5)  
 MBA 626 - Strategic Marketing Management (1.5)  
 MBA 627 - Global Operations Strategy (1.5)  
 MBA 628 - Business Strategy and Information Technology (1.5)  
 MBA 629a - Creating and Sustaining Competitive Advantage (3)

### **SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE FOR STUDIES IN BUSINESS ADMINISTRATION**

The Bryan School of Business and Economics offers a Post-Baccalaureate Certificate for studies in business administration. The purpose of this certificate 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 M.B.A. program. Current students in the M.B.A., M.S. in accounting, or M.S. 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 M.B.A. degree.

#### **Admissions Requirements**

1. A bachelor's degree from an accredited institution of higher learning.
2. A minimum GPA of 3.0 in the undergraduate major.
3. A satisfactory score on the GMAT, taken within five years.

The certificate program will consist of 12 hours of courses selected from the following list:

MBA 600 - Business Statistics (1.5)  
 MBA 602 - Presentation and Interpretation of Financial Statements (1.5)

MBA 603 - Economic Analysis (1.5)  
 MBA 604 - Organizational Behavior (1.5)  
 MBA 605 - Financial Management (1.5)  
 MBA 606 - Marketing Management (1.5)  
 MBA 607 - The Operations Function (1.5)  
 MBA 609 - Management Communications (1.5)  
 MBA 610 - Advanced Business Statistics (1.5)  
 MBA 612 - Cost Management Systems (1.5)  
 MBA 613 - Economic Policy and the Global Environment (1.5)  
 MBA 617 - Management Science (1.5)  
 MBA 618 - Business Processes and Technology (1.5)

### **SPECIFIC REQUIREMENTS FOR THE POST-MASTER'S CERTIFICATE IN FINANCIAL ANALYSIS**

The Bryan School of Business and Economics offers a Post-Master's Certificate program in financial analysis. The purpose is to provide professionals who already have a M.B.A. or Master of Science in accounting to acquire state-of-the-art skills in the tools and techniques of financial analysis.

The certificate program will consist of at least 12 hours chosen from the following:

MBA 625 - Corporate Strategy and the Finance Function (1.5)  
 MBA 630 - Global Financial Markets (1.5)  
 MBA 631 - Security Analysis (1.5)  
 MBA 633 - Financial Statement Analysis (1.5)  
 MBA 637 - Corporate Governance (1.5)  
 MBA 639 - Value-Based Management (1.5)  
 MBA 669 - Business Law (1.5)  
 MBA 682 - Financial Reporting and Regulation (1.5)  
 MBA 683 - Mergers and Acquisitions (1.5)  
 MBA 684 - Advanced Topics in Managerial Accounting (1.5)  
 MBA 686 - Tax Strategy (3)  
 MBA 687 - International Accounting (1.5)  
 MBA 688 - Advanced Business Law (3)

### **SPECIFIC REQUIREMENTS FOR THE POST-MASTER'S CERTIFICATE FOR INTERNATIONAL STUDIES IN BUSINESS ADMINISTRATION**

The Bryan School of Business and Economics offers a Post-Master's Certificate program in international studies in business administration. The purpose of this certificate is to provide professionals with state-of-the-art knowledge and skills in international business.

The certificate program will consist of at least 12 hours.

**A. Required Course (1.5 hours)**

MBA 616 - Business in the International Economy (1.5)

**B. Electives (10.5 hours)**

MBA 627 - Global Operations Strategy (1.5)  
MBA 630 - Global Financial Markets (1.5)  
MBA 638 - International Financial Management (3)  
MBA 644 - International Marketing Management (3)  
MBA 660 - International Trade Economics (1.5-3)  
MBA 662 - International Monetary Economics (1.5-3)  
MBA 663 - Experience Business Abroad (1.5)  
MBA 675 - Issues in Cross-cultural Management (1.5)  
Other appropriate graduate level international liberal arts courses as approved by the M.B.A. advisor.

Additional hours to complete the program may be selected from Bryan School MBA courses in international business, or courses outside the business school which will broaden the student's understanding and appreciation of foreign cultures and economic environments. Students will be expected to meet the same course prerequisite requirements as current M.B.A. students.

**SPECIFIC REQUIREMENTS FOR THE POST-MASTER'S CERTIFICATE IN MANAGEMENT**

The Bryan School of Business and Economics offers a Post-Master's Certificate program in management. The purpose of this certificate is to provide professionals who already have a M.B.A. or related professional degree the opportunity to acquire specialized state-of-the-art knowledge and skills in one or more areas of business practice (e.g. marketing, finance, human resource management).

The certificate program will consist of at least 12 hours.

**A. Required Courses (3 hours)**

MBA 620 - Competitive Analysis and Strategy Formulation (1.5)

and one of the following:

MBA 624 - Strategies for Managing Human Resources (1.5)  
MBA 625 - Corporate Structure and the Finance Function (1.5)  
MBA 626 - Strategic Marketing Management (1.5)  
MBA 627 - Global Operations Strategy (1.5)  
MBA 628 - Business Strategy and Information Technology (1.5)

Students having equivalent course work may waive any of these required courses and substitute additional approved electives.

**B. Electives (9 hours)**

Additional hours to complete the program will be selected from the approved courses offered in Bryan School graduate programs. With the exception of MBA 615 and 616, courses in the pre-M.B.A. and Foundation Levels of the M.B.A. program may not be selected as electives for the certificate program. Students will be expected to meet the same course prerequisite requirements as current M.B.A. students.

**Additional Information for Post-Master's Certificate Programs:**

Students interested in the Post-Master's Certificate program apply for admission through The Graduate School. Candidates for the certificate program must have completed a master's degree at a program accredited by the AACSB, The International Association for Management Education. Students from non-AACSB accredited schools, or from fields other than business administration, will be considered, however, their admission must be approved by the M.B.A. Program Committee, in consultation with the Dean of The Graduate School. GMAT scores are not required.

Students will receive a certificate from the Bryan School of Business and Economics upon completion of the required course of study.

**MASTER OF BUSINESS ADMINISTRATION (MBA) COURSES FOR GRADUATES**

**595. Selected Topics in Business Administration (1.5:1.5).**  
*Pr. permission of instructor.*

Opportunity for advanced students of Business Administration to study, in depth, a topic or issue of special interest. May be repeated for credit when topics vary.

**600. Business Statistics (1.5:1.5).**  
*Pr. MAT 119 or equivalent.*

Statistical methods with applications in business and economics; descriptive statistics, probability, estimation and hypothesis testing.

**602. Presentation and Interpretation of Financial Statements (1.5:1.5).**

The conceptual framework underlying financial reporting by business enterprises, the processes by which authoritative accounting guidelines are promulgated, and the presentation, interpretation, and use of financial statements.

**603. Economic Analysis (1.5:1.5).**

Economic theory to analyze supply and demand, firm behavior, market structure, competitive behavior, government regulation, and the global and domestic environment facing the firm.

**604. Organizational Behavior (1.5:1.5).**

Organizational behavior within complex work organizations. Organizational structure and theory, work redesign, perception and attribution, learning, motivation, groups, conflict, power, influence, leadership, and decision making.

**605. Financial Management (1.5:1.5).**

*Pr. 600, 602, 603.*

Financial decision-making; financial markets, valuation of securities, capital budgeting, financial analysis, working capital policy, and financing a firm's operations.

**606. Marketing Management (1.5:1.5).**

*Pr. 602, 603.*

Strategic decisions in marketing. Combines theory and application so students learn when and why to make key decisions such as segmentation/targeting, product, price, distribution, and promotion.

**607. The Operations Function (1.5:1.5).**

*Pr. 600.*

Design, operation, and control of organizations. Procedures/quantitative techniques to analyze and critique present operations and develop improved operations.

**609. Management Communications (1.5:1.5).**

Principles of managerial communication; development of personal skills in writing, speaking and interacting as a group member in an organizational setting.

**610. Advanced Business Statistics (1.5:1.5).**

*Pr. 600.*

Construction, estimation, and evaluation of regression models and the use of regression for prediction. Simple linear regression and correlation, multiple linear regression, nonlinear regression, dummy variables.

**611. Ethics, Public Policy and Business (1.5:1.5).**

Effect of ethics, moral development, and social and business values in business decision-making. Business, government and society interactions in formulating public policy. Cultural problems in international business.

**612. Cost Management Systems (1.5:1.5).**

*Pr. 602.*

Organizational strengths and weaknesses as a basis for the development and use of cost systems in formulating and implementing strategy.

**613. Economic Policy and the Global Environment (1.5:1.5).**

*Pr. 603.*

Economic theory analyzes short-run and long-run effects of domestic fiscal, monetary, and exchange rate policies and the international consequences of global policy changes on the domestic economy.

**615. Managerial Assessment and Development (1.5:1.5).**

Managerial strengths and developmental needs are identified, and based on constructive feedback, students can improve their managerial skills. (Graded on S-U basis)

**616. Managing in a Global Environment (1.5:1.5).**

*Pr. 604, 605, 606, 607. Coreq. 613.*

Examines the environmental, cultural, political, legal and operational challenges facing managers in doing business across international boundaries.

**617. Management Science (1.5:1.5).**

*Pr. 600, 605, 607. Coreq. 610.*

Quantitative techniques which can be used to support decision making. Theory, limitations and applications of these techniques utilizing computer-based problem solving.

**618. Business Processes and Technology (1.5:1.5).**

*Pr. admission to a Bryan School graduate program or permission of the MSITM Program Director.*

Computer systems and networks, telecommunications, and business applications using all forms of information technology; survey of the managerial challenges presented by the use of information technology. (Same as ISM 601)

**620. Competitive Analysis and Strategy**

**Formulation (1.5:1.5).**

*Pr. 604, 606, 609, 612, 613. Coreq. 611, 618.*

Examines the tools and techniques of strategic/competitive analysis and how they can be used to formulate strategies designed to meet organizational goals.

**624. Strategies for Managing Human Resources (1.5:1.5).**

*Pr. 604, 617, 620. Coreq. 620.*

Overview of HRM and its major functions focusing on current trends including management of change and cultural diversity with a systematic integration of international perspectives.

**625. Corporate Strategy and the Finance**

**Function (1.5:1.5).**

*Pr. 605, 617, 620. Coreq. 620.*

Finance in the strategic management process; corporate strategies and shareholder value creation, financing decisions, distribution policy, and long-term investment decisions.

**626. Strategic Marketing Management (1.5:1.5).**

*Pr. 606, 610, 620. Coreq. 620.*

Comprehensive marketing plans in contexts including new product introductions, global marketing, services, non-profits, and competitive industries. Role of marketing information systems and new marketing trends.

**627. Global Operations Strategy (1.5:1.5).**

*Pr. 607, 610, 617, 620. Coreq. 620.*

Overall business strategies translated into operational strategies and tactics; international competition, total quality management, competing with flexibility, and implementation through computers and communication technology.

**628. Business Strategy and Information**

**Technology (1.5:1.5).**

*Pr. 610, 620.*

Selection, implementation, and management of information technology in supporting organizational goals; nature and use of information technology in achieving superior performance and competitive advantage.

**629a. Creating and Sustaining Competitive**

**Advantage (3:3).**

*Pr. 625, 626, 627. Coreq. 624, 628.*

Using a computer simulation, student teams will compete against one another in a global environment to practice how organizations can move towards a position of competitive advantage.



**629b. Creating and Sustaining Competitive**

**Advantage (3:3).**

*Pr. 625, 626, 627 and permission of program director. Coreq. 624, 628.*

Student teams will serve as consultants to area organizations and provide their managers with comprehensive solutions to strategic challenges.

**630. Global Financial Markets (1.5:1.5).**

*Pr. 605, 613.*

Structure and instruments of global financial markets; interest rate determination, term structure of interest rates, global markets for equity, fixed income and derivative securities, foreign exchange, and central banking.

**631. Security Analysis (1.5:1.5).**

*Pr. 625 or permission of instructor.*

Principal approaches to security valuation for equity and fixed-income securities in a conceptual and applied context; market cycles, fundamental and technical analysis.

**632. Financial Institutions (1.5:1.5).**

*Pr. 605, 613, 630.*

Theory and practice of financial institutions: commercial banks, securities firms, finance and insurance companies, pension and mutual funds; products and services; global relationships; management and performance measures.

**633. Financial Statement Analysis (1.5:1.5).**

*Pr. 605.*

Examination of financial statement information to measure creation of value and assess risks from the perspective of investors, creditors, regulators, and strategy formulators.

**634. Advanced Financial Statement Analysis and Security Valuation (1.5:1.5).**

*Pr. 633.*

Financial forecasting and valuation stressing economic and accounting measures of value. Topics include quality of earnings analysis; full-information forecasting and valuation; analysis of credit risk. Supported with appropriate software.

**635. Entrepreneurial Finance (1.5:1.5).**

*Pr. 605.*

Examines the financial decision-making of small businesses from their start-up, to on-going management and through to the initial public offering.

**637. Corporate Governance (1.5:1.5).**

Examination of relationships among stakeholders who determine the direction and performance of the modern corporation. Primary emphasis will be on the interrelationships between shareholders, management and the board of directors.

**638. International Financial Management (3:3).**

*Pr. 630.*

International dimensions of financial decision-making; international financial system and markets, the financing of international operations, and the investment in foreign operations.

**639. Value-Based Management (1.5:1.5).**

*Pr. 625.*

In-depth analysis of the value-creation process and how executive compensation systems can be used to align the interests of shareholders and managers.

**641. Consumer Behavior (1.5:1.5).**

*Pr. 626.*

Understanding consumer markets and how to design more efficient marketing plans. Concepts and theory from psychology, sociology, anthropology and economics.

**642. Marketing Research: Gathering Original Data (1.5:1.5).**

*Pr. 610, 626.*

Marketing research, emphasizing primary data. Defining the research purpose, selecting a data gathering method, writing a survey/questionnaire, and sampling methods. Research proposal must be written.

**643. Marketing Research: Data Analysis (1.5:1.5).**

*Pr. 642.*

Using statistics and interpreting the results to make marketing decisions. Completion of research project proposed in MBA 642 expected.

**644. International Marketing Management (3:3).**

*Pr. 620.*

Activities that direct the flow of products to markets in a transnational, transcultural context; transcultural consumer behavior, channel strategy, physical distribution, promotion, and pricing.

**647. Marketing with E-commerce (1.5:1.5).**

*Pr. 626.*

In-depth analysis of methods for developing Web marketing strategies as well as integrating Web marketing efforts with current market strategy.

**648. Brand Management (1.5:1.5).**

*Pr. 606.*

The evolving nature of branding over time and the interaction of managerial actions to produce consumer understanding and response to brands in both domestic and global markets.

**650. Total Quality Management (1.5:1.5).**

*Coreq. 620.*

Philosophy and tools that comprise Total Quality Management (TQM). How TQM can be implemented in manufacturing and service firms. Integrates philosophy, tools, and implementation issues through cases/project. (Same as ISM 650)

**651. Management of Technology and Innovation (1.5:1.5).**

Technology and innovation in the competitive strategy of organizations; sources of innovations, the different dimensions of technological innovations, and the adoption and justification of innovations. (Same as ISM 651)

**652. Implementation of Total Quality Management (1.5:1.5).**

*Pr. 650.*

Implementation of quality management in organizations. Organization-based project to study the strategic and operational details of building quality for enhancing competitiveness. (Same as ISM 652)

**653. Service Operations Management (1.5:1.5).**

*Pr. 607.*

Managerial processes underlying operations management in service-providing organizations; operations strategy, design and delivery, and operations planning and control in services. (Same as ISM 653)

**654. Project Management (1.5:1.5).**

*Pr. 607.*

Modern methods for defining, planning and managing large projects. Computer software and network modeling are used to support the efficient scheduling

- of interdependent activities. (Same as ISM 654)
- 655. Knowledge Management (1.5:1.5).**  
*Pr. admission to a Bryan School graduate program or permission of MSITM Program Director.*  
 Examines current theories and foundations of knowledge management, knowledge assets and their organizational, analytical, managerial tools and techniques for knowledge acquisition, generation, assessment, evaluation, and dissemination are studied. (Same as ISM 657)
- 657. e-Business Strategy (1.5:1.5).**  
*Pr. 602, 606, 610.*  
 Provides an understanding of the skills, business concepts, strategic opportunities, and social issues that surround the emergence of electronic commerce (EC) or e-Business.
- 662. International Monetary Economics (1.5-3).**  
*Pr. 613, ECO 346 or permission of instructor.*  
 Examines movements in exchange rates, exchange rate crises, policy dilemma of achieving internal and external balance, monetary integration and global macroeconomics topics. (Same as ECO 662)
- 663. Experience Business Abroad (1.5:1.5-4.5:4.5).**  
*Pr. 616 or permission of instructor.*  
 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. May be repeated if offered in different country.
- 669. Business Law (1.5:1.5).**  
 The relationship between the legal system and the business environment with emphasis on the choice between the legal forms of business, employment law, and contracts.
- 670. Organizational Theory (1.5:1.5).**  
*Pr. 604.*  
 Organization theory and structure combining historical development and recent theory and findings from the behavioral and social sciences. Construction of organizational models based upon modern theory and the survival needs of the enterprise.
- 671. Organizational Change and Development (1.5:1.5).**  
*Pr. 604.*  
 Organizational development and change techniques. Management of planned organizational change from theoretical and applied perspectives. Skill development in designing, implementing and evaluating selected organizational change programs.
- 672. Advanced Topics in Human Resource Management (1.5:1.5).**  
*Pr. 624, or permission of instructor.*  
 Specific course title identified each semester by the topical extension to the basic title; e.g., Advanced Topics in Human Resource Management: Appraisal and Compensation. May be repeated for credit when topic varies.
- 675. Issues in Cross-Cultural Management (1.5:1.5).**  
*Pr. 624, or permission of instructor.*  
 International dimensions of human resources. Comparison of U.S. and other workforce cultures, emphasizing the need for cross-cultural behavior understanding and training. (Graded on S-U basis)
- 676. Advanced Topics in Management Communications (1.5:1.5).**  
*Pr. 609, or permission of instructor.*  
 Specific course title identified each semester by the topical extension to the basic title; e.g., Advanced Topics in Management Communications: Technical Writing. May be repeated for credit when topic varies.
- 678. Increasing Work Team Effectiveness (1.5:1.5).**  
*Pr. 604.*  
 Examines factors relevant to work team effectiveness including the change to teams; team empowerment; international teams; self-management; decision making, communication, and conflict; and measuring and rewarding team performance.
- 682. Financial Reporting and Regulation (1.5:1.5).**  
*Pr. 602 or equivalent.*  
 Provides abilities necessary to understand, interpret, and analyze corporate financial disclosures in a manner commensurate with advanced understanding of financial analysis.
- 683. Mergers and Acquisitions (1.5:1.5).**  
*Pr. 625.*  
 Mergers and acquisitions as a means of meeting a firm's strategic goals; financial analysis of mergers, public policy concerns, and accounting and tax aspects.
- 684. Advanced Topics in Managerial Accounting (1.5:1.5).**  
*Pr. 612.*  
 Case oriented study of advanced managerial accounting topics including resource allocation, activity-based costing, target costing, performance measurement systems and compensation systems.
- 685. Crisis Management (1.5:1.5).**  
*Pr. 620.*  
 Anticipating, preparing for, and managing during times of organizational crisis. Particular attention is paid to the strategic implications of preparing for the unexpected and the successful use of planning and communication tools.
- 686. Tax Strategy (3:3).**  
*Pr. 612 or equivalent.*  
 How taxes affect business strategy and modeling the decision process. Impact of taxation on investments, capital structure, business forms, multinational operations, mergers, acquisitions, reorganizations and divestitures.
- 687. International Accounting (1.5).**  
*Pr. 602 or equivalent, 616, or permission of instructor.*  
 Study of accounting from an international perspective, concentrating on differential developments among various nations. Accounting problems of multinational enterprises are analyzed.
- 688. Advanced Business Law (3:3).**  
*Pr. 669 or equivalent.*  
 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.

**689. Seminar in Leadership Development (6:6).**

*Pr. recommendations of adviser and permission of instructor.*  
For students from all disciplines who intend to pursue a career in administrative positions. Development of the creative leadership potential and maximization of personal growth. Students requested to make emotional as well as intellectual commitment to development of leadership qualities. (Same as ELC 689) (Graded on S-U basis)

**695. Special Topics in Business Administration (1.5-3).**

Specific course title identified each semester by the topical extension to the basic title: e.g., Special Topics in Business Law; Organizational Theory. May be repeated for credit when topic varies.

**696. Organizational Internship (3:3)**

*Pr. 620 and permission of M.B.A. Program Director.*  
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. May be repeated for credit.

**697. Directed Studies (1.5-3).**

*Pr. completion of 12 hours or equivalent in the M.B.A. program and permission of M.B.A. Program Director.*  
Independent study of a business administration topic, not currently covered by courses in the M.B.A. program, under the supervision of a faculty member(s). May be repeated for a maximum of 6 hours credit when topic varies.

**711. Experimental Course.**

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

**803. Research Extension (1-3).**

## DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

435 Science Building  
(336) 334-5714  
<http://www.uncg.edu/che>

*Professors*

**John R. Jezorek**, Ph.D., Analytical chemistry, liquid chromatography, capillary electrophoresis, chemical surface modification, novel stationary phases.

**Terence A. Nile**, Ph.D., Synthetic organometallic chemistry, cyclopentadiene and polypyridyl chemistry, catalysis, organometallics in organic synthesis (Head of Department).

**Jerry L. Walsh**, Ph.D., Inorganic chemistry, coordination chemistry of transition metal complexes, synthesis, photochemistry, reaction mechanisms.

*Associate Professors*

**R. Bruce Banks**, Ph.D., Bioorganic chemistry, chemical carcinogenesis, xenobiotic metabolism.

**Alice E. Haddy**, Ph.D., Biophysical chemistry, electron paramagnetic resonance studies of transition metals in biological systems (Director of Graduate Study).

**Eric R. Johnston**, Ph.D., Organic chemistry, study of molecular dynamics by 1D and 2D nuclear magnetic resonance techniques.

**Gregory M. Raner**, Ph.D., Bioinorganic chemistry, enzymology, mechanistic studies and industrial applications of cytochrome P450 monooxygenase enzymes.

*Assistant Professors*

**Nadja B. Cech**, Ph.D., Analytical chemistry, electrospray ionization mass spectrometry, liquid chromatography, medicinal plant chemistry.

**G. Brent Dawson**, Ph.D., Analytical chemistry, capillary electrophoresis and chromatography for the analysis of biological molecules.

**Liam M. Duffy**, Ph.D., Physical chemistry, gas-phase chemical reaction dynamics probed by millimeter wavelength spectroscopy.

**Jason J. Reddick**, Ph.D., Bioorganic chemistry, biochemistry, biosynthesis of polyketides.

**Darrell J. Spells, Ph.D.,** Organic chemistry, organic synthesis and self-assembled monolayers, applications of organometallic chemistry to the preparation of self-assembled monolayers.

The Department of Chemistry and Biochemistry offers the Master of Science degree. The Master of Science degree requires students to learn a core of advanced course work from each of the four major areas of chemistry (analytical, inorganic, organic, and physical) as well as to complete courses in other areas. In addition, a research thesis is required which will allow students to do original research under the direction of a faculty advisor. The Master of Science program gives students the opportunity to demonstrate and develop their potential for work in chemistry. As such, it is especially attractive to individuals who have been out of an academic environment for some time, or for students who wish to bolster their undergraduate science experience. The successful Master of Science candidate will be prepared for positions of significant responsibility in industry or government or for further study towards a doctoral degree at another institution.

The Master of Science in chemistry is linked to the Bachelor of Arts in biology and the Bachelor of Science in chemistry 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.

A Master of Education in curriculum and instruction with a concentration in chemistry education is offered through the Department of Curriculum and Instruction. Please see the Department of Curriculum and Instruction for specific degree requirements.

### **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN CHEMISTRY**

The Department of Chemistry and Biochemistry offers a graduate program of study leading to a 30 hour Master of Science in chemistry degree.

### **A. Required Core Courses (12 hours)**

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)

### **B. Research Techniques**

Graduate students must write a thesis and may take additional research hours for a total of 12 hours.

CHE 699 - Thesis (1-6)  
CHE 680 - Research Problems in Chemistry (1-6)

### **C. Seminar**

All graduate 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)

### **D. Electives**

Students must select other 500-700 level courses to bring the total credit hours to at least 30. 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.

### **E. Comprehensive Examination**

The comprehensive examination consists of a research proposal including a literature review related to the thesis topic. The proposal must be approved by the student's thesis committee.

### **F. Thesis Defense**

Students must defend the completed thesis before the thesis committee.

## **(CHE) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

### **531. Instrumental Analysis (3:3).**

*Pr.* 331, 333, 205 or 352 (either may be taken concurrently), PHY 212 or 292.

Theory and practice of advanced analytical techniques with emphasis on instrumental methods of analysis.

### **533. Instrumental Analysis Laboratory (1:0:4).**

*Pr.* 531 concurrently.

Laboratory work to accompany 531.

**536. Computers in Chemistry.** (3:3).

*Pr. two semesters of chemistry beyond general chemistry; one semester of calculus; one year of physics; one semester of programming in a higher level language; or permission of instructor.*

Introduction to the analysis of chemical data and control of chemical instruments with digital computers. Designed primarily for chemistry majors but may be taken by other interested science majors.

**553. Advanced Organic Chemistry I** (3:3).

*Pr. 352.*

Advanced topics in organic chemistry with special emphasis on reaction mechanisms and stereochemistry.

**555. Organometallic Chemistry** (2:2).

*Pr. 352 and 442.*

Theoretical and synthetic aspects of organometallic chemistry and applications to catalysis and synthetic organic chemistry.

**556. Biochemistry I** (3:3).

*Pr. 352, BIO 111-112.*

Introductory biochemistry presented from a chemical perspective. Topics include amino acids, proteins and enzymes, carbohydrates, nucleic acids, lipids, membranes, and carbohydrate catabolism.

**557. Biochemistry II** (3:3).

*Pr. 352, BIO 111-112, CHE 556, or permission of instructor.*

Continuation of 556. Enzyme catalytic mechanisms, additional topics in intermediary metabolism, genetic biochemistry, and selected topics in molecular physiology.

**558. Biochemistry Laboratory** (1:0:4).

*Pr. 556 or its equivalent, 354, 333, or permission of instructor.*

Introduction to biochemical techniques, including isolation, purification and characterization of biological molecules.

**570. Advanced Special Topics in Chemistry** (1-3).

Studies at an advanced level dealing with specialized areas of chemistry in which there is special expertise among departmental faculty. Hours per week and credit to be arranged. May be repeated for a maximum of six hours credit when topic varies. Areas to be identified as follows: **570a Analytical**; **570b Biochemistry**; **570c Inorganic**; **570d Organic**; **570e Physical**; **570f, Chemical Education**.

**589. Experimental Course.**

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

**(CHE) COURSES FOR GRADUATES****601. Graduate Seminar I** (1:1).

*Pr. 401 or equivalent.*

Oral reports from the current literature of chemistry by the students, as well as attendance at presentations by other students, staff, and guest speakers.

**602. Graduate Seminar II** (1:1).

*Pr. 601.*

Oral reports from the literature and the student's thesis research, as well as attendance at presentations by other students, staff, and guest speakers.

**604. Advanced Polymer Chemistry** (3:3).

*Pr. 352.*

Modern concepts of addition, ring opening, and condensation polymerization, and the application of physical instrumentation to the characterization of polymers.

**632. Advanced Analytical Chemistry** (3:3).

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

Current research activities in the analytical area, primarily for first-year graduate students. Four areas emphasized: chemical equilibrium, spectroscopy, separations, and electrochemistry.

**641. Advanced Inorganic Chemistry II** (3:3).

*Pr. 442.*

Group theory, its applications, and other topics in advanced inorganic chemistry.

**652. Advanced Organic Chemistry II** (3:3).

*Pr. 553.*

Advanced topics in organic chemistry with attention on organometallic, small-ring, bicyclic, and heterocyclic compounds, conservation of orbital symmetry, and stereochemistry.

**661. Advanced Physical Chemistry I** (3:3).

*Pr. 461 and 462 or equivalent (one year of physical chemistry).*

Selected topics in quantum chemistry, spectroscopy, statistical thermodynamics, and chemical kinetics will be developed with attention to methods of application.

**662. Advanced Physical Chemistry II** (3:3).

*Pr. 661.*

Advanced topics in quantum chemistry, spectroscopy, statistical thermodynamics, and chemical kinetics.

**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 semester hours credit when topic varies. Areas identified as follows:

**670a Analytical** (*Pr. 632*); **670b Biochemistry** (*Pr. 556*); **670c Inorganic** (*Pr. 641*); **670d Organic** (*Pr. 553*); **670e Physical** (*Pr. 661*).

**680. Research Problems in Chemistry** (1-6).

*Pr. permission of instructor and department head.*

Advanced laboratory research in specialized areas of chemistry under the direction of a faculty member appointed by the department head after consultation with student and faculty member. Preparation of master's thesis. May be taken for credit over two or more semesters.

**699. Thesis** (1-6).

Independent research under the direction of faculty member appointed by department head after consultation with student and faculty member. Preparation of master's thesis. May be taken for credit over two or more semesters. (Graded on S-U basis)

**711. Experimental Course.**

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

**801. Thesis Extension** (1-3). (Graded on S-U basis)**803. Research Extension** (1-3). (Graded on S-U basis)



## DEPARTMENT OF CLASSICAL STUDIES

233 McIver Building  
(336) 334-5214  
<http://www.uncg.edu/cla>

### *Professors*

**Susan Shelmerdine**, Ph.D., Homeric and archaic Greek poetry, Greek tragedy, mythology and religion, Greek and Latin pedagogy (Head of Department).

**Jeffrey Soles**, Ph.D., Aegean archaeology (Minoans and Mycenaeans), Classical archaeology of Greece and Rome.

### *Associate Professors*

**Hugh Parker**, Ph.D., Silver Latin literature, mythology, Medieval Latin.

**David B. Wharton**, Ph.D., Literary criticism, Linguistics, Greek philosophy.

### *Assistant Professor*

**Kathryn F. Williams**, Ph.D., Historiography, literature of the Roman Republic, Augustan literature (Director of Graduate Study).

The Department of Classical Studies offers a 38 hour Master of Education degree in Latin for teachers interested in pursuing further study in their subject area or in working towards "M" licensure. Separate options are available to accommodate students entering the program with and without prior initial licensure.

The program concentrates on the study of the Latin language, with additional course work required in the areas of classical civilization and professional education. Courses are offered in the summer, usually in an intensive three-week format, and in the evening during the school year to accommodate in-service teachers. Distance learning sections are offered for some courses.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN LATIN

The Department of Classical Studies, together with the School of Education, offers a graduate program of study with two tracks leading to a Master of Education degree: the Teacher Leadership track is for individuals who already have initial teaching licensure for Latin and are seeking "M" licensure; the Classroom

Practice track is intended for post-baccalaureates who do not have initial teaching licensure for Latin but wish to attain "M" licensure.

### Teacher Leadership Track (38 hours)

For students who already hold "A" licensure.

#### A. Core Courses (6 hours)

CCI 502 - The History of Latin Literature (3)

LAT 552 - Teaching Latin at the Secondary Level (3)

#### B. Professional Education (9 hours)

CUI 545 - Diverse Learners (3)

CUI 669 - Educational Implications of Learning and Developmental Theory (3)

CUI 675 - Teacher as Researcher (3)

#### C. Study of Latin (12-15 hours)

In consultation with the Director of Graduate Study, a student will select a minimum of 12 hours from courses in Latin (LAT) at the 500-level or above.

#### D. Electives (6-9 hours)

In consultation with the Director of Graduate Study, a student will select a minimum of 6 hours from courses in classical civilization (CCI) or another appropriate field at the 500-level or above.

#### E. Portfolio (2 hours)

In consultation with the Director of Graduate Study, a student will complete a portfolio which addresses the required competencies for licensure.

#### F. Non-Course Requirements

1. Diagnostic translation exam to be given in the first semester of participation in the program and reviewed by members of the Department of Classical Studies.
2. Attendance at at least one professional conference to be approved in advance by the graduate advisor.
3. Attendance at two area Latin teacher meetings or pedagogical presentations approved in advance by the graduate advisor and documented with a written reflective assessment which will be included in the final portfolio.
4. Comprehensive exam to be given within the last two semesters of a student's enrollment in the program.

### Classroom Practice Track (38 hours)

#### A. Core Courses (6 hours)

CCI 502 - The History of Latin Literature (3)

LAT 552 - Teaching Latin at the Secondary Level (3)

## B. Professional Education (9 hours)

- CUI 545 - Diverse Learners (3)
- CUI 669 - Educational Implications of Learning and Development Theory (3)
- CUI 675 - Teacher as Researcher (3)

## C. Study of Latin (15-18 hours)

- LAT 531 - Latin Grammar and Composition (3)

In consultation with the Director of Graduate Study, a student will select a minimum of 12 additional hours from courses in Latin (LAT) at the 500-level or above.

## D. Electives (3-6 hours)

In consultation with the Director of Graduate Study, a student may select a minimum of 3 hours from courses in classical civilization (CCI) or another appropriate field at the 500-level or above. Non-lateral entry candidates must take CUI 680, Clinical Experience in Teaching.

## E. Portfolio (2 hours)

In consultation with the Director of Graduate Study, a student will complete a portfolio which addresses the required competencies for licensure.

## F. Non-Course Requirements

1. Diagnostic translation exam to be given in the first semester of participation in the program and reviewed by members of the Department of Classical Studies.
2. On-site observation of at least two different master teachers.
3. Attendance at two area Latin teacher meetings or pedagogical presentations approved in advance by the graduate advisor and documented with a written reflective assessment which will be included in the final portfolio.
4. Fifty hours of pre-student teaching field experience required for pre-service students not in the lateral entry program.
5. Comprehensive exam to be given within the last two semesters of a student's enrollment in the program.

## CLASSICAL CIVILIZATION

### (CCI) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

- 501. Independent Study (Classical Civilization) (1-3).**  
*Pr. permission of instructor.*  
 Directed program of reading, research, and individual instruction in classical civilization. May be repeated for a maximum of 6 hours credit.

- 502. The History of Latin Literature (3:3).**

*Pr. permission of instructor.*

A survey of Latin literature in English translation from the third century B.C. to the beginnings of the Middle Ages.

- 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.

- 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. May be repeated once for credit when topic varies.

- 550. Special Topics in Classical Studies (3:3).**

*Pr. permission of instructor.*

Varying topics in Greek and/or Roman literature, archaeology, or culture, chosen according to the needs of the students. All readings in English translation. May be repeated once for credit when topic varies.

- 589. Experimental Course.**

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

## (CCI) COURSES FOR GRADUATES

- 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.

- 711. Experimental Course.**

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

## GREEK (GRK)

### (GRK) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

- 501. Independent Study. (1-3).**

*Pr. permission of instructor.*

Directed program of reading, research, and individual instruction in Greek languages and literature. May be repeated for a maximum of 6 hours credit.

- 550. Topics in Greek Studies (3).**

*Pr. permission of instructor.*

Studies in selected topics in Greek literature or language, e.g., the development of a genre, the nature of a period of literary history, or the treatment of a particular theme. May be repeated once for credit when topic varies.

- 589. Experimental Course.**

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

## (GRK) COURSES FOR GRADUATES

- 711. Experimental Course.**

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

## LATIN

**(LAT) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES****501. Independent Study (1-3).**

*Pr. permission of instructor.*

Directed program of reading, research, and individual instruction in Latin languages and literature. May be repeated for a maximum of 6 hours of credit.

**531. Latin Grammar and Composition (3:3).**

*Pr. 204, or permission of instructor.*

Intensive study of Latin grammar, syntax, and prose style; includes reading of Latin texts and translation into Latin from English. Required for initial teaching licensure in Latin.

**550. Topics in Latin Studies (3).**

*Pr. permission of instructor.*

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. May be repeated once for credit when topic varies.

**552. Teaching Secondary-Level Latin: Current Trends (3:3).**

*Pr. admission to the "A" licensure or M.Ed. in Latin program or permission of instructor.*

Current 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 issues. May be repeated once for credit.

**571. Medieval and Renaissance Latin (3:3).**

Selections from Medieval and Renaissance prose and poetry.

**589. Experimental Course.**

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

**(LAT) COURSES FOR GRADUATES****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.

**601. Lyric Poetry (3:3).**

Selected readings from Catullus, the *Odes* of Horace, and Martial.

**602. Ovid (3:3).**

Selected readings from the *Metamorphoses*, *Ars Amatoria*, and *Tristia*.

**611. Roman Historians (3:3).**

Study of the works of Caesar, Livy, Sallust, and Tacitus.

**612. Cicero (3:3).**

Study of the orations, letters, and essays of Cicero.

**623. Roman Comedy (3:3).**

Reading of selected plays of Plautus and Terence in their historical and cultural context.

**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.

**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.

**626. Silver Age Survey (3:3).**

A survey of the major authors of the first century with special emphasis on Petronius, Juvenal, Martial, and Pliny.

**670. Directed Study: Portfolio Development (2).**

*Pr. completed at least 30 semester hours in M.Ed. in Latin program.*

Directed research and portfolio development for students in the M.Ed. program. To be taken at the end of the student's plan of study. (Graded on S-U basis)

**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. May be repeated for a maximum of 9 credits when authors vary.

**711. Experimental Course.**

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

**803. Research Extension (1-3).****DEPARTMENT OF COMMUNICATION**

102 Ferguson Building

(336) 334-5297

<http://www.uncg.edu/cst>

*Professor*

**Harold Lloyd Goodall, Jr., Ph.D.**, Ethnography, organizational and family studies (Head of Department).

*Associate Professors*

**Peter M. Kellett, Ph.D.**, Conflict analysis and management, narrative methodology (Director of Graduate Study).

**Elizabeth J. Natalie, Ph.D.**, Gender and communication theory, interpersonal processes, feminist criticism.

*Assistant Professors*

**Sharon L. Bracci, Ph.D.**, Communication ethics, argumentation, health communication.

**David A. Carlone, Ph.D.**, Organizational communication, social and cultural theory, cultural studies of work and organization.

**Daniel H. DeGooyer, Jr., Ph.D.**, Social and communication theory, small group and organizational communication.

**Spoma Jovanovic, Ph.D.**, Communication and communities, communication ethics, social justice, service learning.

**Christopher N. Poulos, Ph.D.**, Relational communication, philosophy of communication, film, dialogue.

*Lecturer*

**Joyce Ferguson, M.Ed.,** Speech pedagogy,  
small group communication.

**Mission**

*We believe that human communication is the creative process that builds, sustains and transforms relationships and communities. We engage students in this process through communication scholarship.*

The graduate program in communication studies is concerned with research and inquiry into the strategic and ethical uses of communication to build relationships and communities. We are a community of scholars and students of communication who are engaged in seminars, research, and experiential learning. We value students who are able to blend theory, research and application in a variety of communication environments. We also value students who are research focused, self-motivated, and who are already good writers and speakers. Students develop the in-depth theoretical knowledge and research skills in the core courses and then apply this to the subject matter of the elective courses they take. Every elective course synthesizes communication theory, research, and application because we regard theory, research and application as interdependent and necessary aspects of scholarship.

**Admission Requirements:**

Admission to the graduate program in communication is based on the faculty's evaluation of the application file. That file must include:

1. A 2-3 page cover letter explaining the applicant's qualifications and interests in our program.
2. Original transcripts of the applicant's undergraduate record as well as any graduate work previously undertaken. Note that all transcripts should be submitted.
3. GRE (Graduate Record Exam) scores.
4. Three letters of reference from persons able to comment on the applicant's prospects for success in graduate education.
5. A writing sample such as an academic paper, or a paper written in consultation with the graduate director.
6. An interview (phone or in person) with the Director of Graduate Study or a member of the graduate faculty.
7. Graduate School and departmental application forms.

**Note that all materials should be sent to The Graduate School.** When an application file is complete at The Graduate School, it is then forwarded to the department and the admission decision is made shortly after the May 1<sup>st</sup> deadline. It is the student's responsibility to make sure The Graduate School receives all of the application materials.

Please contact the Director of Graduate Study, Dr. Peter Kellett, at [pmkellett@uncg.edu](mailto:pmkellett@uncg.edu) or (336) 334-3840 if you have questions concerning these requirements.

**Procedural Guidelines:**

1. The deadline for admission to the program, with or without a Teaching Assistantship (TA) or Research Assistantship (RA) for the fall semester, is May 1<sup>st</sup>.
2. Decisions to admit with a teaching assistantship and any tuition waivers will be made shortly after the May 1 deadline. Students will be notified and, if an offer is made, will have a one-week deadline for their response to the offer. Applications received after May 1<sup>st</sup> will not be accepted. See *The Graduate School Bulletin* for their deadlines and for information on spring admissions.
3. Upon admission to the department, the Director of Graduate Study will advise graduate students on departmental and graduate school processes, and procedures.
4. 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, be placed on academic probation, or asked to leave the program.
5. In the semester immediately prior to their final semester, students will form a comprehensive examination advisory committee consisting of two faculty members with whom they have taken classes during their degree, one of whom will serve as their major guiding professor. This committee will guide the student through the development of comprehensive examination questions and will also coordinate grading, rewrites when necessary, and procedures for reporting unsatisfactory/failing examination performance where appropriate. To allow for adequate planning, the committee should be formed before either fall or spring break in the semester prior to the final semester.

**SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS IN COMMUNICATION STUDIES**

The requirements for the 30 hour Master of Arts in communication studies consist of (1) satisfactory completion of the mandatory core



courses, (2) satisfactory completion of elective course work, and (3) satisfactory completion of the comprehensive examination.

### A. Mandatory Core Courses (9 hours)

- CST 600 - Engaging in Graduate Scholarship (3)
- CST 601 - Engaging Communication Theories (3)
- CST 602 - Engaging Communication Research Methodology (3)

The core courses form the foundation for effective scholarship and inquiry. CST 600 should be taken in the first semester of graduate study. This course introduces students to the policies, procedures, and expectations of graduate level work. CST 601 and 602 should be taken in the first year of the program and introduces students to the theories and methodologies necessary to engage in communication scholarship respectively.

### B. Elective Course Work (21 hours)

Satisfactory completion of 21 hours is required. At least 9 hours of electives must be at the 600-level. Up to 6 hours may be taken outside the Department of Communication, but courses graded S/U may not count toward the minimum number of hours required for the degree.

### C. Comprehensive Examination

All students must take and pass the comprehensive examination taken in the final semester of course work (see **Procedural Guidelines** for more information).

### SACS 18-Hour Requirement

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

## COMMUNICATION STUDIES

### (CST) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

CST 500-level classes are open to any graduate student. Undergraduate student prerequisite: *permission of instructor*.

#### 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.

#### 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.

#### 555. Relational Communication and the Hollywood Feature Film (3:2:3).

Analysis and application of the images, discourses, and practices concerning human communication and relationships as they are represented in the powerful cultural medium of film.

#### 562. Organizational Change (3:3).

Instruction in communicating changes into existing organizations. Methods of creating a climate for change, diffusing new ideas and technologies, and assessing change consequences.

#### 576. Communication, Play, and Creativity (3:3).

How play and creativity infuse and transform our communicative actions in interpersonal relationships, workplaces, and our communities.

#### 589. Experimental Course.

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

#### 599. Communication Pedagogy (3:3)

Seminar focusing on the effect of communication upon learning. For graduate teaching assistants in any discipline, graduates and undergraduates interested in teaching or training. Emphasis on pedagogical principles and instructional materials.

## (CST) COURSES FOR GRADUATES

#### 600. Engaging in Graduate Scholarship (3:3).

*Pr. admission to appropriate degree program or permission of instructor.*

Introduces students to the policies, procedures, and expectations of graduate community, and prepares students for graduate level work.

#### 601. Engaging Communication Theories (3:3).

*Pr. admission to appropriate degree program or permission of instructor.*

Contemporary theories of communication, including interpretive, critical, rhetorical, and scientific. Emphasis on engaging social and cultural contexts in which to utilize theory.

#### 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.

#### 605. Communication and 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.

#### 612. Seminar in Communication Studies (3:3).

*Pr. admission to appropriate degree program or permission of instructor.*

Subject matter varies. May be repeated for credit.

#### 626. The Aesthetics of Communication (3:3).

Examines how notions of beauty and power are implicated in our everyday communicative actions within interpersonal relationships, workplaces, and communities.



- 630. Creating Community in the Workplace (3:3).**  
How do we create communities out of autonomous and creative individuals? Considers communication as the creative process underlying democratic communities, and the concepts of power, identity, and voice.
- 632. Seminar in Communication Ethics (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
Theory and practice of communication ethics in a free society. Issues and cases ranging from intrapersonal to mass media communication situations.
- 650. Independent Study (1-3).**  
*Pr. admission to appropriate degree program or permission of instructor and major advisor.*  
Topic to be determined by faculty advisor and student.
- 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.
- 663. Seminar in Relational Communication (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
Major interpersonal communication theories and constructs, and methods for investigating them.
- 711. Experimental Course.**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 803. Research Extension (1-3).**

## DEPARTMENT OF COMMUNICATION SCIENCES AND DISORDERS

300 Ferguson Building  
(336) 334-5184  
<http://www.uncg.edu/csd>

### *Professor*

**Celia Hooper, Ph.D., CCC-SLP,** Prevention of communication disorders, adult neurogenic speech and language disorders, voice disorders and care of the professional voice (Head of Department).

### *Academic Professional Professor*

**Vicki McCready, M.A., CCC-SLP,** Clinical supervision, interpersonal communication in supervisory and clinical processes (Director of Speech and Hearing Center).

### *Associate Professors*

**Jacqueline M. Cimorelli, Ph.D., CCC-SLP,** Child and adolescent language acquisition and impairments, neurolinguistics, psychosocial applications to human communication.

**Virginia A. Hinton, Ph.D., CCC-SLP,** Normal speech physiology, craniofacial anomalies, neuromotor control for speech production, voice disorders (Director of Graduate Study).

### *Assistant Professors*

**Susan L. Phillips, Ph.D., CCC-A,** Psychoacoustics, speech perception (Clinical Supervisor in Audiology).

**Denise A. Tucker, Ph.D., CCC-A,** Auditory electrophysiology, hearing aids, aural rehabilitation, medical audiology (Clinical Supervisor in Audiology).

### *Academic Professional Assistant Professors*

**Perry F. Flynn, M.Ed., CCC-SLP,** Adolescent language and reading, public school service delivery (Coordinator of Adolescent Language Project).

**Lyn B. Mankoff, M.A., CCC-SLP,** Clinical supervision (Coordinator of Speech-Language Pathology Internships).

**Ninevah W. Murray, M.S., CCC-SLP,** Language learning disabilities in children and adolescents.

### *Academic Professional Instructor*

**Louise F. Raleigh, M.Ed., CCC-SLP,** Clinical supervisor (Campus Coordinator of Distance Education Program in Speech-Language Pathology).

### *Lecturer*

**Sandra Barrie Blackley, M.A., CCC-SLP,** Language and literacy.

The graduate program in communication sciences and disorders provides a lifespan approach for advanced study of language, speech, swallowing, non-speech communication systems, and hearing in persons of all ages. The University Speech and Hearing Center, hearing and speech laboratories, and a variety of human service agencies provide ample practical and research experiences.

## Admission Requirements:

Admission to the graduate program in the Department of Communication Sciences and Disorders is based upon the faculty's evaluation of the entire application file. For application submission procedures, please refer to the section on **Admissions** on page 10 of this *Bulletin*. A written personal statement should be included with the application packet. This statement should not exceed two double-spaced typed pages and should focus on the applicant's unique qualifications and interests in the field of speech-language pathology and the master's program at UNCG.

**All application materials should be sent to The Graduate School.** It is the applicant's responsibility to make sure that all materials are received by The Graduate School prior to February 1<sup>st</sup>. When an application file is complete at The Graduate School, it is forwarded to the Department of Communication Sciences and Disorders. Admission decisions are made by the departmental faculty in March of each year and applicants are notified of the decision by April 15<sup>th</sup>. Decisions regarding graduate assistantships and tuition waivers are made at the time of admission decisions. Applicants will be notified as soon as possible regarding these decisions. Upon admission to the master's program in speech-language pathology, each student will be assigned an academic advisor. That advisor and/or the Director of Graduate Study will provide each student with initial information regarding academic and clinical aspects of the program.

### **SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS IN SPEECH-LANGUAGE PATHOLOGY**

The Department of Communication Sciences and Disorders program offers a graduate program leading to a 60 hour (35 hours in academic coursework and 25 hours in clinical coursework) Master of Arts degree (excludes clinical practicum hours earned). The program, accredited by the Council of Academic Accreditation of the American Speech-Language-Hearing Association (ASHA), provides academic and clinical instruction sufficient for the Certificate of Clinical Competence (CCC) in SLP awarded by ASHA and licensure in the state of North Carolina. Prospective students without an undergraduate degree in communication sciences and disorders should expect to spend an additional year taking pre-professional courses (see *Undergraduate Bulletin*, CSD major) which are required before graduate course work. Students should consult with advisors in this program for course selection that will meet degree, certification, and licensure requirements.

#### **A. Research Techniques (9 hours)**

All graduate students are required to take one graduate level course in statistics (e.g., STA 571, ERM 617). In addition, the following courses are required of all students in communication sciences

and disorders:

- CSD 632 - Introduction to Research in Communication Sciences and Disorders (2)
- CSD 633 - Current Topics in Communication Sciences and Disorders Research (2)
- CSD 634 - Research Design in Communication Sciences and Disorders (2)
- CSD 699: Thesis (optional)

#### **B. Required Professional Area Courses (26 hours)**

Students must complete the following courses:

- CSD 600 - Professional Issues & Ethics in Speech-Language Pathology (1)
- CSD 626 - Professional Writing and Speaking in Communication Sciences and Disorders (1)
- CSD 627 - Multicultural Issues in Communication Sciences and Disorders (1)
- CSD 629 - Dysphagia (1)
- CSD 630 - Fundamentals for Speech and Language Analysis (3)
- CSD 631 - Structured Language Intervention for Language-Literacy Impairments (3)
- CSD 636 - Prevention, Assessment and Intervention of Communication Disorders: Birth-Four years (5)
- CSD 637 - Prevention, Assessment and Intervention of Communication Disorders: School Age (3)
- CSD 639 - Prevention, Assessment and Intervention of Communication Disorders: Late Adolescence and Early Adulthood (3)
- CSD 640 - Prevention, Assessment and Intervention of Communication Disorders: Middle and Older Adults (5)

#### **C. Electives in Speech-Language Pathology**

Students may select, in consultation with an academic advisor in the discipline, courses in the elective professional areas:

- CSD 612 - Augmentative and Alternative Communication (1)
- CSD 618 - Counseling and Interviewing Skills in Communication Sciences and Disorders (1)
- CSD 619 - The Supervisory Process in Communication Sciences and Disorders (1)
- CSD 635 - Advanced Phonetic Transcription (1)
- CSD 650: Independent Study (1-3)

#### **D. Clinical Practicum (25 hours minimum)**

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 571 - Beginning Clinical Practice in Speech-Language Pathology (3)
- CSD 638 - Minor Area Clinical Practicum for Speech-Language Pathology Majors (1)
- CSD 677 - Internship in Communication Disorders (18)

CSD 678 - Advanced Clinical Practice in Speech-Language Pathology (3)

## E. 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 Child Speech and Language Development (3)

## F. Capstone Experience

All degree candidates will complete the research sequence of courses, CSD 632, 633, 634 and 677 as capstone experiences.

## G. Residence Requirement

Students will be admitted only for full-time study except in unusual circumstances; permission for exceptions must be approved by faculty. In most cases, students will enroll as full-time students in the fall semester and continue full-time enrollment for the subsequent four semesters.

## (CSD) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 550. Diagnostic Procedures: Inquiry, Observation and Measurement (3:2:3).

*Pr. completion of all CSD 300-level courses required for the major or permission of instructor.*

Processes and techniques of data acquisition and analysis for the diagnosis, assessment, and evaluation of communication disorders.

### 551. Speech and Language Disorders: Diagnostic Procedures (3:2:2).

*Pr. permission of instructor.*

Differential diagnosis of speech, language, voice, and rhythm problems.

### 552. Communication and Aging (3:3).

*Pr. 308 or permission of instructor.*

Development of communication in old age; factors affecting development and competency; communication evidence and theories of aging; facilitation of life-long functional communication.

### 554. Advanced Speech Science (3:3).

*Pr. 306, 307, 308, 309.*

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.

### 556. Aural Rehabilitation (3:3).

*Pr. 334 or 570 or permission of instructor.*

Principles and methods of aural rehabilitation with the hearing impaired and deaf. Hearing aids; cochlear implants; speech reading; education techniques; and auditory training.

### 568. Psychoacoustics (3:3).

*Pr. 306, 307, 309, or permission of instructor.*

Principles underlying perception of pitch, loudness, and various other auditory phenomena. Focus on speech intelligibility and the relationships between acoustic elements and elicited responses.

### 571. Beginning Clinical Practice in Speech-Language Pathology (3:2:4).

*Pr. admission to appropriate degree program or permission of instructor.*

Beginning clinical practice in diagnosis of and therapy for communication disorders. (Graded on S-U basis)

### 575. Instrumentation for Communication Disorders (3:3).

*Pr. 306, 307, 309, or permission of instructor.*

Instrumentation commonly used in communication disorders; operation and measurement techniques for clinical and research applications.

### 588. Neurology of Speech, Language and Hearing (3:3).

*Pr. 309 or permission of instructor.*

Neuroanatomy and neurophysiology with a concentration on neurological mechanisms related to speech, language and hearing.

### 589. Experimental Course.

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

## (CSD) COURSES FOR GRADUATES

### 600. Professional Issues and Ethics in Speech-Language Pathology (1:1).

*Pr. admission to appropriate degree program or permission of instructor.*

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.

### 601. Special Topics in Child Speech and Language Development (3:3).

*Pr. graduate courses in appropriate content area and admission to appropriate degree program, or permission of instructor.*

Child speech and language development in specialized areas of current professional concern. Topic to be announced. May be repeated for credit when topic varies.

### 602. Seminar in Speech Pathology: Organic Disorders (3:3).

*Pr. 551 or equivalent and admission to appropriate degree program, or permission of instructor.*

Study of organic disorders of communication.

### 603. Seminar in Voice Problems (3:3).

*Pr. 551 or equivalent and admission to appropriate degree program or permission of instructor.*

Investigation of current literature and theories of vocal anomalies. Organic deviations.

### 604. Pediatric Fluency Disorders (3:3).

*Pr. 551 or equivalent and admission to appropriate degree program or permission of instructor.*

The development of stuttering and cluttering in young children; diagnosis, treatment, and prevention of fluency disorders. Fluency treatment techniques for speech-language pathologists in a school setting or early intervention.

- 605. Seminar in Speech and Language Pathology (3:3).**  
*Pr. graduate-level courses in appropriate content area and admission to appropriate degree program, or permission of instructor.*  
 Studies dealing with specialized areas of communication disorders. Topic to be announced each semester course is offered. May be repeated for credit when topic varies.
- 606. Seminar in Aphasia (3:3).**  
*Pr. 551 or equivalent and admission to appropriate degree program, or permission of instructor.*  
 Investigation of language problems arising from cardio-cerebro-vascular and associated anomalies. Pathology, diagnosis, and rehabilitation.
- 610. Seminar in Clinical Audiology (3:3).**  
*Pr. 556, 570, 574 and admission to appropriate degree program, or permission of instructor.*  
 Selected topics in clinical audiology. May be repeated for credit when topic varies.
- 611. Hearing Aids and Residual Hearing (3:3).**  
*Pr. 570 and admission to appropriate degree program, or permission of instructor.*  
 Acoustic measurement of the hearing aid. Use as a rehabilitative device. Amplification systems.
- 612. Augmentative and Alternative Communication (1:1).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Knowledge of augmentative and alternative communications and problem-solving in the design and application of appropriate AAC systems.
- 613. Communication Problems in Aging (3:3).**  
*Pr. Permission of instructor.*  
 Nature, assessment, and management of communication disorders in the elderly.
- 614. Language Disorders in Children (3:3).**  
*Pr. 551 and admission to appropriate degree program, or permission of instructor.*  
 Summarizes health and linguistic information on conditions found in children with developmental disabilities. Lectures include the description, cause, incidence, course, accompanying health problems, medical management, and diagnostic and therapeutic measures of potential communication disorders arising from various developmental disabilities.
- 615. Communication and Severe/Profound Disabilities (3:3).**  
*Pr. permission of instructor.*  
 Nature, assessment, and management of communication disorders in persons of all ages who have severe/profound disabilities.
- 616. Neurogenic Communication Disorders (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Investigation of the neuroanatomy and physiology of motor speech, and exploration of assessment and remediation techniques of dysarthria, apraxia, and dysphagia.
- 617. Language Disorders and Neurological Theory (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Latest knowledge on the specialization of the two hemispheres and clinical syndromes/language disorders resulting from left and right hemisphere dysfunction.

- 618. Counseling and Interviewing Skills in Communication Sciences and Disorders (1:1).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Instruction and practice in counseling and interviewing skills during the assessment and treatment of speech, language, and hearing disorders.
- 619. The Supervisory Process in Communication Sciences and Disorders (1:1).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Study and practice of clinical supervision in speech-language pathology. Theoretical models of supervision, pertinent research, and clinical practice.
- 620. Seminar in Peripheral Auditory Electrophysiology (3:2:2).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Anatomy and physiology of the inner ear and auditory nerve, method of electrophysiologic measurement of the peripheral auditory system, clinical applications in diagnosis and evaluation of peripheral auditory disorders.
- 621. Seminar in Cortical Auditory Electrophysiology (3:2:2).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Anatomy and physiology of auditory cortex, methods of middle and late auditory evoked response measurements of the central auditory system, applications of evoked response tests in clinical practice.
- 622. Seminar in Medical Audiology (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Anatomy and physiology of human vestibular system, electrophysiologic assessment of balance function, neuropathologies and neuroscientific technologies encountered within clinical practice in medical settings.
- 623. Seminar in Central Auditory Processing (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 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.
- 624. Seminar in Pediatric Audiology (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Development of the auditory system in human infants and young children, methods of assessment of hearing in children, pathologies associated with hearing loss in children.
- 625. Seminar in Hearing Conservation (3:3).**  
*Pr. admission to appropriate degree program or permission of instructor.*  
 Theory and practice of hearing conservation. Experiences include sound level measures in the industrial setting and hearing/middle ear screening for industry, neonates and school-age children.



**626. Professional Writing and Speaking in Communication Sciences and Disorders (1:1).**

*Pr. admission to appropriate degree program or permission of instructor.*

Instruction and practice in writing professional reports, research papers, and in making oral presentations.

**627. Multicultural Issues in Communication Sciences and Disorders (1:1).**

*Pr. admission to appropriate degree program or permission of instructor.*

Identification and treatment of speech and language differences in diverse populations.

**629. Dysphagia (1:1).**

*Pr. admission to appropriate degree program or permission of instructor.*

Anatomical bases of normal and disordered swallowing; evaluation and treatment of swallowing disorders.

**630. Fundamentals for Speech and Language Analysis (3:3:1).**

*Pr. admission to appropriate degree program or permission of instructor.*

Basic linguistic structures that support oral and written English, including phonetics and phonology, morphology, orthography, semantics, and syntax.

**631. Structured Language Intervention for Language-Literacy Impairments (3:3:1).**

*Pr. admission to appropriate degree program or permission of instructor.*

Certification course in the *Language!™* Curriculum (Sopris West, Inc.), an intervention curriculum for individuals at risk for literacy problems.

**632. Introduction to Research in Communication Sciences and Disorders (2:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Introduction to research procedures in the study of normal communication and its disorders.

**633. Current Topics in Communication Sciences and Disorders Research (2:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Research in selected topics of various areas of communication sciences and disorders.

**634. Research Design in Communication Sciences and Disorders (2:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Development of research proposal, from generation of hypothesis through data analysis and interpretation.

**635. Advanced Phonetic Transcription (1:1:2).**

*Pr. completion of an introductory phonetics course and admission to appropriate degree program or permission of instructor.*

Detailed transcription of normal and disordered speech using the International Phonetic Alphabet.

**636. Prevention, Assessment, and Intervention of Communication Disorders: Birth - Four Years (5:5:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Communication development and disorders (speech, language, and hearing) in infants, toddlers, and pre-schoolers.

**637. Prevention, Assessment, and Intervention of Communication Disorders: School Age (3:3:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Communication development and disorders (speech, language, and hearing) in school aged children.

**638. Minor Area Clinical Practicum for Speech-Language Pathology Majors (1).**

*Pr. 334, graduate standing, and completion of 25 observation hours.*

Instruction for speech-language pathology majors in performing hearing screenings. Helps obtain the 20 clock hours in the minor area required by the American Speech-Language-Hearing Association (ASHA). (Graded on S-U basis)

**639. Prevention, Assessment, and Intervention of Communication Disorders: Late Adolescence and Early Adulthood (3:3:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Communication development and disorders (speech, language, and hearing) in late adolescents and young adults.

**640. Prevention, Assessment, and Intervention of Communication Disorders: Middle and Older Adults (5:5:2).**

*Pr. admission to appropriate degree program or permission of instructor.*

Communication development and disorders (speech, language, and hearing) in middle aged and older adults.

**650. Independent Study (1-3).**

*Pr. admission to appropriate degree program or permission of instructor and major advisor.*

Topic to be determined by faculty advisor and student.

**670. Diagnostic Audiology I (3:2:2).**

*Pr. 334 or permission of instructor.*

Basic diagnostic procedures in audiology. Includes anatomy, physiology, and disorders of the hearing mechanism, basic evaluation and interpretation of auditory function.

**672. Minor Area Clinical Practicum for Audiology Majors (1).**

*Pr. 308, graduate standing, and completion of 25 observation hours.*

Instruction for audiology majors in performing speech and language screenings. Helps obtain the 20 clock hours in the minor area required by the American Speech-Language-Hearing Association (ASHA). (Graded on S-U basis)

**673. Communication Disorders: Clinical Supervision (3:3).**

*Pr. permission of instructor.*

Supervision in speech-language pathology and audiology. Theoretical models of supervision, pertinent research and clinical practice. Opportunities for observation.

**674. Diagnostic Audiology II (3:2:2).**

*Pr. 570 or equivalent.*

Non-organic hearing loss; differential diagnosis; special problems in diagnosis.

**676. Clinical Practice in Audiology (3:2:4).**

*Pr. 570 or permission of instructor.*

Supervised clinical practice in evaluation of hearing and management of hearing impairment.



**677. Internship in Communication Disorders (3-9).***Pr. permission of instructor.*

Clinical experience under supervision of a certified speech-language pathologist in an off-campus facility.

**678. Advanced Clinical Practice in Speech-Language Pathology (3:2:4).***Pr. admission to appropriate degree program or permission of instructor.*

Advanced clinical practice in diagnosis of and therapy for communication disorders. May be repeated for credit.

**688. Research Design in Communication Disorders (3:3).***Pr. admission to appropriate degree program and at least one semester of clinical practicum and two semesters of graduate courses.*

Development of research proposals, from generation of hypothesis through data analysis and interpretation. Includes pilot study project.

**698. Experimental Design in Communication Disorders (3:3).***Pr. 688 and statistics and admission to appropriate degree program, or permission of instructor.*

Research of normal communication processes and speech, language, and hearing disorders. Preparation of research for presentation or publication.

**699. Thesis (1-6).***Pr. admission to appropriate degree program, or permission of instructor and major advisor.***711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).**

## CONFLICT RESOLUTION, MASTER OF ARTS

257 Brown Annex  
(336) 334-4118 (office)  
(336) 334-4119 (fax)**Program Director:****Cathie J. Witty, Ph.D.**, Conflict theory and practice, cultural dimensions of conflict, mediation, conflict analysis and transformation.

The Master of Arts in Conflict Resolution is a new degree program beginning in the Fall of 2004. It is dedicated to providing high-quality, professional training in multiple conflict intervention skills such as mediation, negotiation, and conflict transformation, violence intervention, and collaborative problem solving. The program focuses on pragmatic approaches to solving problems in a variety of social settings. Students are exposed to a wide array of techniques and strategies to achieve nonviolent solutions to conflicts that arise in diverse and conflictual personal, professional, organizational, and community environments.

The 30 semester hour program promotes a systemic perspective to the challenges facing individuals, families, organizations, and communities. With an interdisciplinary sensibility and a commitment to individual, cultural and social integrity, we train professionals to seek collaborative and equitable means for resolving human problems. Our goal is to mold reflective conflict practitioners—professionals with a critical understanding of theory and method, as well as an appreciation of diversity, human rights, and responsibility. Students are encouraged to explore a range of professional applications for their practice skills, and they are closely mentored and supported by the faculty. Electives are focused in two practice areas: family and interpersonal conflict, and workplace and community based conflict. The program is built on a comprehensive core curriculum, varied electives, and flexible time schedules allowing students of all ages and needs to participate in the learning process.

Certification of the program by the Dispute Resolution Commission of North Carolina is pending. Qualified graduates may seek certification as supreme court or family mediators

upon completion of the degree. Applicants must satisfy all admission requirements of The Graduate School and submit a 200-300 word essay explaining the applicant's interest in pursuing a degree in conflict resolution. The Program Director will interview all applicants. Applications are accepted throughout the year but should be received by May 30 to ensure consideration for the fall semester.

Requirements for the M.A. in conflict resolution include 18 semester hours of core courses and 12 hours of electives. Students are required to pass a comprehensive examination when they have completed the six program core courses. In addition, students are required to complete a practicum in an approved community setting. Program requirements are currently in the review process. Contact the Program Director and the UNCG web site for additional information.

## DEPARTMENT OF COUNSELING AND EDUCATIONAL DEVELOPMENT

228 Curry Building  
(336) 334-3434  
<http://www.uncg.edu/ced>

### *Professors*

**James M. Benshoff**, Ph.D., Student development in higher education, peer consultation, consultation, counseling supervision, group process issues.

**L. DiAnne Borders**, Ph.D., Counseling supervision, counseling theory, professional ethics, school counseling, adoptive families (Chair of Department and Director of Graduate Study).

**Gerald A. Juhnke**, Ed.D., Substance abuse counseling, marriage and family counseling, crisis intervention, assessment, violence counseling.

**Jane E. Myers**, Ph.D., Gerontological counseling, developmental counseling, adult children of older adults, wellness across the lifespan, assessment.

### *Associate Professors*

**Craig S. Cashwell**, Ph.D., Spirituality in the counseling process, counseling children and adolescents, play therapy approaches, family counseling and assessment.

**Marie F. Shoffner**, Ph.D., School counseling, counseling supervision, rural youth, career development in science, math, engineering and technology, collaborative training of school personnel.

### *Assistant Professors*

**Todd F. Lewis**, Ph.D., Community counseling, drinking behavior among college students, motivational approaches to counseling, Adlerian theory, aggression in schools/ bullying behavior, psychometric issues in testing, quantitative design and analysis.

**Jose Villalba**, Ph.D., Elementary school counseling, multicultural counseling, bilingual/ bicultural identity issues, assessment in counseling, psychoeducational group process, counselor preparation issues.

**Kelly L. Wester**, Ph.D., Violent behavior, exposure to violence, and mental health in adolescents; gender issues; research misconduct and narcissistic disorder; leadership in counseling; counselor supervision.

There are three primary program areas in counselor education for which the Master's, Specialist, and Doctorate degrees are offered: community counseling, student development in higher education, 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: community counseling (M.S.), student development in higher education (M.S.), school counseling (M.S.), marriage and family counseling (dual degree M.S. and Ed.S.) and gerontological counseling (M.S.), and counseling and counselor education (Ph.D. and Ed.D.). 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 M.S. degree or dual M.S. and Ed.S. degrees, or the advanced Ph.D. or Ed.D. degree.

### **The Curriculum:**

The Counselor Education program faculty adheres to the scientist problem-solver 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 it is 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, and (d) a strong emphasis on the normal developmental issues of the individual as opposed to an approach based on pathology.

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 goals of the scientist problem-solver model of training in the program's curriculum, students are required to demonstrate satisfactory knowledge in each of the following core areas: the helping relationship; group dynamics, process, and counseling; career and lifestyle development; appraisal of individuals; research and evaluation; and professional orientation. Available within the program requirements are courses offered by other departments which 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, and substance abuse. Supervised clinical experience in the 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; counseling centers; child, youth, and family agencies; and gerontological, 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 two student organizations 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 proj-

ects. 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 M.S. and Ed.S. 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 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, and internship hours count toward the experience requirement for the LPC credential. 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 "M" (M.S.) or "S" (M.S. and Ed.S. dual degrees) state school counseling license. Graduates of the community counseling specialization in marriage and family counseling (M.S. and Ed.S. 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.

### Requirements for Admission:

Doctoral applicants are required to:

1. Present a master's degree in counseling or an acceptable equivalent;
2. Have graduated from a program accredited by the Council for Accreditation of Counseling and Related Educational Programs or present evidence of an appropriate degree from a regional accredited university (CACREP requirements for a master's program are needed; if missing, these are corequisites for admission);
3. Have an acceptable master's degree grade point average;
4. Present three reference letters that specifically address the applicant's academic proficiency and potential for advanced study, as well as professional skills and potential for leadership in the counseling or student development in higher education fields;
5. Have an appropriate score on the GRE as determined by the program faculty; and
6. Have vocational goals compatible with the selected program and subspecialty.

Entry level applicants (master's and dual degrees master's and specialist programs) are required to have:

1. A grade point average of 2.75 or better in undergraduate study or a 3.0 or better in the undergraduate major on a 4.0 scale;
2. Three references that address the applicant's academic potential;
3. An appropriate score on the GRE as determined by the program faculty; and
4. 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.

### POST-MASTER'S CERTIFICATES IN COUNSELING

Post-Master's Certificates are offered in three areas: gerontological counseling, marriage and family counseling, and school counseling. These three programs were designed to meet practicing counselors' needs for professional development, in response to advances and greater specialization in the profession.



The curriculum for each Certificate is based on national accreditation standards, competency statements, and/or certification standards for each of the areas. Each Certificate consists of a minimum of **15-18** semester hours of required course work, including internship requirements. Internships involve a 300 to 600-hour supervised clinical experience across one or two semesters in an appropriate setting. In addition, co-requisite hours may be required for students whose Master's degree was not completed in a CACREP-accredited counseling program. Prerequisite courses and Certificate courses are usually offered during morning and afternoon hours. Typically, students can complete a program in three semesters; students have five academic years to complete a program.

### Application Procedure:

Applications are available from and should be submitted to The Graduate School. Applications are reviewed during the weeks preceding the start of classes for fall and spring semesters. Given the time required to process applications before they are sent to the Department, completed applications should be submitted no later than four months before the review period. The following information is required of all Post-Master's applicants:

1. Completed application form;
2. Three letters of recommendation that address professional and academic qualifications;
3. Personal statement, including personal and professional qualifications, Certificate of interest, and professional goals relevant to the Certificate;
4. Graduate Record Examination scores (general);
5. Resume;
6. College transcripts.

In addition to University and School requirements, the applicant must comply with individual program requirements for admission. All applicants should consult with the Department of Counseling and Educational Development for additions to the above requirements.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE

The Department of Counseling and Educational Development offers a graduate program of study leading to a **48** hour Master of Science degree.

## Community Counseling Program

### A. Required Core Areas

#### Human Growth and Development (3 hours as advised):

Counseling individuals at all developmental levels, e.g., CED 612 - Counseling Over the Lifespan (3)

#### Social and Cultural Foundations (3 hours as advised):

Counseling in a multicultural and diverse society, e.g., CED 605, Counseling and Guidance of Diverse Populations (3)

#### Common Core (21 hours as advised):

CED 610 - Helping Relationships (3)  
 CED 620 - Counseling Theories and Practice (3)  
 CED 647b - Consultation in Counselor Education: Theory and Process (3)  
 CED 650 - Techniques of Group Counseling (3)  
 CED 669 - Career Development (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:

(Prerequisite: A course in abnormal behavior.) Nine (9) hours, as advised, in one of the following areas (see departmental program planner for specific courses):

Child and youth settings  
 Community settings  
 Employment settings  
 Family 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 Exercise and Sport Science to plan course of study.)

#### Supervised laboratory field experience and practicum:

Six (6) hours of counseling internship across two (2) semesters, plus practicum experiences across the curriculum as required in the Schedule of Courses.  
 CED 653 - Practicum in Counseling (1)  
 CED 680a, 680b - Counseling Internship (3) (3)

### B. Curricular Electives (3-6 hours)

Under advisement, a student will select from courses in A above.



### C. Collateral Expertise

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

### D. Comprehensive Examination

Please consult with Departmental office for dates of this examination.

### Gerontological Counseling Specialization

The gerontological counseling program follows the basic plan of study for the community counseling program except that in addition to acquiring knowledge concerning community counseling, students complete specialized study under advisement and internships in settings where they can work directly with older persons.

### Student Development in Higher Education Program

#### A. Required Core Areas

#### Human Growth and Development (3 hours as advised):

Counseling individuals at all developmental levels, e.g.,  
CED 612 - Counseling over the Lifespan (3)

#### Social and Cultural Foundations (3 hours as advised):

Counseling in a multicultural and diverse society, e.g., CED 605, Counseling and Guidance of Diverse Populations (3)

#### Common Core (18-21 hours as advised):

CED 610 - Helping Relationships (3)  
CED 620 - Counseling Theories and Practice (3)  
CED 647b - Consultation in Counselor Education: Theory and Process (3)  
CED 650 - Techniques of Group Counseling (3)  
CED 669 - Career Development (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:

Nine (9) hours, as advised, in student development in higher education (see departmental program planner for specific courses).

#### Supervised laboratory field experience and

#### practicum:

Six (6) hours of counseling internship across two (2) semesters, plus practicum experiences across the curriculum as required in the Schedule of Courses.  
CED 653 - Practicum in Counseling (1)  
CED 680a, 680b - Counseling Internship (3) (3)

### B. Curricular Electives (3-6 hours)

Under advisement, a student will select from courses in A above.

### C. Collateral Expertise

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

### D. Comprehensive Examination

Please consult with departmental office for dates of this examination.

### School Counseling Program

#### A. Required Core Areas

#### Human Growth and Development (3 hours as advised):

Counseling individuals at all developmental levels, e.g.,  
CED 612 - Counseling over the Lifespan (3)

#### Social and Cultural Foundations (3 hours as advised):

Counseling in a multicultural and diverse society, e.g., CED 605, Counseling and Guidance of Diverse Populations (3)

#### Common Core (18-21 hours as advised):

CED 610 - Helping Relationships (3)  
CED 620 - Counseling Theories and Practice (3)  
CED 647b - Consultation in Counselor Education: Theory and Process (3)  
CED 650 - Techniques of Group Counseling (3)  
CED 669 - Career Development (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:

Nine (9) hours, as advised, in one of the following areas (see departmental program planner for specific courses):  
Elementary and Middle School  
Secondary School

### **Supervised laboratory field experience and practicum:**

Six (6) hours of school counseling internship across two (2) semesters, plus practicum experiences across the curriculum as required in the Schedule of Courses. Students who do not hold an "A" Teaching Certificate must also enroll in CED 677, School Certification, as a corequisite.

CED 653 - Practicum in Counseling (1)

CED 680a, 680b - Counseling Internship (3) (3)

### **B. Curricular Electives (3-6 hours)**

Under advisement, a student will select from courses in A above.

### **C. Collateral Expertise**

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

### **D. Comprehensive Examination**

Please consult with departmental office for dates of this examination.

## **SPECIFIC REQUIREMENTS FOR THE DUAL MASTER OF SCIENCE AND SPECIALIST IN EDUCATION**

The Department of Counseling and Educational Development offers a graduate program of study leading to a 66 hour (beyond the bachelor's degree) dual degree Master of Science and Specialist in Education.

Available is a dual degree M.S. and Ed.S. sequence that allows entering students the opportunity to achieve a level of professional attainment beyond the M.S. degree and recognition of that higher level of professional attainment by receiving the Ed.S. degree. A student admitted to the dual degree program will be awarded the M.S. and Ed.S. degrees concurrently after successful completion of a total of 66 hours of prescribed course work beyond the bachelor's degree. Programs available include community counseling, school counseling, and student development in higher education. Also, a marriage and family counseling specialization is available in conjunction with the Community Counseling Program.

On average, the completion of a dual degree program takes two and one-half years.

## **Community Counseling Program**

### **A. Required Core Courses**

#### **Human Growth and Development (3 hours as advised):**

Counseling individuals at all developmental levels, e.g., CED 612 - Counseling over the Lifespan (3)

#### **Social and Cultural Foundations (3 hours as advised):**

Counseling in a multicultural and diverse society, e.g., CED 605, Counseling and Guidance of Diverse Populations (3)

#### **Common Core (24 hours as advised):**

CED 610 - Helping Relationships (3)

CED 620 - Counseling Theories and Practice (3)

CED 642 - Substance Abuse Counseling (3)

CED 647b - Consultation in Counselor Education: Theory and Process (3)

CED 650 - Techniques of Group Counseling (3)

CED 669 - Career Development (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):**

(Prerequisite: A course in abnormal behavior.)

Students in this track must choose one of the following nine areas as an emphasis:

Child and youth settings

Community mental health settings

Employment settings

Family 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 Exercise and Sport Science to plan course of study.)

### **Supervised laboratory field experience and practicum:**

Six (6) hours of counseling internship across two (2) semesters, plus practicum experiences across the curriculum as required in the Schedule of Courses.

CED 653 - Practicum in Counseling (1)

CED 680a, 680b - Counseling Internship (3) (3)

CED 680c, 680d - Counseling Internship (3) (3)

### **B. Curricular Electives (12 hours)**

Under advisement, a student will select from courses in A above.

### C. Collateral Expertise

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

### D. Comprehensive Examination

Please consult with departmental office for dates of this examination.

### Marriage and Family Counseling Specialization

This program requires that students follow the basic plan of study for community counseling but with specialized studies in marriage and family counseling. Students in Marriage and Family Counseling enroll in specialized course work to include CED 690, Counselors Working with Families, and CED 691, Advanced Clinical Topics in Couples and Family Counseling/Therapy, and internships in family counseling. Other marriage and family course work is selected under advisement.

### Gerontological Counseling Specialization

The gerontological counseling program is available through enrollment in the combined M.S. and Ed.S. degree. The course of study follows the basic plan of study for the community counseling degree but includes specialized course work in gerontological counseling, which is selected under advisement.

### Student Development in Higher Education Program

#### A. Required Core Areas

##### Human Growth and Development (3 hours as advised):

Counseling individuals at all developmental levels, e.g.,  
CED 612 - Counseling over the Lifespan (3)

##### Social and Cultural Foundations (3 hours as advised):

Counseling in a multicultural and diverse society, e.g., CED 605, Counseling and Guidance of Diverse Populations (3)

##### Common Core (24 hours as advised):

CED 610 - Helping Relationships (3)  
CED 620 - Counseling Theories and Practice (3)  
CED 642 - Substance Abuse Counseling (3)  
CED 647b - Consultation in Counselor Education: Theory and Process (3)  
CED 650 - Techniques of Group Counseling (3)

CED 669 - Career Development (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):

Selections are to be made under advisement:

##### Supervised laboratory field experience and practicum:

Six (6) hours of counseling internship across two (2) semesters, plus practicum experiences across the curriculum as required in the Schedule of Courses.  
CED 653 - Practicum in Counseling (1)  
CED 680a, 680b - Counseling Internship (3) (3)  
CED 680c, 680d - Counseling Internship (3) (3)

#### B. Curricular Electives (12 hours)

Under advisement, a student will select from courses in A above.

### C. Collateral Expertise

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship requirements.

### D. Comprehensive Examination

Please consult with departmental office for dates of this examination.

### School Counseling Program

#### A. Required Core Areas

##### Human Growth and Development (3 hours as advised):

Counseling individuals at all developmental levels, e.g.,  
CED 612 - Counseling over the Lifespan (3)

##### Social and Cultural Foundations (3 hours as advised):

Counseling in a multicultural and diverse society, e.g., CED 605, Counseling and Guidance of Diverse Populations (3)

##### Common Core (24 hours as advised):

CED 610 - Helping Relationships (3)  
CED 620 - Counseling Theories and Practice (3)  
CED 642 - Substance Abuse Counseling (3)  
CED 647b - Consultation in Counselor Education: Theory and Process (3)  
CED 650 - Techniques of Group Counseling (3)  
CED 669 - Career Development (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):

Twelve (12) hours in either elementary and middle  
 school or secondary school are needed. Specific  
 course selections are made under advisement.  
 Elementary and middle school  
 Secondary school

### Supervised laboratory field experience and practicum:

Six (6) hours of school counseling internship across two  
 (2) semesters, plus practicum experiences across the  
 curriculum as required in the Schedule of Courses.  
 CED 653 - Practicum in Counseling (1)  
 CED 680a, 680b - Counseling Internship (3) (3)  
 CED 680c, 680d - Counseling Internship (3) (3)

### B. Curricular Electives (12 hours)

Under advisement, a student will select from  
 courses in A above.

### C. Collateral Expertise

A student must demonstrate satisfactory perfor-  
 mance in professional practice. This requirement is  
 satisfied by successfully completing practicum and  
 internship requirements.

### D. Comprehensive Examination

Please consult with departmental office for dates  
 of this examination.

## POST-MASTER'S CERTIFICATES

Corequisite hours are required for students  
 whose Master's degree was not completed in  
 a CACREP-accredited counseling program.  
 Students need to enroll in regular department  
 courses in order to fulfill these corequisites.  
 Corequisite courses and Certificate courses  
 typically are offered during the morning and  
 afternoon hours.

### Marriage and Family Counseling (18 hours)

Internships involve a 300-hour supervised experi-  
 ence across one semester in an appropriate setting.

### Required Course Work:

CED 690<sup>1</sup> - Counselors Working with Families (3)  
 \*CED 691<sup>1</sup> - Advanced Clinical Topics in Couple and  
 Family Counseling/Therapy (3)  
 \*CED 691 - Advanced Clinical Topics in Couple and  
 Family Counseling/Therapy (3)  
 CED 680c - Counseling Internship (3 - marriage and  
 family counseling setting)

\*CED 691 must be taken twice as a required course and  
 may be repeated for credit as an elective course when  
 the topic varies. CED 691 may be repeated for up to  
 12 hours credit.

<sup>1</sup>Denotes courses that must be completed successfully  
 before a student can enroll in internship.

### Electives

A minimum of two electives (6 semester hours),  
selected under advisement, must be completed.

Note: Some counseling courses have a one-hour corequi-  
 site counseling practicum; hours for that practicum do not  
 count towards the 18 hours required for the Certificate.

### Gerontological Counseling (15 hours)

Internships involve a 300-hour supervised experi-  
 ence across one semester in an appropriate setting.

### Required Course Work:

CED 672<sup>1</sup> - Counseling for Middle and Later Life (3)  
 CED 680c - Internship (3 - gerontological counseling  
 setting)

<sup>1</sup>Denotes courses that must be completed successfully  
 before a student can enroll in internship.

### Electives

A minimum of three electives (9 semester hours),  
selected under advisement, must be completed.

Note: Some counseling courses have a one-hour corequi-  
 site counseling practicum; hours for that practicum do not  
 count towards the 18 hours required for the Certificate.

### School Counseling (18 hours)

Internships involve a 600-hour supervised  
 experience across two semesters in an appropri-  
 ate setting.

### Required Course Work - Elementary/Middle School:

CED 648<sup>1</sup> - The Functions and Organization of Pupil  
 Personnel Services (3)  
 \*CED 677 - School Certification (3 - taken in conjunction  
 with CED 648) or CED 653 - Practicum in  
 Counseling (1)  
 CED 641 - Counseling and Guidance with Children (3)  
 CED 680c - Counseling Internship (3 - school counsel-  
 ing setting)  
 CED 680d - Counseling Internship (3 - school counsel-  
 ing setting)  
 SES 540<sup>1</sup> - Introduction to Exceptional Individuals (3)

**Required Course Work - Secondary School:**

- CED 648<sup>1</sup> - The Functions and Organization of Pupil Personnel Services (3)
- \*CED 677 - School Certification (3 - taken in conjunction with CED 648) or CED 653 - Practicum in Counseling (1)
- CED 671 - Understanding and Counseling Adolescents (3)
- CED 680c - Counseling Internship (3 - school counseling setting)
- CED 680d - Counseling Internship (3 - school counseling setting)
- SES 540<sup>1</sup> - Introduction to Exceptional Individuals (3)

\*These courses do not count towards the 18 hours required for the Certificate.

<sup>1</sup>Denotes courses that must be completed successfully before a student can enroll in internship.

**Electives**

A minimum of one elective (3 semester hours), selected under advisement, must be completed.

Note: Some counseling courses have a one-hour corequisite counseling practicum; hours for that practicum do not count towards the 18 hours required for the Certificate.  
Note: This Certificate would be classified as a licensure-only program at the graduate level.

**SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY OR THE DOCTOR OF EDUCATION**

The Department of Counseling and Educational Development offers a graduate program of study leading to the Ph.D. or Ed.D. degree. The Ph.D. and Ed.D. programs require a minimum of 60 semester hours beyond the master's or, for those students entering the program in the M.S./Ph.D. enrollment option, a minimum of 108 semester hours beyond the baccalaureate degree. Students enrolling in the M.S./Ph.D. option must hold an appropriate baccalaureate degree combined with superior ability and a high level of motivation and dedication to learning. After completing the M.S. degree, M.S./Ph.D. students continue study toward the Ph.D. 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 Ph.D. 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 supervision.

**A. Required Core Areas****Human Growth and Development:**

Counseling individuals at all developmental levels (prerequisite).

**Social and Cultural Foundations:**

Counseling in a multicultural and diverse society (prerequisite).

**Common Core (15 hours required):**

- CED 756 - Advanced Counseling Theory and Practice (3)
- CED 760 - Seminar: Consultation in Human Service Settings (3)
- CED 774 - Career Counseling (3)
- CED 777a - Seminar in Counseling: Clinical Assessment (3)
- CED 781a - Counseling Internship Supervision (3)

**Cognate (12 hours as advised):**

To be selected under advisement from social and behavioral sciences.

**Specialized and Environmental Curricular Studies (minimum 3 hours):**

Course work in this area focuses on the institution or agency setting in which the student plans to specialize (i.e., community counseling, marriage and family counseling, gerontological counseling, student development in higher education, or school counseling). Courses are selected from listings under the program or one of its relevant specializations.

**Community Counseling:**

- Child and youth settings
- Community mental health settings
- Employment settings
- Family 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 Exercise and Sport Science to plan course of study.)

**Student development in higher education****School counseling:**

- Elementary and middle school
- Secondary school

**Supervised laboratory field experience and practicum:**

- Six (6) hours of counseling internship across two (2) semesters, plus practicum experiences across the curriculum as required in the Schedule of Courses/prerequisite of 600 hours of internship plus practicum.
- CED 653 - Practicum in Counseling (1)
- CED 780a, 780b - Advanced Counseling Internship (3-9) (3-9)
- CED 781b - Counseling Supervision (1-6)



## B. Research Techniques (15 hours above the M.S. level)

## C. Curricular Electives (3-6 hours)

Under advisement, a student will select from courses in A above.

## D. Collateral Expertise

A student must demonstrate satisfactory performance in professional practice. This requirement is satisfied by successfully completing practicum and internship. Additionally, it is expected that students will successfully complete CED 757, Internship in University Teaching in Counseling and/or CED 781b, Counseling Supervision.

## E. Comprehensive Examination

Requires consultation with major advisor concerning format and dates of this examination.

## F. Dissertation (12 hours)

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) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 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)

### 574. Contemporary Topics in Counseling (3:3).

Course designed to study issues, problems, or new approaches in helping relationships. Emphasis is placed on current topics.

### 589. Experimental Course.

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

## (CED) COURSES FOR GRADUATES

### 602. Student Development in Higher Education (3:3).

*Pr. or coreq. 610 or permission of instructor. Coreq. 653.*  
Study of development services. Areas such as admissions, orientation, career counseling, academic advising, student activities, housing, and financial aid are reviewed. (Formerly CED 579. Students who took this course as CED 579 are **not** eligible to take CED 602 and receive credit.)

### 603. The American College Student (3:3).

*Pr. 602 or permission of instructor.*

Overview of the postsecondary student; academic characteristics, socioeconomic background, finances, self-concept, interests, peer-group influences, personality characteristics, developmental tasks, and reasons for attending college, reactions to college, choice of vocation, major field of study, freedom and authority, educational and occupational aspirations, and dropouts.

### 605. Counseling Diverse Populations (3:3).

*Pr. or coreq. 610 and counseling major. Coreq. 653.*

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. (Formerly CED 505. Students who took this course as CED 505 are **not** eligible to take CED 605 and receive credit.)

### 610. Helping Relationships (3:3).

*Coreq. 653.*

Fundamental principles of providing a helping relationship through counseling and interviewing are integrated in a conceptual framework for subsequent professional studies in counseling and guidance. Personal and professional development through skills training in techniques.

### 611. The Counselor as Scientist-Practitioner (3:3).

*Pr. counseling major.*

Ways in which counselors can demonstrate accountability in a broad range of settings and from a variety of theoretical perspectives.

### 612. Counseling Over the Lifespan (3:3).

*Pr. 610, 620; counseling major. Pr. or Coreq. human development/developmental psychology or equivalent or permission of instructor. Coreq. 653.*

Developmental theories and processes of individuals, families, and groups form the basis for understanding and applying techniques of developmental assessment and intervention. Cognitive-developmental approaches are emphasized.

### 620. Counseling Theories and Practice (3:3).

*Pr. 610 and counseling major. Coreq. 653.*

Basic understanding of various counseling theories, procedures, and techniques. Practice in these areas will lead to a clearer understanding of student's own counseling technique.

### 640. Research Practicum in Counseling and Personnel Services (3:3).

*Pr. ERM 617, ERM 604, or equivalent courses.*

Data-based research problems of special interest in counseling and development. Work must demonstrate the ability to organize and conduct a research project.

### 641. Counseling Children (3:3).

*Pr. 610, 620, and/or permission of instructor. Coreq. 653.*

Case conceptualization and intervention strategies for working with young children in school and community settings, with an emphasis on play therapy and behavioral interventions. (Formerly CED 576. Students who took this course as CED 576 are **not** eligible to take CED 641 and receive credit.)

**642. Substance Abuse Counseling (3:3).**

*Pr. or Coreq. 610 or permission of instructor. Coreq. 653.*  
Counseling intervention strategies related to prevention, substance use, abuse and dependency will be emphasized. Etiology, assessment, and professional counseling concerns discussed.

**644. Counseling in Community Settings (3:3).**

*Pr. or coreq. 610; counseling major. Coreq. 653.*  
Theoretical and applied information for counselors working in community settings. Explores mental health counseling delivery systems and various counseling procedures and techniques related to community counseling.

**645. Mental Health Issues for Genetic Counselors (3:3).**

*Pr. matriculation to fourth semester of the M.S. in genetic counseling.*  
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.

**647b. Consultation in Counselor Education: Theory and Process (3:3).**

*Pr. 610 and counseling major. Coreq. 653.*  
Skill development in consultation. Intended for master's degree students in counseling and development.

**648. Counseling in School Settings (3:3).**

*Pr. or coreq. 610 and counseling major. Coreq. 653.*  
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.

**650. Group Counseling Theory and Practice (3:3).**

*Pr. 610, 620, and counseling major. Coreq. 653.*  
Develop understanding and skills in the theory and practice of group work, the relationship of group activities to counseling, and fundamental group counseling techniques.

**653. Practicum in Counseling (1:1).**

*Pr. counseling major.*  
Skill development and application of theory to practice in counseling, assessment and consultation through supervised work with clients in a laboratory setting. (Graded on S-U basis)

**669. Career Development (3:3).**

*Pr. 610, 620, and counseling major. Coreq. 653.*  
Theories and research in career development and the application of counseling and guidance materials and procedures to career development.

**671. Understanding and Counseling Adolescents (3:3).**

*Pr. or coreq. 610 or permission of instructor. Coreq. 653.*  
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.

**672. Counseling for Middle and Later Life (3:3).**

*Pr. or coreq. 610; permission of instructor. Coreq. 653.*  
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.

**673. Group Process and Leadership (3:3).**

*Pr. 610, 620, 650, and/or permission of instructor. Coreq. 653.*  
Develop advanced understanding and skills related to group leadership, group process and dynamics, and structured interventions appropriate to groups in a variety of settings.

**676a-g. Organization and Administration of Student Development Services (3:3).**

*Pr. 602; counseling major.*  
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.

**677. School Certification (3:3).**

Required of all counselor education students who wish to be certified as public school counselors but lack a North Carolina Class "A" Teacher's Certificate. Includes seminar classes and a minimum of seventy-five (75) clock hours of supervised experiences conducted in public school settings. (Graded on S-U basis)

**678. Professional Orientation (3:3).**

*Pr. counseling major.*  
Goals and objectives of professional organizations, codes of ethics, legal considerations, standards of preparation, certification, licensing, and role identity of counselor and other personnel services specialists.

**680a-d. Counseling Internship (3:3), (3:3).**

*Pr. advanced standing and recommendation by the major professor.*  
On-the-job experience for counselors totaling a minimum of 600 hours over a one-year period. (Graded on S-U basis)

**682. Application of Measurement and Clinical Appraisal Techniques (3:3).**

*Pr. counseling major. Coreq. 653.*  
Practical experience in administering and interpreting evaluative techniques of appraisal.

**688. Contemporary Problems Seminar (1-3).**

*Pr. advanced master's or doctoral standing, or permission of instructor.*  
Specific course title identified each semester by subscript, e.g., Contemporary Problems Seminar; Issues in Professional Counseling. May be repeated for credit when topic varies.

**690. Counselors Working with Families (3:3).**

*Pr. 610, 620. Coreq. 653.*  
Advanced work of counselors who work with families and are interested in school age children. Clinical skills including assessment, treatment planning, and skills and techniques.

**691. Advanced Clinical Topics in Couple and Family Counseling/Therapy (3:3).**

*Pr. 690 or permission of instructor. Coreq. 653.*  
Advanced seminar in the scientific foundations for practice of couple and family counseling/therapy. May be repeated for credit when topic varies.

**692. Independent Study (1-4).**

*Pr. permission of instructor.*  
Guided readings, research, and individual project work under direction of a staff member.

**699. Thesis (1-6).**

Individual guidance and direction in the development of a research problem in the master's degree thesis.

**711. Experimental Course.**

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

**756. Advanced Counseling Theory and Practice (3:3).**

*Pr. 610, 620, doctoral standing, or permission of instructor. Coreq. 653.*

In-depth study and supervised experiences. Focused upon one or more theoretical approaches to counseling. Extends student's understanding of the theoretical basis and develops competence in techniques.

**757. Internship in University Teaching in Counseling (3:3).**

*Pr. permission of instructor.*

Supervised teaching in the area of counseling and development in a college or university setting.

**760. Seminar: Consultation in Human Service Settings (3:3).**

*Pr. doctoral standing or permission of instructor. Coreq. 653.* Theory, research, and skill development in consultation. Intended for doctoral students who plan to work in educational and human service settings.

**774. Career Counseling (3:3).**

*Pr. 669 or permission of instructor. Coreq. 653.*

Interrelationships between career development theories and counseling theories. Career guidance procedures and materials applicable across the life span; supervised practice with their use in career counseling is provided.

**775. Directed Doctoral Research (3).**

*Pr. advanced doctoral standing or permission of instructor.* Individual work on research problems consisting of collection, analysis, critical review, integration, and interpretation of research literature on a topic. May be repeated for credit.

**777a-d. Seminar in Counseling (3:3), (3:3).**

*Pr. advanced doctoral standing in counselor education and recommendation of doctoral adviser.*

Contemporary issues and trends, relevant research, professional problems, and the individual needs and interests of enrolled students. Second semester (777b) on student research and the identification and preparation of doctoral dissertation studies.

**780a-d. Advanced Counseling Internship (3:3) (3:3).**

*Pr. 756 or 774.*

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. (Graded on S-U basis)

**781a-d. Counseling Supervision (3:3) (3:3).**

*Pr. advanced doctoral standing and recommendation by the major professor.*

Counseling supervision theories, models, interventions, and relationship issues; ethical and legal considerations. Didactic and/or supervised experiences. (781b-d graded on S-U basis)

**799. Dissertation (1-12).**

Individual direction in the development and execution of a doctoral dissertation.

**801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF CURRICULUM AND INSTRUCTION

336 Curry Building

(336) 334-3437

<http://www.uncg.edu/cui>

### Professors

**Gerald G. Duffy, Ed.D.**, Reading strategy instruction, teacher development (William Moran Distinguished Professor).

**Bert Goldman, Ed.D.**, College student retention, unpublished experimental mental measures.

**Samuel D. Miller, Ph.D.**, Literacy development, student motivation, teacher education (Chair of Department).

**Gerald Ponder, Ph.D.**, Teacher education, curriculum policy and practice, leadership, social studies education.

**Dale H. Schunk, Ph.D.**, Social cognitive learning, self-regulation, motivation.

**David B. Strahan, Ed.D.**, Middle grades curriculum and instruction, teacher education, instructional improvement, young adolescent development.

**A. Edward Uprichard, Ph.D.**, Mathematics education (elementary and middle grades), teacher education, leadership.

### Associate Professors

**Ceola Ross Baber, Ph.D.**, Multicultural education, secondary education, social studies curriculum and instruction.

**Francine R. Johnston, Ed.D.**, Emergent literacy, integrated language arts, children's literature, spelling.

**Barbara B. Levin, Ph.D.**, Teacher education, pedagogical thinking, technology education for teachers and children, case-based teaching, problem-based learning, social studies curriculum (Assistant Chair of Department and Director of Graduate Study).

**Catherine E. Matthews, Ph.D.**, Science education, technology, multicultural education.

**Holly J. Thornton, Ph.D.**, Middle grades education, language arts.

*Assistant Professors*

**David F. Ayers**, Ed.D., Higher education administration, community colleges, adult learning and development.

**Heidi B. Carlone**, Ph.D., Applications of educational anthropology and science studies to science education, equity in science education, science curriculum.

**Jewell Cooper**, Ph.D., Multicultural education, middle grades education, preservice teacher beliefs.

**Cos D. Fi**, Ph.D., Mathematics education.

**Sherri P. Merritt**, Ph.D., Action research, teacher reflection, composition, research processes of students, Paideia Seminar methods, English curriculum.

Graduate programs in the Department of Curriculum and Instruction include Master of Education degrees in curriculum and instruction, higher education, and educational supervision, a Specialist in Education in higher education, and a Doctor of Philosophy in curriculum and teaching with a concentration in either teacher education and development or higher education. The Department of Curriculum and Instruction offers a Master of Education in curriculum and instruction with eleven concentrations: elementary education, instructional technology, middle grades education, social studies education, science education, Spanish education, French education, reading education, English as a second language, mathematics education, and chemistry education. Each of the concentrations culminates with the development of an Advanced Competencies Portfolio, providing eligibility for candidates to earn "M" licensure. Six of the concentrations—elementary education, middle grades education, social studies education, science education, Spanish education, and French education—offer two tracks, a Classroom Practice track and a Teacher Leadership track. The other four concentrations—reading education, English as a second language, mathematics education, and chemistry education—offer only the Teacher Leadership track. All concentrations and tracks require **39** semester hours for the master's degree.

The Classroom Practice track 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 in the Student Advising and Recruitment Center or the department's Web page (contact information listed below).

The Teacher Leadership track is designed for candidates who already hold the "A" or initial license to teach and who 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 M.Ed. programs.

For more information on a specific concentration or track contact the Student Advising and Recruitment Center (SARC) at (336) 334-3410 or the department's Web page at: <http://www.uncg.edu/cui>

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN CURRICULUM AND INSTRUCTION**

### **Chemistry Education Concentration - Teacher Leadership Track (39 hours)**

#### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

#### **B. Pedagogical Expertise (21 hours)**

CHE 602 - Graduate Seminar (2)  
CHE 680 - Research Problems in Chemistry (6)  
7-10 hours advanced courses in chemistry selected after needs assessment and under advisement from the Department of Chemistry  
CUI 632 - Trends and Teaching Practices and Curriculum in Secondary School Science (3)



### C. Professional Development/Leadership (9 hours)

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)

### D. Advanced Competencies Portfolio (and other required culminating experiences)

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 Education Concentration - Classroom Practice Track (39 hours)

#### A. Core Courses (9 hours)

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3)

#### B. Pedagogical Expertise (18 hours)

CUI 517 - Literacy I: Reading and Writing in the Primary Elementary Grades (3)  
CUI 518 - Mathematics in the Elementary and Middle Schools (3)  
CUI 519 - Science in the Elementary School (3)  
CUI 520 - Social Studies in the Elementary School (3)  
CUI 521 - Literacy II: Reading and Writing in the Intermediate Elementary Grades (3)  
CUI 622 - Differentiated Instruction (3)

### C. Professional Development/Leadership (12 hours)

CUI 650 - The Interaction of Classroom Management and Instruction (3)  
CUI 680a - Clinical Experience in Teaching (6)  
CUI 680b - Clinical Experience in Teaching Seminar (3)

### D. Advanced Competencies Portfolio (and other required culminating experiences)

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 Education Concentration - Teacher Leadership Track (39 hours)

#### A. Core Courses (9 hours)

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

### B. Pedagogical Expertise (15-21 hours)

CUI 622 - Differentiated Instruction (3)  
6 hours minimum outside CUI  
6-12 hours elected on basis of approved plan of study

### C. Professional Development/Leadership (9-12 hours)

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)  
6 hours (if available) in supervision **or** consultation (CED or SES) **or** leadership **or** research/evaluation

### D. Advanced Competencies Portfolio (and other required culminating experiences)

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.

### English as a Second Language Concentration - Teacher Leadership Track (39 hours)

#### A. Core Courses (9 hours)

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

#### B. Pedagogical Expertise (15-21 hours)

CUI 523 - Legal, Historical, and Cultural Implications of English as a Second Language (3)  
CUI 526 - Teaching English as a Second Language (3)  
CUI 605 - Developmental Psycholinguistics (3)  
CUI 613 - Linguistics for ESL Teachers (3)  
ENG 660 - Modern Language Theory (3)  
6 hours electives

### C. Professional Development/Leadership (9-15 hours)

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)  
6 hours electives, if program allows

### D. Advanced Competencies Portfolio (and other required culminating experiences)

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.



## **French Education Concentration - Classroom Practice Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3)

### **B. Pedagogical Expertise (21 hours)**

FRE 507 - Teaching French Through French Literature (3) **or** FRE 511 - The Practice of French Translation and Interpretation (3) **or** FRE 615, 616 - Advanced Composition for Graduate Students (3) (3)  
FRE 532, 533 - French Civilization (3) (3) **or** FRE 557 - Advanced Topics in French Literature (3) (if the topic is Paris)  
Three courses from French literature and/or film (director/author and/or film genre) at the 500-level and above  
CUI 527 - Teaching Second Languages in the Elementary/Middle Schools (3)  
CUI 552 - Teaching Practices and Curriculum in Foreign Languages (3)

### **C. Professional Development/Leadership (9 hours)**

CUI 638 - Seminar in Secondary Education (3)  
CUI 680a - Clinical Experience in Teaching (3)  
CUI 680b - Clinical Experience in Teaching Seminar (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

## **French Education Concentration - Teacher Leadership Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

### **B. Pedagogical Expertise (21 hours)**

FRE 507 - Teaching French Through French Literature (3) **or** FRE 511 - The Practice of French Translation and Interpretation (3) **or** FRE 615, 616 - Advanced Composition for Graduate Students (3) (3)  
FRE 532, 533 - French Civilization (3) (3) **or** FRE 557 - Advanced Topics in French Literature (3) (if the topic is Paris)  
Three courses from French literature and/or film (director/author and/or film genre) at the 500-level and above

CUI 622 - Differentiated Instruction (3)  
CUI 633 - Trends in Teaching Practices and Curriculum in Foreign Languages (3)

### **C. Professional Development/Leadership (9 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

## **Instructional Technology Concentration Teacher Leadership Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 604 - Methods of Educational Research (3) **or** ERM 605 - Educational Measurement and Evaluation (3)

### **B. Pedagogical Expertise (21 hours)**

CUI 610 - Integrating Technology into Subject Matter Instruction (3)  
CUI 644 - Supervised Practicum in Curriculum and Instruction (3)  
CUI/LIS 672 - Instructional Design (3)  
LIS 616 - Media Production Services for Library Programs (3)  
LIS 647 - Emerging Technological Trends in Information Access (3)  
LIS 648 - Managing School/Library Computer Laboratories (3) **or** LIS 645 - Computer-Related Technologies for Library Management (3)  
SES 662 - Assistive Technology for Inclusive Education (3)

### **C. Professional Development/Leadership (9 hours)**

CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)  
CUI/LIS 674 - Seminar: Issues and The Electronic Community (3) **or** CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute

## **Mathematics Education Concentration - Teacher Leadership Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)

ERM 605 - Educational Measurement and Evaluation (3)  
or ERM 604 - Methods of Educational Research (3)

### **B. Pedagogical Expertise (21 hours)**

Five courses selected from the following list and under advisement from the Departments of Mathematical Sciences and Curriculum and Instruction: MAT 513, 514, 516, 517, 518, 519, 531, 532, 540, 545, 546, 549, 591, 592, 595, 596, 631, 632, 647, and 648

CUI 622 - Differentiated Instruction (3) or CUI 665 - Diagnosis and Corrective Teaching in Mathematics (3)

CUI 630 - Trends in Teaching Practices and Curriculum in Secondary School Mathematics (3) or CUI 664 - Teaching Problem Solving (3) or CUI 668 - Seminar in Mathematics Pedagogy (3)

### **C. Professional Development/Leadership (9 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) or ELC 697 - Selected Critical Issues in American Education (3) or approved substitute

CUI 656 - Teacher as Leader (3)

CUI 675 - Teacher as Researcher (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

### **Middle Grades Education Concentration Classroom Practice Track (39 hours)**

#### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)

CUI 669 - Educational Implications of Learning and Developmental Theory (3)

ERM 605 - Educational Measurement and Evaluation (3)

#### **B. Pedagogical Expertise (18 hours)**

CUI 626 - Middle Grades Curriculum and Instruction (3)

CUI 634 - Seminar in Middle Grades Education (3 - with internship)

CUI 635 - Reading in the Secondary School and Content Areas (3)

6 hours content

3 hours methods

#### **C. Professional Development/Leadership (12 hours)**

CUI 650 - The Interaction of Classroom Management and Instruction (3)

CUI 680a - Clinical Experience in Teaching (6)

CUI 680b - Clinical Experience in Teaching Seminar (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

### **Middle Grades Education Concentration Teacher Leadership Track (39 hours)**

#### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)

CUI 669 - Educational Implications of Learning and Developmental Theory (3)

ERM 605 - Educational Measurement and Evaluation (3) or ERM 604 - Methods of Educational Research (3)

#### **B. Pedagogical Expertise (21 hours)**

CUI 626 - Middle Grades Curriculum and Instruction (3 - or approved substitute)

CUI 644 - Supervised Practicum in Curriculum and Teaching (3)

CUI 654 - Teaching Models and the Analysis of Instruction (3) or CUI 622 - Differentiated Instruction (3)

Content courses or supervision (12)

#### **C. Professional Development/Leadership (9-12 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) or ELC 697 - Selected Critical Issues in American Education (3) or approved substitute

CUI 656 - Teacher as Leader (3)

CUI 675 - Teacher as Researcher (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

### **Reading Education Concentration - Teacher Leadership Track (39 hours)**

#### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)

CUI 669 - Educational Implications of Learning and Developmental Theory (3)

ERM 605 - Educational Measurement and Evaluation (3) or ERM 604 - Methods of Educational Research (3)

#### **B. Pedagogical Expertise (21 hours)**

CUI 615 - Literacy in the Early Years (3)

CUI 616 - Literacy Development and Instruction Across the Grades (3)

CUI 617a - Diagnosis and Correction of Reading Problems (3)

CUI 617b - Advanced Strategies in Diagnosis and Correction (3)

CUI 619 - Research and Programs in Reading Education (3)

CUI 640 - Writing Instruction in the Elementary and Middle Grades (3)  
3 hours elective

### **C. Professional Development/Leadership (9 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 675 - Teacher as Researcher (6 - taken as two separate offerings)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

## **Science Education Concentration - Classroom Practice Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3)

### **B. Pedagogical Expertise (21 hours)**

CUI 559 - Teaching Practices and Curriculum in Science (3)  
CUI 623 - Environmental Education in the K-12 Classroom (3)  
15 hours content courses

### **C. Professional Development/Leadership (9 hours)**

CUI 638 - Seminar in Secondary Education (3)  
CUI 680a - Clinical Experience in Teaching (3)  
CUI 680b - Clinical Experience in Teaching Seminar (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

## **Science Education Concentration - Teacher Leadership Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

### **B. Pedagogical Expertise (21 hours)**

CUI 622 - Differentiated Instruction (3)  
CUI 632 - Trends in Teaching Practices and Curriculum in Secondary School Science (3)  
15 hours content courses, to include option in environmental education

### **C. Professional Development/Leadership (9 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

## **Social Studies Education Concentration Classroom Practice Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3)

### **B. Pedagogical Expertise (21 hours)**

CUI 553 - Teaching Practices and Curriculum in Social Studies (3)  
18 hours content courses

### **C. Professional Development/Leadership (9 hours)**

CUI 638 - Seminar in Secondary Education (3)  
CUI 680a - Clinical Experience in Teaching (3)  
CUI 680b - Clinical Experience in Teaching Seminar (3)

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

## **Social Studies Education Concentration Teacher Leadership Track (39 hours)**

### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)

ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

### **B. Pedagogical Expertise (18 hours)**

CUI 622 - Differentiated Instruction (3)  
CUI 631 - Trends in Teaching Practices and Curriculum in Secondary School Social Studies (3)  
12 hours content courses, to include options in multi-cultural education and global education

### **C. Professional Development/Leadership (12 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)  
3 hours elective

### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

### **Spanish Education Concentration - Classroom Practice Track (39 hours)**

#### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3)

#### **B. Pedagogical Expertise (21 hours)**

CUI 527 - Teaching Second Languages in the Elementary/Middle Schools (3)  
CUI 552 - Teaching Practices and Curriculum in Foreign Languages (3)  
SPA 532 - Spanish Civilization (3) **or** SPA 534 - Spanish-American Civilization (3)  
Two 600-level Hispanic literature seminars  
Two courses in Hispanic language and literature at the 500-level or above  
(Coreq or prereq: SPA 416)

#### **C. Professional Development/Leadership (9 hours)**

CUI 638 - Seminar in Secondary Education (3)  
CUI 680a - Clinical Experience in Teaching (3)  
CUI 680b - Clinical Experience in Teaching Seminar (3)

#### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

### **Spanish Education Concentration - Teacher Leadership Track (39 hours)**

#### **A. Core Courses (9 hours)**

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ERM 605 - Educational Measurement and Evaluation (3) **or** ERM 604 - Methods of Educational Research (3)

#### **B. Pedagogical Expertise (21 hours)**

CUI 622 - Differentiated Instruction (3)  
CUI 633 - Trends in Teaching Practices and Curriculum in Foreign Languages (3)  
SPA 532 - Spanish Civilization (3) **or** SPA 534 - Spanish-American Civilization (3)  
Two 600-level Hispanic literature seminars  
Two courses in Hispanic language and literature at the 500-level or above

#### **C. Professional Development/Leadership (9 hours)**

CUI 628 - Trends and Issues in Curriculum and Instruction (3) **or** ELC 697 - Selected Critical Issues in American Education (3) **or** approved substitute  
CUI 656 - Teacher as Leader (3)  
CUI 675 - Teacher as Researcher (3)

#### **D. Advanced Competencies Portfolio (and other required culminating experiences)**

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.

### **SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN HIGHER EDUCATION**

The Department of Curriculum and Instruction offers a graduate program of study leading to a 36 hour Master of Education degree in higher education. At least 18 hours must be at the 600-level or above.

#### **A. Required Courses Area of Concentration (15 hours)**

CED 603 - The American College Student (3)  
CUI 606 - Administration of Higher Education (3)  
CUI 661 - Higher Education in the U.S. (3)  
CUI 662 - Curriculum in Higher Education (3)  
CUI 690 - Internship in Higher Education (3)

#### **B. Research (3 hours)**

ERM 604 - Methods of Educational Research (3)



**C. Supporting Courses (12 hours)**

Twelve (12) hours minimum or 18 hours in a community college teaching field (12 hours from approved courses and 6 hours from humanistic and behavioral studies).

**D. Humanistic and Behavioral Studies**

Six (6) hours minimum (anthropology, management, information systems, political science, psychology, sociology).

**E. Comprehensive Examination**

Please consult with the Director of Graduate Study or departmental secretary for the dates of this examination.

**\*SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN EDUCATIONAL SUPERVISION**

\*For 2004-2005, no new degree candidates will be accepted.

**SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN EDUCATIONAL SUPERVISION WITH A CONCENTRATION IN INSTRUCTIONAL DESIGN**

This 36 hour program is designed for teachers and other candidates who wish a broad course of study related to curriculum and instruction. No licensure is attached to this concentration. The student's educational goals should be articulated with an advisor.

**A. Foundation Courses (9 hours)**

- CUI 669 - Educational Implications of Learning and Developmental Theory (3)
- CUI 698 - Human Development (3)
- ELC 695 - Comparative Education or ELC 696 - Philosophies of Education (3) or ELC 697 - Selected Critical Issues in American Education (3)

**B. Research (6 hours)**

- ERM 604 - Methods of Educational Research (3)
- ERM 605 - Educational Measurement and Evaluation (3)

**C. Required Major Courses (12 hours)**

- CUI 622 - Differentiated Instruction (3)
- CUI 654 - Teaching Models and the Analysis of Instruction (3)
- ELC 615 - Foundations of Curriculum (3)
- LIS 672 - Instructional Design (3)

**D. Elective Major Courses (9 hours)**

Electives must be selected with the prior approval of the advisor to address licensure needs or student interest.

**SPECIFIC REQUIREMENTS FOR THE POST-MASTER'S CERTIFICATE IN COLLEGE TEACHING AND ADULT LEARNING**

The Department of Curriculum and Instruction offers a 15 semester hour Post-Master's Certificate in college teaching and adult learning. The program is designed for current and future faculty with appointments in higher education institutions such as community colleges and public and private four-year colleges and universities. The program is also intended for UNCG graduate students who have completed a minimum of 18 hours in their program and who are in good standing with their department. Completion of the master's degree is required for the awarding of the certificate.

The certificate program is designed to facilitate the development of knowledge, skills, and dispositions that lead to excellence in teaching and learning at the undergraduate level. The program focus is on learner differences, contexts for learning, instructional delivery, and assessment and accountability.

**A. Required Core Courses (12 hours)**

- CUI 607 - Adult Learning and College Teaching (3)
- CUI 663 - Planning Programs in Postsecondary Education (3)
- CUI 745 - High Education: Equity, Inclusion, and Learning (3)
- CUI 759 - College Teaching Practicum or discipline-based equivalent (3)

**B. Elective (3 hours)**

One elective course in the Department of Curriculum and Instruction.

**SPECIFIC REQUIREMENTS FOR THE SPECIALIST IN EDUCATION**

The Department of Curriculum and Instruction offers a graduate program of study leading to a 33 hour Specialist in Education degree with a concentration in higher education. At least 18 hours must be in 600-level courses.

**A. Courses (18 hours)**

Courses selected with prior approval of advisor:

- CED 602 - Student Development in Higher Education (3)



- \*CED 603 - The American College Student (3)
- CED 676 - Organization and Administration of Student Development Services (3)
- CUI 600 - The Community College (3)
- \*CUI 606 - Administration of Higher Education (3)
- CUI 607 - Adult Learning and College Teaching (3)
- CUI 611 - Survey of Adult Education (3)
- CUI 612 - Current Issues in Higher Education (3)
- CUI 625 - Academic Advising and Retention in Higher Education (3)
- \*CUI 661 - Higher Education in the U.S. (3)
- \*CUI 662 - Curriculum in Higher Education (3)
- \*CUI 690 - Supervised Practicum in Educational Administration (3)
- \*Required courses if not taken at the master's level

## B. Research (6 hours)

With prior approval, students will select 6 additional hours in research of which ERM 604, Methods of Educational Research, is a prerequisite.

## C. Cognate Disciplines (9 hours)

With prior approval of the student's advisor, students will select 9 hours from other areas (e.g., sociology, history, business, philosophy, English, psychology).

## D. Comprehensive Examination

Please consult with the Director of Graduate Study for the dates of this examination.

# SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN CURRICULUM AND TEACHING

The Department of Curriculum and Instruction offers a graduate program of study leading to a Ph.D. in curriculum and teaching with a concentration in teacher education and development or higher education. All students in the curriculum and instruction doctoral program are required to meet requirements in the areas of curriculum and instruction and research as described below. Additional course requirements are determined on an individual basis through planning by the student and his/her doctoral advisory/dissertation committee.

## A. Required Core Courses (12 hours minimum)

All students must complete a required core of courses as denoted below (an asterisk denotes the required course which should be the first completed in the doctoral program):

## Teacher Education and Development Concentration

- \*CUI 750 - Seminar: Issues in Curriculum and Instruction (3)

At least three courses from the following:

- CUI 654 - Teaching Models and Analysis of Instruction (3)
- CUI 748 - Seminar in Cognition and Motivation (3)
- LIS 672 - Instructional Design (3)
- An SES course

## Higher Education Concentration

- CED 603 - The American College Student (3)
- \*CUI 750 - Seminar: Issues in Curriculum and Instruction (3)
- CUI 661 - Higher Education in the U.S. (3)
- CUI 662 - Curriculum in Higher Education (3)

## B. Research Requirements (21 hours minimum)

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.

The research component must include ERM 680, ERM 681, and one qualitative research course.

The research component must include at least 6 hours of applied research courses. In the teacher education and development concentration, this requirement may be satisfied by taking CUI 775, Directed Doctoral Research, which may be repeated once for credit. In the higher education concentration students will complete CUI 790, Practicum: Applied Research in Higher Education, which may be repeated once for credit.

The remaining research courses will be selected with advice and approval of the doctoral committee.

## C. Teacher Education and Development Concentration (15 hours minimum)

In the teacher education and development concentration, students will decide on courses in the curriculum and instruction concentration 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, supervision, elementary education, middle grades education, reading and literacy education, mathematics education, social studies education, science education, foreign language education, multicultural education, English as a second language/ TESOL, or an interdisciplinary focus.

## D. Higher Education Concentration (21 hours minimum)

In the higher education concentration, students take 21-27 hours, to be determined during consultation with the doctoral advisory/dissertation committee. Course work consistent with the concentration to include: higher education finance, higher education law, higher education policy, ethics, organizational development and management, higher education research and assessment, and college teaching.

## E. 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.

## F. Dissertation (12 hours minimum)

Each candidate for a doctoral degree must prepare and present a dissertation that focuses on some aspect of curriculum, instruction, and supervision, shows independent investigation, and is acceptable in form and content to the student's committee and The Graduate School.

## (CUI) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 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)

### 516. Emergent Literacy and Literature (3:3).

Explores emergent literacy development in pre-school/kindergarten setting and introduces the wide range of literature available for young children with emphasis on using books to stimulate language and cognitive development.

### 517. Literacy I: Reading and Writing in the Primary Elementary Grades (3:3).

*Pr. admission to the M.Ed. in curriculum and instruction Classroom Practice Track, or permission of instructor.*  
Course focuses on how children learn to read and what classroom teachers can do to facilitate their growth as readers in the primary grades.

### 518. Mathematics in the Elementary and Middle Schools (3:3).

Study of the current mathematics program, including emphasis on meaning theory and on instructional materials, methods, and procedures in teaching the fundamental operations.

### 519. Science in the Elementary School (3:3).

Course treats concepts of science, both biological and physical, as well as principles involved in the earth and space science. The emphasis is on understanding scientific concepts and on developing experiences by which these concepts can be meaningfully taught to elementary school children of varying ages and abilities.

### 520. Social Studies in the Elementary School (3:3).

Course designed to help educators design and implement appropriate social studies instruction in the elementary school. Emphasis is given to program structure, instructional processes, and research developments. Specific attention is given to current emerging elements of the modern social studies program in the elementary school.

### 521. Literacy II: Reading and Writing in the Intermediate Elementary Grades (3:3:3).

*Pr. admission to the M.Ed. in curriculum and instruction Classroom Practice Track and 517, or permission of instructor.*

Integrated reading and language arts course designed to prepare students to teach reading and writing in the elementary grades.

### 523. Legal, Historical, and Cultural Implications of English as a Second Language (3:3).

*Pr. "A" licensure in another area or permission of instructor.*  
Exploration of legal and historical bases of English as a Second Language. Analysis of differences among home and school cultures, especially related to language.

### 526. Teaching English as a Second Language (3:3:3).

*Pr. permission of instructor.*

Preparation for ESL teaching through study of trends, major theories, methodologies, and assessment in second language learning.

### 527. Teaching Second Languages in the Elementary/Middle Schools (3:3).

*Pr. 545 and admission to teacher education program or permission of instructor.*

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.

### 530. Middle Grades Language Arts Education (3:3).

*Pr. admission to middle grades education.*

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.

### 535. Literacy in the Content Areas (3:3).

*Pr. admission to teacher education or permission of instructor.*

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.

### 545. Diverse Learners (3:3:2).

*Pr. admission to advanced master's program in teacher education and/or admission to teacher education, or by permission of instructor.*

Provides students with a broad base of knowledge and skills to increase their effectiveness in meeting the needs of diverse learners through appropriate instructional, curricular, and behavioral strategies.

### 551. Teaching Practices and Curriculum in English (3:3:2).

*Pr. 450, and admission to teacher education. Coreq. or pr. 470, or permission of instructor. Required of student teachers in English.*

Designed to acquaint prospective teachers with modern concepts and practices in English instruction in secondary schools; emphasis on teaching four fundamental language arts: speaking, writing, reading, and listening.

**552. Teaching Practices and Curriculum in Foreign Languages (3:3:2).**

*Pr. 450, 545 and admission to teacher education. Coreq. or pr. 470, or permission of instructor.*

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.

**553. Teaching Practices and Curriculum in Social Studies (3:3:2).**

*Pr. 450, 545 and admission to teacher education. Coreq. or pr. 470, or permission of instructor. Required of student teachers in social studies.*

Organization of social studies in secondary schools; classroom methods, techniques, and activities; teaching materials; testing and evaluation.

**554. Middle Grades Social Studies Education (3:3).**

*Pr. admission to middle grades education concentration.*

Candidate competencies in middle grades social studies instruction. Emphases include practical and theoretical attention to curriculum development, planning, resources, standards, instructional strategies, and assessment.

**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.

**557. Teaching Practices and Curriculum in Mathematics (3:3:2).**

*Pr. Pr. 450, 545 and admission to teacher education. Coreq. or pr. 470, or permission of instructor. Required of student teachers in mathematics.*

Special teaching problems in secondary mathematics. Teaching procedures for important topics discussed in relation to their foundations in mathematics and logic.

**559. Teaching Practices and Curriculum in Science (3:3:2).**

*Pr. 450, 545 and admission to teacher education. Coreq. or pr. 470, or permission of instructor. Required of student teachers in science.*

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.

**589. Experimental Course.**

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

**(CUI) COURSES FOR GRADUATES****600. The Community College (3:3).**

Development of the community college on the national and state levels, including objectives, organization, curricula, instruction, and services.

**605. Developmental Psycholinguistics (3:3).**

*Pr. one course in human development or child development, one course focusing on human learning, and permission of instructor. A course in linguistics is recommended.*

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.

**606. Administration of Higher Education (3:3).**

*Pr. permission of instructor.*

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.

**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.

**609. Methods of Teaching Computer Literacy and Computer Programming (3:3:3).**

*Pr. 669, LIS 580, LIS 582, LIS 672; or permission of the instructor.*

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. (Same as LIS 609)

**610. Integrating Technology into Subject Matter Instruction (3:3:3).**

*Pr. 669, LIS 590, LIS 672, and experience with Hypercard and the Internet; or permission of instructor.*

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.

**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.

**612. Current Issues in Higher Education (3:3).**

Identification and analysis of current issues with discussion of proposals for resolution.

**613. Linguistics for ESL Teachers (3:3).**

*Pr. admission to the M.Ed. in curriculum and instruction, valid North Carolina "A" licensure, or permission of Director of ESL program.*

Designed for teachers pursuing advanced licensure in English as a Second Language. Focuses on understanding general linguistic concepts and their application to ESL pedagogy.

**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.

**615. Literacy in the Early Years (3:3).**

Course gives experienced teachers an in-depth study of how children learn to read and how to facilitate growth as readers in primary grades. Emphasis on at-risk readers.

**616. Literacy Development and Instruction Across the Grades (3:3).**

Designed to give teachers a deeper understanding of the theories and research behind effective reading instruction for students beyond the primary grades.

**617a. Diagnosis and Correction of Reading Problems (3).**

*Pr. 615 and 616 and permission of instructor.*

Causes of reading disabilities, diagnostic instruments, standard and informal testing procedures, report writing, and materials and methods of instructing the atypical reader. Work with individual students or small groups identified as problem readers.

**617b. Advanced Strategies in Diagnosis and Correction (3).**

*Pr. 615 and 616 and permission of instructor.*

Further examination of atypical readers. Work with problem readers in a supervised, clinical context. Evaluation of formal and informal assessments, the generation of educational prescriptions, and the direction of assessment procedures.

**619. Research and Programs in Reading Education (3:3).**

*Pr. minimum of 9 hours in reading education; 3 hours in research or statistics or permission of instructor.*

For students completing a master's program with a concentration in reading education or those entering into postmaster's work. Students encouraged to employ previously gained knowledge in seeking solutions to the problems facing the profession.

**620. Theories of Reading and Writing Processes (3:3).**

*Pr. 517, ERM 604 or equivalent, or permission of instructor.*

Current cognitive and social theories of reading processes and writing processes. Implications of applying those theories to the elementary and middle school curriculum.

**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.

**622. Differentiated Instruction (3:3).**

*Pr. admission to the M.Ed. in curriculum and instruction; 545, 669, ERM 605, and a minimum of 15 hours in the pedagogical expertise area, or permission of instructor.*

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).

**623. Environmental Education in the K-12 Classroom (3:3).**

*Pr. 545, 669, ERM 605, or permission of the instructor.*

Teachers will design, conduct and evaluate environmental education activities in their K-12 classrooms. Course activities partially fulfill requirements for North Carolina environmental education licensure. Weekend field trip is required.

**624. Elementary School Curriculum and Instruction (3:3).**

*Pr. 500-level course in elementary education.*

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.

**625. Academic Advising and Retention in Higher Education (3:3).**

Addresses academic advising as a key element in the retention of college students; academic advising on the college campus.

**626. Middle Grades Curriculum and Instruction (3:3).**

*Pr. permission of instructor.*

Curricular and instructional principles, processes, and designs applicable to students in the middle grades. Particular emphasis is given to exemplary middle school programs.

**627. Enrollment Management (3:3).**

*Pr. CED 579 or permission of instructor.*

"Enrollment influences" including the institution's integrated efforts in marketing, recruitment, admission, and retention, etc.

**628. Trends and Issues in Curriculum and Instruction (3:3).**

*Pr. admission to the M.Ed. in curriculum and instruction, 545, 669, ERM 605; or permission of instructor.*

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.

**630. Trends in Teaching Practices and Curriculum in Secondary School Mathematics (3:3).**

*Pr. permission of instructor.*

Will familiarize teachers of grades 7-12 with the changes in content and methods of teaching secondary mathematics. May be repeated for credit when topic varies.

**631. Trends in Teaching Practices and Curriculum in Secondary School Social Studies (3:3).**

*Pr. permission of instructor.*

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.

**632. Trends in Teaching Practices and Curriculum in Secondary School Science (3:3).**

*Pr. permission of instructor.*

Curriculum developments in biology, chemistry, physics, and earth science at the secondary school level.

New approaches to teaching-learning, problem solving, discovery methods of learning, concept learning, and learning by inquiry. May be repeated once for credit when topic varies.

**633. Trends in Teaching Practices and Curriculum in Foreign Languages (3:3).**

*Pr. permission of instructor.*

Research in first and second language acquisition as it relates to second language teaching. Developments in foreign language curriculum and methodology. May be repeated once for credit when topic varies.

**634. Seminar in Middle Grades Education (3:3).**

*Pr. completion of a course in middle grades curriculum and instruction.*

Will focus on the unique needs of students and teachers in middle level schools.

**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.

**637. Trends in Teaching Practices and Curriculum in Secondary School English (3:3).**

*Pr. permission of instructor.*

Developments in the teaching of English and analysis of current practices. Changes in curriculum and materials. May be repeated once for credit when topic varies.

**638a, b. Seminar in Secondary Education (3:3), (3:3).**

Group analysis of selected problems. Individual student presentations of research done on topics related to that person's professional situation.

**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.



**640. Writing Instruction in the Elementary and Middle Grades (3:3).**

Interrelates knowledge, research, and practice in teaching writing as a process in elementary and middle grades. Implementing the writing process across the curriculum.

**644. Supervised Practicum in Curriculum and Teaching (3:3).**

*Pr. permission of instructor.*

Directed studies of curricular and instructional issues in a field setting. (Graded on S-U basis)

**650. The Interaction of Classroom Management and Instruction (3:3).**

*Pr. permission of instructor.*

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.

**654. Teaching Models and the Analysis of Instruction (3:3).**

*Pr. ELC 615 or permission of instructor.*

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.

**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.

**656. Teacher as Leader (3:3).**

*Pr. ERM 605 and 24 hours of M.Ed. course work, or permission of instructor.*

Study of leadership skills and best practices for teachers as leaders working with school, district, state and/or national initiatives and issues.

**661. Higher Education in the U.S. (3:3).**

Major problems and issues affecting contemporary higher education in the U.S. and their historical background.

**662. Curriculum in Higher Education (3:3).**

*Pr. 600 or 601 or permission of instructor.*

Curricular patterns and processes in postsecondary educational institutions. Social, historical, and philosophical perspectives on current curricular trends and processes of change among various institutional types.

**663. Program Planning in Postsecondary Education (3:3).**

Review of classic, naturalistic, and critical programming models in adult and postsecondary education. Prepares faculty, trainers, and staff developers to translate felt needs into meaningful learning experiences.

**664. Teaching Problem Solving (3:3).**

*Pr. admission to a graduate program, or permission of instructor.*

Survey of methods and materials for teaching problem solving and evaluating problem solving performance of students. Development of instructional programs on problem solving and assessment of their effects.

**665. Diagnosis and Corrective Teaching in Mathematics (3:3).**

*Pr. Successful completion in two mathematics courses (MAT 112 or higher) and one course in mathematics education, or permission of instructor.*

Techniques for diagnosing learning difficulties in mathematics in grades K-8. Design of instructional strategies to help students overcome difficulties. Attention to evaluation of remedial instruction.

**667. Technology in Mathematics Education (3:3).**

*Pr. 664 or permission of instructor.*

Technologies used to learn mathematics and ways of incorporating those technologies into mathematics instruction.

**668. Seminar in Mathematics Pedagogy (3:3).**

*Pr. 664 or equivalent, or permission of instructor.*

Analysis of alternative pedagogy for specific mathematics content, with design of instruction and assessment based on that analysis. May be repeated for credit; maximum of 6 hours applicable toward any degree.

**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.

**670. Research in Mathematics Education (3:3).**

*Pr. successful completion of two courses in mathematics education, or permission of instructor.*

Research in mathematics instruction and learning; attention to synthesizing and identifying educational implications of research.

**672. Instructional Design (3:3).**

Components of the systems approach to instructional design. (Same as LIS 672)

**674. Seminar: Issues and The Electronic Community (3:3).**

*Pr. LIS 584a-d or permission of instructor.*

Major social and ethical issues emerging in the electronic community including those embraced by access, privacy, intellectual property, freedom of speech, institutional/social control, and evolving formats. (Same as LIS 674)

**675. Teacher as Researcher (3:3:3).**

*Pr. ERM 605 and 24 hours of M.Ed. course work, or permission of instructor.*

Methods and skills for designing, conducting, interpreting, and applying action research, the systematic inquiry into curriculum, instruction, teaching, and learning. Course focuses on reflective inquiry and practical application of findings. May be repeated once for credit.

**680a. Clinical Experience in Teaching (6).**

*Pr. admission to M.Ed., Classroom Practice Track program, or permission of department.*

Supervised in-school clinical experience. Required full-time teaching.

**680b. Clinical Experience in Teaching Seminar (3).**

*Pr. admission to M.Ed., Classroom Practice Track program, or permission of department.*

Seminar focused on the ways students learn within the classroom and community context.



**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.

**688. Contemporary Problems Seminar (1-3).**

*Pr. advanced master's or doctoral standing, or permission of instructor.*

Specific course title identified each semester by subscript (e.g., Contemporary Problems Seminar; Issues in Professional Negotiations). May be repeated for credit when topic varies.

**690. Internship in Higher Education (3).**

*Pr. must have completed 18 semester hours in the Plan of Study and permission of instructor.*

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. (Graded on S-U basis)

**692. Independent Study (1-4).**

*Pr. permission of instructor.*

Guided readings, research, and individual project work under direction of a staff member.

**699. Thesis (1-6).**

Individual guidance and direction in the development of a research problem in the master's degree thesis.

**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.

**710. Human Development and Education (3:3).**

*Pr. 698 or permission of instructor.*

Major conceptual approaches to human development, current developmental research topics and their application to education.

**711. Experimental Course.**

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

**726. Seminar in Curriculum Development in Middle Grades Education (3:3).**

*Pr. master's degree in middle grades education; 644, 654, 655 or permission of instructor.*

Current research in young adolescent development and curriculum development as it relates to improving middle grades education.

**730. Qualitative Research Design in Curriculum and Instruction (3:3).**

*Pr. 750 or permission of instructor.*

Qualitative research design in curriculum and instruction, including its history, philosophy and nature. Includes discussion of types of qualitative research, assessment issues, and critical reading of qualitative research.

**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.

**748. Seminar in Student Cognition and Motivation (3:3).**

*Pr. 669 or permission of instructor.*

Current research findings in cognition and motivation as they apply to the development of various instructional approaches and activities.

**750. Seminar: Issues in Curriculum and Instruction (3:3).**

*Pr. admission to the doctoral program in curriculum and teaching; or permission of instructor.*

Issues and trends in pedagogy and supervision. Students will extend their research interests, and develop strategies for critical reading and writing.

**754. Internship in Curriculum and Instructional Leadership (3:0:10).**

*Pr. minimum of 24 semester hours from courses included in the doctoral student's program of study including the following or their equivalent: 654, 655, 685; written verification by the student's doctoral committee that student is ready for internship.*

Directed internship in an appropriate curriculum and instructional leadership setting. Supervision provided by departmental faculty in collaboration with field-based mentors. May be repeated once for credit.

**759. College Teaching Practicum (3:3).**

*Pr. advanced standing in the curriculum and teaching doctoral track and permission of instructor.*

Supervised experiences in teaching college level course(s).

**775. Directed Doctoral Research (3).**

*Pr. doctoral students in CUI and permission of instructor.*

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. May be repeated once for credit.

**785. Research on Teaching and Teacher Education (3:3).**

*Pr. completion of ERM 604 or equivalent and one qualitative research methods course and admission to the doctoral program in curriculum and teaching; or permission of instructor.*

In-depth study of current trends and issues in research on teaching.

**790. Practicum: Applied Research in Higher Education (3).**

*Pr. 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.*

Complete an applied research project that addresses specific information needs of the cooperating institution. Learn to uphold the standards of the selected research methods. May be repeated once for credit. (Graded on S-U basis)

**799. Dissertation (1-12).**

Individual direction in the development and execution of a doctoral dissertation.

**801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF DANCE

323 H.H.P. Building

(336) 334-5570

<http://www.uncg.edu/dce>

### *Professors*

**John Gamble**, Choreography, lighting design and production.

**Larry E. Lavender**, M.F.A., Ph.D., Choreography, dance criticism, aesthetics, philosophy of dance (Head of Department).

**Susan W. Stinson**, Ed.D., Curricular issues in dance/arts education, meaning-making, gender issues.

**Jan E. VanDyke**, Ed.D., Choreography, social and economic issues in dance (Director of Graduate Study).

### *Associate Professors*

**Ann H. Dils**, Ph.D., Dance history, issues in dance as cultural practice.

**Jill Green**, Ph.D., Dance education, somatics (body-mind practice), creativity, feminist and post-positivist research, socio-cultural issues of the body (Coordinator of Dance Education).

**Eluza M. Santos**, M.F.A., Ph.D., Choreography, dance as cultural expression.

### *Assistant Professors*

**Robin M. Gee**, M.F.A., African and American dance, choreography, dance history, and culture.

**Elizabeth J. Sullivan**, M.F.A., Choreography, somatic practices. application of alternative approaches to movement technique.

The Department of Dance offers two graduate degrees, a Master of Fine Arts and a Master of Arts. Admission to graduate study in dance is on the basis of competence as evidenced by the undergraduate record and demonstrated proficiency and potential in dance. To continue in either graduate degree, students must achieve an overall average of 3.0 or better.

The M.F.A. is a 60 hour degree program normally completed over three years. It is considered a terminal degree and is commonly held by studio teaching faculty at the university level. Designed for dance artists who wish to refine their craft and develop their aesthetic point of view, the M.F.A. in choreography reflects the interdependence of dance-making, performance, theory, and pedagogy. A second option is in lighting design for dance. Students

may select one option or a combination. The M.F.A. in choreography culminates in the production of a concert or equivalent event approved by the faculty and an accompanying paper. The M.F.A. in design culminates in executing lighting design for two full concerts of dance and a paper. Two semesters of residency are required for the M.F.A.

The Master of Arts in Dance is a 36 hour degree planned for two kinds of students. Some may be seeking an artistic and/or scholarly program providing a significant and rigorous post-baccalaureate experience. Others may use the M.A. as preparation for a terminal degree program (M.F.A. or Ph.D.). Options are available in choreography, design, dance education, or dance and a related area which is available for study at UNCG.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS

The Department of Dance offers a graduate program leading to a 60 hour Master of Fine Arts degree with concentrations in choreography, performance and design.

### A. Requirements for All Concentrations (6 hours)

DCE 610 - Dance: The Phenomenon I (3)

DCE 611 - Dance: The Phenomenon II (3)

### B. Additional Requirements for Specific Concentrations

#### Choreography Concentration: (21 hours)

\*DCE 505 - Contemporary Dance: Aesthetic and Cultural Practice (3)

\*DCE 560 - The Dancer's Body (3)

DCE 624 - Movement for Dance (three times - 3)

DCE 651 - Studio Problems in Choreography (four times -12)

#### Design Concentration: (21 hours)

DCE 555 - Dance Production Technology (3)

DCE 624 - Movement for Dance (3)

DCE 650 - Dance Design Practicum (three times - 9)

Additional courses in the arts outside the Department (6)

\*offered alternate years

### C. Related Electives (15 hours)

Each student must choose additional graduate hours for a total of 60. At least 45 of the 60 must be in DCE.

DCE 661 and 662 are **STRONGLY ADVISED**; they are required for all TA's and all students who wish a teaching recommendation from the faculty.

It is **STRONGLY ADVISED** that students take related courses in areas other than dance, such as theatre, art, music and anthropology.

### D. Admission to Candidacy

At the completion of at least 18 graduate credit hours, including two semesters of practica in the area of emphasis (DCE 650 or 651) and removal of all deficiencies, M.F.A. students must apply for admission to candidacy. Admission is based on a variety of criteria. A minimum overall 3.0 GPA is required to be admitted to candidacy. Students will be notified when a review committee has been appointed by the Graduate Coordinator. The following materials must be submitted to the committee for evaluation (all of this work should have been done since entering the M.F.A. program at UNCG):

1. Videotape showing work in the area(s) of emphasis.
  - a. Choreography Concentration: student's work in DCE 651 up to this point.
  - b. Design Concentration: a portfolio of at least two designs for dances, including a video, slides, cue sheets, lighting plot, magic sheet, etc.
2. Writing (candidates must have achieved a B or better in DCE 610):
  - a. Two Papers: include a major paper from DCE 610 and another from one of the following courses: DCE 560, 611, or 660. Substitutions must be appealed to the chair of your candidacy committee.
  - b. Thoughtful and In-depth Answers to Questions Posed by the Graduate Faculty.

The committee will meet for this review early in the third semester of the student's graduate work. The chair of the committee will write a formal statement regarding the outcome. 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 M.F.A. program.

### E. Portfolio Review

Once the student has passed candidacy, completed 2/3 of the course work including DCE 610 and 611, and been in residence for at least two semesters, a portfolio of written and creative work must be submitted for review. The following outcomes will be considered by the reviewing committee: (1) clearance for the master production, (2) independent work to strengthen skills in the area of concentration, or (3) further structured course of study. On the first day of the semester before the semester of the student's anticipated Master Production Concert, each committee member should be provided with the following, accompanied by the Master Production proposal:

1. Videotape (choreography) or portfolio (design) of all work done during the practicum courses.
2. Paper from DCE 611 or major paper done in another course.
3. Answers to set of questions posed by the Graduate Faculty.

The student is responsible for selecting a chair and reviewing committee according to department guidelines. The Review must be completed within three weeks. If the committee requires changes, only two additional weeks will be allowed. The Portfolio Review must be passed before a date can be scheduled for the Master Production concert.

### F. Master Production (6 hours)

DCE 697 - Master Production (6)

The Master Production requires one of the following accompanied by a paper complying with department guidelines:

**Choreography Concentration:** full evening concert of the student's choreography or the equivalent.

**Design Concentration:** lighting design for two full dance concerts or the equivalent.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS

The Department of Dance offers a graduate program of study leading to a 36 hour Master of Arts degree in dance education with or without "M" licensure (available through primarily online courses), and a Master of Arts degree in dance with concentrations in choreography, design, or dance and related studies (history, philosophy, etc.).

### A. General Requirements (6 hours)

DCE 610 - Dance: The Phenomenon I (3)

DCE 611 - Dance: The Phenomenon II (3)

## B. Additional Requirements

### Dance Education (with "M" licensure - 30 hours):

- \*DCE 560 - The Dancer's Body (3)
- \*DCE 660 - Issues in Planning the Dance Curriculum (3)
- DCE 664 - Action Research in Dance Education (3) or CUI 675 - Teacher as Researcher (3)
- ERM 604 - Methods of Educational Research (3)
- CUI 545 - Diverse Learners (3)
- CUI 669 - Educational Implications of Learning and Developmental Theory (3)
- Electives - (6) At least 3 semester hours in dance. Must have a total of at least 24 credits in DCE courses.
- DCE 693 - Portfolio in K-12 Dance Education (6)
- Undergraduate credits in dance technique - 4 (waived for students who take 2 credits of DCE 624 as electives)

\*offered alternate years

### Dance Education (without licensure - 30 hours):

- \*DCE 560 - The Dancer's Body (3)
- \*DCE 660 - Issues in Planning the Dance Curriculum (3)
- DCE 663 - Dance Education Practicum (3)
- Research Course - (3)
- Electives - 12 (at least 6 in DCE)
- DCE 698 or 699 - Project or Thesis (6)
- Undergraduate credits in dance technique - 4 (waived for students who take 2 credits of DCE 624 as electives)

\*offered alternate years

### Choreography Concentration (non-thesis - 30 hours):

- \*DCE 505 - Contemporary Dance: Aesthetic and Cultural Practice (3)
- \*DCE 560 - The Dancer's Body (3)
- DCE 624 - Movement for Dance (two times - 2)
- DCE 651 - Studio Problems in Choreography (three times - 9)
- Electives - 13 (at least 6 in DCE)

The choreography concentration requires a culminating project: the performance of one piece of choreography, created since enrollment in the M.A. program, produced on the Departmental Concert during the student's final semester.

### Design Concentration (non-thesis - 30 hours):

- DCE 555 - Dance Production Technology (3)
- DCE 624 - Movement for Dance (two times - 2)
- DCE 650 - Dance Design Practicum (two times - 6)
- Courses in visual arts and/or theatre (6)
- Electives - 13 (at least 6 in DCE)

### Dance and Related Studies Concentration (30 hours):

- Research course (3)
- Courses in related area of study (9)
- Electives (12 - at least 6 in DCE)
- DCE 698 or 699 - Project or Thesis (6)

## C. Portfolio Review

Once the student has completed 2/3 of the course work and DCE 610 and 611, a Portfolio Review may be scheduled. Students must pass this Review before they can graduate. The following requirements apply:

### 1. Dance Education Concentrations:

- a. Portfolio Review must be satisfactorily completed before beginning DCE 693, 698, or 699.
- b. The following materials should be submitted for review:
  1. Final paper from DCE 611 and two major papers done in other courses.
  2. Answers to set of questions posed by the graduate faculty.
  3. Non-licensure students: proposal for 698 or 699. M-licensure students: school supervisor's evaluations of teaching since student's admission to the graduate program.

### 2. Choreography and Design Concentrations:

- a. Students must be in residence for at least one semester before scheduling Portfolio Review
- b. Portfolio Review must be satisfactorily completed before graduation.
- c. The following materials should be submitted for review:
  1. Videotape (choreography) or portfolio (design) of work done during the practicum courses.
  2. Final paper from DCE 611 or major paper done in another course.
  3. Answers to a set of questions posed by the graduate faculty.

### 3. Dance and Related Studies Concentration:

- a. Students must be in residence for at least one semester before scheduling Portfolio Review.
- b. Portfolio Review must be satisfactorily completed before beginning project or thesis.
- c. The following materials should be submitted for review:
  1. Final paper from DCE 611 and two major papers done in other courses.
  2. Answers to set of questions posed by the graduate faculty.
  3. Thesis or project proposal (students must pass the Portfolio Review before beginning thesis or project).

The student is responsible for selecting a chair and review committee according to department guidelines. The student must consult with his/her committee chair to arrange the date, time and place for a meeting with the committee to conclude the Review.



## (DCE) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 505. Contemporary Dance: Aesthetic and Cultural Practice (3:3).

*Pr. Satisfactory completion of the dance history requirement for admission to a graduate dance program.*

Cultural issues and aesthetic priorities of dance in the late postmodern world, especially contemporary dance. Present ideas about and debate issues concerning contemporary dance.

### 550. Creative Process: Dance Perspective (3:3).

*Pr. advanced standing in an arts program or permission of instructor.*

Exploration and examination of issues related to creativity and the creative process in dance and related arts. Includes experiential and theoretical modes of encounter.

### 553. Choreographic Workshop (3:3).

*Pr. 451 or permission of instructor.*

Development of choreographic skills for advanced students through workshops that focus on a particular approach to dance composition developed by a contemporary professional artist. May be repeated for credit.

### 555. Dance Production Technology (3:2:2)

*Pr. 355, or admission to graduate study in dance, or permission of instructor.*

Theory and practice in technical production areas of dance performance. Topics include lighting, sound, video, costumes, scenery, and production management. Laboratory work with University dance concerts.

### 560. The Dancer's Body (3:3).

*Pr. two semesters of dance technique and the equivalent of 340, or permission of instructor.*

An exploration of selected approaches to body awareness, integration, and release, and their implications for dance technique and performance.

### 589. Experimental Course.

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

## (DCE) COURSES FOR GRADUATES

### 610. Dance: The Phenomenon I (3:3).

*Pr. previous or current enrollment in graduate course work in the arts.*

An exploration and confrontation with the nature and meaning of dance as an art form.

### 611. Dance: The Phenomenon II (3:3).

*Pr. grade of B or better in 610 or approval of department head.* In-depth personal inquiry into the nature and making of meaning for a selected area of concern in dance. Includes significant individual project.

### 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.

### 621. Administration of Dance (3:3).

Introduction to the business of dance including aspects of grant writing, company development and management, public relations, concert production and presentation, and touring.

### 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.

### 624. Movement for Dance (1:0:5).

*Pr. graduate standing in dance.*

Opportunities for dancers to continue to practice their craft, develop working knowledge of different styles of modern dance, ballet, ethnic dance, improvisation, etc. Style and emphasis will vary each semester. May be repeated for a maximum of six credits. (Graded on S-U basis)

### 650. Dance Design Practicum (3:3).

*Pr. 555 and graduate standing in dance.*

Advanced practicum in the technical, aesthetic and theoretical aspects of dance design.

### 651. Studio Problems in Choreography (3:3).

Exploration of form and content in choreography; process, period, style, genre. Individualized problems determined for progressive growth of student artist. May be repeated for credit.

### 660. Issues in Planning the Dance Curriculum (3:3).

*Pr. graduate standing in dance.*

Curriculum planning for dance in educational settings. Involvement with issues in the field.

### 661. Dance Pedagogy in Higher Education (2:2).

*Pr. graduate standing in dance or permission of instructor(s).*

Consideration of pedagogical issues and strategies in teaching dance studio and theory courses at the undergraduate college/university level.

### 662. Practicum in Teaching Dance (1-3).

*Pr. graduate standing in dance; or permission of instructor and previous teaching experience; or 18 graduate semester hours in dance.*

Observation of dance teaching and supervised practice. May be repeated for a maximum of three credits. (Graded on S-U basis)

### 663. Dance Education Practicum (3).

*Pr. admission to graduate program in dance.*

Development, implementation, and evaluation of an individualized dance education project in a clinical setting. May be repeated for a maximum of 6 credits.

### 664. Action Research in Dance Education (3).

*Pr. 611, ERM 604, or permission of instructor.*

Review of recent research relevant to dance education; planning, implementation, and evaluation of action research project.

### 676. Problems Seminar (3:3).

*Pr. graduate standing in dance.*

Specific course title identified each semester by subscript, e.g., Problems Seminar: Dance as Therapy. May be repeated for credit when topic varies.

### 687. Performance Theory and Practice (2:3).

*Pr. graduate standing in dance or permission of instructor.* Rehearsal and performance of work designed to challenge graduate students at their level of performance. Choreography by graduate faculty. May be taken five times for credit.

### 688. Practicum in Dance Performance (1-3).

*Pr. graduate standing in dance or permission of the instructor.*

Rehearsal and performance of choreography created or reconstructed by faculty or guest artist. One credit per 60 rehearsal hours; one experience per choreographer. May be taken three times for credit. (Graded on S-U basis)



**693. Portfolio in K-12 Dance Education (1-6).**

*Pr. satisfactory completion of (a) all required courses for the M.A. 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.*

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. May be repeated for a maximum of 6 semester hours. (Graded S-U basis)

**695. Independent Study (1-3).**

*Pr. demonstrated competency for independent work and consent of departmental academic adviser and the instructor.*  
Intensive study in an area of special interest in dance.

**697. Master Production in Dance (1-6).**

*Pr. satisfactory completion of Portfolio Review.*

Research, development, and execution of the choreography and/or performance for a major concert or the lighting design for two concerts, or the equivalent. Credit may be divided over two or more semesters (Graded on S-U basis)

**698. Field Project in Dance (6).**

*Pr. approved candidates for M.A. in dance only.*

Field learning experiences in dance. Development and implementation of lecture-demonstrations, administrative internships, curriculum development. Formal written product and oral examination. (Graded on S-U basis)

**699. Thesis (1-6).**

*Pr. satisfactory completion of portfolio review.*  
(Graded on S-U basis)

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).****DEPARTMENT OF ECONOMICS**

462 Bryan Building

(336) 334-5463

<http://www.uncg.edu/bae/econ>

*Professors*

**Stuart D. Allen**, Ph.D., Macroeconomics, monetary economics (Head of Department).

**Bruce J. Caldwell**, Ph.D., History of economic thought, economic methodology (Joe Rosenthal Excellence Professor).

**Albert N. Link**, Ph.D., R&D, innovation and science policy, productivity analysis.

**John L. Neufeld**, Ph.D., Energy economics, microeconomics, economic history.

**Christopher J. Ruhm**, Ph.D., Labor and health economics, applied microeconomics (Jefferson-Pilot Excellence Professor).

*Associate Professors*

**Peter M. Bearse**, Ph.D., Econometrics, public economics.

**Stephen Layson**, Ph.D., Microeconomic theory, economics of crime.

**Dennis P. Leyden**, Ph.D., Public finance, economics of public education, public choice.

**Donald L. McCrickard**, Ph.D., International trade and finance, macroeconomics.

**Kenneth A. Snowden, Jr.**, Ph.D., Economic history, financial economics, macroeconomics (Director of Graduate Study).

*Assistant Professors*

**Amanda E. Dawsey**, Ph.D., Applied microeconomics, public economics, micro-economic theory.

**Stephen P. Holland**, Ph.D., Natural resources and environmental economics, industrial organization.

**Dan T. Rosenbaum**, Ph.D., Labor economics, public economics, health economics, applied econometrics.

**Michelle S. Sylvester**, Ph.D., Labor economics, applied microeconomics.

*Lecturer*

**Andrew Brod**, Ph.D., Industrial and regional economics, (Director, Office of Business and Economics Research).

The Department of Economics offers the Master of Arts in applied economics, the Doctor of Philosophy in economics and an innovative, combined program that leads to both a Master of Arts and a Doctor of Philosophy in economics. The M.A. and Ph.D.

curricula are distinct, high-quality, terminal professionally-oriented degree programs. The two programs are closely integrated, however, and mutually support our innovative combined M.A./Ph.D. degree track. The department's faculty has an established national reputation for scholarship in applied microeconomic research; its 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 that are required to conduct and disseminate the outcomes of that research.

Students complete the M.A. program in applied economics through one of two tracks: (Option 1) 35 semester hours of course work that includes a research capstone course (with an optional concentration in financial economics), or (Option 2) 30 semester hours of course work that culminates in a major, independent research project. Both tracks are designed to be completed in three semesters of full-time course work. The M.A. program is designed for students who are seeking careers in business, finance, or government as economists, forecasters, policy analysts, economic researchers, or managers with strong quantitative skills. Students who expect to work in the financial sector may elect to complete the financial economics concentration that is offered within the M.A. program. Excellent training is also provided for students who wish to enter the Ph.D. program at UNC Greensboro or to pursue additional graduate education at other institutions.

The Ph.D. in economics is offered to superior applicants who seek careers in business and financial institutions, in nonacademic research organizations, in agencies of federal, state and local governments, and in academic departments with a strong focus on public policy and applied microeconomics. The program aims to develop in students the theoretical, quantitative and statistical skills that are required to perform and interpret economic analyses on a wide range of policy-oriented issues. The program focuses on applied microeconomics and offers a highly structured curriculum that represents an innovative alternative to more traditional doctoral programs in economics

that are generally broader in scope and more flexible in structure. Our doctoral program focuses on the fields of labor, health, public (including the economics of education, science and technology policy, and urban economics) and financial economics.

Students may enter the Ph.D. program directly or through the M.A. program in applied economics. The latter path provides students with the opportunity to begin earning a high-quality, innovative terminal M.A. degree before deciding whether to pursue doctoral training. Students who follow this track apply to the Ph.D. program during their second semester and, if accepted, begin course work towards the degree in their third semester as they complete their M.A. program. Applicants who have already completed a master's degree in economics at UNCG or another institution apply for direct admission into the Ph.D. program. Students who have completed a baccalaureate degree in economics, and who can demonstrate outstanding preparation for, and strong interest in, applied microeconomics training at the doctoral level, may also apply for direct admission to the Ph.D. program.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS IN APPLIED ECONOMICS**

The Department of Economics offers a graduate program of study leading to a Master of Arts degree in applied economics. Students may choose the 35 hour course-based track (Option 1) that requires a literature review (ECO 694) and the capstone data analysis course (ECO 696), or the 30 hour research track (Option 2) that requires a literature review and a major research paper (ECO 694 and 695). The M.A. in applied economics with a concentration in financial economics is a variant of

Option 1. An overall grade point average of 3.00 is required for graduation (with no more than 6 semester hours of C credit).

### **Option 1 (35 hours)**

#### **A. Core Knowledge Requirement (17 hours)**

- ECO 619 - Mathematical Economics (3)
- ECO 641 - Microeconomics I (3)
- ECO 642 - Microeconomics II (2)
- ECO 643 - Econometric Methods (3)
- ECO 644 - Econometric Theory (3)
- ECO 646 - Macroeconomics I (3)

**B. Research Specialization (4 hours)**

ECO 721 - Empirical Microeconomics (4) or  
ECO 722 - Time Series and Forecasting (4)

**C. Electives (8 hours)**

Electives may be earned with 500-, 600-, or 700-level economics courses or with approved graduate courses taken outside the department. Students are encouraged to take both ECO 721 and 722, so one becomes an elective. Other electives in economics include:

ECO 518 - American Economic History (3)  
ECO 555 - History of Economic Thought (3)  
ECO 723 - Predictive Data Mining (4)  
ECO 731 - Applied Policy Methods I (2)  
ECO 732 - Applied Policy Methods II (2)  
ECO 741 - Advanced Mathematical Economics (2)

Students may also take approved courses in finance (MBA) or information systems (ISM).

**D. Research Seminars (6 hours)**

ECO 694 - Seminar and Research in Economics I (2)  
ECO 725 - Data Methods in Economics (2)  
ECO 726 - Data Project in Economics (2)

**E. Qualifying Examinations**

As a requirement for graduation every student is required to successfully complete two qualifying examinations—one in economic theory and the other in econometrics. Both examinations are administered during the first two weeks of the spring semester, and students must pass each examination with a minimum grade of B- (2.7). Students who do not pass either or both examinations may retake the examination(s) one time.

**F. Concentration in Financial Economics**

To complete a concentration in financial economics, students within the 35 hour Option 1 program must take ECO 722 to satisfy the research specialization requirement, six elective hours chosen from approved MBA finance courses, and ECO 723.

**Option 2 (30 hours)****A. Core Knowledge Requirement (17 hours)**

ECO 619 - Mathematical Economics (3)  
ECO 641 - Microeconomics I (3)  
ECO 642 - Microeconomics II (2)  
ECO 643 - Econometric Methods (3)  
ECO 644 - Econometric Theory (3)  
ECO 646 - Macroeconomics I (3)

**B. Research Specialization (4 hours)**

ECO 721 - Empirical Microeconomics (4) or

ECO 722 - Time Series and Forecasting (4)

**C. Electives (3 hours)**

Students in the 30 hour program choose electives from the same set specified above for the 35 hour track.

**D. Research Seminars (6 hours)**

ECO 694 - Seminar and Research in Economics I (2)  
ECO 695 - Seminar and Research in Economics II (4)

**E. Qualifying Examinations**

As a requirement for graduation every student is required to successfully complete two qualifying examinations—one in economic theory and the other in econometrics. Both examinations are administered during the first two weeks of the spring semester, and students must pass each examination with a minimum grade of B- (2.7). Students who do not pass either or both examinations must retake the examination(s) in May each year.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS/DOCTOR OF PHILOSOPHY IN ECONOMICS

The Department of Economics offers an integrated program of study that leads to both a Master of Arts in applied economics and a Doctor of Philosophy in economics. Students may be accepted into this program only after completing at least 21 hours (preferably 25 hours) in the M.A. program and passing the M.A. qualifying examinations (see above). Students may enroll only in courses within the M.A. program before applying for, and being admitted to, the Ph.D. program. These courses are indicated with a (\*) in the requirements below:

**Note:** Application to the integrated M.A./Ph.D. track is limited to students who are currently enrolled in the M.A. program and who have completed at least one semester of course work. Acceptance to the Ph.D. from the M.A. program is based on a student's undergraduate record, recommendations, GRE scores and first year performance in the M.A. program. Students who are interested in the integrated M.A./Ph.D., but who are not currently enrolled at UNCG, should apply to the M.A. program in applied economics.

**A. Required Courses in Economic Theory and Mathematical Economics (19 hours)**

\*ECO 619 - Mathematical Economics (3)  
\*ECO 641 - Microeconomics I (3)  
\*ECO 642 - Microeconomics II (2)  
\*ECO 646 - Macroeconomics I (3)

ECO 741 - Advanced Mathematical Economics (2)  
 ECO 751 - Advanced Microeconomic Theory I (3)  
 ECO 752 - Advanced Microeconomic Theory II (3)

### **B. Required Courses in Econometrics (16 hours)**

\*ECO 643 - Econometric Methods (3)  
 \*ECO 644 - Econometric Theory (3)  
 ECO 761 - Econometric Theory (4)  
 ECO 762 - Advanced Econometrics I (3)  
 ECO 763 - Advanced Econometrics II (3)

### **C. Required Research Methods (14 hours)**

\*ECO 694 - Seminar and Research in Economics I (2)  
 \*ECO 721 - Empirical Microeconomics (4)  
 \*ECO 725 - Data Methods in Economics (2)  
 \*ECO 726 - Data Project in Economics (2)  
 \*ECO 731 - Applied Policy Methods I (2)  
 \*ECO 732 - Applied Policy Methods II (2)

### **D. Elective Courses for the M.A. (8 hours)**

Students must satisfy the elective requirement for the 35 hour M.A. program (Option 1) described above.

### **E. Required Field Courses (23 hours)**

Field-related theory courses (6 hours): students must complete at least three courses chosen from ECO 755, 756, 757 and 758.  
 Empirical field courses (8 hours): students must complete at least two courses chosen from ECO 771, 772, 773, 774 and 775.  
 Supervised independent field research (9 hours): students must complete research seminars ECO 797 and 798.

### **F. Comprehensive Examinations**

As a requirement for graduation from the M.A. program, every student must successfully complete the comprehensive examination in economic theory and econometrics after their first semester of course work. That examination is described more fully in the description of the M.A. program. For the Ph.D. degree, every student is required to successfully complete qualifying examinations in economic theory and econometrics that cover material in the required doctoral courses in these areas. The qualifying examinations are administered in the summer after completion of the first year of course work, and students who do not pass this examination may retake it the following December.

### **G. Dissertation Research (12 hours)**

Each candidate for a doctoral degree 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.

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN ECONOMICS**

The Department of Economics offers a graduate program of study leading to a Doctor of Philosophy in economics. The program is offered in two tracks depending on the applicant's degree status:

**Track 1:** Students who have earned a master's degree in economics at UNCG or another institution must satisfy the 63 hour curriculum described below. Up to 12 of these hours may be accepted from UNCG's M.A. in economics program or transferred from a comparable master's program. Students who enter the program with a master's 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 M.A. program as stated above.

**Track 2:** Exceptionally well-qualified applicants with a baccalaureate degree in economics can complete the Doctor of Philosophy degree by satisfying the 63 hour curriculum described below and an additional 12 hours of approved course work in economics at the 600- or 700-level—generally including ECO 643, 646, and 726.

### **A. Required Courses in Economic Theory and Mathematical Economics (8 hours)**

ECO 741 - Advanced Mathematical Economics (2)  
 ECO 751 - Advanced Microeconomic Theory I (3)  
 ECO 752 - Advanced Microeconomic Theory II (3)

### **B. Required Courses in Econometrics (10 hours)**

ECO 761 - Econometric Theory (4)  
 ECO 762 - Advanced Econometrics I (3)  
 ECO 763 - Advanced Econometrics II (3)

### **C. Required Research Methods (10 hours)**

ECO 721 - Empirical Microeconomics (4)  
 ECO 725 - Data Methods in Economics (2)  
 ECO 731 - Applied Policy Methods I (2)  
 ECO 732 - Applied Policy Methods II (2)

### **D. Required Field Courses (23 hours)**

Field-related theory courses (6 hours): students must



complete at least three courses chosen from ECO 755, 756, 757 and 758.

Empirical field courses (8 hours): students must complete at least two courses chosen from ECO 771, 772, 773, 774 and 775.

Supervised independent field research (9 hours): students must complete research seminars ECO 797 and 798.

## E. Comprehensive Examinations

As a requirement for the Ph.D. degree, every student is required to successfully complete qualifying examinations in economic theory and econometrics that cover material in the required doctoral courses in these areas. The qualifying examinations are administered in the summer after completion of the first year of course work, and students who do not pass this examination may retake it the following December.

## F. Dissertation Research (12 hours)

Each candidate for a doctoral degree 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) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 510. Law and Economics (3:3).

*Pr. 201.*

Applies economic theory in analysis of law. Presents framework for analysis, examines the legal system and various fields of law, studies public regulation, reviews economic analyses of crime, and examines alternative views of legal process.

### 513. Directed Studies in Economics I (1-3).

*Pr. 201 semester hours of economics and permission of instructor.*

Individual study of economic problems of special interest to the student. Regular conferences with instructor required.

### 517. American Economic History: Colonial Times to 1865 (3:3).

*Pr. 201 or permission of instructor.*

Evolution of the American economy through the Civil War. Emphasis on sources of economic growth and economic welfare. (Same as HIS 517)

### 518. American Economic History: 1865 to Present (3:3).

*Pr. 201 or permission of instructor.*

Evolution of the American economy from the Civil War to the present. Emphasis on economic performance through time measured against the goals of full employment, price stability, and rapid growth. (Same as HIS 518)

### 523. Topics in Public Finance (3:3).

*Pr. 301.*

Examination of market failure, public goods, economic efficiency, income distribution, and decision making in

nonmarket sector. Economic analysis of major taxes and expenditures with emphasis on incidence and allocative effects.

### 530. Urban and Regional Economics (3:3).

*Pr. 301 or permission of instructor.*

Application of the analytical tools of economics to explain the economic organization of cities, metropolitan areas, and larger regions and to deal with their economic problems. Problem areas analyzed include growth, poverty, housing, transportation.

### 553. Economic Forecasting (3:3).

*Pr. 351, 554 or permission of instructor.*

Forecasting economic trends and fluctuations. Applications of regression analysis, exponential smoothing techniques, and Box-Jenkins procedures to forecast such economic variables as gross national product and unemployment levels.

### 555. History of Economic Thought (3:3).

*Pr. 201 or equivalent.*

Main currents in the evolution of economic thought, with emphasis on the classical and neoclassical schools and developments in economic interrelations in a market system.

### 570. Topics in Labor Economics (3:3).

*Pr. 301 or permission of instructor.*

Advanced theory and research related to labor supply and demand theory, investments in human capital, job search, migration, unemployment, theories of discrimination, income distribution theory, and public policy.

### 575. Industrial Organization and Public Policy (3:3).

*Pr. 301 or permission of instructor.*

Theoretical and empirical study of firms relative to their rivals, suppliers, and customers. Use of theory and industry studies to understand the nature of competition and consequences of imperfect competition.

### 589. Experimental Course.

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

## (ECO) COURSES FOR GRADUATES

### 613. Directed Studies in Economics II (1-3).

*Pr. graduate admission and permission of the Director of Graduate Study in economics and the professor who will supervise the study.*

Individual study of an advanced topic in economics. Regular conferences with the instructor are required.

### 619. Mathematical Economics (3:3).

*Pr. 301, 319 or equivalent.*

Reviews statistics and probability, matrix algebra and optimization and introduces theory and applications in integral calculus, and differential equations.

### 641. Microeconomics I (3:3).

*Pr. 301, 619 or permission of instructor.*

Theory of consumer and firm behavior under certainty and uncertainty including exchange, production, income distribution, market structure and welfare economics.

### 642. Microeconomics II (2:2).

*Pr. 641 or permission of instructor.*

An introduction to game theory, with an emphasis on real-world applications, empirical tests, and perfect information. Subjects covered include timing, equilibrium concepts, strategies, payoffs and solution techniques.

### 643. Econometric Methods (3:3).



*Pr. 351, 619 or permission of instructor.*

Introduction to advanced econometric applications: topics include seemingly unrelated regressions, simultaneous equations, identification, two-stage least squares, probit, tobit, sample selection models; application to economic data using Stata or other software.

**644. Econometric Theory (3:3).**

*Pr. 643 or permission of instructor.*

Theory of econometric models: topics include the standard linear model, classical assumptions, violations of assumptions, hypothesis testing, and corrective procedures; application to economic data using SAS or other statistical software.

**646. Macroeconomics I (3:3).**

*Pr. 619, 641, or permission of instructor.*

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.

**652. Advanced Economic and Business Statistics I (1.5-3).**

*Pr. MBA 600, MBA 610 or permission of instructor.*

Topics will include regression analysis, analysis of variance, and nonparametric tests. SAS is employed.

**691. Economics Internship (1-3).**

*Pr. permission of the M.A. Program Director.*

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. May be repeated. Maximum of 3 credit hours may apply toward M.A. degree.

**694. Seminar and Research in Economics I (2:2).**

*Pr. 644, 646 or permission of instructor.*

Students present their proposed research project, write a literature review and present their on-going research. (Graded on S-U basis)

**695. Seminar and Research in Economics II (4:4).**

*Pr. permission of Director of Graduate Study.*

Supervised independent research culminating in the completion of a economic research paper or project. (Graded on S-U basis)

**699. Thesis (1-6).**

**711. Experimental Course.**

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

**712. Directed Studies in Economics III (1-3).**

*Pr. permission of Director of Graduate Study.*

Individual study of an advanced topic in economics. Regular conferences with the instructor are required. May be repeated for credit.

**721. Empirical Microeconomics (4:3:1).**

*Pr. 641, 644, 646 or permission of instructor.*

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.

**722. Time Series and Forecasting (4:3:1).**

*Pr. 643, 644, 646 or permission of instructor.*

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 using RATS software.

**723. Predictive Data Mining (4:4).**

*Pr. 643 and 644 or permission of instructor.*

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.

**725. Data Methods in Economics (2:2).**

*Pr. 721 or permission of instructor.*

Advanced techniques in data preparation; topics include data formats, error checking, merging data, large data sets, and missing observations. Students work extensively with SAS and STATA in the UNIX environment.

**726. Data Project in Economics (2:2).**

*Pr. 725 or permission of instructor.*

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.

**731. Applied Policy Methods I (2:2).**

*Pr. 642 and 644 or permission of instructor.*

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.

**732. Applied Policy Methods II (2:2).**

*Pr. 642 and 644 or permission of instructor.*

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.

**741. Advanced Mathematical Economics (2:2).**

*Pr. 619 or permission of instructor.*

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.

**751. Advanced Microeconomic Theory I (3:3).**

*Pr. 719 or permission of instructor.*

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.

**752. Advanced Microeconomic Theory II (3:3).**

*Coreq. 719 or permission of instructor.*

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.

**755. Applied Theory I: Economics of Information (2:2).**

*Pr. 752.*

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.

**756. Applied Theory II: Intertemporal Economics (2:2).**

*Pr. 752.*

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.

**757. Applied Theory III: Public Goods (2:2).***Pr. 752.*

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.

**758. Applied Theory IV: Directed Study (2:2).***Pr. 752, permission of Director of Graduate Study.*

A faculty-directed, independent study of applied theory for a topic particularly related to a student's primary field of interest. May replace ECO 755, 756, or 757.

**761. Econometric Theory (4:4).***Pr. 644 and 741.*

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.

**762. Advanced Econometrics I (3:3).***Pr. 761.*

Advanced methods in microeconomic analysis. Covers linear models for panel data with unobserved heterogeneity, M-estimators, maximum likelihood, generalized method of moments, and discrete response models. Includes lab.

**763. Advanced Econometrics II (3:3).***Pr. 762.*

Techniques for microeconomic policy evaluation. Topics include censored regression, sample selection, sample attrition, stratified sampling, average treatment effects, count data, and duration analysis. Includes lab.

**771. Labor Economics (4:4).***Pr. 757 and 763.*

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.

**772. Public Economics (4:4).***Pr. 757 and 763.*

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.

**773. Health Economics (4:4).***Pr. 757 and 763.*

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.

**774. Financial Economics (4:4).***Pr. 757 and 763.*

Examines the operation of credit markets from an empirical, microeconomic perspective. Topics include intermediation, contract design, and the impacts of regulation on supply and demand within credit markets.

**775. Independent Field Course (4:4).***Pr. 752 and 763, permission of Director of Graduate Study.*

A faculty-directed, independent study of a research area that is particularly related to a student's primary field of interest. May serve as one required major field course.

**797. Seminar in Empirical Economics (3:3).***Pr. 725 and 763.*

A supervised seminar in which students formulate a major empirical research project and identify, collect and assemble the data required to pursue that research.

**798. Seminar in Economic Research (6:6).***Pr. 725 and 763.*

A supervised research seminar in which students complete an extensive review of the literature in their chosen area of research specialization.

**799. Dissertation (1-12).****801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF EDUCATIONAL LEADERSHIP AND CULTURAL FOUNDATIONS

239A Curry Building  
(336) 334-3490

<http://www.uncg.edu/elc>

### *Professors*

**Dale Brubaker**, Ph.D., Educational leadership theory and practice.

**Glenn M. Hudak**, Ph.D., Critical pedagogy and the inner life, liberation theology and psychoanalytic thought in personal and social transformation, popular culture and education.

**Ulrich C. Reitzug**, Ed.D., Schools as centers of inquiry and change, school renewal, democratic schooling, principals narratives and practices (Chair of Department).

**Svi Shapiro**, Ed.D., Social foundations of education, political change and educational policy, critical pedagogy and social theory, interpretive methods of research (Director of Graduate Study for Ph.D. program).

### *Associate Professors*

**Kathleen Casey**, Ph.D., Curriculum theory, poverty and education, political analysis of education, narrative research.

**Carolyn J. Riehl**, Ph.D., Sociological perspectives on school organization and leadership, social context of schooling, discourse and administrative practice, cultural diversity and education, research methodologies (Director of Graduate Study for Ed.S. and Ed.D. programs).

### *Assistant Professors*

**Rebecca L. Carver**, Ph.D., K-12 policy implementation, school reform, experimental education, youth development, youth-led research evaluation.

**Joanne R. Chesley**, Ed.D., Psychosocial dimensions of school alienation and dropouts, resilience theory and dropouts, leadership behaviors that reduce school failure.

**Camille Wilson Cooper**, Ph.D., Educational policy, race and equity in school change, parental choice and involvement, feminist theory and methodology.

**Charles P. Gause**, Ph.D., Cultural and critical perspectives of school leadership, popular culture and schooling, youth identity, black masculinity, and gender construction, as well as media representation.

**Carl Lashley**, Ed.D., The critical practice of administration, legal and ethical dimensions of education, special education administration, disability studies and policy (Director of Graduate Study for M.S.A. program).

**Leila E. Villaverde**, Ph.D., Curriculum studies, cultural studies, feminist theory, aesthetics, social foundations of art, critical pedagogy.

The Department of Educational Leadership and Cultural Foundations is concerned with issues of educational theory, practice, policy, leadership, curriculum, and administration. The department offers studies that are interdisciplinary in focus and that especially emphasize questions of moral concern and the cultural context of education. There is a strong interest in issues of educational change as this relates to matters of human and social vision. Graduate degrees offered include master's, educational specialist, and the Ed.D. in educational leadership, and a Ph.D. in curriculum and teaching with a specialization in cultural studies.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCHOOL ADMINISTRATION

The Department of Educational Leadership and Cultural Foundations offers a graduate program of study leading to a 42 hour M.S.A. degree. The program is designed to meet state standards for initial licensure as a P-12 administrator in North Carolina; it is also designed to provide a smooth transition to advanced graduate study in school leadership. Students should work closely with advisors in planning their programs of study.

### A. Required Courses (18 hours)

ELC 615 - Foundations of Curriculum (3)  
ELC 660 - The School Principalship (3)  
ELC 687 - The Legal and Ethical Foundations of Public Education (3)  
ELC 691 - School Organization and Leadership (3)  
ELC 694 - Educational Governance and Policy (3)  
ELC 670 - Leadership for Teaching and Learning (3)

### B. Required Field Experiences (12 hours)

Students are required to complete an internship experience that is the equivalent of one year of full-time administrative field experience.

ELC 690 - Supervised Practicum in Educational Administration (12)

**C. Research (3 hours)**

ELC 675 - Schools as Centers of Inquiry (3) **or** another appropriate research course selected with prior approval from the student's advisor.

**D. Electives (9 hours)**

With prior approval, a student will select 9 additional hours of electives.

**E. Capstone Experience**

Prior to program completion, each student will prepare a portfolio and analytic paper that describes and reflects on his/her development during the degree program. The student will participate in a capstone presentation that features his/her portfolio. The student's advisor and one other faculty member will be responsible for reviewing and approving successful completion of the capstone experience.

**SPECIFIC REQUIREMENTS FOR THE SPECIALIST IN EDUCATION**

The Department of Educational Leadership and Cultural Foundations offers a graduate program of study leading to a 33 hour Ed.S. degree with a concentration in K-12 educational leadership. At least 18 hours must be in 600-level courses.

**A. Required Courses (18-21 hours)**

ELC 658 - Planning of Educational Facilities (3) **or** approved substitute  
 ELC 659 - Educational Finance (3)  
 ELC 683 - Engaging the Public in Education (3)  
 ELC 686 - Curriculum Theory (3)  
 ELC 751 - Concepts and Cases in Educational Administration (3)  
 ELC 752 - Theories in Educational Administration (3)  
 ELC 690 - Supervised Practicum in School Administration (3 - required only of those students who did not have practicum in educational administration during their master's degree program)

**B. Research (6 hours)**

\*ERM 617 - Statistical Methods in Education (3) **or** ERM 680 - Intermediate Statistical Methods in Education (3)  
 ERM 642 - Evaluation of Educational Programs (3)  
 ELC 664 - Foundations of Interpretive Inquiry (3)  
 ERM 670 - Educational Measurement and Evaluation (3) **or** approved alternative  
 \*Required

**C. Electives (3 hours)**

CED 544 - Psychology of Individuals with Special Education Needs (3)  
 ELC 609 - Epistemology and Education (3)  
 ELC 661 - Ethics and Education (3)  
 ELC 679 - History of Education in the United States (3)  
 ELC 695 - Comparative Education (3)

ELC 697 - Selected Critical Issues in American Education (3)  
 CUI 698 - Human Development (3) **or** approved alternative  
 Additional electives as approved by advisor

**D. Humanistic and Behavioral Studies (6 hours)**

Courses in sociology, anthropology, political science, economics, and business administration.

**SPECIFIC REQUIREMENTS FOR THE DOCTOR OF EDUCATION IN EDUCATIONAL LEADERSHIP**

The Department of Educational Leadership and Cultural Foundations offers a graduate program of study leading to a 72-90 hour Ed.D. degree in educational leadership. Students can choose from three different administrative licensure concentrations or select the non-licensure concentration. This degree has a time limit of five academic years for completion.

**Advanced Principal Concentration (78 hours)**

Intended for students who have a master's degree in some area other than school administration and desire North Carolina Advanced Principal (AP) administrative licensure.

**A. Administration and Leadership (33 hours)**

ELC 660 - The School Principalship (3)  
 ELC 687 - The Legal and Ethical Foundations of Public Education (3)  
 ELC 691 - School Organization and Leadership (3)  
 ELC 694 - Educational Governance and Policy (3)  
 ELC 690 - Supervised Practicum in Educational Administration (12)

Students select 9 hours from the following courses:

ELC 659 - Educational Finance (3)  
 ELC 683 - Engaging the Public in Education (3)  
 ELC 750 - Advanced Seminar in School Law Research (3)  
 ELC 751 - Concepts and Cases in Educational Administration (3)  
 ELC 752 - Theories in Educational Administration (3)  
 ELC 754 - Personal Leadership Assessment and Enhancement (3)

**B. Curricular and Instructional Leadership (12 hours)**

ELC 615 - Foundations of Curriculum (3)  
 ELC 670 - Leadership for Teaching and Learning (3)  
 Curricular and instructional leadership electives (6)

### C. Social and Cultural Foundations (6 hours)

Social and cultural foundations electives (6)

### D. Research (15 hours)

ERM 617 - Statistical Methods in Education (3) **or**  
ERM 680 - Intermediate Statistical Methods in Education (3)  
ELC 675 - School as Centers of Inquiry (3)  
Research and inquiry electives (9)

### E. Dissertation (12 hours)

ELC 799 - Dissertation (12)

### District Administrator and Superintendent Concentration (72 hours)

Intended for students who already have North Carolina entry level (P) administrative licensure and desire preparation for district level administrator and superintendent positions. This concentration leads to North Carolina Advanced Principal and Advanced Superintendent (AP and AS) administrative licensure.

### A. Administration and Leadership (33 hours)

ELC 659 - Educational Finance (3)  
ELC 683 - Engaging the Public in Education (3)  
ELC 701 - The School Superintendency (3)  
ELC 750 - Advanced Seminar in School Law Research (3)  
ELC 751 - Concepts and Cases in Educational Administration (3)  
ELC 752 - Theories in Educational Administration (3)  
ELC 754 - Personal Leadership Assessment and Enhancement (3)  
ELC 790 - Internship in Educational Leadership (12)

### B. Curricular and Instructional Leadership (6 hours)

Curricular and instructional leadership electives (6)

### C. Social and Cultural Foundations (6 hours)

Social and cultural foundations electives (6)

### D. Research (15 hours)

ERM 617 - Statistical Methods in Education (3) **or**  
ERM 680 - Intermediate Statistical Methods in Education (3)  
Research and inquiry electives (12)

### E. Dissertation (12 hours)

ELC 799 - Dissertation (12)

### Advanced Principal, District Administrator, and Superintendent Concentration (90 hours)

Intended for students who already have a master's degree in some area other than school admin-

istration and desire preparation for a wide variety of administrative positions (principal, district level administrator, superintendent). This concentration leads to North Carolina Doctoral-level Principal and Superintendent (DP and DS) administrative licensure.

### A. Administration and Leadership (45 hours)

ELC 659 - Educational Finance (3)  
ELC 660 - The School Principalship (3)  
ELC 683 - Engaging the Public in Education (3)  
ELC 687 - The Legal and Ethical Foundations of Public Education (3)  
ELC 691 - School Organization and Leadership (3)  
ELC 694 - Educational Governance and Policy (3)  
ELC 701 - The School Superintendency (3)  
ELC 750 - Advanced Seminar in School Law Research (3)  
ELC 751 - Concepts and Cases in Educational Administration (3)  
ELC 752 - Theories in Educational Administration (3)  
ELC 754 - Personal Leadership Assessment and Enhancement (3)  
ELC 690 - Supervised Practicum in Educational Administration (6) (Typically involves work in principalship-related tasks)  
ELC 790 - Internship in Educational Leadership (6) (Typically involves work on superintendent and/or district-level related tasks)

### B. Curricular and Instructional Leadership (12 hours)

ELC 615 - Foundations of Curriculum (3)  
ELC 670 - Leadership for Teaching and Learning (3)  
Curricular and instructional leadership electives (6)

### C. Social and Cultural Foundations (6 hours)

Social and cultural foundations electives (6)

### D. Research (15 hours)

ERM 617 - Statistical Methods in Education (3) **or**  
ERM 680 - Intermediate Statistical Methods in Education (3)  
ERM 675 - Schools as Centers of Inquiry (3)  
Research and inquiry electives (9)

### E. Dissertation (12 hours)

ELC 799 - Dissertation (12)

### Non-Administrative Licensure Educational Leadership Emphasis (72 hours)

Intended for students who want to enhance their understanding of educational leadership but are not interested in administrative licensure. Specific courses for each area below to be selected in consultation with major advisor and program committee.



**A. Administration and Leadership  
(27-33 hours including a 12 hour  
\*internship)**

**B. Curricular and Instructional  
Leadership (6-12 hours)**

**C. Social and Cultural Foundations  
(6-12 hours)**

**D. Research (15 hours)**

**E. Dissertation (12 hours)**

ELC 799 - Dissertation (12)

\*The internship will not necessarily be in PK-12 schools or districts, but may be in any setting, approved by the University internship supervisor, in which the student has an opportunity to observe leadership and participate in leadership experiences.

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN CURRICULUM AND TEACHING**

The Department of Educational Leadership and Cultural Foundations offers a graduate program of study leading to a 60 hour Ph.D. degree in curriculum and teaching with a concentration in cultural studies.

The program in cultural studies has as its framework the program of study of the curriculum and teaching doctoral program. Within that framework, we are concerned with the breadth and depth of what is fundamental to educational practice—its ideology, philosophical assumptions, and moral claims. The program is grounded in the study of education and culture with a particular interest in the integration of the arts, humanities, social analysis, and moral inquiry.

The responsibility for developing a coherent and meaningful program of study is the joint responsibility of the candidates and their individual doctoral advisory/dissertation committee. Although the program involves “core and recommended courses” every effort is made to avoid rigidity and undue repetition. The program should be seen as having both formal and informal dimensions—course work, comprehensive examinations, doctoral dissertation as well as discussions with faculty, other students, reflections, attending lectures and

performances, etc. The formal course work involves the following:

### **A. Educational Foundations (18 hours)**

Normally students in this program take the basic core courses in the Department of Educational Leadership and Cultural Foundations.

ELC 696 - Philosophies of Education (3)

ELC 697 - Selected Critical Issues in American Education (3)

In addition, students are expected to take an additional 9-12 hours in educational foundations with the approval of the student's doctoral advisory/dissertation committee.

### **B. Research (15 hours)**

Normally students take four (4) core courses:

ELC 609 - Epistemology and Education (3)

ERM 617 - Statistical Methods in Education (3) **or**

ERM 680 - Intermediate Statistical Methods in Education (3)

ELC 664 - Foundations of Interpretive Inquiry (3)

ELC 749 - Dissertation Seminar (3)

Students will take one additional course with the approval of the student's doctoral advisory/dissertation committee.

### **C. Curriculum and Teaching (15-24 hours)**

Normally students take two (2) core courses:

ELC 615 - Foundations of Curriculum (3)

ELC 686 - Curriculum Theory (3)

Students are expected to take an additional 9-18 hours with the approval of the student's doctoral advisory/dissertation committee.

## **(ELC) COURSES FOR ADVANCED UNDERGRU- ATES AND GRADUATES**

### **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)

### **581. Teaching in the Urban School (3:3).**

*Pr. admission to teacher education or permission of instructor.*

Course designed to provide an opportunity for educators to examine research and literature related to the problems of teaching in the urban school.

### **589. Experimental Course.**

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

## (ELC) COURSES FOR GRADUATES

### 604. Moral Dimensions of Education (3:3).

*Pr. 696 or 697 or their equivalents.*

Values involved in educational decision making; application of various moral discourses to educational practices.

### 609. Epistemology and Education (3:3).

*Pr. 696 or 697 or their equivalents.*

An overview of several systems of knowledge and the problems of knowing, knowing how, and belief. Deals with intellect, rationality, and positional knowledge.

### 615. Foundations of Curriculum (3:3).

*Pr. graduate standing.*

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.

### 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.

### 641. Designing Educational Programs (3:3).

Aspects of systematic educational program planning. Each student will be required to design an educational program plan.

### 658. Planning of Educational Facilities (3:3).

School facilities planning for the purpose of promoting better surveys of needs and functional educational specifications through cooperative action. Relationships between design and educational program. Community involvement, funding, the role of the school architect, and the team approach to alternative solutions for building problems.

### 659. Educational Finance (3:3).

*Pr. advanced graduate standing and permission of instructor.*

Financial management of education; basic economic theory. A business management appreciation of the complexity and magnitude of education as an important resource in the public sector. How the American economy provides funding for public education, how funds are administered, and trends toward more efficient utilization of resources. Equity in the provision of school services and support as crucial concerns of the public school administrator.

### 660. The School Principalship (3:3).

For the prospective principal of the lower, intermediate, and secondary levels. Functions in providing a system of communications, organizing people to meet educational goals, defining and formulating goals and objectives, leadership in instruction, supervision, curriculum design and development, personnel administration, and ethical and legal responsibilities.

### 661. Ethics and Education (3:3).

*Pr. 696 or 697 or their equivalents.*

Appraisal of human aims and practices, attitudes towards character, and conceptions of desirable human life, as these are related to educational theory and practice.

### 662. Power, Politics, and Schools (3:3)

*Pr. graduate standing.*

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.

### 663. Educational Administration in Historical Perspective (3:3).

*Pr. graduate standing.*

Evolution of administrative thought and practice in ancient, medieval, and modern times and their relevance to the functioning of educational organizations.

### 664. Foundations of Interpretive Inquiry (3:3).

*Pr. 593, 696 or 697; ERM 617 or their equivalents.*

Theoretical and philosophical dimensions of interpretive inquiry in education; concepts that are the foundation for qualitative methodologies in educational research.

### 670. Leadership for Teaching and Learning (3:3).

*Pr. admission to the M.S.A. program or permission of instructor.*

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.

### 675. Schools as Centers of Inquiry (3:3).

*Pr. admission to the M.S.A. program and ELC 670, or permission of instructor.*

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.

### 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.

### 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.

### 686. Curriculum Theory (3:3).

*Pr. 515 or its equivalent.*

The nature of theory and of theory building; application of theoretical criteria to the field of curriculum.

### 687. The Legal and Ethical Foundations of Public Education (3:3).

*Pr. advanced graduate standing. Basic knowledge of history of American education, governance and organization of education and basic U.S. history and/or constitutional law.*

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.

**688. Contemporary Problems Seminar (1-3).**

*Pr. advanced master's or doctoral standing, or permission of instructor.*

Specific course title identified each semester by sub-script, e.g., Contemporary Problems Seminar; Issues in Professional Negotiations. May be repeated for credit when topic varies.

**689. Seminar in Leadership Development (6).**

*Pr. recommendation of adviser and permission of instructor.*

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. (Same as MBA 689) (Graded on S-U basis)

**690. Supervised Practicum in Educational Administration (3-12).**

*Pr. for educational administration majors at either master's or sixth-year levels and permission of instructor.*

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. May be repeated for a maximum of 12 hours credit. (Graded on S-U basis)

**691. School Organization and Leadership (3:3).**

Examines organizational dimensions of schooling (structure, culture, human resources, politics, bureaucracy, community); explores practical organizational/leadership strategies for reforming schools to serve diverse students and promote learning, social justice, and democracy.

**692. Independent Study (1-4).**

*Pr. approval of instructor.*

Guided readings, research, and individual project work under direction of a staff member.

**694. Educational Governance and Policy (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.

**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.

**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.

**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.

**699. Thesis (1-6).**

Individual guidance and direction in the development of a research problem in the master's degree thesis.

**701. The School Superintendency (3:3).**

*Pr. admission to Ed.S. or Ed.D. program in educational leadership or permission of instructor.*

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.

**711. Experimental Course.**

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

**721. Social and Cultural Change and Education (3:3).**

*Pr. 696 or 697 or their equivalents.*

The process of change, the causes of change, examples of projected societal trends, and implications for education and educational institutions.

**749. Doctoral Dissertation Seminar (1-3).**

*Pr. permission of instructor.*

Develop, discuss, and defend a dissertation prospectus.

**750. Advanced Seminar in School Law Research (3:3).**

*Pr. 687, PSC 528, PSC 529, and/or permission of instructor.*

Case studies in school law. For Ed.S. students or the doctoral student writing a legal dissertation.

**751. Concepts and Cases in Educational Administration (3:3).**

*Pr. advanced graduate standing, including students majoring in educational administration, and others by permission of instructor.*

Use of cases in educational administration to involve students by requiring them to analyze, role play, and make decisions. Philosophy, social and behavioral sciences, and humanities which apply to administration.

**752. Theories in Educational Administration (3:3).**

*Pr. advanced graduate standing, including students majoring in educational administration, and others by permission of instructor.*

The nature of theory, definition, utilization; contemporary theories applied to educational administration; system theory and its application possibilities to educational administration.

**753. Problems and Dilemmas in Administering Education (1-3:6).**

*Pr. 604 or equivalent; six semester hours of research tools (604, 617) and/or experience in some extended practical research activity, and permission of instructor.*

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.

**754. Personal Leadership Assessment and Enhancement (3:3).**

*Pr. admission to Ed.S. or Ed.D. program in educational leadership or permission of instructor.*

For students who intend to pursue educational leadership roles and careers in administration. Emphasizes development of creative leadership potential and maximization of personal growth.

**775. Directed Doctoral Research (3).**

*Pr. doctoral students in ELC or CUI and permission of instructor.*

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. May be repeated once for credit.

**790. Internship in Educational Leadership (3-18).**

*Pr. 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.*

Directed year-long internship in an appropriate educational administration field-based setting. Supervision shared by department faculty and field-based mentors. (Graded on S-U basis)

**799. Dissertation (1-12).**

Individual direction in the development and execution of a doctoral dissertation.

**801. Thesis Extension (1-3).**

**802. Dissertation Extension (1-3).**

**803. Research Extension (1-3).**

## DEPARTMENT OF EDUCATIONAL RESEARCH METHODOLOGY

206 Curry Building  
(336) 334-3471

<http://www.uncg.edu/erm>

*Professors*

**Terry Ackerman, Ph.D.**, Educational measurement and practical applications of item response theories, including computerized adaptive testing, test construction, equating, differential item/test functioning and ability estimation; theory and application of multi-dimensional item response theory; applied statistics.

**Richard Luecht, Ph.D.**, Educational measurement, employment and professional testing; performance assessments; standard setting; design of computerised testing systems; integration of cognitive science and measurement; automated test assembly; structural equation modeling; experimental design; multivariate statistics.

**Linda F. Wightman, Ed.D.**, Educational measurement; test construction, analysis, and use; item response theory and applications; computer adaptive testing; applied statistics (Chair of Department).

The Department of Educational Research Methodology offers programs of study leading to the M.S. and the Ph.D. degrees in educational research, measurement, and evaluation. Graduates 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. Classroom instruction is combined with mentored experience working on policy research studies conducted by individual faculty or by the UNCG Center for Educational Research and Evaluation. This experience leads to independent research conducted by students.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE

The Department of Educational Research Methodology offers a graduate program of study leading to a 36 hour Master of Science degree in educational research, measurement, and evaluation.

### A. Required Core Courses (24 hours)

In cases where students have previously satisfied these requirements, course substitutions may be allowed with the approval of the major advisor.

- ERM 604 - Methods of Educational Research (3)
- ERM 642 - Evaluation of Educational Programs (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)

### B. Electives (12 hours)

Students must complete a combination of 12 hours in elective courses at the 600-749 level. At least 6 hours must be completed in a cognate discipline outside of educational research. Cognate disciplines may include educational foundations, curriculum and instruction, psychology, sociology, statistics (some 500-level courses are acceptable), public health, political science, or computer science. With the approval of the major advisor, up to 6 of the 12 elective hours may be selected from among the following educational research courses:



ERM 643 - Applied Educational Evaluation (3)  
 ERM 670 - Computer-based Testing: Methods and Applications (3)  
 ERM 688 - Contemporary Problems Seminar:  
 Educational Statistics and Measurement (1-3)  
 ERM 693 - Seminar in Advanced Research Methods (3)  
 ERM 726 - Advanced Topics in Educational  
 Measurement (3)  
 ERM 728 - Factor Analysis and Multidimensional Scaling (3)  
 ERM 729 - Advanced Item Response Theory (3)  
 ERM 731 - Structural Equation Modeling in  
 Education (3)  
 ERM 742 - Advanced Evaluation of Educational Programs (3)

### C. Comprehensive Examination

The student will successfully complete a written comprehensive examination to be arranged by the major advisor.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE/DOCTORAL OF PHILOSOPHY

The Department of Educational Research Methodology offers a graduate program of study leading to a Ph.D. degree in educational research, measurement, and evaluation of 87 hours beyond the baccalaureate degree (for student's entering the program in the M.S./Ph.D. track) or a minimum of 51 hours beyond the master's degree program. Following are the requirements.

### A. Required Core Courses in Educational Research Methodology (51 hours)

In cases where students have previously satisfied these requirements, course substitutions may be allowed with the approval of the major advisor.

ERM 604 - Methods of Educational Research (3)  
 ERM 625 - Applied Methods of Educational Research (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 670 - Computer-based Testing: Methods and Applications (3)  
 ERM 675 - Data Presentation and Reporting (3)  
 ERM 693 - Seminar in Advanced Research Methods (3)  
 ERM 728 - Factor Analysis and Multidimensional Scaling (3)  
 ERM 729 - Advanced Item Response Theory (3)  
 ERM 730 - Practicum in Educational Research and Evaluation (3)  
 ERM 731 - Structural Equation Modeling in Education (3)  
 ERM 742 - Advanced Topics in Educational Program Evaluation (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 671 - Multivariate Analysis (3)

\*Requires a 1 credit hour computer laboratory in addition to all other course requirements listed.

### B. Minor in Statistics (18 hours)

Students may elect to complete a minor in statistics offered by the Department of Mathematical Sciences. This minor requires 9 hours in STA 661, 662, and 671 plus an additional 9 hours in approved graduate-level statistics courses. With approval of the doctoral Advisory/Dissertation Committee, courses taken for completion of this minor may help fulfill requirements for electives (see below).

### C. Electives (24 hours)

At least 6 hours must be completed outside of educational research and statistics. Cognate disciplines may include educational foundations, curriculum and instruction, psychology, sociology, public health, political science or computer science. Up to 9 hours in statistics may be included as electives, excluding STA 661, 662, and 671. Statistics courses at the 500-level must be approved by the Advisory/Dissertation Committee.

With the approval of the Advisory/Dissertation Committee, up to 9 hours may be taken in the following courses:

ERM 605 - Educational Measurement and Evaluation (3)  
 \*ERM 688 - Contemporary Problems Seminar (1-3)  
 \*ERM 692 - Independent Study (1-4)  
 ERM 726 - Advanced Topics in Educational Measurement (3)

\*May be taken more than once for credit with the approval of the Advisory/Dissertation Committee.

### D. Dissertation (12 hours)

Research that culminates in the preparation of a required doctoral dissertation.

ERM 799 - Dissertation (12)

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY

The Department of Educational Research Methodology offers a graduate program of study leading to a 75 hour Ph.D. degree in educational research, measurement, and evaluation.



## A. Required Core Courses (33 hours)

With the approval of the Advisory/Dissertation Committee, a maximum of 15 hours in the following courses may be transferred from UNCG's master's degree or from a comparable master's degree program. The 15 hour maximum also includes any transferred courses included to satisfy required core courses. In cases where students have previously satisfied these requirements, course substitutions may be allowed with the agreement of the major advisor.

- ERM 625 - Applied Methods of Educational Research (3)
- ERM 670 - Computer-based Testing: Methods and Applications (3)
- ERM 693 - Seminar in Advanced Research Methods (3)
- ERM 728 - Factor Analysis and Multidimensional Scaling (3)
- ERM 729 - Advanced Item Response Theory (3)
- ERM 730 - Practicum in Educational Research and Evaluation (3)
- ERM 731 - Structural Equation Modeling in Education (3)
- ERM 742 - Advanced Topics in Educational Program Evaluation (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 671 - Multivariate Analysis (3)

\*Requires a 1 credit hour computer laboratory in addition to all other course requirements listed.

## B. Minor in Statistics (18 hours)

Students may elect to complete a minor in statistics offered by the Department of Mathematical Sciences. This minor requires 9 hours in STA 661, 662, and 671 plus an additional 9 hours in approved graduate-level statistics courses. With the approval of the Advisory/Dissertation Committee, courses taken for completion of this minor may help fulfill requirements for electives (see below).

## C. Electives (30 hours)

At least 6 elective hours must be completed outside of educational research and statistics. Cognate disciplines may include educational foundations, curriculum and instruction, psychology, sociology, public health, political science, or computer science. Up to 9 hours in statistics may be included as electives, excluding STA 661, 662, and 671. Statistics courses at the 500-level must be approved by the Advisory/Dissertation Committee.

With the approval of the Advisory/Dissertation Committee, up to 24 of the 30 elective hours may be taken in the following courses:

- ERM 643 - Applied Educational Evaluation (3)
- ERM 667 - Foundations of Educational Measurement Theory (3)
- ERM 668 - Survey Research Methods in Education (3)
- ERM 675 - Data Presentation and Reporting (3)
- \*ERM 688 - Contemporary Problems Seminar (1-3)
- \*ERM 692 - Independent Study (1-4)
- ERM 726 - Advanced Topics in Educational Measurement (3)

\*May be taken more than once for credit with the approval of the Advisory/Dissertation Committee.

## D. Dissertation (12 hours)

Research that culminates in the preparation of a required doctoral dissertation.

- ERM 799 - Dissertation (12)

## (ERM) COURSES FOR GRADUATES

### 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. (Formerly EAR 593. Students who took this course as EAR 593 are **not** eligible to take ERM 604 and receive credit.)

### 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. (Formerly EAR 670; students who took this course as EAR or ERM 670 are **not** eligible to take ERM 605 and receive credit.)

### 617. Statistical Methods in Education (3:3).

*Pr. elementary algebra.*

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. (Formerly EAR 501. Students who took this course as EAR 501 are **not** eligible to take ERM 617 and receive credit.)

### 625. 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.

### 642. Evaluation of Educational Programs (3:3).

*Pr. permission of instructor and 617 or equivalent.*

Existing and emerging formulations of educational evaluation. Developing operational guidelines for conducting evaluations in educational settings.

### 643. Applied Educational Evaluation (3:3).

*Pr. 642.*

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.

**667. Foundations of Educational Measurement Theory (3:3).***Pr. 680 or equivalent course.*

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. (Credit may not be obtained for PSY 437)

**668. Survey Research Methods in Education (3:3).***Pr. 617 and 680 or equivalent.*

Theory, methods, and procedures of survey research as this methodology is applied to problems in education. Sampling from finite populations.

**669. Item Response Theory (3:3).***Pr. 667, and either 681 or STA 662, or equivalent courses and permission of instructor.*

Conceptual and mathematical foundations, parameter estimation, tests of model assumptions and goodness of fit, and practical applications of IRT.

**670. Computer-Based Testing: Methods and Applications (3:3).***Pr. 667, 727.*

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.

**675. Data Presentation and Reporting (3:3).***Pr. 680.*

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.

**680. Intermediate Statistical Methods in Education (3:3).***Pr. elementary algebra.*

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. (Formerly ERM 618. Students who took this course as ERM 618 are not eligible to take ERM 680 and receive credit)

**681. Design and Analysis of Educational Experiments (3:3).***Pr. 618, 680 or equivalent, or permission of instructor.*

Advanced inferential statistics including factorial ANOVA, repeated measures design, multiple regression, ANCOVA, log-linear analysis. Applications in education and the social sciences.

**688. Contemporary Problems Seminar (1-3).***Pr. advanced master's or doctoral standing, or permission of instructor.*

Specific course title identified each semester by subscript, e.g., Contemporary Problems Seminar; Issues in Professional Negotiations. May be repeated for credit when topic varies.

**692. Independent Study (1-4).***Pr. permission of instructor.*

Guided readings, research, and individual project work under direction of a staff member.

**693. Seminar in Advanced Research Methods (3:3).***Pr. 604, 605, 680, 681, or equivalent.*

Advanced techniques of research or measurement applied to educational or social and behavioral science problems.

**699. Thesis (1-6).**

Individual guidance and direction in the development of a research problem in the master's degree thesis.

**711. Experimental Course.**

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

**726. Advanced Topics in Educational Measurement (3:3).***Pr. 680, 667 or permission of instructor.*

Technical developments and applications in classical test theory, item response theory, generalizability theory, models of selection bias, differential item functioning, and test score equating.

**728. Factor Analysis and Multidimensional Scaling (3:3).***Pr. 681 or permission of instructor.*

Exploratory and confirmatory factor analysis and multidimensional scaling. Methods of estimation and rotation including the common factor model. Weighted and unweighted MDS. Uses of SPSS, SAS, and BMDP statistical packages.

**729. Advanced Item Response Theory (3:3).***Pr. 669 or equivalent.*

Estimation techniques for various unidimensional dichotomous and polytomous IRT models using various software packages. IRT applications such as computerized testing, equating, test construction, and differential item/test functioning are also covered.

**730. Practicum in Educational Research and Evaluation (3).***Pr. permission of instructor.*

Field-based and mentored practicum. (Graded on S-U basis)

**731. Structural Equation Modeling in Education (3:3).***Pr. 681 or STA 662 or equivalent courses, and permission of instructor.*

Formulation of structural models, estimation of structural coefficients using LISREL, estimation of model fit, confirmatory factor analysis models, practical applications.

**742. Advanced Topics in the Evaluation of Educational Programs (3:3).***Pr. 642 and permission of instructor.*

Theoretical understanding of evaluation design and strengthening of practical program evaluation skills.

**750. Case Study Methods in Educational Research (3:3).***Pr. 604, 642, or equivalent.*

Overview of the methodology of case study research; enhancement of students' skills in using case study methods.

**775. Directed Doctoral Research (1-6).***Pr. doctoral students in ERM and permission of instructor.*

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.

**799. Dissertation (1-12).**

Individual direction in the development and execution of a doctoral dissertation.

**801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF ENGLISH

132A McIver Building  
(336) 334-5311  
<http://www.uncg.edu/eng>

### *Professors*

**Denise N. Baker**, Ph.D., Middle English literature, Langland, Chaucer, Julian of Norwich, medieval women writers, (Head of Department).

**Walter H. Beale**, Ph.D., Rhetorical theory and criticism, history of rhetoric, theory of discourse.

**Keith Cushman**, Ph.D., Modern British literature, D. H. Lawrence, contemporary literature, modern American literature.

**James E. Evans**, Ph.D., 18<sup>th</sup> century British literature, especially fiction, drama and periodicals; theory of comedy.

**Mary Ellis Gibson**, Ph.D., 19<sup>th</sup> century British literature, critical theory, Women's Studies, modernism, imperialism, Southern women writers.

**Karen L. Kilcup**, Ph.D., 19<sup>th</sup> and early 20<sup>th</sup> century American literature, women's and Native American literature, romanticism and regionalism, American Studies and Women's Studies, poetry, humor, critical theory.

**Robert Langenfeld**, Ph.D., Victorian and Edwardian literature. Editor/Publisher *ELT* and *ELT Press*.

**Russ McDonald**, Ph.D., Shakespeare, early-modern and modern drama, performance criticism, Renaissance poetry, opera.

**Hephzibah Roskelly**, Ph.D., Rhetoric and composition, reading theory, pedagogy, American literature.

**Stephen R. Yarbrough**, Ph.D., Literacy; critical and rhetorical theory; history of American literature and discourse, especially 18<sup>th</sup> and 19<sup>th</sup> centuries.

### *Associate Professors*

**Elizabeth Chiseri-Strater**, Ph.D., Composition theory and pedagogy, language and literacy, portfolio evaluation, ethnography, collaborative learning.

**Stuart L. Dischell**, M.F.A., Poetry writing, poetry and poetics, modern literature, world literature.

**SallyAnn H. Ferguson**, Ph.D., African-American literature and language, Charles W. Chesnutt, African-American women novelists, American literature.

**Christopher Hodgkins**, Ph.D., Renaissance literature, 17<sup>th</sup> century lyric poetry, George Herbert, British imperial imagination, Sir Francis Drake, religion and literature, Shakespeare.

**Gail McDonald**, Ph.D., American Studies, late 19<sup>th</sup> and early 20<sup>th</sup> century literature, modernism, poetry.

**Nancy Myers**, Ph.D., Rhetoric and composition theory and pedagogy; history of rhetoric, composition, and English Studies; sociolinguistics; structuralism.

**Michael F. Parker**, M.F.A., Fiction writing, contemporary fiction, short story, forms in fiction, novella, personal/familiar essay.

**Scott B. Romine**, Ph.D., Southern literature, modern American literature, narrative theory, autobiography, Irish literature.

**Charles Tisdale**, Ph.D., Old and Middle English literature, Chaucer, Age of Bede, history of ideas, original historical fiction and poetry.

**Lee Zacharias**, M.F.A., Fiction writing, contemporary literature, American literature.

### *Assistant Professors*

**Jennifer M. Keith**, Ph.D., 18<sup>th</sup> century and Romantic British literature, poetry, satire, gender studies, William Blake.

**Christian Moraru**, Ph.D., Literary and cultural theory, 20<sup>th</sup> century American literature with emphasis on contemporary narrative, postmodernism, comparative literature (Director of Graduate Study).

**Jeanne Follansbee Quinn**, Ph.D., American Studies, late 19<sup>th</sup> century literature, the novel, cultural and intellectual history.

**Alexandra W. Schultheis**, Ph.D., Postcolonial literatures and theory, gender studies, 20<sup>th</sup> century British and American literature, critical theory.

**Stephen B. Stallcup**, Ph.D., Middle English literature, Chaucer, Langland, Malory, Arthurian literature, medieval manuscript studies, Shakespeare.

**Annette Van**, Ph.D., Victorian literature, history and theory of the novel, critical theory, gender studies.

**Karen A. Weyler**, Ph.D., Early and 19<sup>th</sup> century American literature, women writers, the history and theory of the novel, personal narratives, and the history of the book.

**Eve Wiederhold**, Ph.D., Rhetoric and composition, gender studies, literary and cultural theory, film studies.

**Adrian J. Wurr**, Ph.D., Second language acquisition and teaching, sociolinguistics, service-learning, literacy development and instruction, and composition pedagogy.

The Department of English offers degree programs leading to the Master of Arts, the Master of Education, 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 in 1986 became the location of *English Literature in Transition (1880–1920)*, a scholarly journal. In 1988, ELT Press began to publish the 1880–1920 British Authors Series. *Studies in American Humor* is also edited at UNCG.

The Post-Baccalaureate Certificate in Technical Writing is a non-degree, interdisciplinary program that provides both currently employed professionals and graduate students with the knowledge and skills required for effective written communication within technologically advanced environments.

The M.A. in English—designed for those planning work toward the doctorate and for those preparing to teach in community colleges, technical institutes, or some undergraduate colleges or to work in a non-academic setting—offers four plans of study beyond the core requirements for the degree: (1) thesis plan, (2) teaching composition plan, (3) writing and editing plan, and (4) minor field plan.

The M.Ed. is offered in conjunction with the School of Education. Successful completion of the degree meets requirements for the North Carolina advanced competencies licensure.

The M.F.A. 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 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 Ph.D. in English 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 are usually appointed as teaching assistants in the composition program of the department. The most talented students are recommended for fellowships.

Scheduling of classes for the M.A. and, in some cases, for the Ph.D. is intended to meet the needs of students already employed in teaching or other professions.

Students should consult either the Director of Graduate Study in English, the Director of the M.F.A. Writing Program, or, for the M.Ed., the Director of English Education for information about the details of these requirements.

### **\*SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN TECHNICAL WRITING**

The Department of English offers a Post-Baccalaureate Certificate program in technical writing. The purpose of this certificate is to provide professionals with the knowledge and skills required for writing within technologically advanced environments.

A minimum of **15** semester hours are required for the certificate. Students must have a minimum grade point average of 3.0 to be admitted to the program and must maintain it in all certificate course work. Only three (3) semester hours of C will count towards the certificate. A maximum of three (3) semester hours may be repeated.

### **Admission Information**

Students interested in the Post-Baccalaureate Certificate will apply for admission through The Graduate School. Candidates must submit a statement of purpose and a writing sample to be assessed by the Director of Graduate Study. Normally, semester hours from a prior baccalaureate or graduate degree may not apply toward a certificate.



**A. Required Courses (6 hours)**

- ENG 524 - Writing-Advanced: Analytical and Technical (3)  
 ENG 604 - Electronic Discourse and User Documentation (3)

**B. Electives (9 hours)**

The remaining hours to complete the program may be selected from the following list, or include any appropriate graduate course approved by the Director of Graduate Study:

- ENG 602 - Electronic Research, Writing, and Editing (3)  
 ENG 620 - Contemporary Publishing (3)  
 ENG 621 - Seminar on Publishing (3)  
 ENG 622 - Writing and Editing Internship (3)  
 MBA 614 - Managerial Communications (1.5)  
 MBA 628 - Business Strategy and Information Technology (1.5)  
 ISM 656 - Understanding Groupware: Technology for Teamwork (1.5)  
 CST 505 - Speech Writing (3)  
 CST 561 - Advanced Public Relations (3)  
 CST 663 - Seminar in Interpersonal Communication (3)  
 ART 529 - The Multi-Media Print (4 - requires prerequisites)

**\*For 2004-2005, no new certificate candidates will be accepted.**

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS**

The Department of English offers a graduate program of study leading to a **30-36** hour Master of Arts degree. All students select from the alternative plans of study outlined below. At least half the hours must be in 600- and 700-level courses.

**A. Required Core Courses (24 hours):**

- ENG 701 - English Studies: Content, Methods, and Bibliography (3)

A course in language selected from the following or from special topics courses as approved in advance by the Director of Graduate Study:

- ENG 510 - Old English (3)  
 ENG 513 - History of the English Language (3)  
 ENG 660 - Modern English (3)

A course in critical theory selected from the following or from special topics courses as 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 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)

Three courses in literature, including one before 1800 and one after.

Two electives, normally in English or American literature.

**B. Alternative Plans of Study (6-12 hours):**

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 (6)

Students must demonstrate reading knowledge of one foreign language through the first semester of the intermediate level (equivalent to 203 at UNCG) by examination or course work as approved by the Director of Graduate Study. Because of the language requirement, a minimum of **30** hours is required for the degree: 24 core hours and 6 thesis hours. Students who enter the Ph.D. program must fulfill the foreign language requirement.

Students who have been admitted into the Ph.D. 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 M.A. 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)

Three electives in rhetoric and composition or language and linguistics. Electives may be chosen from ENG 510, 513, 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 (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)

### Writing and editing plan:

A total of **36** hours is required for the degree, the 24 hour core plus 12 hours distributed as follows:

ENG 620 - Contemporary Publishing (3)  
ENG 621 - Seminar on Publishing (3)  
ENG 622 - Writing and Editing Internship (3)

One elective in writing and editing to be selected from special topics courses approved in advance by the Director of Graduate Study or from the following:

ENG 524 - Writing—Advanced: Analytical and Technical (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)  
Three courses in a minor or collateral field (9)

## SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION

The Master of Education degree with a concentration in English is offered to those students teaching or preparing to teach in public secondary schools. The program is approved by the National Council for Accreditation of Teacher Education and by the North Carolina Department of Public Instruction. The degree is available in two tracks leading to the new advanced competencies license.

### Teacher Leadership Track (39 hours)

This option is designed for students already holding North Carolina “A” licensure for secondary teaching in English. It requires **39** hours of course work including a directed research project. There is no thesis or foreign language requirement. Prerequisite is undergraduate course equivalents for the B.A. in English with “A” licensure.

#### A. Core Courses (9 hours)

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ENG 670 - Directed Master’s Research (3)

#### B. Pedagogical Expertise (21 hours)

ENG 513 - History of the English Language (3) or  
ENG 660 - Modern Language Theory (3)  
ENG 522 - Teaching Composition: Theory and Applications (3)  
3 courses in literature (9)  
Electives (6)

Students who are preparing materials for National Board certification are advised to take CUI 675.

### C. Professional Development/Leadership (9 hours)

CUI 628 - Trends and Issues in Curriculum and Instruction (3) or CUI 637 - Trends in Teaching Practices in Curriculum in Secondary School English (3)  
CUI 656 - Teacher as Leader (3)  
ENG 602 - Electronic Research, Writing, and Editing (3)

### Classroom Practice Track (39 hours)

This option is designed for students who do not have North Carolina licensure for secondary teaching in English. It requires **39** hours of course work including a directed research project. There is no foreign language or thesis requirement. Prerequisite is a B.A. degree in English from a certified college or equivalent course work. Students may also have to fulfill additional prerequisites normally completed during an “A” licensure program. Students completing this track must compile an Advanced Technology Skills Portfolio.

#### A. Core Courses (9 hours)

CUI 545 - Diverse Learners (3)  
CUI 669 - Educational Implications of Learning and Developmental Theory (3)  
ENG 670 - Directed Master’s Research (3)

#### B. Pedagogical Expertise (21 hours)

CUI 551 - Teaching Practices and Curriculum in English (3)  
ENG 513 - History of the English Language (3) or  
ENG 660 - Modern Language Theory (3)  
ENG 522 - Teaching Composition: Theory and Applications (3)  
3 courses in literature (9)  
Electives (3)

Students who have not taken a course in literary theory are strongly advised to take ENG 701.

### C. Professional Development/Leadership (9 hours)

CUI 638 - Seminar in Secondary Education (3)  
CUI 680 - Clinical Experience in Teaching (6)

## SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN CREATIVE WRITING

The Department of English offers a graduate program of study leading to a **36-hour** Master of Fine Arts degree in creative writing. The M.F.A. Writing Program is a residency program designed for full-time students.

### A. Required Core Courses (12–18 hours)

- ENG 625, 626 - M.F.A. Fiction Workshop (3)
- ENG 627, 628 - M.F.A. Poetry Workshop (3)
- ENG 671, 672 - Graduate Tutorial in Writing: Fiction (3)
- ENG 673, 674 - Graduate Tutorial in Writing: Poetry (3)
- ENG 677, 678 - Special Problems in Writing (3)

### B. Elective Academic Courses (12–18 hours)

M.F.A. 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 M.F.A. 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, Broadcasting and Cinema, 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 - Writing and Editing Internship (3)

### C. Comprehensive Examination

Please consult with the Director of the M.F.A. Writing Program about dates for this examination.

### D. Thesis (6 hours)

- ENG 699 - Thesis (6)

May be a novel, a collection of short stories, or a volume of poetry.

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY

The Department of English offers a graduate program of study leading to the Ph.D. degree.

*M.A./Ph.D. track:* Students who enter the doctoral program with a B.A. are required to complete the M.A. with a two-paper thesis within five academic years of their initial enrollment. (For the requirements, see M.A. Alternative Plans of Study above). These students do not need to reapply for doctoral study after finishing the master's program.

*Ph.D. track:* Students who enter with an M.A. in English are required to earn a minimum of 36 hours of course credit exclusive of the dissertation. 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.

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.

### A. Required Core Courses

These requirements must be met in work offered for the degree beyond the B.A. With approval of the Director of Graduate Study the requirements, but not minimum semester hours, may be met in work taken for the M.A. degree prior to matriculation in the Ph.D. program.

- ENG 701 - Content, Methods, and Bibliography (3) or its equivalent as approved by the Director of Graduate Study. Normally to be taken in the first semester.

### Rhetoric, Critical Theory, and Language (12 hours)

One course from each area as specified below and one additional course. ENG 747, Theories and Practices in the Teaching of College English, may satisfy the requirement for the one additional course in this category. Courses should be chosen from special topics courses as approved by the Director of Graduate Study or from the following:

#### Rhetoric:

- ENG 522 - Teaching Composition: Theories and Applications (3)
- ENG 590 - Literacy, Learning and Fieldwork (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)

#### Critical Theory:

- ENG 531 - Feminist Theory and Women Writers (3)
- ENG 549 - The Critical Canon and Contemporary Issues (3)
- ENG 650 - Modern Literary 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)

### Language:

- ENG 510 - Old English (3)
- ENG 513 - History of the English Language (3)
- ENG 660 - Modern English (3)

### Literary Studies (18 hours)

Students should take one course in each of the following areas from special topics courses approved by the Director of Graduate Study or from the list below. Genre courses, in the novel or poetry, for example, may satisfy these requirements depending upon the texts taught, subject to approval by the Director of Graduate Study.

#### Old and Middle English Literature:

- ENG 510 - Old English (3)
- ENG 537 - Middle English Literature (3)
- ENG 608 - Chaucer (3)
- ENG 708 - Studies in Middle English Literature (3)

#### Renaissance Literature:

- ENG 540 - Shakespeare (3)
- ENG 541 - Milton (3)
- ENG 641 - Elizabethan and Jacobean Drama (3)
- ENG 710 - Studies in English Renaissance Literature (3)
- ENG 712 - Studies in Sixteenth-Century British Literature (3)
- ENG 713 - Studies in Seventeenth-Century British Literature (3)
- ENG 714 - Studies in Shakespeare (3)

#### Restoration and Eighteenth-Century Literature:

- ENG 561 - Eighteenth-Century British Writers (3)
- ENG 616 - Restoration and Eighteenth-Century Drama (3)
- ENG 617 - The Eighteenth-Century British Novel (3)
- ENG 717 - Studies in Eighteenth-Century British Literature (3)

#### Nineteenth-Century British Literature:

- ENG 545 - Nineteenth-Century British Writers (3)
- ENG 646 - The Nineteenth-Century British Novel (3)
- ENG 719 - Studies in British Romanticism (3)
- ENG 721 - Studies in Victorian Literature and Culture (3)

#### American Literature Before the Twentieth-Century:

- ENG 563 - American Poetry Before 1900 (3)
- ENG 564 - American Prose Before 1900 (3)
- ENG 630 - Early American Literature (3)
- ENG 638 - Southern American Writers (3)
- ENG 730 - Studies in American Literature (3)
- ENG 731 - Studies in American Literature before 1900 (3)
- ENG 734 - Studies in American Women Writers (3)
- ENG 735 - Studies in African American Literature (3)

### Twentieth-Century British or American Literature:

- ENG 550 - Modern British Writers (3)
- ENG 558 - American Poetry after 1900 (3)
- ENG 559 - Twentieth-Century British Poetry (3)
- ENG 565 - American Prose after 1900 (3)
- ENG 582 - Modern Drama (3)
- ENG 638 - Southern American Writers (3)
- ENG 639 - American Literary Criticism (3)
- ENG 653 - Modern Irish Literature (3)
- ENG 654 - Contemporary American and British Poetry (3)
- ENG 657 - James Joyce (3)
- ENG 658 - D.H. Lawrence and Virginia Woolf (3)
- ENG 724 - Twentieth-Century British Literature (3)
- ENG 725 - Studies in Modernism (3)
- ENG 729 - Postcolonial Literatures (3)
- ENG 730 - Studies in American Literature (3)
- ENG 733 - Studies in American Literature after 1900 (3)
- ENG 734 - Studies in American Women Writers (3)
- ENG 735 - Studies in African-American Literature (3)
- ENG 737 - Studies in Multi-Ethnic American Literature (3)
- ENG 740 - Studies in Contemporary and Postmodern American Literature (3)

For the remaining hours of electives, students should choose from the graduate offerings in English or the supporting fields. These courses, selected in consultation with the student's advisory committee, should form a coherent plan to prepare the student in the areas of specialization.

Students majoring in rhetoric and composition are required to take at least two courses in supporting fields.

### B. 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.

### C. Foreign Language Requirement

The Ph.D. student must complete the foreign language requirement before taking the preliminary examination. The student must demonstrate reading knowledge of one foreign language through the second semester of the intermediate level (equivalent to 204 at UNCG) by examination or course work as approved by the Director of Graduate Study.

## D. 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, including both the written and oral components, which are prepared and evaluated by the advisory committee. Reading lists for the secondary fields are available from the Director of Graduate Study; for the primary field the list is augmented by the student in consultation with the advisory committee.

The written examination is taken on three days within one week and consists of the following: (1) a five-hour examination on the primary field, the specialization chosen from among rhetoric and composition or seven periods of literary studies: Old and Middle English, Renaissance, Restoration and Eighteenth-Century, Nineteenth-Century British, American before the Twentieth Century, Twentieth-Century British (including colonial and post-colonial), and Twentieth-Century American, and (2) two three-hour examinations in secondary fields. One of these secondary fields may be either a cross-period field or literary/language theory. The oral examination (two to three hours) is on the primary and secondary fields and is taken within a month after the written examination.

## E. Dissertation (15-21 hours)

ENG 799 - Dissertation (15-21)

A dissertation demonstrates ability to do original research and to present this investigation in an orderly, exact, and complete manner.

## F. 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) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### LITERATURE, LANGUAGE, AND CRITICISM

Prerequisite for credit in all literature courses on the 500-level: (1) successful completion of at least six hours of English or American literature at the junior level or above, or (2) admission to a program in the Department of English. A doctoral plan of study may include only three courses at the 500-level.

#### 510. Old English (3:3).

Language and literature of the Anglo-Saxon period (600-1100 A.D.). The language is studied primarily in conjunction with literary texts in the context of their history and culture.

#### 513. History of the English Language (3:3).

The origins and development of English, 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.

#### 522. Teaching Composition: Theories and Applications (3:3).

*Pr. 321 or 660 desirable.*

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.

#### 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.

#### 531. Feminist Theory and Women Writers (3:3).

Examines gender and creativity, women's place in literary tradition, and connections between art, gender, race, and class. Focuses on contemporary theory and on literary works from one historical period.

#### 537. Middle English Literature (3:3).

The language and literature of 13th, 14th, and 15th century England.

#### 540. Shakespeare (3:3).

Major comedies, histories, tragedies selected for topical study. Related background readings and criticism.

#### 541. Milton (3:3).

Milton's major poems and his most important prose works in their 17th century setting.

#### 545. Nineteenth-Century British Writers (3:3).

Major Romantic and/or Victorian writers. Attention to poetry and prose.

#### 549. The Critical Canon and Contemporary Issues (3:3).

Important critical writings from ancient Greece through the 19th century, emphasizing their influence upon modern theory and practice.

#### 550. Modern British Writers (3:3).

Major novelists, poets, and playwrights of the modernist period.

#### 553. Topics in English Studies (3:3).

Studies in selected topics in English or American literature or language. May be repeated once for credit when topic varies.

#### 558. American Poetry after 1900 (3:3).

Critical and historical study of major 20th century American poets to World War II.

#### 559. Twentieth-Century British Poetry (3:3).

Critical and historical study of 20th century British poetry to World War II.

#### 561. Eighteenth-Century British Writers (3:3).

Selected major writers, 1660-1800, from among Dryden, Swift, Pope, Johnson, and others.

#### 563. American Poetry before 1900 (3:3).

American poetry and related critical theory with special emphasis on Taylor, Freneau, Bryant, Poe, Emerson, Longfellow, Whitman, and Dickinson.



- 564. American Prose before 1900** (3:3).  
Genres, themes, and movements of American prose, fiction and non-fiction, written before 1900.
- 565. American Prose after 1900** (3:3).  
American prose written after 1900 with an emphasis on historical content, prose traditions in America, and the development of form, style, and genre.
- 582. Modern Drama** (3:3).  
Drama of the late 19th and 20th century: continental, English, and American.
- 589. Experimental Course.**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 590. Literacy, Learning and Fieldwork** (4:3:3).  
Historical, pedagogical, ideological and theoretical threads of literacy studies, debates and programs; training/tutoring fieldwork in local literacy programs, primarily in the public libraries.

## (ENG) COURSES FOR GRADUATES

Prerequisite for credit in all courses on the 600-level or above: (1) admission to a graduate program in the Department of English, or (2) twelve hours of English or American literature on the junior level or above. It is strongly recommended that a student enrolling in a graduate seminar have previous work in an appropriate period course.

### Literature, Language, and Criticism

- 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.
- 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.
- 608. Chaucer** (3:3).  
Chaucer's major works, including *The Canterbury Tales* and *Troilus and Criseyde*.
- 616. Restoration and Eighteenth-Century Drama** (3:3).  
Critical and historical study of comic and serious plays from the period 1660-1800.
- 617. The Eighteenth-Century British Novel** (3:3).  
Historical and critical study of such novelists as Defoe, Richardson, Fielding or Burney.
- 620. Contemporary Publishing** (3:3).  
An introduction to current practices in the publishing industry from manuscript preparation to the printed book or magazine.
- 621. Seminar on Publishing** (3:3).  
*Pr. 620.*  
Intensive study of a major area of the publishing industry from manuscript or proposal to final form as magazine or book. Topics to vary.
- 622. Writing and Editing Internship** (3:3).  
*Pr. 620 or permission of instructor.*  
Practical experience in writing and editing. Students work under supervision of professionals.
- 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).
- 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.
- 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.
- 639. American Literary 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.
- 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. Textual and cultural analysis.
- 646. The Nineteenth-Century British Novel** (3:3).  
Historical and critical study of such novelists as Austen, Dickens, Eliot, and Hardy.
- 650. Modern Literary 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.
- 653. Modern Irish Literature** (3:3).  
Irish literature from the Literary Revival to the present, usually emphasizing Yeats, Synge, Joyce, and O'Casey.
- 654. Contemporary American and British Poetry** (3:3).  
Critical and historical study of American and British poetry from World War II to the present.
- 657. James Joyce** (3:3).  
Study of the writings of James Joyce, with emphasis on *Ulysses*.
- 658. D.H. Lawrence and Virginia Woolf** (3:3).  
Study of the writings of D.H. Lawrence and Virginia Woolf, with emphasis on the evolution of their careers.
- 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.
- 663. Postcolonial Literary and Cultural Theory** (3:3).  
*Pr. 601 or 650 or permission of instructor.*  
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.
- 670. Directed Master's Research** (3:3).  
*Pr. limited to M.Ed. candidates.*  
Directed research project for students in the M.Ed. program. To be taken at the end of the student's plan of study.

- 680. Teaching Internship in English (3).**  
*Pr. admission to graduate degree program.*  
 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. (Graded on S-U basis)
- 682. The Structure of Verse (3:3).**  
 Verse forms and sound patterns in English and American poetry.
- 683. The Structure of Fiction (3:3).**  
*Pr. admission to the M.F.A. program or permission of instructor.*  
 Elements of prose fiction, with an emphasis on the theory and art of narrative structure.
- 688. Women's Rhetoric and Feminist Pedagogy (3:3).**  
*ENG 522, 531, or 681 recommended.*  
 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.
- 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.
- 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.
- 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.
- 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 Quintillian.
- 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.
- 699. Thesis (1-6).**
- 701. 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.
- 704. Studies in Contemporary Literary and Cultural Theory (3:3).**  
*Pr. 601 or 650.*  
 Problems and topics in literary and critical theory studied in conjunction with specific cultural contexts and phenomena. May be repeated once for credit when topic varies.
- 705. Cultural Studies (3:3).**  
*Pr. 601 or 650.*  
 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. May be repeated once when topic varies.
- 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. May be repeated once for credit when topic varies.
- 710. Studies in English Renaissance Literature (3:3).**  
 Investigation of selected authors or topics. May be repeated once for credit when topic varies.
- 711. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 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. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 714. Studies in Shakespeare (3:3).**  
 Problems of text, interpretation, and structural, stylistic, and character analysis of selected plays or poems. May be repeated once for credit when topic varies.
- 717. Studies in Eighteenth-Century British Literature (3:3).**  
 Study of a major author, movement, or genre, 1660–1800. May be repeated once for credit when topic varies.
- 719. Studies in British Romanticism (3:3).**  
 Study of one or more British Romantic writers, and of Romanticism as a movement. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 724. Twentieth-Century British Literature (3:3).**  
 Selected modern and contemporary writers, such as Conrad, Shaw, Forster, Larkin, Stoppard, and Byatt.
- 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. May be repeated once for credit when topic varies.
- 729. Postcolonial Literatures (3:3).**  
 Postcolonial literature from South Asia, Africa, the Caribbean, Australia and Canada in critical and historical context. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 731. Studies in American Literature before 1900 (3:3).**  
 Selected major literary figures and movements. May be repeated once for credit when topic varies.
- 733. Studies in American Literature after 1900 (3:3).**  
 Selected major literary figures and movements. May be repeated once for credit when topic varies.

- 734. Studies in American Women Writers (3:3).**  
Intensive study of a particular area of American women's writing and affiliated critical work. May be repeated once for credit when topic varies.
- 735. Studies in African-American Literature (3:3).**  
Topics, theories, movements, and authors that comprise the African-American literary tradition. May be repeated once for credit when topic varies.
- 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.). May be repeated once for credit when topic varies.
- 740. Studies in Contemporary and Postmodern American Literature (3:3).**  
Topics in contemporary and postmodern American literature, culture, and theory. May be repeated once for credit when topic varies.
- 742. Studies in Rhetorical Theory and Practice (3:3).**  
Themes, eras, and/or theorists in the history of rhetorical theory and practice. May be repeated once for credit when topic varies.
- 744. Seminar in Composition Studies (3:3).**  
*Pr. 522, 681, or permission of instructor.*  
Studies in special topics related to literacy, the process of composing, composition pedagogy, and composition research. May be repeated once for credit when topic varies.
- 746. Studies in Contemporary Rhetorical Theory (3:3).**  
Problems and topics in contemporary rhetorical theory; recent trends, issues, methods of rhetorical theory and related disciplines. May be repeated once for credit when topic varies.
- 747. Theories and Practices in the Teaching of College English (3:3).**  
*Pr. teaching assistant appointment in English.*  
The teaching of English to undergraduates, including theories of literacy and learning.
- 778. Directed Reading (3 to 6).**  
*Pr. admission to Ph.D. program, 24 hours of course work beyond the M.A., and permission of the Director of Graduate Study.*  
Individual conferences. Program of reading formulated to meet the varying needs of each student.
- 780. Independent Doctoral Study (1-6).**  
*Pr. 36 hours of Ph.D. course work and permission of Director of Graduate Study.*  
Intensive review of literature and criticism in a given field in preparation for preliminary examination or dissertation. May be repeated for up to six hours credit. (Graded on S-U basis)
- 799. Dissertation (1-21).**
- 801. Thesis Extension (1-3).**
- 802. Dissertation Extension (1-3).**
- 803. Research Extension (1-3).**

## WRITING

The courses below are reserved for full-time M.F.A. candidates.

- 625, 626. M.F.A. Fiction Workshop (3:3).**
- 627, 628. M.F.A. Poetry Workshop (3:3).**
- 671, 672. Graduate Tutorial in Writing: Fiction (3:3).**
- 673, 674. Graduate Tutorial in Writing: Poetry (3:3).**
- 677, 678. Special Problems in Writing (3:3).**
- 699. Thesis (6).**
- 801. Thesis Extension (1-3).**

## DEPARTMENT OF EXERCISE AND SPORT SCIENCE

250 H.H.P. Building  
(336) 334-5573

<http://www.uncg.edu/ess>

### Professors

- Diane L. Gill, Ph.D.,** Sport and exercise psychology, social psychological aspects of physical activity and well-being across the lifespan (Director of Graduate Study).
- Allan H. Goldfarb, Ph.D.,** Exercise physiology, hormonal/oxidative stress, muscle damage, glycogen metabolism.
- Shirl J. Hoffman, Ed.D.,** Applied motor learning, feedback and learning, relationships between sport, play, ethics and religion.
- Thomas J. Martinek, Ed.D.,** Psycho-social dynamics of teaching and coaching, teacher education, research design and statistics.
- David H. Perrin, Ph.D.,** Athletic training/sports medicine, ACL injury risk factors.
- Richard A. Swanson, Ph.D.,** Historical foundations of sport and physical education in North America, Olympic Games and international sport.
- Kathleen Williams, Ph.D.,** Coordination and control of movement in aging adults, evaluation and validation of movement sequences (Head of Department).

### Adjunct Professor

- Harvey William Gruchow, Ph.D.,** Heart disease, hypertension, nutrition, school and community health programs, survey research.

### Associate Professors

- William B. Karper, Ed.D.,** Exercise effects on ill/disabled children and adults, older adults and immunity.

**Mary Lou Veal**, Ed.D., Student assessment, cooperating teacher's role and reflection in teacher supervision, collaborative action research.

*Assistant Professors*

**Paul G. Davis**, Ph.D., Cardiovascular risk factors, lipoprotein metabolism and factors related to vascular endothelium control with exercise.

**Katherine M. Jamieson**, Ph.D., Social inequities in exercise and sport specifically dealing with women of color and gender and class issues in sport.

**Tammy Schilling**, Ph.D., Teaching in diverse settings, development and evaluation of values-based physical activity programs for underserved youth.

**Randy J. Schmitz**, Ph.D., Athletic training/sports medicine, muscle training, performance, and fatigue, therapeutic modalities in orthopedic rehabilitation.

**Sandra J. Shultz**, Ph.D., Athletic training/sports medicine, ACL injury risk factors, sex differences on knee stability.

**Laurie Wideman**, Ph.D., Exercise endocrinology, body composition and obesity and gender differences in growth hormone in response to exercise.

*Academic Professional Associate Professors*

**John Richards**, Ed.D., Activity instruction program.

**Mary Allen Watson**, Ed.D., Sports medicine/athletic training.

The Department of Exercise and Sport Science offers master's degree programs in several areas of study including: exercise physiology, sport and exercise psychology, school and community youth sport studies, sports medicine, motor behavior, and athletic training. Students may pursue the Master of Science degree in the areas of exercise physiology, sport and exercise psychology, sports medicine, motor behavior, and school and community youth sport studies. The Master of Education degree may be obtained by students in the school and community youth sport studies area. Each degree can be completed through either the thesis/project option (30 hour minimum) or the course work only option (36 hour minimum). In the area of athletic training, students may pursue a course work only Master of Science degree (46 hour minimum).

The Master of Science in exercise and sport science, with a concentration in athletic training, is linked to the Bachelor of Science in exercise and sport science with a concentration in sports medicine so that a student may earn both degrees in approximately five years. Undergraduates must be formally admitted to both of these programs. Please see the appropriate departmental listing in the *Undergraduate Bulletin* for the details of these accelerated programs.

## SPECIFIC REQUIREMENTS FOR ALL MASTER OF SCIENCE AND MASTER OF EDUCATION PROGRAMS

At least one-half of the minimum hours required must be completed in 600- or 700-level courses. A minimum of 24 hours must be completed in the Department of Exercise and Sport Science.

### A. Core Requirements (9 hours)

One course in each of the three groups of discipline-focused areas, sociohistorical, behavioral, and biophysical, is required. Students will select a course from each area in consultation with their advisor. The listing below can be used by students to guide their selection of appropriate courses. Other courses may be acceptable with instructor and advisor approval.

### Sociohistorical Studies of Exercise, Sport, and Physical Activity:

- ESS 563 - Development of Physical Education in the Western World (3)
- ESS 613 - The Meaning and Significance of Physical Education (3)
- ESS 630 - Sport and Society: Social Inequalities (3)
- ESS 632 - Sport and Society: Global and Ethnic Relations (3)
- ESS 653 - History of American Sport and Exercise Science (3)

### Behavioral Studies of Exercise, Sport, and Physical Activity:

- ESS 644 - Psychology of Sport and Exercise (3)
- ESS 647 - Motor Development and Human Movement (3)
- ESS 648 - Learning and Performance of Physical Skills (3)
- ESS 656 - Psycho-Social Aspects of Teaching Physical Education and Sport (3)

### Biophysical Studies of Exercise, Sport, and Physical Activity:

- ESS 576 - Nutrition and Physical Fitness (3)
- ESS 579 - Exercise and Older Adults (3)
- ESS 638 - Therapeutic Modalities (3)
- ESS 643 - Mechanical Analysis of Motor Skills (3)



ESS 670 - Physiology of Exercise (3)  
 ESS 677 - Muscular Aspects of Exercise Physiology (3)  
 ESS 678 - Cardiovascular Aspects of Exercise Physiology (3)

## **B. Research Techniques (3 hours)**

ESS 611 - Research Methods for Exercise and Sport Science (3)

## **Additional Requirements for the Master of Science - Thesis/Project Option (30 hours)**

### **Electives (12 hours)**

With the approval of the advisor, the student selects 12 hours of 500- to 700-level course work that constitute a specialized knowledge base relevant to the student's academic interests and goals.

### **Research and Thesis (6 hours)**

One of the following:

ESS 698 - Field Project in Exercise and Sport Science (6)  
 ESS 699 - Thesis (6)

## **Additional Requirements for the Master of Science - Course Work Only Option (36 hours)**

### **Electives (24 hours)**

With the approval of the advisor, the student selects 24 hours of 500- to 700-level course work that constitute a specialized knowledge base relevant to the student's academic interests and goals.

## **Integrative Experience**

The student's advisor and two other graduate faculty members (selected by the student with approval of the advisor) give guidance to the integrative experience and evaluate the outcome. In some cases, face-to-face meetings of the faculty may be needed; in other cases they may be unnecessary. With the approval of the advisor, the student selects one of the following (if a course option is selected, the hours are included in electives):

1. Comprehensive Examination. The student's advisor and two other Graduate Faculty members (see above), 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.

2. ESS 595 - Exercise Science Internship (3) or (6)
3. ESS 694 - Internship in Sport and Physical Education (3-6)
4. ESS 695 - Independent Study (1-3)
5. ESS 697 - Field Practicum in Exercise and Sport Science (3-6)

## **Additional Requirements for the Master of Education - Thesis/Project Option (30 hours)**

### **Physical Education:**

ESS 655 - Analysis of Teaching Behavior (3)

### **Electives (9 hours)**

With the approval of the advisor, the student selects 9 hours of 500- to 700-level course work in the School of Education. Beyond this, the following two courses are strongly recommended:

ESS 646 - Theoretical Considerations of Physical Education for Children (3)  
 ESS 656 - Psycho-Social Aspects of Teaching Physical Education and Sport (3)

### **Research and Thesis (6 hours)**

One of the following:

ESS 698 - Field Project in Exercise and Sport Science (6)  
 ESS 699 - Thesis (6)

## **Additional Requirements for the Master of Education - Course Work Only Option (36 hours)**

### **Physical Education:**

ESS 655 - Analysis of Teaching Behavior (3)

### **Electives (21 hours)**

With the approval of the advisor, the student selects 21 hours of 500- to 700-level course work that constitute a specialized knowledge base relevant to the student's academic interests and goals. A minimum of 6 hours must be completed in the School of Education. Beyond this, the following two courses are strongly recommended:

ESS 646 - Theoretical Considerations of Physical Education for Children (3)  
 ESS 656 - Psycho-Social Aspects of Teaching Physical Education and Sport (3)

## **Integrative Experience**

See details of Integrative Experience on page 121 (under Additional Requirements for the Master of Science Degree - Course Work Only Option).

## **SPECIFIC REQUIREMENTS FOR THE SCHOOL AND COMMUNITY SPORT STUDIES CONCENTRATION (M.S. -12 HOURS) (M.Ed. - 18 HOURS)**

ESS 520 - Physical Activity Programs for the Under-  
served Youth (3) **or**  
ESS 656 - Psycho-Social Aspects of Teaching Physical  
Education and Sport (3)  
ESS 655 - Analysis of Teaching Behavior (3) **or**  
ESS 663 - Supervision of Physical Education (3)

Minimum of 6 hours for M.S. or minimum of 12  
hours for M.Ed. from the following:

ESS 519 - Mentoring in Community Youth  
Development Programs (3)  
ESS 521 - Evaluation of Physical Activity Programs in  
Youth Development (3)  
ESS 652 - Curriculum Development in Physical Educa-  
tion (3)  
CUI 545 - Diverse Learners (3)  
CUI 555 - Multicultural Education (3)  
CUI 610 - Integrating Technology into Subject  
Matter (3)  
CUI 650 - The Interaction of Classroom Management  
and Instruction (3)  
CUI 654 - Teaching Models and the Analysis of Instruc-  
tion (3)  
CUI 669 - Educational Implications of Learning and  
Developmental Theory (3)  
ELC 581 - Teaching in the Urban School (3)  
ELC 604 - Moral Dimensions of Education (3)  
ELC 615 - Foundations of Curriculum (3)  
ELC 662 - Power, Politics and Schools (3)  
ELC 679 - History of Education in the United States (3)  
CED 610 - Helping Relationships (3)  
HEA 617 - Conflict Resolution and Coalition  
Building (3)  
RPT 613 - Recreation, Parks and Tourism  
Management (3)  
SOC 543 - Urban Sociology (3)

### **Integrative Experience for M.S. (6 hours)**

ESS 698 - Field Project in Exercise and Sport Science (6)  
**or** ESS 699 - Thesis (6)

### **Integrative Experience for M.Ed. (3 hours minimum)**

ESS 694 - Internship in Sport and Exercise Science (3-6)  
**or** ESS 695 - Independent Study (1-3) **or**  
ESS 697 - Field Practicum in Exercise and Sport Sci-  
ence (3-6)

### **Elective for M.Ed. (3 hours)**

Three credit hours chosen from required courses or  
integrative experiences listed above.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE - ATHLETIC TRAINING CONCENTRATION (45 HOURS)**

The CAAHEP accredited entry-level master's  
degree program in athletic training prepares gradu-  
ates to be eligible to sit for the National Athletic  
Trainers Association Board of Certification Exami-  
nation. This is a competitive admission program.  
For further program specifics, please refer to the  
ESS website.

At least one half of the minimum hours required  
must be completed in 600- or 700-level courses. A  
minimum of 24 hours must be completed in the  
Department of Exercise and Sport Science.

### **A. Core Requirements (9 hours)**

One course in each of the three groups of  
discipline-focused areas, sociohistorical, behavioral,  
and biophysical, is required. Students will select a  
course from each area in consultation with their ad-  
visor. The listing below can be used by students to  
guide their selection of appropriate courses. Other  
courses may be acceptable with instructor and advi-  
sor approval.

#### **Sociohistorical Studies of Exercise, Sport, and Physical Activity:**

ESS 563 - Development of Physical Education in the  
Western World (3)  
ESS 613 - The Meaning and Significance of Physical  
Education (3)  
ESS 630 - Sport and Society: Social Inequalities (3)  
ESS 632 - Sport and Society: Global and Ethnic Rela-  
tions (3)  
ESS 653 - History of American Sport and Exercise Sci-  
ence (3)

#### **Behavioral Studies of Exercise, Sport, and Physical Activity:**

ESS 644 - Psychology of Sport and Exercise (3)

#### **Biophysical Studies of Exercise, Sport, and Physical Activity:**

ESS 638 - Therapeutic Modalities (3)

### **B. Research Techniques (3)**

ESS 611 - Research Methods for Exercise and Sport  
Science (3)

### **C. Athletic Training Course Require- ments (27 hours)**

ESS 636 - Athletic Injury Evaluation (3)  
ESS 637 - Athletic Training Clinical Education III (3)  
ESS 640 - Rehabilitation Techniques for Athletic Injuries  
(3)  
ESS 641 - Athletic Training Clinical Education IV (3)  
ESS 720 - Pathophysiology and Pharmacology (3)

## D. Integrative Experience (6 hours)

ESS 697 - Field Practicum in Exercise and Sport Science (3-6)

Must be taken for 3 hours in each of the last two semesters of the student's program of study. The course will incorporate the academic course work of the previous semesters and have the student apply their knowledge base in an actual athletic training setting.

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY

The Department of Exercise and Sport Science offers a graduate program of study leading to a Doctor of Philosophy degree with a minimum of 60 hours of course work. Some students are required to take additional hours beyond the minimum. At least 70% of all course work must be at the 600- or 700-level. Students will complete a minimum of 24 hours in ESS, excluding the dissertation. No more than 9 of these hours may be taken as independent study (ESS 695).

### A. Research Techniques (12 hours)

With the approval of the Advisory Committee, the student selects at least 12 hours of course work focused on research techniques.

### B. Electives (36 hours)

With the approval of the Advisory Committee, the student selects at least 36 hours of 500- to 700-level course work tailored to meet his/her particular academic goals. This should include: (a) course work in a specialized knowledge base and (b) course work in other areas of exercise and sport science and/or other departments. Students are encouraged to develop at least one secondary area of academic expertise in order to be qualified for a broader array of jobs upon graduation.

### C. 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.

The Department does not recognize summer session as part of the residency requirement for Ph.D. students. Two consecutive 16-week semesters of study in which a student is enrolled for a minimum of 9 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.

## D. Formal Reviews and Examinations

The student must pass each of the reviews and examinations listed below. See this catalog and the ESS Graduate Handbook for details.

1. Approval of Plan of Study
2. Preliminary examination
3. Dissertation proposal approval
4. Advancement to candidacy
5. Final oral examination

## E. Research and Dissertation (12 hours)

ESS 799 - Dissertation (12)

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF EDUCATION

The Department of Exercise and Sport Science offers a program of study leading to the Doctor of Education (Ed.D.) degree with a minimum of 63 hours of course work. The Ed.D. is for experienced professionals seeking an advanced degree in a program relating the study of exercise and sport science to the application of teaching or administration. Emphasis is placed on professional development for teaching college academic courses and providing leadership in exercise and sport science. At least 70% of all course work must be at the 600- or 700-level.

### A. Foundational Area Studies (12 hours)

One course in each of the following four foundation areas, sociohistorical, behavioral, bioscience, and professional is required. The listing below can be used to guide the selection of appropriate courses. Other courses may be acceptable with advisor and committee approval.

#### Sociocultural Foundations (3 hours)

One course from the following:

- ESS 630 - Sport and Society: Social Inequalities (3)
- ESS 632 - Sport and Society: Global and Ethnic Relations (3)
- ESS 653 - History of American Sport and Exercise Science (3)

#### Behavioral Foundations (3 hours)

One course from the following:

- ESS 644 - Psychology of Sport and Exercise (3)
- ESS 647 - Motor Development and Human Movement (3)
- ESS 648 - Learning and Performance of Physical Skills (3)

#### Bioscience Foundations (3 hours)

One course from the following:

- ESS 643 - Mechanical Analysis of Motor Skills (3)
- ESS 670 - Physiology of Exercise (3)

**Professional Foundations (3 hours)**

One course from the following:

- ESS 652 - Curriculum Development in Physical Education (3)
- ESS 655 - Analysis of Teaching Behavior (3)
- ESS 656 - Psycho-social Aspects of Teaching Physical Education and Sport (3)
- ESS 663 - Supervision of Physical Education (3)

**B. Research/Inquiry/Problem-Solving (9 hours)**

With the approval of the advisory committee, the student selects at least 9 hours of course work focused on research, inquiry, and problem-solving techniques.

**C. Background Course Work in Support of Dissertation (9 hours)**

With the approval of the advisory committee, the student selects at least 9 hours of course work relevant to the dissertation and ultimate professional goals. This course work may be taken in exercise and sport science and/or other departments.

**D. ESS 649 - Seminar in Exercise and Sport Science (3 hours)**

This integrative seminar, taken early in the program of study, focuses on major issues confronting the field of exercise and sport science, and provides experiences applying concepts to professional practice.

**E. ESS 713 - Advanced Research Seminar in Exercise and Sport Science (3 hours)**

This integrative seminar, taken after the student has completed requirements for foundational area studies, research/inquiry/problem solving, and ESS 649 focuses on the development, refinement, and defense of a dissertation prospectus.

**F. ESS 695 - Independent Study (9 hours)****G. ESS 694 - Internship in Sport and Exercise Science (6 hours)****H. ESS 799 - Dissertation (12 hours)****COMBINING THE GRADUATE DEGREE IN EXERCISE AND SPORT SCIENCE WITH THE POST-BACCALAUREATE CERTIFICATE IN GERONTOLOGY**

Students interested in the study of gerontology should consult with a departmental advisor and with the Director of the Post-Baccalaureate Certificate program in gerontology. See the Department of Exercise and Sport Science Graduate Handbook for course work examples.

**(ESS) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

A minimum GPA of 2.3 at UNCG is required for an undergraduate to enroll in 500-level ESS courses.

**519. Mentoring in Community Youth Development Programs (2).**

Service learning experience mentoring an elementary or middle school youth in a community sport program. On campus seminars required.

**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.

**521. Evaluation of Physical Activity Programs in Youth Development (3:3).**

*Pr. 520.*

Examination of traditional and nontraditional strategies for effective youth program evaluation; attention to analysis and interpretation of data used in conducting such evaluations.

**522. Internship in Community Youth Sport Development Programs (12:1:36).**

*Pr. 520 and 521 or permission of instructor.*

Variety of field experiences in a community setting.

**530. Play, Games, and Sport (3:3).**

Examination of major conceptualizations of play, games, and sport; comparisons and contrasts among the concepts.

**531. Issues in Competitive Sports for Children and Youth (3:3).**

*Pr. permission of instructor.*

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.

**532. Women in Sport and Physical Activity (3:3).**

*Pr. junior standing or higher in exercise and sport science or women's studies, or permission of instructor.*

Examination of women's experiences in sport and physical activity. Consideration of historical, biological, psychological and socio-cultural perspectives.



**535. Exercise Science/Fitness Internship (3:0:8).**

*Pr. 575 and 568 and permission of instructor.*

Field experience in fitness leadership in qualified agencies providing fitness programs. Students must purchase professional liability insurance.

**536. Anatomical Basis of Athletic Injury (2:1:3).**

*Pr. undergraduate anatomy and physiology.*

The link between anatomical structure, function, and athletic injury evaluation; the functional consequence of injury and rehabilitation on anatomical structures.

**545. Psychology of Coaching (3:3).**

*Pr. PSY 121 or permission of instructor.*

Overview of sport psychology principles applied to the teaching and coaching of sport activities. Primarily for students who do not take the graduate sports psychology sequence.

**550. Sports Clinic (1).**

Designed to improve teaching and coaching techniques in various sports utilizing current game strategies.

**559. Water Exercise for Therapy and Rehabilitation (3:2:2).**

*Pr. 375 or 376 (may be taken concurrently).*

Design and implement aquatic therapy exercise programs for persons with injuries or disabilities. Aquatic exercise/stretching protocols will be based on an understanding of anatomical structure and movement.

**560. Aquatic Therapeutic Modalities (3:2:2).**

*Pr. 459 or 559 recommended or permission of instructor.*

Topics include 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.

**563. Development of Physical Education in the Western World (3:3).**

Historical overview of the development of physical education in Western civilization from classical times to the present age.

**565. History of the Olympic Games (3:3).**

Development of the Olympic Games movement in both the ancient world and the modern era. Consideration of cultural, philosophical, political, economic, and performance perspectives.

**567. Measurement and Evaluation in Physical Education (3:3).**

Survey of tests and application of measurement in physical education. Elementary testing procedures.

**570. Development and Implementation of Fitness Programs (3:3).**

*Pr. 468 and 469 or permission of instructor.*

Preparation in planning, designing, developing, organizing, programming, implementing, directing and evaluating fitness programs.

**571. Physical Education for Individuals with Special Needs (3:3).**

*Pr. 381 or permission of instructor.*

Advanced study of physical education for mentally and physically disabled persons. Clinical experience is provided.

**576. Nutrition and Physical Fitness (3:3).**

*Pr. BIO 277 and FNS 213 or equivalent required; ESS 375 or 575 recommended.*

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. (Same as NFS 576)

**578. Needs Assessment of Persons with Disabling Conditions (3:3).**

*Pr. permission of instructor.*

Determination of gross motor and perceptual/gross motor performance needs of handicapped persons. Analysis of published and teacher-made instruments. Construction of new tests for physical education for persons with special needs in physical activity.

**579. Exercise and Older Adults (3:3).**

*Pr. junior admission only by permission of instructor.*

Basic principles underlying exercise/aging. The delivery of exercise information and the conduct of exercise programs for older adults.

**589. Experimental Course.**

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

**595. Exercise Science Internship (3:1:10) or (6:1:20).**

*Pr. permission of instructor; cumulative GPA of 2.50 or better; completion of all ESS core courses and additional concentration courses except 570; grades of "C" or better in all required ESS courses. Coreq. 570 must be taken prior to or concurrent with 595. Application process must be completed prior to registration.*

Supervised field experience in qualified agencies. Application process required for permission to register. Course requirements include specific assignments, supervision, seminars on campus, and evaluation of student's performance. May be repeated for credit if taken for 3 hours; total credits may not exceed 6 hours.

**(ESS) COURSES FOR GRADUATES****606. Workshops in Physical Education (1-3).**

Practices, problems, and new approaches in physical education. Individual study and writing. May be repeated for credit.

**609. Critical Analysis of Professional Literature in Physical Education (3:3).**

Understanding and practicing of written and oral skills involving critical reasoning and analysis, applied to current sources in physical education.

**610. Statistical Methods for Exercise and Sport Science (3:3).**

Basic statistics with applications for exercise and sport science.

**611. Research Methods for Exercise and Sport Science (3:3).**

Concepts and methods of research for exercise and sport science; formulation of problems, design and methodologies, evaluation of research, development of research proposals.

**612. Research in Exercise and Sport Science II: Advanced Topics (3:3).**

*Pr. 611 or permission of instructor.*

Examination of selected strategies, methods, statistical or interpretative analytic processes used in exercise and sport science research. May be repeated for credit when topic varies.

- 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.
- 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.
- 617. Current Theories and Practice of Teaching Sports** (3:3).  
Contemporary approaches to sports analysis and sports teaching in instructional physical education.
- 630. Sport and Society: Social Inequalities** (3:3).  
*Pr. 330, introductory sociology, or permission of instructor.*  
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.
- 632. Sport and Society: Global and Ethnic Relations** (3:3).  
*Pr. 630 or permission of instructor.*  
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.
- 634. Athletic Training Foundations** (2:1:3).  
*Pr. formal acceptance in the M.S. in athletic training program or permission of instructor.*  
Introduction to athletic training emphasizing concepts and skills of prevention of athletic injuries, and management of life-threatening and catastrophic injuries.
- 635. Gender Issues in Exercise and Sport** (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.
- 636. Athletic Injury Evaluation** (3:3).  
*Pr. 390, 376, or permission of instructor.*  
Recognizing and evaluating orthopedic injuries commonly sustained in the athletic environment. Additional topics include the body's pathological response to injury and methods of documentation.
- 637. Athletic Training Clinical Education III** (3:2:4).  
*Pr. formal acceptance in the M.S. in athletic training program or permission of instructor.*  
Laboratory sessions and supervised field experience to develop clinical skills in the evaluation of athletic injuries. Lab fee for supplies required.
- 638. Therapeutic Modalities** (3:3).  
*Pr. BIO 271, 277, or permission of instructor.*  
Theoretical foundation of therapeutic modalities as a component of athletic injury reconditioning programs. Theory and clinical aspects of delivery of therapeutic modalities are examined.
- 639. Athletic Training Clinical Education V** (3:2:4).  
*Pr. formal acceptance in the M.S. in athletic training program or permission of instructor. Coreq. 638.*  
Laboratory sessions and supervised field experience to develop clinical skills in assessing posture and applying therapeutic modalities. Lab fee for supplies required.
- 640. Rehabilitation Techniques for Athletic Injuries** (3:3).  
*Pr. BIO 271, 277, or permission of instructor.*  
Awareness, understanding, and application of principles and skills pertaining to rehabilitation of injuries in physically active populations.
- 641. Athletic Training Clinical Education IV** (3:2:4).  
*Pr. formal acceptance in the M.S. in athletic training program or permission of instructor.*  
Laboratory sessions and supervised field experience to develop clinical skills in instruction of therapeutic exercise. Lab fee for supplies required.
- 643. Mechanical Analysis of Motor Skills** (3:3).  
Mechanical principles applied to the teaching and analysis of selected sports activities; evaluation of modern bio-mechanical techniques.
- 644. Psychology of Sport and Exercise** (3:3).  
*Pr. introductory psychology or permission of instructor.*  
Theories and research related to sport psychology; individual differences, motivation and social influence processes related to sport and exercise behavior.
- 645. Exercise Psychology** (3:3).  
*Pr. 644, 575 or permission of instructor.*  
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.
- 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.
- 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.
- 648. Learning and Performance of Physical Skills** (3:3).  
*Pr. general and developmental psychology (9 hrs.), or permission of the instructor.*  
Application of principles of learning to the learning and performance of physical skills, including the social, emotional, and personality factors affecting skill acquisition.
- 649. Seminar in Exercise and Sport Science** (3:3).  
Integrative seminar focusing on major issues confronting the field of exercise and sport science, and applying concepts to professional practice.
- 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.
- 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.
- 652. Curriculum Development in Physical Education** (3:3).  
Modern principles and practices in curriculum construction and current theories of physical education.
- 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.

**654. Seminar in Curriculum Development in Physical Education (3:3).**

*Pr. 652, ELC 615, or permission of instructor.*

Current theories and research in curriculum and instruction in the field of physical education.

**655. Analysis of Teaching Behavior (3:3).**

*Pr. previous teaching experience at elementary, secondary, or college level, or by permission of instructor.*

Techniques of observation instruments for identifying and evaluating teacher behaviors. Extends the research competencies of those interested in the dynamics of student-teacher relationships.

**656. Psycho-Social Aspects of Teaching Physical Education and Sport (3:3).**

*Pr. previous teaching experiences or permission of instructor.*

Social and psychological factors that influence instructional interactions and the perceptions of teachers, coaches and students.

**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.

**661. Movement Theory (3:3).**

The theoretical structure of human movement; opportunity for developing an individual theory of movement.

**663. Supervision of Physical Education (3:3).**

Current theoretical approaches to supervision. Practice in using tools for observing teacher behavior in physical education setting.

**665. Physical Activity and Health (3:3).**

*Pr. 375 or equivalent or permission of instructor.*

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.

**667. Exercise Electrocardiography and Cardiopulmonary Medications (3:3).**

*Pr. 375 or equivalent or permission of instructor. Coreq. 670 or permission of instructor.*

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.

**668. Advanced Exercise Assessment (3:2:2).**

*Pr. 468 or equivalent, 670, or permission of instructor.*

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.

**669. Advanced Exercise Prescription (3:3).**

*Pr. 670 or permission of instructor.*

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.

**670. Physiology of Exercise (3:3).**

*Pr. 375 or permission of instructor.*

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.

**672. Measurement Theory Applied to Physical Education (3:3).**

*Pr. 610 or equivalent or permission of instructor.*

Measurement theory necessary to the planning, construction, and use of tests in physical education and athletics.

**675. Applied Human Work Physiology (3:3).**

*Pr. 375 or equivalent, or by permission of instructor.*

Physiological factors which influence the exercise and performance capabilities of humans.

**676. Problems Seminar (3:3).**

*Pr. previous course work in appropriate content areas.*

Specific course title identified each semester by subscript, e.g., Problems Seminar: Tension and Relaxation Theories Applied to Sports. May be repeated for credit when topic varies.

**677. Muscular Aspects of Exercise Physiology (3:3).**

*Pr. 375, BIO 277, or permission of instructor.*

Effects of acute and chronic exercise on muscular mechanics, blood supply, size of muscle, fatigue and physical performance.

**678. Cardiovascular Aspects of Exercise Physiology (3:3).**

*Pr. 375, BIO 277, or permission of instructor.*

Effects of acute and chronic exercise on heart function and size, peripheral vasculature, hemodynamics and cardiac output.

**679. Exercise and Older Adults: Advanced (3:3).**

*Pr. previous course work in motor development, motor learning and exercise physiology.*

Scientific and theoretical bases of exercise/aging and guidelines regarding leadership and planning of exercise programs.

**694. Internship in Sport and Exercise Science (3-6).**

*Pr. permission of instructor.*

Supervised field experience appropriate to the student's interests and background in selected settings during the final phases of the student's curricular plan. May be repeated once for credit. (Graded on S-U basis)

**695. Independent Study (1-3).**

*Pr. demonstrated competency for independent work and permission of departmental academic adviser and the instructor.*

Intensive study in an area of special interest in physical education.

**696. Laboratory Technology in Exercise Science (1:0:3 or 2:0:6).**

*Pr. 670 or 678 and 643.*

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).

**697. Field Practicum in Exercise and Sport Science (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. (Graded on S-U basis)

**698. Field Project in Exercise and Sport Science (6).**

*Pr. approved candidates for the master's degree in exercise and sport science only.*

Developing, implementing, and/or evaluating a focused set of professional activities in a field setting. Three-member faculty guidance committee required, along with successful completion of formal project proposal, formal documentation of project, and final oral examination. (Graded on S-U basis)

- 699. Thesis (1-6).**
- 700. Special Topics in Exercise and Sport Science (3).**  
*Pr. prerequisites and defined research competencies will vary according to topic.*  
 Advanced study in special topics from the various subspecialties within the field of exercise and sport science. May be repeated for credit when topic varies.
- 701. Research Topics in Exercise and Sport (3:3).**  
*Pr. prerequisites and defined research competencies will vary according to topic.*  
 Intensive examination of specific topics; critical review of current literature. May be repeated for credit when topic varies.
- 710. Sport and Feminisms (3:3).**  
*Pr. undergraduate/graduate feminist theory course or permission of instructor.*  
 Emergence of U.S. feminist theories, including U.S. Third World feminisms. Application of feminisms to sport as cultural practice.
- 711. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 713. Advanced Research Seminar in Exercise and Sport Science (3:3).**  
*Pr. 611 or permission of instructor.*  
 Integrative seminar, primarily for Ed.D. candidates, focusing on development, refinement, and presentation of research. (Graded on S-U basis)
- 720. Pathophysiology and Pharmacology (3:3).**  
*Pr. 375 and BIO 111 or equivalent or permission of instructor.*  
 In-depth study of the pathophysiology and pharmacologic treatment of major illnesses, injuries, and diseases observed in clinical settings.
- 721. Athletic Training Clinical Education VI (3:2:4).**  
*Pr. formal acceptance in the M.S. in athletic training program or permission of instructor. Coreq. 720.*  
 Laboratory sessions and supervised field experiences to develop clinical skills in assessment and management of general medical situations common to athletic training. Lab fee for supplies required.
- 725. Management and Professional Issues in Athletic Training (3:3).**  
*Pr. formal acceptance in the M.S. in athletic training program or permission of instructor.*  
 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.
- 733. Practicum in Supervision of Physical Education (1-3).**  
*Pr. 663 or permission of instructor.*  
 Individually directed experiences in the organization and evaluation of field experiences in teacher education.
- 744. Applied Sport Psychology (3:2:2).**  
*Pr. 644.*  
 Current research in applied sport psychology; sport-specific individual differences, motivational approaches, and interventions.
- 745. Seminar: Social Psychology and Physical Activity (3:3).**  
*Pr. 644.*  
 Current theories, research methodologies and findings related to the social psychological aspects of sport and exercise behavior.
- 746. Practicum in Applied Sport Psychology (1-3).**  
*Pr. 744 and permission of instructor.*  
 Supervised experience in the organization, administration and evaluation of applied sport psychology programs, generally involving psychological skills with competitive sport participants.
- 754. Applied Sport Psychology Issues and Practice (3:3).**  
*Pr. 644, 744.*  
 Theories and research underlying applied sport psychology. Consideration of issues in educational sport psychology practice.
- 795. Independent Doctoral Research (1-6).**  
*Pr. prior approval of graduate faculty member who will supervise and evaluate the project.*  
 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. (Graded on S-U basis)
- 798. Doctoral Seminar in Grant Writing (3:3).**  
*Pr. minimal second year doctoral candidate in ESS or permission of instructor. Coreq. registration in 695 with faculty advisor or course instructor for individualized mentoring of the grant writing project.*  
 The grant writing process, including the procedures and technical strategies for developing and submitting a grant proposal for funding. (Graded on S-U basis)
- 799. Dissertation (1-12).**
- 801. Thesis Extension (1-3).**
- 802. Dissertation Extension (1-3).**
- 803. Research Extension (1-3).**



## GENETIC COUNSELING, MASTER OF SCIENCE

119 McIver Street  
(336) 256-0175  
<http://www.uncg.edu/gen>

### Interdisciplinary Faculty and Advisors:

#### *Professors*

**L. DiAnne Borders**, Ph.D., Counseling supervision, counseling theory and process, ethics, school counseling, adoptive families (Department of Counseling and Educational Development)

**Terrance McConnell**, Ph.D., Ethical theory, medical ethics, political philosophy (Department of Philosophy).

#### *Clinical Professor*

**Nancy P. Callanan**, M.S., C.G.C., Counseling and educational needs in genetic screening programs (Program Director).

#### *Adjunct Professor*

**Pamela J. Reitnauer**, Ph.D., M.D., Dysmorphology syndromes, primary care of individuals with genetic disorders, epidemiology of birth defects (Program Medical Director).

#### *Adjunct Associate Professor*

**Tamision Jewett**, M.D., Clinical evaluation and management of individuals with multiple malformations, connective tissue disorders, services to Spanish speaking individuals, professional and community education (Department of Biology).

#### *Assistant Professor*

**Thomas R. Kwapil**, Ph.D., Schizophrenia and related illnesses studied from experimental and developmental psychopathology perspectives (Department of Psychology).

**Dennis R. LaJeunesse**, Ph.D., Developmental genetics and cell biology (Department of Biology).

#### *Clinical Assistant Professor*

**Sonja R. Eubanks**, M.S., C.G.C., Clinical supervision, prenatal and pediatric genetic counseling (Assistant Program Director).

An interdisciplinary Master of Science in genetic counseling is offered through The Graduate School. The program is accredited by the American Board of Genetic Counseling (ABGC). 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.

### The Curriculum

The Master of Science in genetic counseling program was designed in accordance with guidelines provided by the American Board of Genetic Counseling (ABGC) 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 ABGC. A total of 55 semester hours are required for the degree. This 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.

### Requirements for Admission

1. Bachelor's degree from a regionally accredited institution of higher education with a minimum grade point average of 3.0 (on a 4 point scale).
2. Successful completion of at least one upper level undergraduate course each in general genetics and biochemistry, and at least one undergraduate course in statistics.
3. Satisfactory scores on the Graduate Record Examination (GRE) verbal, analytical, and quantitative sections.

Applicants will be required to complete a UNCG application form and submit undergraduate transcripts, three letters of reference, resume, and a personal essay. 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.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN GENETIC COUNSELING

### A. Required Courses

#### Year One: Fall Semester (13 hours)

- BIO 614 - Prenatal Development: Embryology and Teratology (3)
- BIO 616 - Human Molecular Genetics (3)
- GEN 601 - Principles of Genetic Counseling I (3)
- GEN 610 - Genetic Counseling and the Community (2)
- GEN 658 - Molecular Diagnostics (1)

GEN 688 - Genetics Journal Club (1)

**Year One: Spring Semester (13 hours)**

GEN 602 - Principles of Genetic Counseling II (3)  
 GEN 630 - Medical/Clinical Genetics I (3)  
 GEN 688 - Genetics Journal Club (1)  
 PSY 624 - Research Methods in Clinical Psychology (3)  
 Approved elective (3)

**Year One: Summer Session I (2 hours)**

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 (16 hours)**

GEN 701 - Principles of Genetic Counseling III (3)  
 GEN 718 - Clinical Rotations I (4)  
 GEN 730 - Medical/Clinical Genetics II (3)  
 GEN 748 - Research Project (3)  
 PHI 602 - Ethics and Genetics (3)

**Year Two: Spring Semester (10-13 hours)**

CED 645 - Mental Health Issues in Genetic Counseling (3)  
 GEN 719 - Clinical Rotations II (4)  
 GEN 749 - Research Project (3)  
 Optional elective (3)

**B. Elective (3-6 hours)**

An elective course from offerings in the Departments of Psychology or Human Development and Family Studies may be substituted for GEN 640 with approval from the program director. An additional (optional) elective relevant to the student's professional goals may be selected with the approval of the program director.

**C. Clinical Internships (9 hours)**

The clinical rotations will be an integral part of the program and will 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 American Board of 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: Duke University Medical Center, Fullerton Genetics Clinic, Moses 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 and provided that the site is approved by the American Board of Genetic Counseling (ABGC) as an *ad hoc* clinical training site.

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: Duke University Medical Center, Moses Cone Health System, University of North Carolina at Chapel Hill, and Wake Forest School of Medicine, and Fullerton Genetics Clinic.

**D. Research Project (6 hours)**

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 early in the third 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) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

**589. Experimental Course.**

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

**(GEN) COURSES FOR GRADUATES**

**601. Principles of Genetic Counseling I (3:3).**

*Pr. enrollment in M.S. genetic counseling program.*

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.

- 602. Principles of Genetic Counseling II (3:3).**  
*Pr. matriculation to second semester of M.S. genetic counseling program.*  
 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.
- 605. Research Design in Genetic Counseling (3:3).**  
*Pr. matriculation to second semester of M.S. genetic counseling program.*  
 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.
- 610. Genetic Counseling and the Community (2:1:3)**  
*Pr. enrollment in M.S. genetic counseling program.*  
 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.
- 614. Prenatal Development: Embryology and Teratology (3:3).**  
*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*  
 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. (Same as BIO 614)
- 616. Human Molecular Genetics (3:3).**  
*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*  
 Review and extension of basic principles of molecular genetics and their application for the characterization, understanding, and treatment of genetically based disorders and susceptibilities. (Same as BIO 616)
- 630. Medical/Clinical Genetics I (3:3).**  
*Pr. enrollment in M.S. genetic counseling program, BIO 516, BIO 614.*  
 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.
- 658. Molecular Diagnostics (1:0:3).**  
*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*  
 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. (Same as BIO 658)
- 669. Clinical Skills Seminar (1:1).**  
*Pr. matriculation to Summer Session I of M.S. genetic counseling program.*  
 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.
- 671. Quantitative Risks in Practice: Understanding Risk Assessment (1:3).**  
*Pr. matriculation to Summer Session I of M.S. genetic counseling program.*  
 Analytical and mathematical techniques utilized in genetic risk assessment. Topics include pedigree analysis, probability and segregation analysis. Bayes theorem, Hardy Weinberg, empiric risk counseling.
- 688. Genetics Journal Club (1:1).**  
*Pr. enrollment in M.S. genetic counseling program or permission of instructor.*  
 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. May be repeated for a maximum of two semester hours credit.
- 698. Summer Clinical Rotations (1).**  
*Pr. matriculation to Summer Session II of M.S. genetic counseling program.*  
 Introduction to clinical genetic counseling. Supervised observational and participatory activities, skill development. (Graded on S-U basis)
- 701. Principles of Genetic Counseling III (3:3).**  
*Pr. matriculation to third semester of M.S. genetic counseling program.*  
 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.
- 711. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 718/719. Clinical Rotations I, II (4:0:15).**  
*Pr. matriculation to second year of M.S. genetic counseling program.*  
 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. (Graded on S-U basis)
- 730. Medical/Clinical Genetics II (3:3).**  
*Pr. matriculation to third semester of M.S. genetic counseling program or permission of instructor.*  
 Common diseases of childhood and adulthood, genetic screening programs, population genetics and genetic epidemiology, special topics in selected Mendelian disorders, models of molecular disease, and current applications of gene therapy.
- 748/749. Research Project (3).**  
*Pr. matriculation to third semester (748) and fourth semester (749) of M.S. genetic counseling program and successful completion of PSY 624.*  
 Research project in genetic counseling. (Graded on S-U basis)
- 803. Research Extension (1-3).**

## DEPARTMENT OF GEOGRAPHY

129 Graham Building

(336) 334-5489

<http://www.uncg.edu/geo>

### *Professors*

**D. Gordon Bennett**, Ph.D., Demographic analysis, world population problems.

**Jeffrey C. Patton**, Ph.D., Cartographic theory, history of cartography, earth science (Head of Department).

**John Rees**, Ph.D., Economic development, public policy.

### *Associate Professors*

**Keith G. Debbage**, Ph.D., Urban planning, regional development, tourism.

**Michael E. Lewis**, Ph.D., Natural resources, environmental management, applied physical geography.

**Elisabeth S. Nelson**, Ph.D., Cartographic perception and cognition (Director of Graduate Study).

**Roy S. Stine**, Ph.D., Geographic information systems (GIS), remote sensing (Director of Post-Baccalaureate Certificate Program).

### *Assistant Professors*

**Gerald J. Lennartson**, Ph.D., Environmental planning, hazards, meteorology.

**Zhi-Jun Liu**, Ph.D., Environmental geography, GIS, spatial statistics, hydrologic/ecological modeling.

**Phillip Royall**, Ph.D., Geomorphology, drainage basin dynamics, soil science, water resources.

**William F. Welsh**, Ph.D., GIScience, population-environmental interaction, land use/land cover dynamics.

The Department of Geography offers the Master of Arts in applied geography, the Doctor of Philosophy in geography, the Post-Baccalaureate Certificate in Geographic Information Science (GIS), and the Post-Baccalaureate Certificate in 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 different locational contexts: urban, rural, regional and international.

The master's degree in applied geography will prepare and educate graduates for

professional careers in industrial and commercial site selection, transportation planning, environmental assessment, and urban and regional development. The program emphasizes the application of theoretical constructs in geography to solve problems, particularly within the Triad and the State, but which can also be extended to the national and international levels.

The program also leads to the acquisition of research skills and expertise appropriate to geographic analysis, including spatial statistics, cartography, remote sensing, and geographic information systems.

The doctoral degree in geography is designed primarily for persons who are preparing for careers that apply geographic theory, method, information technology and other skills to solving problems in urban and regional planning, natural resource management and environmental assessment, demographic analysis, and economic development, as well as those preparing for careers in teaching and research in colleges and universities. The main areas of research of the faculty are in the areas of urban planning, earth science/environmental studies, and the geographic information sciences; these will serve as the main orientation of the doctoral program.

## SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN GEOGRAPHIC INFORMATION SCIENCE

The Department of Geography offers a Post-Baccalaureate Certificate in Geographic Information Science (GIS). The purpose of the certificate is to provide professionals with the knowledge and skills needed to effectively utilize spatial analytic tools, geographic data visualization techniques, spatial programming, and geographic information and image processing software. The certificate program emphasizes the application of Geographic Information Science in the fields of urban and regional planning, environmental assessment, remote sensing, spatial software development, cartography, and economic development.



The certificate requires **18** semester hours of course work (15 hours of core courses and 3 hours of approved electives). A minimum of 15 of these hours must be completed at UNCG. Certificate students must meet all requirements for admission to The Graduate School. Students must maintain a minimum grade point average of 3.0 in all certificate courses. No more than 3 semester hours of C will count towards the certificate.

### A. Required Core Courses (15 hours)

GEO 520 - Advanced Remote Sensing-Imaging (3)  
 GEO 521 - Advanced Cartography (3)  
 GEO 523 - Advanced Geographic Information Systems (3)  
 GEO 524 - GIS Programming, Design and Application (3)  
 GEO 620 - Spatial Analysis (3)

### B. \*Electives (3 hours)

Select one from the following:

GEO 623 - Seminar in Geographic Information Science (3)  
 STA 571 - Statistical Methods for Research I (3)  
 CSC 570 - Principles of Database and Knowledge-Base Systems (3)  
 BIO 522 - Landscape Ecology (3)

\*Additional elective courses may be approved by the Director of Graduate Study

## SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN URBAN AND ECONOMIC DEVELOPMENT

The Departments of Geography and Political Science jointly offer a program of study leading to a Post-Baccalaureate Certificate in urban 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.

The certificate requires **18** semester hours of course work (12 hours of core courses and 6 hours of approved electives) and must be completed during a five academic year period. A minimum of 15 of these hours must be completed at UNCG. Certificate students must meet all requirements for admission to The Graduate School. Students must maintain a minimum grade point average of 3.0 in all certificate courses. No more than 3 semester hours of C will count towards the certificate.

### A. Required Core Courses (12 hours)

GEO 502 - Urban Planning (3)  
 GEO 533 - Industrial Development: State and Local (3)  
 PSC 520 - The Urban Political System (3)  
 PSC 630 - Community and Economic Development: Theory and Practice (3)

### B. Electives (6 hours)

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 Development Policy (3)

## SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS IN APPLIED GEOGRAPHY

The Department of Geography offers a graduate program of study requiring a minimum of **33** hours of graduate work, including a maximum of 6 hours of GEO 695 or GEO 699. Seventeen of these 33 hours must be at the 600-level or above. As part of the master's degree, students may choose to either complete a thesis or internship project or pursue a non-thesis option. The non-thesis option requires a minimum of **36** hours of course work, excluding GEO 695 and GEO 699, and completion of a competency portfolio. The non-thesis option is considered to result in a terminal degree.

### A. Required Core Courses (3 hours)

GEO 601 - Research Trends in Geography (3)

### B. Electives (24-33 hours)

The student, in consultation with the advisor, will determine the appropriate courses to be taken in that individual's program, including any cognate courses.

### C. Research Courses (3-6 hours)

GEO 695 - Internship (3-6) or GEO 699 - Thesis (3-6)

### D. Collateral Expertise

The student will pass two courses in any combination of the following: statistics, computer science, or data analysis. See Director of Graduate Study for approved list of courses.

### E. Formal Reviews and Examinations

1. Approval of master's Plan of Study.
2. Comprehensive preliminary examination (taken after the completion of 24 hours of course work; administered at the beginning of the fall and spring terms).
3. Thesis, internship project, or portfolio proposal approval.

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.

### MASTER OF ARTS IN APPLIED GEOGRAPHY WITH A CONCENTRATION IN URBAN PLANNING AND ECONOMIC DEVELOPMENT

The Department of Geography offers a concentration in urban planning and economic development. This 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 Master of Arts degree in applied geography. Within this framework, the following 15 hours must be completed.

#### A. Required Core Courses (12 hours)

- GEO 502 - Urban Planning (3)
- GEO 522 - Seminar in Population and Urban Studies (3)
- GEO 533 - Industrial Development: State and Local (3)
- GEO 603 - Understanding Geographic Information Systems (3)

#### B. Elective Courses (3 hours)

Choose one from the following:

- GEO 602 - Regional Planning (3)
- GEO 622 - GIS Applications in Urban Planning (3)
- GEO 631 - Transportation Planning (3)
- PSC 620 - Urban Development Policy (3)
- PSC 630 - Community and Economic Development: Theory and Practice (3)

### SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN GEOGRAPHY

The Department of Geography offers a graduate program of study leading to the Ph.D. degree. This innovative program is centered on the research-oriented application of geographical concepts and theories to the solving of real-world problems. The total number of hours required for the degree is **48 to 54**. At least three fourths of all work submitted for the degree 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.

#### A. Required Core Courses (9 hours)

- GEO 620 - Spatial Analysis (3)
- GEO 760 - Research Design (3)
- GEO 761 - History of Geographic Thought (3)

#### B. Courses Required from Geography Clusters (24 hours)

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.

#### C. Dissertation (15-21 hours)

- GEO 799 - Dissertation (15-21)

#### D. Formal Reviews and Examinations

1. Approval of Doctoral Plan of Study.
2. Comprehensive preliminary examination (taken after the completion of 33 hours of course work).
3. Dissertation proposal approval.
4. Public dissertation defense.

### (GEO) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

#### 502. Urban Planning (3:3).

Experiences in planning and primary concepts and procedures utilized by planners in city and other local government agencies for improving the quality of the urban environment.

#### 520. Advanced Remote Sensing-Imaging (3:3).

Pr. 323.

Remote sensing of the environment using scientific visualization and digital image processing techniques.

**521. Advanced Cartography (3:3).**

*Pr. 321 or permission of instructor.*

Introduction to computer cartography and advanced photographic methods for map production. The student will learn to design, produce, and evaluate computer photographically generated maps.

**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.

**523. Advanced Geographic Information Systems (3:3).**

*Pr. 321 or permission of instructor.*

Development and application of geographic information systems. Emphasis on spatial data structures and their relationship to the analytic processes of geography and planning.

**524. GIS Programming Design and Application (3:3).**

*Pr. 523.*

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.

**533. Industrial Development: State and Local (3:3).**

Theories of industrial location; techniques to measure impact of industry on communities; policy and institutional issues related to state and local industrial development.

**560. Seminar in Regional Geography (3:3).**

Smaller regions within Latin America, the United States, and Europe as case studies of regionalism and the regional method in geography.

**570. Applied Physical Geography (3:6:1).**

Applications in physical geography. Topics include field experience in hydrology, dendrochronology, geomorphology, climatology, and mapping. Extended field trip required. May be repeated as area of world visited changes.

**589. Experimental Course.**

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

**(GEO) COURSES FOR GRADUATES****601. Research Trends in Geography (3:3).**

*Pr. admission to graduate program in geography.*

An overview of the main research trends in geography which are related to the graduate program in applied geography. (Graded on S-U basis)

**602. Regional Planning (3:3).**

Regional development and planning processes focused on regional planning techniques and law.

**603. Understanding Geographic Information Systems (3:3).**

Study and application of geographic information systems for professional problem-solving, spatial analysis, and mapping.

**605. Seminar in Environmental Studies (3:3).**

Selected topics of current interest in environmental studies.

**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.

**612. Natural Resource Geography (3:3).**

Application of geographical theory to natural resource use and distribution. Emphasis on resource use and constraints to development.

**620. Spatial Analysis (3:3).**

*Pr. 523 and STA 571 or equivalent.*

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.

**622. GIS Applications in Urban Planning (3:3).**

*Pr. 322 (or equivalent) and 523 or permission of instructor.*

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.

**623. Seminar in Geographic Information Science (3:3).**

*Pr. 323 and 523 or permission of instructor.*

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.

**631. Transportation Planning (3:3).**

*Pr. 502 or permission of instructor.*

Theory and practice of transportation planning with an emphasis on urban transportation systems.

**641. Earth Surface Processes and Landforms (3:3).**

*Pr. 314/314L or equivalent advanced undergraduate course in geomorphology.*

Advanced systematic study of geomorphology with applications to human responses to natural hazards and environmental management.

**690. Research Problems in Applied Geography (3).**

*Pr. graduate course on the topic.*

Independent study on a topic of special interest.

**695. Internship (1-6).**

*Pr. 18 hours in the M.A. in applied geography program.*

Practical experience in a professional setting related to the student's main topic of interest. Includes written paper linking the topic to the experience. May be repeated for a maximum of 6 hours credit.

**699. Thesis (1-6).**

*Pr. permission of Geography Thesis Committee.*

**711. Experimental Course.**

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

**750. Advanced Spatial Analysis (3:3).**

*Pr. 620.*

Theory and practice in spatial analysis with an emphasis on spatial statistics. Spatial pattern analysis, spatial association and interpolation, spatial data mining.

**760. Research Design (3:3).**

*Pr. STA 571 or equivalent.*

Design and execution of applied research projects as practiced by professional geographers.

**761. History of Geographic Thought (3:3).**

*Pr. admission to doctoral program in geography or allied field.*

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.

**771. Doctoral Seminar in Geographic Information Science (3:3).**

Advanced seminar in the theory, practice, and technical aspects of Geographic Information Science.

**781 - Seminar in Earth Science/Natural Resources (3:3).**

*Pr. 612 or 641 or permission of instructor.*

Directed readings and research proposal development on selected aspects of natural resource policy and management from the perspective of earth science.

**791. Seminar in Urban Planning/Economic Development (3:3).**

*Pr. 502 or 533 or permission of instructor.*

Directed readings on selected aspects of urban planning/economic development focused on theory and policy issues from a geographic perspective.

**799. Dissertation (1-21).**

*Pr. completion of all Ph.D. course requirements and examinations.*

Required of all Ph.D. in geography candidates. May be taken in two or more semesters.

**801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF GERMAN, RUSSIAN, AND JAPANESE STUDIES

337A McIver Building  
(336) 334-5427  
<http://www.uncg.edu/gar>

*Professor*

**Andreas Lixl**, Ph.D., German cultural history, 19<sup>th</sup> and 20<sup>th</sup> century; German-Jewish history, exile studies, modern German literature (Head of Department).

*Associate Professor*

**Jeffrey T. Adams**, Ph.D., German literary criticism and history, age of Goethe, lyric poetry.

*Assistant Professors*

**Kathleen M. Ahern**, Ph.D., Slavic literatures, Russian literary criticism and cultural history, 20<sup>th</sup> century Russian poetry, Russian and African American literary ties.

**Karin Baumgartner**, Ph.D., German literature, criticism, women's studies, film.

(No graduate degree program offered.)

## (GER) COURSES FOR ADVANCED UNDERGRU- ATES AND GRADUATES

**589. Experimental Course.**

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

## (GER) COURSES FOR GRADUATES

**711. Experimental Course.**

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

## (RUS) COURSES FOR ADVANCED UNDERGRADU- ATES AND GRADUATES

**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 (Bely, Sologub, Pasternak, and Solzhenitsyn). Analysis of the artistic structure and ideas, within the context of Russian literary history, philosophy, and religious thought.

**589. Experimental Course.**

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

## (RUS) COURSES FOR GRADUATES

**711. Experimental Course.**

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

## GRADUATE PROGRAMS IN GERONTOLOGY

119 McIver Street  
<http://www.uncg.edu/gro>

**Program Director:**

**Janice I. Wassel**, Ph.D., Retirement decisions of couples and professionals, healthy aging, caregiving and family systems (Gerontology and The Graduate School).

**Interdisciplinary Faculty and Advisors:***Professors*

**Jane E. Myers**, Ph.D., Gerontological counseling, adult development, developmental counseling, wellness, clinical assessment, adult children of older adults (Department of Counseling and Educational Development).

**Kathleen Williams**, Ph.D., Coordination and control of movement in aging adults, evaluation and validation of movement sequences (Department of Exercise and Sport Science).

*Associate Professors*

**Beth E. Barba**, Ph.D., Human/animal interactions with older adults, Eden Alternative (team care delivery, animals and children) in nursing homes, failure to thrive in older adults (School of Nursing).

**John Dunlosky**, Ph.D., Cognitive aging (memory decline), intervention programs (Department of Psychology).



**Virginia A. Hinton, Ph.D.**, Normal speech pathology (Department of Communication Sciences and Disorders).

**Laurie M. Kennedy-Malone, Ph.D.**, Community-gerontological nursing (School of Nursing).

*Visiting Associate Professor*

**Michele Haber, M.P.H., M.D.**, Individual geriatric assessment and improvement, staff and program development for long-term care facilities and other organizations serving seniors (Public Health Education).

*Assistant Professors*

**Christina O. Lengyel, Ph.D.**, Nutrition and health issues of the elderly, dietary assessment techniques in long-term care centers, food service satisfaction (Nutrition and Foodservice Systems).

*Adjunct Instructors*

**Anne R. Daniel, M.A.**, Medicare and Medicaid, health policy, medical care costs and the health insurance industry affecting older adults and families (Public Health Education).

**Syble Solomon, M.A.**, Life planning and retirement preparation (The Graduate School).

The Graduate School offers graduate work leading to a Post-Baccalaureate Certificate and a Master of Science in gerontology. Students wishing to combine a Post-Baccalaureate Certificate in gerontology with a degree should consult with the Director of the gerontology program and with the department of interest.

### Admission Requirements for the Post-Baccalaureate Certificate

In addition to the admissions requirements set forth by The Graduate School, applicants to the Post-Baccalaureate Certificate in gerontology must complete the following prerequisites before admission to the program:

1. Baccalaureate degree from a nationally recognized college or university.
2. A minimum GPA of 3.0.
3. Three letters of reference.
4. Personal essay elaborating on applicant's experience and/or interest in working with the elderly.

Applications to the Post-Baccalaureate Certificate in gerontology are considered on a rolling basis throughout the year.

### SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN GERONTOLOGY

**Fifteen (15)** credit hours must be successfully completed during four academic years to earn the certificate. Courses fulfilling the certificate program may be used to meet requirements in a degree program in accordance with the policies of The Graduate School.

#### A. Required Core Courses (6 hours)

GRO 501 - Seminar: Critical Issues of the Aged (3)  
GRO 649 - Gerontology Practicum or Supervised Research (3)

#### B. Electives (9 hours)

To meet the student's educational objectives, three courses (9 hours) are selected under advisement from three core areas:

Biology/health  
Gerontology  
Psychosocial

### Admission Requirements for the Master of Science in Gerontology

In addition to the admissions requirements set forth by The Graduate School, applicants to the Master of Science in gerontology must complete the following prerequisites before admission to the program:

1. Baccalaureate degree from a nationally recognized college or university.
2. A minimum GPA of 3.0.
3. Satisfactory score on the Graduate Record Exam (GRE) or Miller Analogies Test (MAT) taken within five years.
4. Three letters of reference.
5. Personal essay elaborating on applicant's experience and/or interest in working with the elderly.

Applications to the Master of Science in gerontology are considered on a rolling basis throughout the year. Applicants who wish to be considered for scholarships must have their applications completed by March 1.

### SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN GERONTOLOGY

The Master of Science in gerontology requires **36** hours of course work and practicum/internships to be completed within five academic years. The program offers a thesis and non-thesis option. At least 50% of all course work must be at the 600- or 700-level. It is rec-

ommended that students complete the statistics requirement prior to enrolling in GRO 620. Students accepted without an undergraduate statistics course are encouraged to complete such a course prior to enrolling in the graduate statistics course.

### A. Required Core Courses (18 hours)

GRO 501 - Seminar: Critical Issues of the Aged (3)  
 GRO 620 - Research Methods in Gerontology (3)  
 GRO 649 - Gerontology Practicum or Supervised Research (3)  
 GRO 651 - Integrative Seminar in Gerontology (3)  
 GRO 679 - Advanced Practicum/Supervised Research (3)  
 ERM 617 - Statistical Methods in Education (3) **or** STA 571 - Statistical Methods for Research I (3) **and** STA 571L - Statistical Methods Laboratory I (1)

### B. Electives (18 hours)

To meet the student's educational objectives, eighteen (18) hours are selected under advisement from three academic areas:

Biology/health  
 Gerontology  
 Psychosocial

### C. Thesis Option (6 hours)

GRO 699 - Thesis (6)

With faculty approval, students who are interested in exploring a specific research problem in depth may choose to complete a thesis. Students must register for six (6) hours of thesis thereby reducing elective hours to 12.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN GERONTOLOGY WITH A CONCENTRATION IN NONPROFIT MANAGEMENT

The Gerontology Program offers a program of study leading to a Master of Science in gerontology with a concentration in nonprofit management. Graduates are prepared to meet the growing demand for trained professionals in public service at local, state and federal agencies; private, nonprofit agencies, and voluntary organizations serving the elderly and/or meeting the needs of an aging society. This program may be completed with a thesis (45 hours) or a non-thesis option (39 hours). All academic work must be successfully completed within five academic years. Core courses and choice requirements are completed in both the Department of Political Science and in the Gerontology Program. Elective courses are selected with faculty advisement to permit

tailoring of the program of study to the student's specific interests. Refer to the political science course offerings for the PSC course descriptions.

### A. Required Core Courses (21 hours)

GRO 501 - Seminar: Critical Issues of the Aged (3)  
 GRO 620 - Research Methods in Gerontology (3)  
 GRO 649 - Gerontology Practicum or Supervised Research (3)  
 GRO 651 - Integrative Seminar in Gerontology (3)  
 ERM 617 - Statistical Methods in Education (3) **or** STA 571 - Statistical Methods for Research I (3) **and** STA 571L - Statistical Methods Laboratory I (1)  
 PSC 540 - Nonprofit Management and Leadership (3)  
 PSC 550 - Philanthropy and Resource Development (3)

### B. Choice Requirements (3 hours)

Students must choose three of the following:

PSC 511B - Problems in Public Management: Marketing for Public and Nonprofit Agencies (1)  
 PSC 511D - Problems in Public Management: Strategic Planning (1)  
 PSC 511F - Problems in Public Management: Financial Management (1)  
 PSC 511G - Problems in Public Management: Grant Writing (1)  
 PSC 511N - Problems in Public Management: Nonprofit Law (1)

### C. Elective Requirements (12 hours)

With faculty consultation, students select 12 hours of elective courses at the 500- or 600-level with at least 3 credit hours in political science and 3 credit hours in gerontology. Other possible electives include courses in business administration, counseling, human development and family studies, public health education, and/or social work.

### D. Practicum Requirement (3 hours)

GRO 679 - Advanced Practicum/Supervised Research (3)

With advisement of faculty in the Gerontology Program and the Department of Political Science, students select an appropriate structured setting as an experiential learning activity within a public or nonprofit agency. The practicum will provide students with practical experience in the ongoing operations of an agency of government or in an organization engaged in public affairs activities serving the elderly or addressing the needs of an aging society.

### E. Thesis Option (6 hours)

GRO 699 - Thesis (6)

With faculty approval, students who are interested in exploring a specific research problem in depth may choose to complete a thesis.

## (GRO) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

- 501. Seminar: Critical Issues of the Aged** (3:3).  
Intensive review and analysis of the literature and research on issues of aging and the unresolved problems. (FA)
- 589. Experimental Course.**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

## (GRO) COURSES FOR GRADUATES

- 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. May be repeated for a maximum of 3 credits when topic varies.
- 610. Life Planning for the Third Age** (3:3).  
*Pr. permission of instructor.*  
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.
- 620. Research Methods in Gerontology** (3:3).  
*Pr. 501 or permission of instructor.*  
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.
- 649. Gerontology Practicum or Supervised Research** (3:1:8).  
*Pr. 501 and permission of instructor.*  
Supervised experience in structured setting for older adults, linking practice to theory; or supervised research in a relevant area of gerontology for professional development. May be repeated once for credit.
- 651. Integrative Seminar in Gerontology** (3:3).  
*Pr. enrollment in the M.S. in gerontology program and completion of at least 24 hours of course work including: 501, 620, 649, ERM 617 or STA 571 (plus lab), and 12 hours of gerontology electives.*  
Integration of current literature and theoretical applications in gerontology focusing on specific area(s) of student's specialty and practicum experiences. Additional emphasis on professional writing, presentations, networks, and extramural funding. (SP)
- 676. Special Topics in Gerontology** (1-3).  
Study of a special topic in gerontology. May be repeated for credit when topic varies.
- 679. Advanced Practicum/Supervised Research** (3:0:3-9)  
*Pr. admission to the M.S. in gerontology. Completion of at least 2/3 course work, including 501, 620, and 649 and permission of instructor.*  
Supervised experience as a participant/observer in structured setting with older adults in order to link theory and practice and increase professional expertise or supervised research in gerontological topic.
- 695. Independent Study** (1-3)  
Intensive study in an area of special interest in gerontology. May be repeated for a maximum of 6 semester hours credit.

- 699. Thesis** (1-6).  
*Pr. 501, 620, 649, 651, 660.*  
Individual guidance in the development of a specific research problem. May be repeated for a maximum of 6 hours credit. (Graded on S-U basis)
- 711. Experimental Course.**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 801. Thesis Extension** (1-3).
- 803. Research Extension** (1-3).

## DEPARTMENT OF HISTORY

219 McIver Building  
(336) 334-5992  
<http://www.uncg.edu/his>

### Professors

- Robert M. Calhoon**, Ph.D., Early American history, southern religious history, American Revolution, 18th century cultural.
- Kenneth L. Caneva**, Ph.D., History of science, 19th century physical science, science in Germany.
- William A. Link**, Ph.D., U.S. South, 20th century U.S., North Carolina, progressive era south, educational and social history (Head of Department).
- Frank T. Melton**, Ph.D., English history 1485-1714, reformation.
- Karl A. Schleunes**, Ph.D., Modern German history, the Holocaust, national socialism, history of antisemitism, World War II.
- Loren Schweninger**, Ph.D., African-American history, race, slavery, quantitative methods.

### Associate Professors

- Jodi Bilinkoff**, Ph.D., Renaissance and Reformation Europe, early modern Spain, religion, gender.
- Mary Floyd**, Ph.D., Latin America, Venezuela, 19th century.
- Phyllis W. Hunter**, Ph.D., American, Colonial, material culture.
- Colleen Kriger**, Ph.D., African history, European expansion in Africa, material culture, oral history.
- Paul Mazgaj**, Ph.D., Modern European intellectual history, French history, history of ideologies, French revolution, Napoleonic era (Director of Graduate Study).
- Stephen Ruzicka**, Ph.D., Ancient history, Greek, Roman, Persia.
- Lisa C. Tolbert**, Ph.D., American cultural history, 19th century U.S., antebellum South, architectural history, museum studies.

*Assistant Professors*

**James A. Anderson**, Ph.D., East Asia, China, Vietnam.

**Richard E. Barton**, Ph.D., Medieval history.

**Peter S. Carmichael**, Ph.D., Civil War, reconstruction, old South.

**Kathleen B. Franz**, Ph.D., 20th century U.S. cultural and social history, history of technology, museum studies, popular culture.

**Thomas F. Jackson**, Ph.D., Recent America, civil rights.

**Jeffrey W. Jones**, Ph.D., Russia.

**Lisa Levenstein**, Ph.D., U.S. women's history.

The Department of History offers the Post-Baccalaureate Certificate in two concentrations (museum studies and historic preservation) and degree programs leading to the Master of Arts in four concentrations (U.S., European, museum studies, and historic preservation) and the Ph.D. in American 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.

The Master of Arts in history offers excellent preparation for those planning to teach the subject at community colleges and secondary schools. The degree also provides a solid foundation for those who go on to Ph.D. programs or who find employment in government and business. The M.A. in history improves analytic, research, and writing skills.

The public history concentration in museum studies and historic preservation provides intensive graduate-level preparation in the core history program as well as hands-on training in museum and historical preservation work. Through mentoring and an internship program, students are prepared to enter the job market in the museum and preservation fields.

Applicants to the M.A. concentrations must present an approved undergraduate background (though not necessarily a major) in history.

The Ph.D. program prepares students to teach and conduct research in American history and to understand it within an expanded global perspective. Students are required to integrate their major field of study, American history, with one of three minor fields: African Ameri-

can history, the history of the Atlantic World, or European history. This broader intercontinental perspective—including the Americas, Europe, and Africa—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.

The Ph.D. program admits only a few highly qualified students each year. 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 the fostering of 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.

### **SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATES IN MUSEUM STUDIES AND HISTORIC PRESERVATION**

The Departments of History and Interior Architecture jointly offer two Post-Baccalaureate Certificates: museum studies and historic preservation. The two certificates provide graduate students training and credentials to pursue careers in history museums, historic preservation, cultural resource management, management of historic sites, and related public history professions. Both certificates require 15 semester hours of course work. Certificate students must meet all requirements for admission to The Graduate School in one of the sponsoring departments and will be able to pursue a master's degree simultaneously. Graduate students in related fields such as applied geography, art or public policy may also pursue a certificate while completing their graduate degrees. Certificate requirements include 9-12 hours of core courses and 3-6 hours of electives. Students must maintain a minimum grade point average of 3.0 in all certificate course work. No more than 3 semester hours of C will count towards a certificate.



## A. Required Courses (9-12 Hours)

### Museum Studies (9 hours)

- HIS 626 - Management and Leadership in Public History (3)
- HIS 627 - Museum and Historic Site Interpretation: Principles and Practice (3)
- \*HIS 690 - Internship (3)
- 6 hours of electives approved by the Director of Graduate Study

### Historic Preservation (12 hours)

- HIS 543 - Historic Preservation: Principles and Practice (3)
- HIS 624 - History of American Landscapes and Architecture (3)
- HIS 625 - Preservation Planning and Law (3)
- \*HIS 690 - Internship (3)
- 3 hours of electives approved by the Director of Graduate Study

\*Students with appropriate professional work experience may substitute an elective for the internship requirement with prior approval of the Director of Graduate Study.

## B. Electives (Historic Preservation - 3 hours; Museum Studies - 6 hours)

To complete the 15 hours of course work for either certificate, electives should be selected with the prior approval of the Director of Graduate Study from the following list:

- HIS 505 - Introduction to Archival Management (3)
- HIS 536 - History of Decorative Arts (3)
- HIS 545 - Southern History and Southern Material Culture in a Museum Context (3)
- HIS 547 - Museum Curatorship: Collections Management (3)
- HIS 548 - Architectural Conservation (3)
- HIS 552 - History and Theories in Material Culture (3)
- HIS 555 - Field Methods in Preservation Technology (3)
- HIS 628 - Identification and Evaluation of the Historic Built Environment (3)
- ART 590 - Museum Studies (3)
- ATY 597 - Special Problems in Anthropology (3)
- GEO 502 - Urban Planning (3)
- PSC 540 - Nonprofit Management and Leadership (3)

Core courses for either certificate may be taken as electives for the other certificate. Because public history requires interdisciplinary work, students may substitute 3 hours of electives from another department with the permission of the Director of Graduate Study.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS

The Department of History offers a graduate program of study in the areas of American, European, and public history, leading to a Master of Arts degree. Students in American and European history complete a **33 hour** program consisting of a major concentration of 21 hours and a minor concentration of 12 hours. Public history students choose a concentration in either historic preservation or museum studies and complete a **36 hour** degree consisting of 21 hours in history courses and 15 hours in the selected public history concentration. All graduate students must complete at least 15 hours of course work at the 600-level or above. Upon entering the program, students will develop a plan of study with prior approval from the Director of Graduate Study.

## A. Required Courses (15-21 hours)

### American history:

- HIS 701 - Colloquium in American History before 1865 (3)
- HIS 702 - Colloquium in American History since 1865 (3)
- HIS 703 - Seminar in American History (3)
- HIS 704 - Seminar in American History (3)
- HIS 709 - Introductory Research Seminar (3)

### European history:

- HIS 705 - Colloquium in European History before 1789 (3)
- HIS 706 - Colloquium in European History since 1789 (3)
- HIS 707 - Seminar in European History (3)
- HIS 708 - Seminar in European History (3)
- HIS 709 - Introductory Research Seminar (3)

## Public history (21 hours; requirements for both the museum studies and historic preservation concentrations):

- HIS 701-702 - Colloquia in American History (6) **or** HIS 705-706 - Colloquia in European History (6)
- \*HIS 703-704 - Seminars in American History (6) **or** HIS 707-708 - Seminars in European History (6)
- HIS 709 - Introductory Research Seminar (3)

\*Public history students may elect to do a thesis in lieu of either HIS 703-704 or HIS 707-708

### Additional General History Requirements for Public History Students (6 hours):

Students in public history must also complete 6 hours in general history electives. These electives should be designed as part of a coherent program of study with prior approval from the Director of Graduate Study.

## B. Electives and Concentration Requirements

### Major concentration:

By approval of the Director of Graduate Study, students in the areas of American and European history select, in addition to the 15 hours of core courses, 6 to 9 hours in their major concentration. They include:

#### **American history:**

- HIS 502 - African American History: Selected Topics (3)
- HIS 515 - American Diplomatic History: The Twentieth Century (3)
- HIS 517 - American Economic History: Colonial Times to 1865 (3)
- HIS 518 - American Economic History: 1865 to Present (3)
- HIS 520 - Southern History: Selected Topics (3)
- HIS 522 - Early American History: Selected Topics (3)
- HIS 524 - Twentieth Century U.S. History: Selected Topics (3)
- HIS 526 - The Civil War and Reconstruction: Selected Topics (3)
- HIS 530 - History of Sexuality: Selected Topics (3)
- HIS 546 - American Cultural History: Selected Topics (3)
- HIS 549 - American Social History: Family and Religion (3)
- HIS 551 - Gender and History: Selected Topics (3)
- HIS 552 - History and Theories of Material Culture (3)
- HIS 624 - History of American Landscapes and Architecture (3)

#### **European history:**

- HIS 510 - Historiography (3)
- HIS 541 - Ancient World: Selected Topics (3)
- HIS 542 - Middle Ages: Selected Topics (3)
- HIS 544 - Early Modern Europe: Selected Topics (3)
- HIS 560 - Nineteenth Century Europe: Selected Topics (3)
- HIS 562 - Twentieth Century Europe: Selected Topics (3)
- HIS 563 - Early Modern England: Selected Topics (3)
- HIS 564 - Modern Britain: Selected Topics (3)
- HIS 567 - French History: Selected Topics (3)
- HIS 571 - Modern European Thought: Selected Topics (3)
- HIS 574 - Modern Germany: Selected Topics (3)
- HIS 575 - Modern Russian History: Selected Topics (3)

#### **Public history (15 hours):**

By approval of the Director of Graduate Study, students in the area of public history complete a 15 hour concentration in either museum studies or historic preservation. Students in the museum studies concentration complete 9 hours of required courses and 6 additional hours of public history courses listed below. Students in the historic preservation concentration complete 12 hours of

required courses and 3 hours of additional public history courses listed below. Because public history requires interdisciplinary work, students may substitute 3 hours of electives from another department with the permission of the Director of Graduate Study. Requirements for both concentrations are as follows:

#### **Museum Studies Concentration Required Courses (9 hours)**

- HIS 626 - Management and Leadership in Public History (3)
- HIS 627 - Museum and Historic Site Interpretation: Principles and Practice (3)
- \*HIS 690 - Internship (3)

#### **Historic Preservation Concentration Required Courses (12 hours)**

- HIS 543 - Historic Preservation: Principles and Practice (3)
- HIS 624 - History of American Landscapes and Architecture (3)
- HIS 625 - Preservation Planning and Law (3)
- \*HIS 690 - Internship (3)

\*Students in either concentration with appropriate professional work experience may substitute an additional public history elective for the internship requirement with the permission of the Director of Graduate Study.

#### **Additional Public History Courses (3-6 hours):**

- HIS 505 - Introduction to Archival Management (3)
- HIS 536 - History of Decorative Arts (3)
- HIS 545 - Southern History and Southern Material Culture in a Museum Context (3)
- HIS 547 - Museum Curatorship: Collections Management (3)
- HIS 548 - Architectural Conservation (3)
- HIS 555 - Field Methods in Preservation Technology (3)
- HIS 628 - Identification and Evaluation of the Historic Built Environment (3)
- ART 590 - Museum Studies (3)
- ATY 597 - Special Problems in Anthropology (3)
- GEO 502 - Urban Planning (3)
- PSC 540 - Nonprofit Management and Leadership (3)

Required courses in either concentration may be taken as electives for students in the other concentration.

#### **Minor Concentration:**

By approval of the Director of Graduate Study, students must select a minor concentration of 12 hours in an area other than their major concentration. NB: Public history students are not required to complete a specific minor concentration. This minor can be constructed from one of the following areas: American history, European history, comparative world history. Students should consult with the relevant faculty members during their first semester to create a plan of course work for the minor.

Students who choose U.S. history as their major concentration and European history as their minor concentration must complete at least one of the European colloquia (either HIS 705 or 706) as part of their minor. Students who choose European history as their major concentration and American history as their minor must complete at least one of the U.S. colloquia (either HIS 701 or 702) as part of their minor.

Students interested in a comparative world history minor are encouraged to focus on a theme topic that is integrated with their work in the major field.

Course offerings from the comparative world history minor include:

- HIS 508 - Latin America: Selected Topics (3)
- HIS 511c - Seminar in Historical Research and Writing (3)
- HIS 581 - African History: Selected Topics (3)
- HIS 587 - Southern African Kingdoms, 1780-1897 (3)
- HIS 588 - East Asian History: Selected Topics (3)
- HIS 692 - Advanced Topics in History (3)
- HIS 697 - Directed Reading (1-4)

### **C. Collateral Expertise**

Many areas of historical research require proficiency in a foreign language. Students who intend to concentrate in such areas are encouraged to substitute the written language examination, administered by the Department. Passage of the language requirement will reduce the minor from 12 to 9 hours. Students who intend to go on for a Ph.D., especially in European history, are strongly encouraged to pass the language examination.

### **D. Comprehensive Examination**

All students must pass a written comprehensive examination. The comprehensives are usually administered three times a year, during fall, spring, and summer. Students may retake a failed exam once.

### **E. Thesis**

Students have the option of completing a 3 hour thesis, with the approval of the Director of Graduate Study.

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY**

The Department of History offers a graduate program of study leading to the Ph.D. in American history. Although all students must major in U.S. history, they are encouraged to enlarge their perspective by understanding and analyzing national history in broader, international contexts. This goal will be 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.

As a basic requirement, all applicants to the Ph.D. program must hold the B.A. degree and have completed the M.A. in history. Students who enter without a M.A. in history and who seek to complete a Ph.D. must first enter the M.A. program and complete the requirements. Students who complete the M.A. at UNCG may apply some course credit toward the doctorate in history. Students who hold a M.A. from another university may receive up to 18 hours of credit toward the doctorate.

General requirements to complete the Ph.D. in history are as follows:

- A minimum of 27 hours beyond the M.A. in history if the master's degree is awarded at UNCG
- A minimum of 42 hours beyond the M.A. in history if the master's degree is awarded from another university

Upon entering the program, all students will develop a Plan of Study with the approval of the Director of Graduate Study.

### **A. Required Core Courses (24 hours)**

- HIS 701, 702 - Colloquium in American History (6)
- HIS 703, 704 - Seminar in American History (6)
- HIS 709 - Introductory Research Seminar (3)
- HIS 714 - Varieties of Teaching (3)
- HIS 750 - Ph.D. Readings Course (3)
- HIS 751 - Ph.D. Dissertation Seminar (3)

### **B. Electives in U.S. Major (6 hours)**

In addition to the core requirements, students must complete 6 hours of elective courses in their major. HIS 692 may not be counted for Ph.D. credit. Consult with the Director of Graduate Study for course offerings.

### **C. Minor Field (12 hours)**

The minor field must be chosen in one of the following concentrations: African American, Atlantic World, European. Courses should be selected to form a coherent program of study and must complement the student's program design in the major. In constructing their minor field, student's must consult with their mentor and receive the approval of the Director of Graduate Study and their Doctoral Advisory/Dissertation Committee (see item F. below). Of the 12 hours, students *must* include the following courses, depending on their choice of minor:

## African American

- HIS 710 - Colloquium in the Atlantic World (3)
- HIS 712 - Slavery in the Americas (3)
- HIS 713 - African Americans after Slavery (3)

## Atlantic World

- HIS 710 - Colloquium in the Atlantic World (3)
- HIS 712 - Slavery in the Americas (3)
- HIS 715 - Atlantic World: Selected Topics (3)

## European

- HIS 710 - Colloquium in the Atlantic World (3)
- HIS 705 - Colloquium in European History before 1789 (3)
- HIS 706 - Colloquium in European History after 1789 (3)

Where appropriate, and with the permission of the Doctoral Advisory/Dissertation Committee, doctoral students may take a maximum of 3 hours outside the Department of History as part of their minor field.

## D. Language

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.

## E. 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 and be approved by the Graduate 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.

## F. Permission to Proceed and Grade Point Average (GPA)

All students in the Ph.D. program must obtain "permission to proceed" at the end of their first year of courses (normally 18 hours). 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.

## G. Qualifying Examination

The qualifying examination, which will come at the end of the 42 hours of course work (including

a 3 hour Ph.D. readings course and a 3 hour Ph.D. seminar), will include two parts:

1. A written examination composed of questions from the major and minor fields;
2. an oral examination to be 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 either the written or oral examination (or both), he/she must retake the entire examination.

## H. Dissertation (12-15 hours)

Students will register for a minimum of 12 hours of dissertation credit (HIS 799) while researching and writing the dissertation.

## (HIS) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

Before any student may enroll in a 500-level course, the Department of History requires the completion of 6 hours of 300-level history courses or permission of the instructor.

### 502. African American History: Selected Topics (3:3).

Intensive examinations of selected topics in black history including African beginnings, slavery, racial attitudes, and civil rights. May be repeated once for credit.

### 505. Introduction to Archival Management (3:3).

*Pr. permission of instructor.*

Principles of archival management, featuring both classroom instruction in archival theory and practical experience in manuscript repositories and public and private archives. (Same as LIS 505)

### 508. Latin America: Selected Topics (3:3).

*Pr. one course in Latin American history or permission of instructor.*

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. May be repeated once for credit when topic varies.

### 510. Historiography (3:3).

Development of the historical profession and perspectives on historical writing. Selected readings by philosophers and practicing historians such as Herodotus, Ibn Khaldun, Ranke, Marx, Braudel, Thompson, Foucault, Dilthey, and Steedman.

### 511a,b,c. Seminar in Historical Research and Writing (3:3), (3:3), (3:3).

*Pr. one 300-level research intensive history course and permission of instructor.*

Locating and using historical source materials, written and oral, published and unpublished. 511a: American; 511b: European; 511c: Wider World. May be repeated once for credit when topic varies. *Required of history majors.*



**512. Public History (3:3).**

History of the preservation of America's past through museums (indoor and outdoor); collections and their interpretation; exhibitions and park and wilderness areas.

**515. American Diplomatic History: The Twentieth Century (3:3).**

Emphasis on the most important crises and the making of basic policy decisions from the Spanish American War to the present.

**517. American Economic History: Colonial Times to 1865 (3:3).**

*Pr. ECO 201 or permission of instructor.*

Evolution of the American economy through the Civil War. Emphasis on sources of economic growth and economic welfare. (Same as ECO 517)

**518. American Economic History: 1865 to Present (3:3).**

*Pr. ECO 201 or permission of instructor.*

Evolution of the American economy from the Civil War to the present. Emphasis on economic performance through time measured against the goals of full employment, price stability, and rapid growth. (Same as ECO 518)

**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. May be repeated once for credit when topic varies.

**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. May be repeated once for credit when topic varies.

**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. May be repeated once for credit when topic varies.

**526. The Civil War and Reconstruction: Selected Topics (3:3).**

Causes of the Civil War. Military events and developments on the home front in wartime, North and South. Reconstruction policy in Washington and its implementation in the South. May be repeated once for credit when topic varies.

**530. History of Sexuality: Selected Topics (3:3).**

*Pr. for undergraduates, 359 or permission of instructor.*

Intensive exploration of critical themes in the history of sexuality, including such issues as fertility control, sexual identity, and sexual politics. May be repeated once for credit when topic varies.

**536. History of Decorative Arts (3:3).**

Study of changing stylistic and cultural developments in the decorative arts with special concentration on America. (Same as IAR 536)

**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. May be repeated once for credit when topic varies.

**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. May be repeated once for credit when topic varies.

**543. Historic Preservation: Principles and Practice (3:3).**

*Pr. IAR 221, IAR 222, or permission of instructor.*

Change in historic preservation theory and practice since the 1800's with emphasis on preservation of built environment and development of philosophical approach for designers to contemporary preservation projects. (Same as IAR 543)

**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. May be repeated once for credit when topic varies.

**545. Southern History and Southern Material Culture in a Museum Context (3).**

*Pr. permission of instructors after completion of required application form.*

Combined southern history and material culture with a museum practicum. Offered each summer at the Museum of Early Southern Decorative Arts in Winston-Salem. Students selected by individual application. May be repeated for credit when topic varies with permission of instructor. (Same as IAR 545)

**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. May be repeated once for credit when topic varies.

**547. History Museum Curatorship: Collections Management (3:3).**

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

Professional practices in the care and management of historic site and history museum collections, including principles of collection development, object registration, cataloging, and preservation. (Same as IAR 547)

**548. Architectural Conservation (3:3).**

*Pr. IAR 301, IAR 332, or permission of instructor.*

Contemporary architectural conservation principles, practice and technology. Field exercises, group projects and investigation of an individual research topic expand upon lectures and readings. (Same as IAR 548)

**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.

**551. Gender and History: Selected Topics (3:3).**

*Pr. 6 hours of 300-level courses or permission of instructor.*

Varying topics in gender and history including gender and popular culture; gender, labor, race, and class; history of masculinity. May be repeated once for credit when topic varies.

**552. History and Theories of Material Culture (3:3).**

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as IAR 552)

- 555. Field Methods in Preservation Technology (3:1:6).**  
*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*  
 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. (Same as IAR 555)
- 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. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 567. French History: Selected Topics (3:3).**  
 Study of specific themes and problem areas in French history. May be repeated for credit when topic varies. May be repeated once for credit when topic varies.
- 571. Modern European Thought: Selected Topics (3:3).**  
 Study of selected themes and/or problems in European intellectual and cultural history. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 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.
- 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. (Same as ATY / IAR 578)
- 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, etc. May be repeated once for credit when topic varies.

**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.

**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. May be repeated once for credit when topic varies.

**589. Experimental Course.**

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

## (HIS) COURSES FOR GRADUATES

**624. History of American Landscapes and Architecture (3:3).**

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as IAR 624)

**625. Preservation Planning and Law (3:3).**

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as IAR 625)

**626. Management and Leadership in Public History (3:3).**

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as IAR 626)

**627. Museum and Historic Site Interpretation: Principles and Practice (3:3).**

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as IAR 627)

**628. Identification and Evaluation of the Historic Built Environment (3:2:2).**

*Pr. 550, admission to a graduate program in history or interior architecture, or permission of instructor.*

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)

**630a,b,c. Historical Conceptualization (3:3), (3:3), (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. May be repeated when topic varies.

- 690. Internship (3).**  
*Pr. at least 12 hours in history M.A. or interior architecture M.S. program and permission of Director of Graduate Study.*  
 Supervised professional experience in selected museum, historic site, or other professional setting in accordance with the major course of study of the student. (Graded on S-U basis) (Same as IAR 690)
- 692. Advanced Topics in History (3:3).**  
*Pr. admission to graduate study in history and permission of instructor.*  
 Topics in history and thematic topics not otherwise covered at the graduate level. For details, see the Director of Graduate Study.
- 697. Directed Reading (1-4).**  
*Pr. admission to graduate study in history and permission of instructor and Director of Graduate Study.*  
 A directed program of reading and research, available to the qualified student upon the recommendation of an instructor and the department head.
- 699. Thesis (1-6).**
- 701. Colloquium in American History before 1865 (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Issues of historical interpretation from the Revolution through the Civil War.
- 702. Colloquium in American History since 1865 (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Issues of historical interpretation from Reconstruction to the present.
- 703. Seminar in American History (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Research and writing on selected topics in American history.
- 704. Seminar in American History (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Research and writing on selected topics in American history.
- 705. Colloquium in European History before 1789 (3).**  
*Pr. permission of Director of Graduate Study.*  
 Topics in European social, economic, political and intellectual history from the Middle Ages to the French Revolution. Methodology and the diversity of historical approaches.
- 706. Colloquium in European History since 1789 (3).**  
*Pr. permission of Director of Graduate Study.*  
 Interpretations of selected historical problems from the French Revolution to the present.
- 707. Seminar in European History (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Research and writing on selected topics in European history.
- 708. Seminar in European History (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Research and writing on selected topics in European history.
- 709. Introductory Research Seminar (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Will focus on methods, sources, and writing; research paper based on primary and contextualized in secondary sources. May be repeated once for credit when topic varies.
- 710. Colloquium in the Atlantic World (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Introduction to the history of the Atlantic trading system, the historiography of Atlantic World studies, and comparative, cross-cultural approaches to historical research.
- 711. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 712. Slavery in the Americas (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Comparative analysis of slavery and race relations in South and Central America, the Caribbean, British North America, and the United States, 1501-1888.
- 713. African Americans After Slavery (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 African American history during the Civil War, Reconstruction, the era of Jim Crow, the civil rights and post-civil rights eras.
- 714. Varieties of Teaching (3:3).**  
*Pr. M.A. in history.*  
 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. (Graded on S-U basis)
- 715. Atlantic World: Selected Topics (3:3).**  
*Pr. permission of Director of Graduate Study.*  
 Topics include European migration, comparative colonization, African diaspora, and "underdevelopment" in Latin America and Africa. May be repeated once for credit when topic varies.
- 750. Ph.D. Readings Course (3).**  
*Pr. permission of Director of Graduate Study.*  
 Designed to provide doctoral students with a program of focused readings in the student's field of study. (Graded on S-U basis)
- 751. Ph.D. Dissertation Seminar (3:3).**  
*Pr. completion of all course requirements and qualifying examination.*  
 Students will develop a doctoral dissertation topic. (Graded on S-U basis)
- 799. Dissertation (1-12).**
- 801. Thesis Extension (1-3).**
- 802. Dissertation Extension (1-3).**
- 803. Research Extension (1-3).**

## DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

228 Stone Building  
(336)334-5307

<http://www.uncg.edu/hdf>

### *Professors*

**Cheryl Buehler**, Ph.D., Interparental conflict and child adjustment, divorce and family transitions, family foster care.

**David H. Demo**, Ph.D., Family diversity, family relationships and children's well-being; parent-child interaction; self-concept development (Chair of Department).

**Garrett Lange**, Ph.D., Learning, memory, cognitive development, family and schooling influences (Director of Graduate Study).

**Marion O'Brien**, Ph.D., Child care, school environments, and children's development; parenting and children's socioemotional development; infant-toddler behavior and development.

**B. Kay Pasley**, Ed.D., Marital dynamics in divorce and marriage, family stress, fathering, intervention with divorcing families.

### *Visiting Emeritus Professors*

**Vira R. Kivett**, Ph.D., Social gerontology, rural aging, informal social supports in later life, minority aging (sex and ethnicity).

**J. Allen Watson**, Ph.D., Developmental theory, children and technology.

### *Associate Professors*

**Deborah J. Cassidy**, Ph.D., Child-care quality, early childhood professional development, developmentally appropriate practices.

**Anne C. Fletcher**, Ph.D., Parental and peer influences on adolescent adjustment, parent and adolescent social integration, social network closure.

**Linda Lott Hestenes**, Ph.D., Young children's understanding of disability, inclusive classrooms, early peer relations.

**Andrea Hunter**, Ph.D., Diversity in children's living arrangements, grandparenthood, multigeneration family systems, constructions of gender.

**Mary Y. Morgan**, Ph.D., Women's everyday lived experiences using feminist research approaches and exploring ethnic and racial diversity.

**Jonathan Tudge**, Ph.D., Ecological and socio-cultural theory, children's development in ethnic, social, and cross-cultural contexts, links between home, preschool and school.

### *Assistant Professors*

**Heather Helms**, Ph.D., Marriage, friendship, work and family in dual-earner couples, midlife parenting and relationships.

**Esther M. Leerkes**, Ph.D., Maternal behavior and infant development, intervention strategies for families at risk, child influences on parents and family.

**C. Chris Payne**, Ph.D., Family-school interface, teacher-child relationships, developmentally appropriate programs in early childhood, childcare and early education policy and evaluation.

**Mary Catherine Scott-Little**, Ph.D., Early childhood education standards and assessments, school readiness and after-school programs.

**Sarah M. Shoffner**, Ph.D., Adolescent employment, low income rural youth's life plans, dual-career couples, women's leadership roles (Director of Internship Program).

**Sudha Shreeniwas**, Ph.D., Well-being and health over the life course; ethnicity, culture, and health among the elderly.

**Andrew J. Supple**, Ph.D., Youth and adolescent development, parent-child relationships, cultural variations, research methods, and program evaluation.

The Department of Human Development and Family Studies offers graduate work leading to the Master of Education, Master of Science, and Doctor of Philosophy degrees in human development and family studies.

Departmental faculty have a wide range of research interests and methodological approaches which include experimental tests of children's social and cognitive development, micro-analytic analyses of peer and parent-child interactions, survey, interview, and qualitative/interpretive investigations of individual development and family processes, and the design and evaluation of educational and intervention programs for children, family members, and educational personnel. Within these general areas of concentration 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, media and technology, 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. Broad areas of concentration include child and adolescent development, child care and early childhood education, adult development and aging, divorce/remarriage, parent and family life education, and family relationships. Students are expected to engage in graduate work full-time.

### Admissions

Applications for the M.S. and Ph.D. programs in human development and family studies are reviewed by the department once annually (beginning February 1) for admission during the fall semester. Applications for the M.Ed. program are reviewed continuously throughout the year. In addition to a review of the applicant's Graduate Record Examination scores, recommendations for successful graduate study, and previous academic training, the department considers the compatibility of the student's interest areas with those of the faculty and with curriculum emphases, as well as the student's availability for full-time graduate study.

### **SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN HUMAN DEVELOPMENT AND FAMILY STUDIES WITH A CONCENTRATION IN BIRTH-KINDERGARTEN: INTERDISCIPLINARY STUDIES IN EDUCATION AND DEVELOPMENT**

The Departments of Human Development and Family Studies and Specialized Education Services offer a joint program of study leading to a 39 hour Master of Education degree. Those who do not have initial teaching license in B-K will be required to take prerequisite courses to fulfill this requirement. Upon completion of this program of study, students will be eligible for "M" license in birth-kindergarten.

### **A. Research Requirements (9 hours)**

ERM 604 - Methods of Educational Research (3)  
HDF 641 - Contemporary Research in Family Studies (3)  
HDF 651 - Contemporary Research in Human Development (3)

### **B. Theory and Practice Requirements (21 hours)**

HDF 609 - Advanced Early Childhood Educational Theory and Practices (3)  
HDF 632 - Infant Development (3)  
HDF 660 - Families of Individuals with Special Needs (3)  
HDF 683 - Leadership and Mentoring Roles in Educating Young Children (3)  
SES 601 - Programs and Policies in Early Intervention (3)  
SES 602 - Theory and Practice in Early Intervention (3)  
SES 603 - Preschool Disabilities: Assessment and Evaluation (3)

### **C. Practicum (6 hours)**

SES 604 - Internship in Early Childhood (6)

### **D. Electives (3 hours)**

With advisor's approval, students complete 3 semester hours.

### **E. Professional Portfolio**

Prior to completion of the program, each student will be expected to complete a professional portfolio. This portfolio will demonstrate their mastery of skills and knowledge in the program competency areas. The portfolio will be developed and submitted to the student's advisor and be evaluated by a team of two faculty and one practicing professional.

### **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

The Department of Human Development and Family Studies offers two graduate programs of study leading to the Master of Science degree. The M.S. thesis-option program prepares graduates to conduct research or to embark on a doctoral program of study. The M.S. non-thesis option prepares graduates as consumers of research enabling them to translate and apply research findings in government and community agencies or to develop social policy.

## General Policy

The M.S. thesis option program requires a minimum of **38** hours and has a master's thesis as its capstone experience. The M.S. non-thesis option program requires a minimum of **36** hours and includes an internship experience in a community or state agency as a capstone experience.

## Thesis Option (38 hours)

### A. Core Content (14 hours)

- HDF 641 - Contemporary Research in Family Studies (3)
- HDF 642 - Family Theory (3)
- HDF 651 - Contemporary Research in Human Development (3)
- HDF 652 - Theories of Human Development (3)
- HDF 689 - Professional Seminar I (1)
- HDF 690 - Professional Seminar II (1)

### B. Area of Specialization (9 hours)

Area of specialization courses are selected jointly by the student and the faculty advisory committee. All **9** hours must be fulfilled through content courses, and at least **6** of the **9** hours must be taken within the Department of Human Development and Family Studies.

### C. Statistics and Methodology (9 hours)

- ERM 680 - Intermediate Statistical Methods in Education (3)
- ERM 681 - Design and Analysis of Educational Experiments (3)
- HDF 630 - Research Methods in HDFS (3)

### D. Research (6 hours)

- HDF 699 - Thesis (6) and oral examination

## Non-thesis Option (36 hours)

### A. Core Content (9 hours)

- HDF 641 - Contemporary Research in Family Studies (3)
- HDF 642 - Family Theory (3) **or** HDF 652 - Theories of Human Development (3)
- HDF 651 - Contemporary Research in Human Development (3)

### B. Area of Specialization (9 hours)

- HDF 612 - Seminar in Parent-Child Relations (3)
- HDF 621 - Advanced Theories and Principles of Parenting (3)
- HDF 622 - Family Life Education (3)

### C. Applied Research Requirements (6 hours)

- ERM 604 - Methods of Educational Research (3)
- ERM 642 - Evaluation of Educational Programs (3)

### D. Applied Research Internship (6 hours)

- HDF 600 - Supervised Professional Experience in Human Development and Family Studies (6)

## E. Additional Requirements (6 hours)

To be selected jointly by the student and the faculty advisory committee.

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN HUMAN DEVELOPMENT & FAMILY STUDIES

The Department of Human Development and Family Studies offers a graduate program leading to a Doctor of Philosophy of **86** hours beyond the baccalaureate degree (for students entering the program in the M.S./Ph.D. track) or a minimum of **48** 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 Master of Science 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 **48** hours of course work and research shown below.

### A. Area of Specialization (18 hours)

The Ph.D. 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 M.S. Of the **18** hours to be taken for the Ph.D., **9** hours must be fulfilled through content knowledge courses.

### B. Professional Development (1 hour)/ Teaching Practicum (5 hours)

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 664 - College Teaching Practicum in Human Development and Family Studies I (2)
- HDF 691 - Professional Seminar III (1)
- HDF 765 - College Teaching Practicum in Human Development and Family Studies II (3)

### C. Statistics and Methodology (12 hours)

- STA 671 - Multivariate Analysis (3)

- One content course focusing on research methodology (3)
- Two content courses focusing on either research methodology and/or statistical analysis (6)

## D. 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.

## E. Research (12 hours)

HDF 799 - Dissertation (12)

Requirements for the M.S. and Ph.D. program of study are specified further in departmental curriculum guides. A majority of students enter the M.S./Ph.D. track.

## (HDF) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 502. Gender in Families (3:3).

*Pr. 211, 212, 410 or permission of instructor.*

Influence of social, philosophical, political, and technological change on gender relationships in families in the past, present, and future.

### 510. Child and Family Ecology (3:3).

*Pr. 412 and 452 or graduate standing.*

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.

### 527. Problems in Human Development and Family Studies (2-6).

*Pr. permission of instructor.*

Designated special problems.

### 589. Experimental Course.

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

## (HDF) COURSES FOR GRADUATES

### 600. Supervised Professional Experience in Human Development and Family Studies (1-6:0:3-12)

*Pr. permission of instructor.*

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.

### 601. Directed Individual Study in Human Development and Family Studies (1-6).

*Pr. 6 semester hours of HDF graduate courses and permission of instructor.*

### 602. Problems in Human Development and Family Studies (2-4).

Designated special problems such as Child Care Administration, Parent Education, Practicum, Child Guidance. May be repeated for credit.

### 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. Students must obtain approval of a supervising graduate faculty member before registering. May be repeated for credit; credit can not be used to meet minimum hour requirements of a degree program. (Graded on S-U basis)

### 606. 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.

### 607. Feminist Theory and Research Methodologies (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.

### 608. Personality and Social Development (3:3).

*Pr. 651 and 652 or permission of instructor.*

Integrates theory and research focusing on dimensions of normal personal-social growth from infancy through childhood. Importance of peer and family relations in the development of social attitudes, self-concept, prosocial behaviors, social conformity, and moral reasoning. (Same as PSY 608)

### 609. Advanced Early Childhood Educational Theory and Practices (3:3).

*Pr. HDF/CUI 435 or equivalent.*

Examination of current curriculum approaches in early childhood programs. Theoretical and developmental foundations of these approaches, accepted early childhood classroom practices, research in curriculum effectiveness will be researched and critiqued.

### 610. Child Development in Cultural Context (3:3).

Examines how culture influences children's development and is simultaneously influenced by members of that culture.

### 612. Seminar in Parent-Child Relations (3:3).

*Pr. 641, 651, 652, or permission of instructor.*

Current theoretical and research perspectives on parent-child relations. Child-rearing practices and socialization processes.

### 618. Intellectual Development in Young Children (3:3).

*Pr. 651, 652, or permission of instructor.*

Current theories and recent research on intellectual development from infancy through middle childhood; language acquisition, thinking, conceptual representation, learning, memory, and perceptual development.

### 621. Advanced Theories and Principles of Parenting (3:2:3).

*Pr. 612 or permission of instructor.*

Examination of established parenting programs. Theoretical foundations and issues related to program selection and evaluation. Opportunity for practical experience in assisting parent educators in the community.

### 622. Family Life Education (3:3).

*Pr. 641 or permission of instructor.*

Issues in family life education in a wide variety of settings.

**630. Research Methods in Human Development and Family Studies (3:3).**

Research methods and designs of research with children and families. Core requirement for M.S. and Ph.D. degrees.

**632. Infant Development (3:2:3).**

*Pr. 651, 652.*

Principles of perceptual, motor, cognitive and socio-emotional development in infants and very young children.

**635. Seminar in Adolescence (3:3).**

*Pr. 651 or permission of instructor.*

Integrates theory, research, and practice focusing on dimensions of normative and problematic adolescent development within its ecological contexts.

**641. Contemporary Research in Family Studies (3:3).**

*Pr. HDF major or permission of instructor.*

Examination of contemporary research findings in the field of family studies.

**642. Family Theory (3:3).**

*Pr. HDF major and 641 or permission of instructor.*

Theories that relate to studying families; linking conceptual ideas, theorizing, and research examples relevant to families. Core requirement for M.S. and Ph.D. degrees.

**651. Contemporary Research in Human Development (3:3).**

*Pr. HDF major or permission of instructor.*

Examination of contemporary research findings in the field of human development.

**652. Theories of Human Development (3:3).**

*Pr. HDF major or permission of instructor.*

Survey of selected theories of individual development. (Core requirement)

**660. Families of Individuals with Special Needs (3:3).**

*Pr. HDF major or permission of instructor.*

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.

**662. The Family in Comparative Perspective (3:3).**

*Pr. 641, and 652.*

Family patterns in different cultures; viewing family systems within their cultural contexts.

**664. 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. May be repeated with a different member of the graduate faculty. (Graded on S-U basis)

**670. Minor Research (2-6).**

*Pr. permission of instructor.*

**672. Divorce and Remarriage (3:3).**

*Pr. 641 or permission of instructor.*

Trends in divorce and remarriage. Critique of theory and research and study of relationships in the reorganization of the family.

**675A. Divorce Mediation (3:3).**

*Pr. 672 or major in human development and family studies, counseling and development, psychology, social work, or permission of instructor.*

Process of divorce mediation including role of the mediator, social, psychological, legal and financial aspects, goals and strategies for an equitable divorce settlement, and ethical considerations.

**675B. Divorce Mediation Practicum (3).**

*Pr. 675A, CED 610, or permission of instructor.*

Skill development and application of theory to practice in divorce mediation through supervised work with clients in a laboratory setting. (Graded on S-U basis)

**681. Family-Centered Interdisciplinary Practice: System of Care (3:3)**

*Pr. exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, or permission of instructor.*

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 HEA 681, PSY 681, RPT 681, SWK 681)

**683. Leadership and Mentoring Roles in Educating Young Children (3:3).**

Advanced leadership and mentoring skills for those who develop and implement early childhood programs for typically and atypically developing young children and their families.

**689. 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.

**690. 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. Core requirement for M.S. and Ph.D. degrees.

**691. Professional Seminar III (1:1).**

*Pr. 689, 690.*

Job search methods and strategies in human development and family studies for doctoral students.

**692. Contemporary Family Life (3:3).**

*Pr. 641, 642, or permission of instructor.*

Contemporary families; the nature of family dynamics and the needs of family members in a changing social context.

**699. Thesis (1-6).**

*Pr. permission of instructor.*

Required of all candidates for the Master of Science degree. Credit may be divided over two or more semesters.

**710. The Ecology of Human Development (3:3).**

For advanced level graduate students in human development and family studies, sociology, psychology, and counseling education.

Urie Bronfenbrenner's Ecological Systems Theory is a major contemporary theory in the field of human development. Course deals with its theoretical foundations, its development, and related contemporary empirical research.



**711. Experimental Course.**

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

**712. Advanced Research Design in Human Development and Family Studies (3:3).**

*Pr. HDF core requirements and two graduate statistics courses or permission of instructor.*

Methods and designs of research with individuals and families from problem specification, data collection and reduction, to data analysis. Core requirement for Ph.D. degree.

**752. Theory Development and the Family (3:3).**

*Pr. 630, 641, 642, two graduate statistics courses, and 6 additional semester hours in family studies, or permission of instructor.*

Recent trends in theories relevant to family analysis; developing family theory and utilizing existing theories to guide empirical investigations of family relations.

**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. Student must obtain the approval of a supervising graduate faculty member before registering. May be repeated with a different member of the graduate faculty.

**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.

**799. Dissertation Problem (1-12).**

*Pr. permission of instructor.*

Required of all candidates for the Doctor of Philosophy degree. Credit may be divided over two or more semesters.

**801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF INFORMATION SYSTEMS AND OPERATIONS MANAGEMENT

479 Bryan Building

(336) 334-5666

<http://www.uncg.edu/bae/isom>

*Professors*

**Richard A. Ehrhardt**, Ph.D., Management science, stochastic modeling, inventory theory, analysis of production planning systems, materials management.

**Gerald L. Hershey**, Ph.D., Organization and management of information systems, support systems productivity, process reengineering, IS program content and management.

**Prashant C. Palvia**, Ph.D., Global information technology management, electronic commerce, media richness theory, and technology diffusion (Director of Ph.D. Program).

**James K. Weeks**, Ph.D., Strategic management, operations management, manufacturing strategy, materials and logistics planning and controls, production scheduling.

*Associate Professors*

**Kwasi Amoako-Gyampah**, Ph.D., Management of advanced technology, systems implementation, flexible manufacturing systems, manufacturing strategy (Head of Department).

**John L. Eatman**, Ph.D., Information systems management and planning, systems analysis and design, telecommunications management (Bryan School IT Director).

**Vidyananya B. Gargeya**, Ph.D., Global operations strategy, supply chain management; total quality management and continuous improvement systems; just-in-time manufacturing; service operations management.

**Hamid R. Nemati**, Ph.D., Neural networks, data flow management, strategic use of information technologies (Director of MSITM program).

**Larry R. Taube**, Ph.D., Material and logistics planning and control, just-in-time implementations, total quality management, supply chain management.

*Assistant Professors*

**Lakshmi S. Iyer**, Ph.D., Electronic commerce, knowledge management, decision support systems, AI and Expert Systems.

**Al Farooq N. Salam**, Ph.D., Electronic commerce, enterprise resource planning, telecommunications, systems analysis and design, E-business models and implementation, emerging technologies.

**Rahul Singh**, Ph.D., Intelligent systems, data mining, systems development, data communications and computer networks, electronic commerce.

**Thomas Van Dyke**, Ph.D., Information systems service quality, user information satisfaction, software developer productivity, database design and implementation.

The Department of Information Systems and Operations Management offers degree programs leading to the Master of Science and the Doctor of Philosophy. The department also offers a Post-Baccalaureate and a Post-Master's Certificate in information technology.

The Master of Science in Information Technology and Management (MSITM) program seeks to prepare professionals to manage the information technology and systems of organizations. The program will combine technological and managerial components to develop graduates who can deal effectively with the variety and complexity of issues involved in applying information technology successfully within organizations. 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.

The MSITM program is open to students with diverse undergraduate degrees. 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 two to four years, depending on the individual student's background and course load.

Students entering the MSITM program must satisfy all foundation level requirements before enrolling in any of the core level required courses. Foundation level course requirements may be waived on the basis of prior academic accomplishment. Decisions concerning the waiver of foundation level course requirements will be made by the Program Director

at the time of admission to the program.

The Ph.D. in information systems (IS) 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 is innovative in that it enhances the traditional Ph.D. program with four distinctive elements: commitment to practical relevance, emphasis on producing quality teachers, research apprenticeship, and interdisciplinary research. Additionally, 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. Students without a master's degree in business will need to take additional courses to establish an understanding of business processes.

## ADMISSION TO THE MSITM AND Ph.D. PROGRAMS

Admission to the MSITM or the Ph.D. program (or another approved graduate program) is a prerequisite for enrollment in course work at any level of the program and is based on a combination of the following factors: transcripts of prior academic work including the grade-point average, score on the GMAT, letters of recommendation, relevant work experience, a personal statement, and, if required, an interview. Applicants should consult the MSITM or Ph.D. Program Directors for specific admissions requirements.

## SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN INFORMATION TECHNOLOGY

The Department of Information Systems and Operations Management offers a Post-Baccalaureate Certificate in information technology. This Post-Baccalaureate Certificate will provide professionals with state-of-the-art knowledge and skills in the application of information technology to the solution of organizational problems.

**Admission Requirements:** Bachelor's degree from an accredited college or university, completed Gradu-

ate School application packet, a personal essay about career and educational goals, three letters of recommendation, and a resume. In addition, applicants may be required to submit materials such as TOEFL or English language competency:

The certificate program will consist of at least **12 hours**. Students must take the following courses:

- ISM 600 - Desktop Data Management Tools (1.5)
- ISM 601 - Information Systems and Technology (1.5)
- ISM 602 - Business Data Systems (1.5)
- ISM 604 - Business Applications Programming I (1.5)
- ISM 605 - Business Applications Programming II (1.5)

Additional hours to complete the program will come from the following courses (**minimum 4.5 hours**):

- ISM 632 - Managing Vendor Relationships (1.5)
- ISM 633 - Enterprise Resource Planning Systems (1.5)
- ISM 654 - Project Management (1.5)
- ISM 655 - IT Consulting in a Business Environment (1.5)
- ISM 657 - Knowledge Management (1.5)
- ISM 660 - XML Applications (1.5)

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN INFORMATION TECHNOLOGY AND MANAGEMENT**

The Department of Information Systems and Operations Management offers a graduate program of study leading to a **46.5 hour** Master of Science degree. This includes 16.5 hours of required foundation level courses (which may be waived), 24 hours of required core level courses, and 6 hours of approved electives. Students must satisfy foundation level course requirements and demonstrate specific computing competencies prior to enrolling in any of the required core level courses. The degree requirements consist of the following:

### **A. Required Courses (40.5 hours)**

#### **Foundation Level (16.5 hours)**

Foundation level courses may be waived by students who have completed equivalent academic course work and who can meet specific learning objectives. Applicants should consult the MSITM Program Director for course waiver information.

- MBA 600 - Business Statistics (1.5)
- MBA 602 - Presentation and Interpretation of Financial Statements (1.5)
- MBA 603 - Economic Analysis (1.5)
- MBA 604 - Organizational Behavior (1.5)
- MBA 605 - Financial Management (1.5)
- MBA 606 - Marketing Management (1.5)
- MBA 607 - The Operations Function (1.5)
- ISM 601 - Information Systems and Technology (1.5)

- ISM 602 - Business Data Systems (1.5)
- ISM 604 - Business Applications Programming I (1.5)
- ISM 605 - Business Applications Programming II (1.5)

### **Core Level (24 hours)**

- ISM 611 - Data Warehousing and Mining (3)
- ISM 612 - Information and Communications Architectures (3)
- ISM 616 - Object-Oriented Programming (3)
- ISM 621 - Systems Development (3)
- ISM 622 - Database Design and Administration (3)
- ISM 623 - Electronic Commerce Applications (3)
- ISM 631 - Management of Information Technology Services (3)
- ISM 641 - Business Planning and Information Technology (3)

### **B. Electives (6 hours)**

With the approval of the MSITM Program Director, a student will select 6 hours of other graduate level courses.

## **SPECIFIC REQUIREMENTS FOR THE POST-MASTER'S CERTIFICATE IN INFORMATION TECHNOLOGY**

The Department of Information Systems and Operations Management offers a Post-Master's Certificate in information technology. The purpose of this certificate is to provide professionals who already have a M.B.A. 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.

**Admission Requirements:** M.B.A. or related master's degree and completed Graduate School application packet.

The certificate program will consist of at least **12 hours**. Students must take the following courses:

- ISM 601 - Information Systems and Technology (1.5)
- ISM 602 - Business Data Systems (1.5)
- ISM 604 - Business Applications Programming I (1.5)
- ISM 605 - Business Applications Programming II (1.5)
- ISM 612 - Information and Communication Architectures (3)

Students having equivalent course work may waive any of the required courses and substitute other courses approved by the MSITM Program Director.

Additional hours to complete the program will come from the following courses (or other 600-level ISM courses approved by the MSITM Program Director):

- ACC 628 - Accounting Information Systems (3)
- ACC 638 - Information Systems Auditing (3)
- ISM 614 - Object Oriented Programming I (1.5)
- ISM 615 - Object Oriented Programming II (1.5)

ISM 622 - Database Design and Administration (3)  
ISM 623 - Electronic Commerce Applications (3)  
ISM 654 - Project Management (1.5)

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY DEGREE**

The Department of Information Systems and Operations Management offers a graduate program of study leading to a **73-91** hour Doctor of Philosophy degree in information systems. The degree requirements consist of the following:

### **A. Leveling Courses/Prerequisites**

To be taken as needed to remedy deficiencies, in consultation with the Ph.D. Program Director.

ISM 601 - Business Processes and Technology (1.5)  
ISM 602 - Business Data Systems (1.5)  
ISM 604 - Business Applications Programming I (1.5)  
ISM 605 - Business Applications Programming II (1.5)  
ISM 616 - Object-Oriented Programming (3)  
MBA 600 - Business Statistics (1.5)  
MBA 602 - Presentation and Interpretation of Financial Statements (1.5)  
MBA 603 - Economic Analysis (1.5)  
MBA 604 - Organizational Behavior (1.5)  
MBA 605 - Financial Management (1.5)  
MBA 606 - Marketing Management (1.5)  
MBA 607 - The Operations Function (1.5)  
MBA 612 - Cost Management Systems (1.5)

### **B. Major (24-27 hours)**

Contact the Ph.D. Program Director for specific courses.

### **C. Supporting Area (9 hours)**

Courses chosen in consultation with the Ph.D. Program Director.

### **D. Research Methodology (12 hours)**

Courses chosen in consultation with the Ph.D. 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)

### **E. Teaching Education (4-7 hours)**

Courses chosen in consultation with the Ph.D. Program Director.

### **F. Organizational Research Internship**

Required of students lacking relevant work experience, as determined by the Ph.D. Program Director.

### **G. Research Seminars (6-12 hours)**

A minimum of 6 hours taken throughout the program.

### **H. Research Apprenticeship**

Two papers must be submitted for publication in conference proceedings or journals prior to taking written comprehensive examinations.

### **I. 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 once in the fall semester and once in the spring semester. If the student fails at the first attempt, a second attempt may be allowed by the Ph.D. Program Director.

### **J. 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.

### **K. 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.

### **L. Dissertation (18-24 hours)**

A minimum of 18 hours credit will be devoted to research that culminates in the preparation of the required doctoral dissertation.

## **(ISM) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

### **589. Experimental Course.**

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



## (ISM) COURSES FOR GRADUATES

- 600. Desktop Data Management Tools (1.5:1.5).**  
*Pr. admission to a Bryan School graduate program.*  
 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.
- 601. Business Processes and Technology (1.5:1.5).**  
*Pr. admission to a Bryan School graduate program or permission of the MSITM Program Director.*  
 Computer systems and networks, telecommunications, and business applications using all forms of information technology; survey of the managerial challenges presented by the use of information technology. (Same as MBA 618)
- 602. Business Data Systems (1.5:1.5).**  
*Pr. admission to a Bryan School graduate program or permission of the MSITM Program Director.*  
 Fundamental concepts of database management systems, including database design, implementation, and the use of the SQL query language.
- 603. Business Applications Programming (3:3).**  
*Pr. admission to a Bryan School graduate program or permission of MSITM Program Director.*  
 Best practices in work group application design and the use of contemporary programming language to construct work group business applications.
- 604. Business Applications Programming I (1.5:1.5).**  
*Pr. admission to a Bryan School graduate program or permission of the MSITM Program Director.*  
 Work group application design and the use of contemporary programming language to construct work group business applications.
- 605. Business Applications Programming II (1.5:1.5).**  
*Pr. 604 or equivalent and admission to a Bryan School graduate program or permission of the MSITM Program Director.*  
 Study of best practices in work group application design and the use of a contemporary programming language to construct work group business applications.
- 611. Data Warehousing and Mining (3:3).**  
 The nature, history, and development of enterprise data systems; survey of consolidated data models and data mining technologies.
- 612. Information and Communications Architectures (3:3).**  
 Information system architectures, telecommunications technologies, and performance evaluation methods; examination of information architecture planning methods; integration of business planning and IT planning.
- 613. Directed Studies (1-3).**  
*Pr. permission of MSITM Program Director and instructor who will supervise study.*  
 Individual study problems in the field. Regular conferences with instructor required.
- 614. Object-Oriented Programming I (1.5:1.5).**  
*Pr. 605 and admission to a Bryan School graduate program or permission of MSITM Program Director.*  
 Object-oriented design and the use of an object-oriented programming language to develop object-oriented programs.
- 615. Object-Oriented Programming II (1.5:1.5).**  
*Pr. 614 or equivalent and admission to a Bryan School graduate program or permission of MSITM Program Director.*  
 Enhanced study of object-oriented systems design and the use of an object-oriented programming environment to create business applications.
- 616. Object-Oriented Programming (3:3).**  
*Pr. 604, 605, 611, 612 or permission of MSITM Program Director.*  
 Provides a foundation in object-oriented concepts and programming course for students who wish to learn how to develop applications in Java.
- 621. Systems Development (3:3).**  
*Pr. admission to the MSITM program, 611, 612, or permission of MSITM Program Director.*  
 The planning, design, and implementation aspects of the information system development process; alternative development methodologies and technologies.
- 622. Database Design and Administration (3:3).**  
*Pr. admission to the MSITM program, 611, 612, or permission of MSITM Program Director.*  
 Decision of relational and object-related databases, the use of databases in N-tier application architectures, the administration of database security, and the management of operational databases.
- 623. Electronic Commerce Applications (3:3).**  
*Pr. permission of MSITM Program Director.*  
 Technical, organizational, and managerial issues associated with the use of electronic commerce; experience in constructing electronic commerce applications.
- 631. Management of Information Technology Services (3:3).**  
*Pr. admission to the MSITM program, 611, 612, or permission of MSITM Program Director.*  
 Management challenges and methods for insuring quality and providing information technology services including training, system maintenance, user support, system evolution, and communications.
- 632. Managing Vendor Relationships (1.5:1.5).**  
*Pr. 611, 612, or permission of MSITM Program Director.*  
 Computer technology and service-related contracts, including legal issues, product/service liability, and negotiation and management of performance standards and assessment.
- 633. Enterprise Resource Planning Systems (1.5:1.5).**  
*Pr. permission of MSITM Program Director.*  
 Purpose, design, and configuration of ERP systems; experience in the use of an ERP system.
- 641. Business Planning and Information Technology (3:3).**  
*Pr. admission to the MSITM program, 611, 612, and permission of MSITM Program Director.*  
 Planning issues of information technology and its integration into the business strategy; review of frameworks and methodologies for evaluation of information technology.
- 650. Total Quality Management (1.5:1.5).**  
*Coreq. 620.*  
 Philosophy and tools that comprise Total Quality Management (TQM). How TQM can be implemented in manufacturing and service firms. Integrates philosophy, tools, and implementation issues through cases/project. (Same as MBA 650)

**651. Management of Technology and Innovation (1.5:1.5).**

Technology and innovation in the competitive strategy of organizations; sources of innovations, the different dimensions of technological innovations, and the adoption and justification of innovations. (Same as MBA 651)

**652. Implementation of Total Quality Management (1.5:1.5).**

*Pr. 650.*

Implementation of quality management in organizations. Organization-based project to study the strategic and operational details of building quality for enhancing competitiveness. (Same as MBA 652)

**653. Service Operations Management (1.5:1.5).**

*Pr. 607.*

Managerial processes underlying operations management in service-providing organizations; operations strategy, design and delivery, and operations planning and control in services. (Same as MBA 653)

**654. Project Management (1.5:1.5).**

Modern methods for defining, planning and managing large projects. Computer software and network modeling are used to support the efficient scheduling of interdependent activities. (Same as MBA 654)

**655. IT Consulting in a Business Environment (1.5:1.5).**

*Pr. admission to a Bryan School graduate program or permission of instructor.*

Provides a solid understanding of the consulting services industry, beginning with the sale of a consulting service engagement and ending with the management of a consulting project.

**656. Understanding Groupware: Technology for Teamwork (1.5:1.5).**

Impact of collaborative technology on group work; computer-based teamwork, group support systems, distributed group work, justifying and implementing groupware, and facilitation of electronic meetings.

**657. Knowledge Management (1.5:1.5).**

*Pr. admission to a Bryan School graduate program or permission of MSITM Program Director.*

Examines current theories and foundations of knowledge management, knowledge assets and their organizational, analytical, managerial tools and techniques for knowledge acquisition, generation, assessment, evaluation, and dissemination are studied. (Same as MBA 655)

**658. Web Services Application Development (1.5:1.5).**

*Pr. 616.*

Application development using the Web Services Architecture and related emerging technologies including SOAP, WSDL, UDDI, ebXML and web service orchestration and management issues.

**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.

**660. XML Applications (1.5:1.5).**

*Pr. 602, 604, 605, 616 or permission of MSITM Program Director.*

Application development using Extensible Markup Language (XML) including XML Schema, Document Type Definition, Extensible Stylesheet Language (XSLT), Document Object Model (DOM), SAX, Oracle XSQL and Oracle XML DB (XDB).

**661. Global IT Strategy and Management (1.5:1.5).**

*Pr. 612, 621 or permission of MSITM Program Director.*

Strategic and management issues of global IT. Topics include: information technology's impact on globalization of businesses, international IT environment, global IT strategy and management, and global electronic commerce.

**662. Global IT Operations and Implementation (1.5:1.5).**

*Pr. 661 or permission of MSITM Program Director.*

Operational and implementation issues of global IT. Topics include: global system development and implementation, global software outsourcing, and global IT infrastructure and operations.

**696. Organizational Internship (1-3:1-3).**

*Pr. permission of MSITM Program Director.*

Academic and required work components allow students to gain organization experience. Course supervised by a designated graduate faculty member and an organization manager. May be repeated for credit.

**711. Experimental Course.**

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

**751. Seminar in Data Warehousing and Mining (3:3).**

*Pr. permission of Ph.D. Director.*

In-depth study of advanced principles, methodologies, and current research related to data warehousing and mining.

**752. Seminar in Information Networks and Architecture (3:3).**

*Pr. permission of Ph.D. Director.*

Concepts, research, issues, and new developments in data communication and advanced computer networks and architectures.

**761. Seminar in Systems Development (3:3).**

*Pr. permission of Ph.D. Director.*

Methodologies and processes used for planning, design and implementation of information systems. Topics include: project management, development life-cycles, systems architectures, object-oriented design, development and evaluation metrics.

**762. Seminar in Database Design and Administration (3:3).**

*Pr. permission of Ph.D. Director.*

Advanced database design principles and issues in database administration. Topics include: design and development of relational databases, E/R diagramming and normalization, DBMS architecture, and database administration.

**763. Seminar in Electronic Commerce (3:3).**

*Pr. 752 and 762, or permission of Ph.D. Director.*

Current research issues on the expanding field of electronic commerce (EC). Topics include: EC strategy, business models, e-marketing, internet advertising, CRM, trust, privacy and security.

**771. Seminar in Management of Information Technology Services (3:3).**

*Pr. permission of Ph.D. Director.*

Research on the management of the information technology (IT) services within an organization. Topics include: quality, evaluation, personnel training, system maintenance, and user support in delivering IT services.

**773. Seminar in Enterprise Resource Planning Systems (3:3).**

*Pr. 761 or permission of Ph.D. Director.*

Analysis of ERP Systems, their justification, adoption and implementation issues as well as their role within supply chain management systems. Current research issues will be discussed.

**774. Seminar in Global Information Technology Management (3:3).**

*Pr. 761 or permission of Ph.D. Director.*

Current and research issues in global information technology management. Topics include: global IT environment, planning and management, global architectures, application development, transborder data flows, and cross-cultural issues.

**775. Seminar in Workflow and Collaboration Systems (3:3).**

*Pr. 761 or permission of Ph.D. Director.*

Issues related to workflow and collaboration technologies. Topics include: electronic meeting systems, distributed groupware, workflow software and technologies. Current research issues will be discussed.

**777. Seminar in Emerging Information Technologies (3:3).**

*Pr. 752 and 761, or permission of Ph.D. Director.*

Investigates advances in information technology and focuses on the impact of these technologies on IS practices and application research.

**781. Seminar in Business Planning and Information Technology (3:3).**

*Pr. 752, 761, 762, or permission of Ph.D. Director.*

Examines strategic information systems and tactics for planning to support key business initiatives and processes. Topics include: organization and management of IT, evaluative frameworks, process integration and virtual planning.

**782. Practicum in IS Teaching (1-3).**

*Pr. permission of Ph.D. Director.*

Supervised teaching of an information systems (IS) course. Faculty mentor will guide in planning and delivery. Course may be repeated for credit. (Graded on S-U basis)

**783. Organizational Research Internship (3-6).**

*Pr. permission of Ph.D. Director.*

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. May be repeated for credit.

**785. Theories of Information Systems (3:3).**

*Pr. permission of Ph.D. Director.*

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.

**786. Frameworks and Research Methods in Information Systems (3:3).**

*Pr. permission of Ph.D. Director.*

Provides an in-depth understanding of the research process. Topics include: IS frameworks and research methodologies, models, development, and evaluation.

**787. Research Development in Information Systems (3:3).**

*Pr. 786 or permission of Ph.D. Director.*

Continues the research apprenticeship experience of ISM 786. Research skills and knowledge are deepened while conducting a semester-long research project that culminates in a substantial research paper worthy of publication.

**789. Research Seminar in Information Systems (1-3).**

*Pr. 786 or permission of Ph.D. Director.*

Explores current and emerging research topics in information systems. May be repeated for credit.

**790. Independent Doctoral Research (1-6).**

*Pr. permission of Ph.D. Director.*

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.

**799. Dissertation (1-24).**

*Pr. admission to candidacy.*

**802. Dissertation Extension (1-3).**

**803. Research Extension (1-3).**

## DEPARTMENT OF INTERIOR ARCHITECTURE

325 Petty Building

(336) 334-5320

<http://www.uncg.edu/iarc>

### Professors

**Jo Ramsay Leimenstoll, M.Arch.**, Historic preservation theory and practice, architectural conservation, design review (Director of Graduate Study).

**Novem Mason, M.F.A.**, Design theory, ideation, furniture design, systems integration.

### Associate Professors

**Thomas Lambeth, M.Landscape Arch.**, Place theory, environmental design, communication graphics (Chair of Department).

**Anna Marshall-Baker, Ph.D.**, Design for special populations, interdisciplinary study, development and criticism of design theory.

### Assistant Professors

**Patrick Lee Lucas, Ph.D.**, Buildings in society and culture, community formation and transformation, historic property care and management, material culture.

**Tina Sarawgi, M. Arch.**, Computer-aided lighting simulation, design of "synthetic" environments, virtual reality applications in architectural design, simulation, and collaboration.

The Master of Science program in interior architecture is intended to provide opportunities for students to achieve a high level of excellence in the design of architectural interiors, and to develop specialization in selected areas of individual interest. The design studio is the nucleus of the program and is taken concurrently with 1) courses in design and research methods, 2) courses that expand the base of knowledge relating to both user needs and environments that serve those needs, and 3) seminars devoted to pertinent issues of environmental design. Special attention may be directed toward problems of adaptive use of existing structures, the preservation and restoration of buildings and neighborhoods, museum studies, exhibit design, design for special populations, digital modeling and imaging, design technology, and lighting. The department offers graduate concentrations and Post-Baccalaureate Certificates in historic preservation and museum studies.

The Master of Science program in interior architecture is a post-professional degree program. An undergraduate professional degree in interior architecture is preferred. Candidates who do not hold a professional undergraduate degree in 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. Such decisions will be based upon an individual evaluation of credentials, portfolio, and design experience.

Admission is contingent upon acceptance by both the Department of Interior Architecture and The Graduate School. Applicants should have a minimum 3.0 grade point average in undergraduate work. The Graduate Record Examination is required and test scores in the 500 range on both the verbal and quantitative sections of the examination are acceptable prerequisites for consideration. A statement of personal interest, three recommendations, and an interview with portfolio, are also required. Enrollment in the program is limited. Priority will be given to applications received before March 1.

## **SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATES IN MUSEUM STUDIES AND HISTORIC PRESERVATION**

The Departments of History and Interior Architecture jointly offer two Post-Baccalaureate Certificates: museum studies and historic preservation. The two certificates provide graduate students training and credentials to pursue careers in history museums, historic preservation, cultural resource management, management of historic sites, and related public history professions. Both certificates require 15 semester hours of course work. Certificate students must meet all requirements for admission to The Graduate School in one of the sponsoring departments and will be able to pursue a master's degree simultaneously. Graduate students in related fields such as applied geography, art or public policy may also pursue a certificate while completing their graduate degrees. Certificate requirements include 9-12 hours of core courses and 3-6 hours of electives. Students must maintain a minimum grade point average of 3.0 in all certificate course work. No more than 3 semester hours of C will count towards a certificate.

### **A. Required Courses (9-12 hours)**

#### **Museum Studies (9 hours)**

IAR 626 - Management and Leadership in Public History (3)  
 IAR 627 - Museum and Historic Site Interpretation: Principles and Practice (3)  
 \*IAR 690 - Internship (3)  
 6 hours of electives approved by the Director of Graduate Study

#### **Historic Preservation (12 hours)**

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

\*Students with appropriate professional work experience may substitute an elective for the internship requirement with prior approval of the Director of Graduate Study.



## **B. Electives (Historic Preservation - 3 hours; Museum Studies - 6 hours)**

To complete the 15 hours of course work for either certificate, electives should be selected with the prior approval of the Director of Graduate Study from the following list:

HIS 505 - Introduction to Archival Management (3)  
 IAR 536 - History of Decorative Arts (3)  
 IAR 545 - Southern History and Southern Material Culture in a Museum Context (3)  
 IAR 547 - Museum Curatorship: Collections Management (3)  
 IAR 548 - Architectural Conservation (3)  
 IAR 552 - History and Theories in Material Culture (3)  
 IAR 555 - Field Methods in Preservation Technology (3)  
 IAR 628 - Identification and Evaluation of the Historic Built Environment (3)  
 ART 590 - Museum Studies (3)  
 ATY 597 - Special Problems in Anthropology (3)  
 GEO 502 - Urban Planning (3)  
 PSC 540 - Nonprofit Management and Leadership (3)

Core courses for either certificate may be taken as electives for the other certificate.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN INTERIOR ARCHITECTURE**

The Department of Interior Architecture offers a graduate program of study leading to a 36 hour Master of Science degree. Eighteen (18) hours are taken in the major area and 12 hours are taken in a concentration or an individual area of specialization. The additional 6 hours are taken as thesis hours. At least 18 hours must be in 600-level courses.

### **A. Studio Course (at least one required, typically two taken — 6-18 hours)**

IAR 501 - Advanced Interior Architecture I (6)  
 IAR 502 - Advanced Interior Architecture II (6)  
 IAR 602 - Advanced Interior Design III (6)

### **B. Research Techniques (9 hours)**

With prior approval by the Director of Graduate Study or the student's committee, a student will select 6 hours from the following:

IAR 631 - Environmental Design Research (3)  
 IAR 645 - Seminar in Interior Architecture (3) or approved alternative

A student will take an additional 3 hours of research methods courses approved by the student's committee, such as statistics, advanced computer science, or other research methods course appropriate to the student's concentration or area of specialization.

## **C. Electives (12 hours)**

With prior approval by the Director of Graduate Study or the student's committee, a student will select 12 hours in the concentration or area of specialization.

## **D. Comprehensive Examination**

At the completion of a student's course work, a written comprehensive examination is required. An oral examination may be required at the discretion of the student's committee.

## **E. Thesis (6 hours)**

A thesis is required of all candidates for the M.S. degree. Credit may be divided over two or more semesters.

IAR 699 - Thesis (6)

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN INTERIOR ARCHITECTURE WITH A CONCENTRATION IN HISTORIC PRESERVATION OR MUSEUM STUDIES**

The Department of Interior Architecture offers a graduate program of study leading to a 36 hour Master of Science degree with a concentration in either historic preservation or museum studies.

### **A. Required Core Courses (15 hours)**

#### **Historic Preservation Concentration**

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)  
 Approved elective (3)

#### **Museum Studies Concentration**

IAR 626 - Management and Leadership in Public History (3)  
 IAR 627 - Museum and Historic Site Interpretation: Principles and Practice (3)  
 \*IAR 690 - Internship (3)  
 Approved Elective (6)

\*Students with appropriate professional experience may substitute an elective for the Internship requirement with prior approval of the Director of Graduate Study.

### **B. Studio Courses (6 hours)**

IAR 501,502 - Advanced Interior Architecture I, II (6) or  
 IAR 602 - Advanced Interior Architecture III (6)

## C. Research Techniques (9 hours)

- IAR 631 - Environmental Design Research (3)
- IAR 645 - Seminar in Housing and Interior Architecture (3) **and** three hours of research methods approved by the student's committee and typically chosen from the following:
  - IAR 548 - Architectural Conservation (3)
  - IAR 555 - Field Methods in Preservation Technology (3)
  - IAR 628 - Identification and Evaluation of the Historic Built Environment (3)
  - IAR 545 - Southern History and Southern Material Culture in a Museum Context (3)

## D. Electives

- HIS 505 - Introduction to Archival Management (3)
- IAR 536 - History of Decorative Arts (3)
- IAR 545 - Southern History and Southern Material Culture in a Museum Context (3)
- IAR 547 - Museum Curatorship: Collections Management (3)
- IAR 548 - Architectural Conservation (3)
- IAR 552 - History and Theories in Material Culture (3)
- IAR 555 - Field Methods in Preservation Technology (3)
- IAR 628 - Identification and Evaluation of the Historic Built Environment (3)
- ART 590 - Museum Studies (3)
- ATY 597 - Special Problems in Anthropology (3)
- GEO 502 - Urban Planning (3)
- PSC 540 - Nonprofit Management and Leadership (3)

Required courses in either concentration may be taken as electives for students in the other concentration.

## E. Thesis (6 hours)

A thesis is required of all candidates for the M.S. degree. Credit may be divided over two or more semesters.

- IAR 699 - Thesis (6)

## (IAR) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 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.

### 501, 502. Advanced Interior Architecture I, II (6:0:12), (6:0:12).

Advanced design problems having complex functional, social, and economic implications, with emphasis on problem identification, formulation, and design development.

### 527. Problems in Interior Architecture (2-6).

### 531. Design Seminar (2:2).

*Pr. permission of instructor.*

Investigation of current research and subjects of topical interest in environmental design. May be repeated for credit.

### 535. Architectural Lighting Design (2:2).

Study of architectural lighting design: uses and control of light, lighting fixtures, and lighting installation for desired effect.

### 536. History of Decorative Arts (3:3).

Study of changing stylistic and cultural developments in the decorative arts with special concentration on America. (Same as HIS 536)

### 543. Historic Preservation: Principles and Practice (3:3).

*Pr. 221, 222, or permission of instructor.*

Change in historic preservation theory and practice since the 1800's with emphasis on preservation of built environment and development of philosophical approach for designers to contemporary preservation projects. (Same as HIS 543)

### 545. Southern History and Southern Material Culture in a Museum Context (3).

*Pr. permission of instructors after completion of required application form.*

Combined southern history and material culture with a museum practicum. Offered each summer at the Museum of Early Southern Decorative Arts in Winston-Salem. Students selected by individual application. May be repeated for credit when topic varies with permission of instructor. (Same as HIS 545)

### 547. History Museum Curatorship: Collections Management (3:3).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

Professional practices in the care and management of historic site and history museum collections, including principles of collection development, object registration, cataloging, and preservation. (Same as HIS 547)

### 548. Architectural Conservation (3:3).

*Pr. 301, 332, or permission of instructor.*

Contemporary architectural conservation principles, practice and technology. Field exercises, group projects and investigation of an individual research topic expand upon lectures and readings. (Same as HIS 548)

### 552. History and Theories of Material Culture (3:3).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as HIS 552)

### 555. Field Methods in Preservation Technology (3:1:6).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as HIS 555)

### 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. (Same as ATY/HIS 578)

### 589. Experimental Course.

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

**(IAR) COURSES FOR GRADUATES**

**601. Directed Individual Study in Interior Architecture** (1-6).

**602. Advanced Interior Architecture III** (6).

*Pr. 501 or 502.*

Design issues or problems relevant to the individual student's concentration or area of specialization are explored in real or simulated studio projects.

**611. Graduate Seminar** (0).

**624. History of American Landscapes and Architecture** (3:3).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as HIS 624)

**625. Preservation Planning and Law** (3:3).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as HIS 625)

**626. Management and Leadership in Public History** (3:3).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as HIS 626)

**627. Museum and Historic Site Interpretation: Principles and Practice** (3:3).

*Pr. admission to a graduate program in history or interior architecture, or permission of instructor.*

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. (Same as HIS 627)

**628. Identification and Evaluation of the Historic Built Environment** (3:2:2).

*Pr. 624, admission to a graduate program in history or interior architecture, or permission of instructor.*

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)

**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.

**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.

**665. Problems in Interior Architecture** (2-4).

**690. Internship** (3).

*Pr. at least 12 hours in history M.A. or interior architecture M.S. program and permission of Director of Graduate Study.* Supervised professional experience in selected museum, historic site, or other professional setting in accordance with the major course of study of the student. (Graded on S-U basis) (Same as HIS 690)

**699. Thesis** (1-6).

Required of all candidates for the Master of Science in interior architecture. Credit may be divided over two or more semesters.

**711. Experimental Course.**

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

**801. Thesis Extension** (1-3).

**803. Research Extension** (1-3).

**LIBERAL STUDIES**

1100 W. Market Street

(336) 334-5414

<http://www.uncg.edu/dcl>

**Advisory Board:***Professors*

**Robert Cannon**, Ph.D., Microbiology, biology of *Acetobacter*, a cellulose synthesizing microbe (Director of Graduate Study; Department of Biology).

**Randy Kohlenberg**, Ph.D., Trombone, music education, Market Street Brass (School of Music).

**Jo Ramsay Leimenstoll**, M.Arch., Historic preservation theory and practice, architectural conservation, design review (Department of Interior Architecture).

**Mary K. Sandford**, Ph.D., Physical anthropology, disease and nutrition, osteology; Sudan, eastern U.S. and Caribbean (Department of Anthropology).

**Mark I. Smith-Soto**, Ph.D., 19th and 20th century Spanish American poetry (Department of Romance Languages).

*Associate Professors*

**Susan J. Buck**, Ph.D., Environmental policy and law, public policy, administrative law (Department of Political Science).

**Gerald A. Juhnke**, Ed.D., Substance abuse counseling, marriage and family counseling, crisis intervention, assessment, violence counseling (Department of Counseling and Educational Development).

**John J. Young**, Ph.D., Philosophy of language, ethics, ancient and medieval philosophy, philosophy of religion (Program Director; Department of Philosophy).

*Ex officio*

**Robert L. Miller**, Ph.D., Physical chemistry with a special emphasis on Quantum Chemistry, history of science (Professor Emeritus, Department of Chemistry).

The Master of Arts in Liberal Studies program 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 disciplines of the various liberal arts 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 M.A.L.S. degree can serve to enhance career opportunities as well as provide personal enrichment.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS IN LIBERAL STUDIES**

The M.A.L.S. is an interdisciplinary degree consisting of 33 hours of graduate course work. The student must satisfy the admission requirements of The Graduate School. The program requires that applicants submit a three to four page essay describing their academic background and interest in the liberal arts and the program.

### **A. Required Core Seminars (9 hours)**

MLS 610 - Culture and Ideas (3)  
MLS 620 - Human Nature and Society (3)  
MLS 630 - Scientific Reasoning (3)

### **B. Electives (18 hours)**

In consultation with the program director, a student may choose 18 hours of 500- to 600-level electives.

### **C. Comprehensive Examination**

Coordinated with the program director.

### **D. Thesis or Non-thesis Option**

MLS 699 - Thesis (6) or Non-thesis Option - 6 additional hours of core seminars in area of academic interest.

More information is available at The Graduate School or the Division of Continual Learning.

## **(MLS) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

### **589. Experimental Course.**

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

## **(MLS) COURSES FOR GRADUATES**

### **610. Culture and Ideas (3:3).**

*Pr. admission to the M.A.L.S. program.*

Artistic, literary, philosophical, or religious traditions, works of particular thinkers, and historical discourse on intellectual issues. May be repeated for credit when topic varies.

### **620. Human Nature and Society (3:3).**

*Pr. admission to the M.A.L.S. program.*

Issues concerning human nature, society, or political life through works or problems from the various social sciences. May be repeated for credit when topic varies.

### **630. Scientific Reasoning (3:3).**

*Pr. admission to the M.A.L.S. program.*

Reflections on scientific reasoning and/or investigations of particular problems to illustrate scientific reasoning. May be repeated for credit when topic varies.

### **650. Independent Study (1-3).**

Guided readings, research and individual project work on an interdisciplinary topic under direction of a faculty member. May be repeated for a maximum of 6 hours credit when topic varies.

### **699. Thesis (1-6).**

### **711. Experimental Course.**

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

### **801. Thesis Extension (1-3).**

### **803. Research Extension (1-3).**



## DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

349 Curry Building  
(336) 334-3477  
<http://www.uncg.edu/lis>

### *Professors*

**James V. Carmichael, Jr.**, Ph.D., Library history, information retrieval, gender and race studies.

**Lee Shiflett**, Ph.D., Cataloging and classification, history of books and libraries, information policy issues (Chair of Department).

### *Associate Professors*

**Pamela P. Barron**, Ph.D., Information sources and services for children and young adults, distance education, family literacy, intellectual freedom, storytelling, film making, and folklore.

**Beatrice Kovacs**, D.L.S., Collection management, science and technology materials, special libraries.

### *Assistant Professors*

**Gail K. Dickinson**, Ph.D., School library media programs, job satisfaction, economics of educational programs.

**Julie A. Hersberger**, Ph.D., Management, public libraries, intellectual freedom, the homeless, information needs and seeking behaviors.

**Julie M. Reinhart**, Ph.D., Distance education, computer-mediated communication, technologies for instruction, media production, instructional design and technology management and support.

The Department of Library and Information Studies provides an educational program leading to the Master of Library and Information Studies degree. The program 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 M.L.I.S. degree 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. Graduates qualify for the North Carolina Public Library Certification.

LIS courses are offered to off-site locations via distance learning options. Students may take 36 hours leading to the M.L.I.S. degree in Greensboro, Charlotte and Asheville.

Individuals wishing more information about courses at off-campus sites should contact the Department at (336) 334-3477.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF LIBRARY AND INFORMATION STUDIES

The Department of Library and Information Studies offers a graduate program of study leading to a 36 hour Master of Library and Information Studies degree. At least 24 hours must be in 600-level courses, to include:

### A. Required Core Courses (16 hours)

- LIS 600 - Foundations of Library and Information Studies (3)
- LIS 603 - Capstone Experience in Library and Information Studies (1)
- LIS 615 - Collection Management (3)
- LIS 620 - Information Sources and Services (3)
- LIS 640 - Organizing Library Collections (3)
- LIS 650 - Library Administration and Management (3)

### B. Additional Technology Requirement (3 hours)

Selected with advisement:

- LIS 616 - Media Production Services for Library Programs (3)
- LIS 645 - Computer Related Technologies for Information Management (3)
- LIS 647 - Emerging Technological Trends in Information Access (3)
- LIS 648 - Managing School/Library Computer Laboratories (3)

### C. Electives (17 hours)

Seventeen hours selected with advisement from other 500- or 600-level courses in Library and Information Studies or cognate fields. Students in licensure programs in school and public libraries should confer with faculty for specific requirements.

### D. Capstone Experience

Students must complete a professional portfolio or master's project. Please consult the LIS homepage for details.

### **M.L.I.S. with a Concentration in Instructional Technology (37 hours)**

This 37 hour 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. The Instructional Technology Specialist—Computers (077) licensure is attached to this concentration.

#### **A. Required Core Courses (16 hours)**

- LIS 600 - Foundations of Library and Information Studies (3)
- LIS 603 - Capstone Experience in Library and Information Studies (1)
- LIS 615 - Collection Management (3)
- LIS 620 - Information Sources and Services (3)
- LIS 640 - Organizing Library Collections (3)
- LIS 650 - Library Administration and Management (3)

#### **B. Instructional Technology Concentration Requirements (21 hours)**

- CUI 610 - Integrating Technology into Subject Matter Instruction (3)
- LIS 616 - Media Production Services for Library Programs (3)
- LIS 647 - Emerging Technological Trends in Information Access (3)
- LIS 648 - Managing School/Library Computer Laboratories (3) or LIS 645 - Computer-Related Technologies for Information Management (3)
- CUI/LIS 672 - Instructional Design (3)
- SES 662 - Assistive Technology for Inclusive Education (3)
- LIS 601, CUI 644 - Practicum (with Portfolio requirement) (3)

### **SPECIFIC REQUIREMENTS FOR THE MEDIA COORDINATOR (076) LICENSURE**

The Department of Library and Information Studies offers students the opportunity to earn the Media Coordinator (076) licensure. Applicants already holding an M.L.I.S. degree and wishing to obtain 076 licensure should contact the Department of Library and Information Studies for specific requirements. Students not holding a valid North Carolina teaching license will be required to take additional course work as well as an additional practicum.

#### **A. M.L.I.S. Core Requirements (16 hours)**

- LIS 600 - Foundations of Library and Information Studies (3)
- LIS 603 - Capstone Experience in Library and Information Studies (1)
- LIS 615 - Collection Management (3)
- LIS 620 - Information Sources and Services (3)
- LIS 640 - Organizing Library Collections (3)
- LIS 650 - Library Administration and Management (3)

#### **B. Designated Electives for Media Coordinator Licensure (15 hours)**

- LIS 601 - Practicum (3)
- LIS 616 - Media Production Services for Library Programs (3)
- LIS 617 - Materials for Children or (3) LIS 618 - Materials for Adolescents (3)
- LIS 653 - The School Library (3)
- LIS 654 - School Library Media Specialist and the Curriculum (3)

### **(LIS) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES**

#### **505. Introduction to Archival Management (3:3).**

*Pr. permission of instructor.*

Principles of archival management, featuring both classroom instruction in archival theory and practical experience in manuscript repositories and public and private archives. (Same as HIS 505)

#### **589. Experimental Course.**

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

### **(LIS) COURSES FOR GRADUATES**

#### **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. Required for all M.L.I.S. students in first year. (Core course)

#### **601. Practicum (3-6).**

*Pr. 600 and permission of instructor.*

Supervised field experience in library/media center settings, with seminars. Credit required will vary with individual needs. Only 3 hours credit may count towards M.L.I.S. degree. (Graded on S-U basis)

#### **603. Capstone Experience in Library and Information Studies (1:1).**

*Pr. completion of all other degree requirements and permission of instructor.*

Developing a professional portfolio or master's project. Faculty supervised, department chair approved. Required in final semester of MLIS program. Consult LIS homepage for details. (Graded on S-U basis)

#### **605a. Website Design and Management (2:1:1).**

Design, construction, and management of Internet sites with emphasis on HTML coding, and the effective use of hypertext and graphics editing and publishing software.

#### **605b. Telecommunications and the Internet (2:1:1).**

Examines components of and modes of access to the Internet, Internet telecommunications technologies, Internet use and finding aids, evaluation of Internet resources, and ethical and social issues and the Internet.

#### **605c. Desktop Publishing (2:1:1).**

Elements of style, design, and format in professional publications and on the application of principles learned to professional activities in library settings using desktop publishing software.

#### **605d. Online Bibliographic Information Retrieval (2:2).**

Develops competencies in selecting, evaluating, and using the variety of commercially available electronic databases.

- 608. Independent Study (1-4).**  
*Pr. 600, 620, 640, 650, and permission of instructor.*  
 Guided readings, research, and individual project work under direction of faculty.
- 609. Methods of Teaching Computer Literacy and Computer Programming (3:3:3).**  
*Pr. 672, CUI 669; or permission of the instructor.*  
 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. (Same as CUI 609)
- 610. Social Sciences Information Sources (3:3).**  
*Pr. 600, 620, or permission of instructor.*  
 Major bibliographic and information sources and services in the social and behavioral sciences.
- 611. Humanities Information Sources (3:3).**  
*Pr. 600, 620, or permission of instructor.*  
 Major bibliographic and information sources and services in the humanities.
- 612. Science and Technology Information Sources (3:3).**  
*Pr. 600, 620, or permission of instructor.*  
 Major bibliographic and information sources and services in the sciences and technology.
- 613. Business Information Sources and Services (3:3).**  
*Pr. 620 or permission of instructor.*  
 Business reference work in the library setting; types of business topics, reference materials, and methods of research.
- 614. Public Documents Information Sources (3:3).**  
*Pr. 600, 620, or permission of instructor.*  
 Federal, state, and United Nations agency documents: selection, organization, and use. For students in library studies, business and economics, history and political science.
- 615. Collection Management (3:3).**  
 Principles, processes, and problems in selection, evaluation, and acquisition of resources for libraries and information centers. (Core course)
- 616. 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.
- 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.
- 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.
- 620. Information Sources and Services (3:3).**  
 Selection, evaluation, and use of basic information sources; emphasizing search strategies, question negotiation, and current problems in the provision of information service. (Core course)
- 640. Organizing Library Collections (3:3).**  
 Methods of organizing library and information center collections for effective use; principles and techniques of cataloging and classification. (Core course)
- 645. Computer-Related Technologies for Information Management (3:3).**  
*Pr. 600 or permission of instructor.*  
 Essential computer-related technologies in a library/school/information agency environment.
- 646. Seminar in Indexing and Abstracting (3:3).**  
*Pr. 600, 640, or permission of instructor.*  
 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.
- 647. 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.
- 648. 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.
- 650. Library Administration and Management (3:3).**  
 Emphasizes management functions, resource management, and application of concepts to management situations in libraries and information centers. (Core course)
- 651. Seminar in Advanced Information Sources and Services (3:3).**  
*Pr. 620.*  
 Application of sophisticated tools and techniques to the solution of information problems. Emphasis on academic and large public libraries, and special collections.
- 652. Library Administration and Management Seminar (3:3).**  
*Pr. 650 or permission of instructor.*  
 Topical approach examines current management issues in an in-depth manner.
- 653. The School Library (3:3).**  
*Pr. 600, 615, 620, 640, 650 or permission of instructor.*  
 The role and function of the school library media center; planning, evaluation, and program development.
- 654. School Library Media Specialist and the Curriculum (3:3).**  
*Pr. 650 and 653 or permission of instructor.*  
 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.
- 655. The Public Library (3:3).**  
*Pr. 600, 650, or permission of instructor.*  
 The public library in the governmental structure, the librarian as a public administrator, financial and cooperative planning, library services, community analysis.
- 656. The Academic Library (3:3).**  
*Pr. 600, 650, or permission of instructor.*  
 Major trends, issues, and problems in the organization and provision of services in college and university libraries.

**657. The Special Library (3:3).**

*Pr. 600, 650, or permission of instructor.*

Major trends, issues, and problems in the provision of services in profit and not-for-profit special libraries.

**658. Library 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.

**659. Library and Information Science Research (3:3).**

*Pr. 600, 615, 620, 640, 650, or permission of instructor.*

Problems of concern to libraries and information center personnel, including application of interdisciplinary concepts and research methods.

**660. Supervision: School System Library Media Programs (3:3).**

*Pr. permission of instructor.*

Principles and problems in administration and supervision of the district level library/media program of the school system.

**664. Intellectual Freedom Seminar (3:3).**

*Pr. 600, 615, or permission of instructor.*

Examination of critical issues of intellectual freedom in libraries/information centers. Covers traditional concerns of access to print, government information, current and future issues of technology access, privacy concerns.

**665. Library Services for Young People (3:3).**

*Pr. 617 or 618 or permission of instructor.*

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.

**672. Instructional Design (3:3).**

Components of the systems approach to instructional design. (Same as CUI 672)

**674. Seminar: Issues and The Electronic Community (3:3).**

*Pr. permission of instructor.*

Major social and ethical issues emerging in the electronic community including those embraced by access, privacy, intellectual property, freedom of speech, institutional/social control, and evolving formats. (Same as CUI 674)

**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. Course may be repeated when topic varies.

**711. Experimental Course.**

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

**803. Research Extension (1-3).**

## DEPARTMENT OF MATHEMATICAL SCIENCES

383 Bryan Building

(336) 334-5836

<http://www.uncg.edu/mat>

### Professors

**Francine Blanchet-Sadri**, Ph.D., Theoretical computer science and symbolic logic, bioinformatics.

**Alexander Chigogidze**, D.Sc., Geometric topology, functional analysis (Head of Department).

**Paul F. Duvall, Jr.**, Ph.D., Geometric topology, combinatorics, dynamics (Director of Graduate Study).

**Suzanne M. Lea**, Ph.D., Image processing: automated segmentation and object recognition for astronomical and oceanographic images.

**Fereidoon Sadri**, Ph.D., Database and knowledge-base systems, modeling uncertainty in databases, deductive and object-oriented databases.

**Jerry E. Vaughan**, Ph.D., General topology and set theory.

**Theresa P. Vaughan**, Ph.D., Algebraic number theory, combinatorics.

### Associate Professor

**Richard H. Fabiano**, Ph.D., Analysis, applied mathematics, differential equations, and control theory.

### Assistant Professors

**Kenneth A. Byrd**, Ph.D., Ring theory, non-commutative rings and module theory, algebraic combinatorics.

**Maya Chhetri**, Ph.D., Nonlinear elliptic PDE's, nonlinear functional analysis, applied mathematics.

**Igor Erovenko**, Ph.D., Combinatorial properties of linear groups, bounded generation of S-arithmetic groups.

**Lixin Fu**, Ph.D., Datamining, databases, algorithms.

**Nancy Green**, Ph.D., Human-computer interaction, natural language processing, multimedia and dialogue interfaces.

**Scott J. Richter**, Ph.D., Statistical theory and methods equivalence testing, robust analysis of variance, statistical consulting.

**Shan Suthaharan**, Ph.D., Digital watermarking, video coding and compression, computer networks and security, wireless communications, image processing.



The Department of Mathematical Sciences offers courses in mathematics, statistics, and computer science. This breadth makes it possible for students pursuing the M.A. or M.S. degree to tailor their degree programs to emphasize their particular interests and career goals.

The Master of Arts in mathematics is linked to the Bachelor of Arts and Bachelor of Science in mathematics 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.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS IN MATHEMATICS**

The Department of Mathematical Sciences offers a graduate program of study leading to a Master of Arts degree in three areas of concentration: applied mathematics (30-33 hours), applied statistics (35 hours), and pure mathematics (30-33 hours). In the applied mathematics and pure mathematics concentrations, there is a thesis option (30 hours) and a non-thesis option (33 hours). 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 and 35 hour program. Course work must be approved by the Department of Mathematical Sciences and must include certain courses as explained in the discussion of the concentrations.

### **Concentration in Applied Mathematics (30-33 hours)**

#### **A. Algebra or Analysis (3 hours)**

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 - Modern Algebra (3)
- MAT 595 - 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.)

#### **B. Core Courses (9 hours)**

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 623, 624 - Numerical Mathematics (3) (3)
- MAT 631, 632 - Combinatorics and Graph Theory (3) (3)
- MAT 647, 648 - Linear Algebra and Matrix Theory (3) (3)
- MAT 615, CSC 653 - Symbolic Logic and Advanced Theory of Computation (3) (3)
- MAT 615, CSC 656 - Symbolic Logic and Foundations of Computer Science (3) (3)
- CSC 653, 656 - Advanced Theory of Computation and Foundations of Computer Science (3) (3)
- MAT 695, 696 - Real Analysis (3) (3)
- MAT 645, 646 - Approximation Theory (3) (3)
- STA 651, 652 - Mathematical Statistics (3) (3)

#### **C. Electives (12-21 hours)**

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.

#### **D. Thesis or Comprehensive Examination**

Each candidate may elect to (1) prepare a thesis or (2) pass a written comprehensive examination on his/her program of course work. The thesis option is a 30 hour program, and the non-thesis option is a 33 hour program.

#### **Thesis (6 hours)**

The candidate may prepare a thesis based on the investigation of a topic in mathematics, statistics, or computer science. A thesis director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. Generally, 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 possibly to some original results. While writing a thesis, candidates may include up to 6 hours of thesis in the required 30 hour program. Registration for the thesis will be under MAT 699, CSC 699, or STA 699. Students intending to write a thesis on a topic in computer science are expected to have had MAT 253, CSC 261, CSC 330, and STA 271 (or their equivalents) before beginning their graduate course work; students intending to write a thesis on a topic in statistics are expected to have had MAT 295, STA 271, STA 351, and STA 352 (or their equivalents) before beginning their graduate course work. Students intending to write a thesis in either computer science or statistics should also consult the Director of Graduate Study during their first semester in residence about other possible course work in these areas. An oral examination on the thesis is 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.

## Concentration in Applied Statistics (35 hours)

Undergraduate prerequisites: STA 271, MAT 310 and 394, CSC 130, or their equivalents.

### A. Core Courses (26-29 hours)

- STA 551, 552 - Introduction to Probability and Mathematical Statistics (3) (3)
- \*STA 561 - Introduction to Experimental Design and Sampling (3)
- STA 661, 661L - Advanced Statistics in the Behavioral and Biological Sciences I (4)
- STA 662, 662L - Advanced Statistics in the Behavioral and Biological Sciences II (4)
- STA 671 - Multivariate Analysis (3)
- STA 673 - Statistical Linear Models I (3)
- STA 698 - Project in Statistics (3)
- STA 699 - Thesis (6)

(Note: Students can do a project and take 32 hours of course work, or do a thesis and take 29 hours of course work for a total of 35 program hours. Students who have completed 551, 552 or their equivalents as undergraduates will replace those courses with additional electives chosen from the list below.)

\*Pending approval

### B. Electives (6-9 hours)

- STA 575 - Nonparametric Statistics (3)
- STA 670 - Categorical Data Analysis (3)
- STA 672 - Applied Statistical Computing (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)
- MAT 531 - Combinatorial Analysis (3)
- MAT 541/542 - Stochastic Processes (3) (3)
- CSC 523/524 - Numerical Analysis and Computing (3) (3)
- CSC 526 - Bioinformatics (3)
- ERM 668 - Survey Research Methods in Education (3)
- ERM 669 - Item Response Theory (3)
- ERM 728 - Factor Analysis and Multidimensional Scaling (3)
- ERM 729 - Advanced Item Response Theory (3)
- ERM 731 - Structural Equation Modeling in Education (3)

## Concentration in Pure Mathematics (30-33 hours)

### A. Algebra and Analysis (9 hours)

Each candidate must complete any three of the following four courses:

- MAT 591 - Advanced Modern Algebra (3)
  - MAT 592 - 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, 6, or 9 hours must be replaced by the same number of hours chosen in consultation with the Director of Graduate Study.)

### B. Core Courses (9 hours)

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 631, 632 - Combinatorics and Graph Theory (3) (3)
- MAT 647, 648 - Linear Algebra and Matrix Theory (3) (3)
- MAT 688, 689 - Mathematical Logic and Axiomatic Set Theory (3) (3)
- MAT 691, 692 - Modern Abstract Algebra (3) (3)
- MAT 693, 694 - Complex Analysis (3) (3)
- MAT 695, 696 - Real Analysis (3) (3)
- MAT 697, 698 - General Topology (3) (3)

### C. Electives (6-15 hours)

With prior approval of the Director of Graduate Study, a student will select 6-15 hours of other 500-600 level mathematics courses.

### D. Thesis or Comprehensive Examination

Each candidate may elect to (1) prepare a thesis or (2) pass a written comprehensive examination on his/her program of course work. The thesis option is a 30 hour program, and the non-thesis option is a 33 hour program.

### Thesis (6 hours)

The candidate may prepare a thesis based on the investigation of a topic in mathematics, statistics, or computer science. A thesis director will be appointed by the Department Head after consultation with the student and the Director of Graduate Study. Generally, 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 possibly to some original results. While writing a thesis, candidates may include up to 6 hours of thesis in the required 30 hour program. Registration for the thesis will be under MAT 699, CSC 699, or STA 699. Students intending to write a thesis on a topic in computer science are expected to have had MAT 253, CSC 261, CSC 330, and STA 271 (or their equivalents) before beginning their graduate course work; students intending to write a thesis on a topic in statistics are expected to have had MAT 295,

STA 271, STA 351, and STA 352 (or their equivalents) before beginning their graduate course work. Students intending to write a thesis in either computer science or statistics should also consult the Director of Graduate Study during their first semester in residence about other possible course work in these areas. An oral examination on the thesis is required and is followed by oral questions on the candidate's course work.

### 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.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN COMPUTER SCIENCE

The Department of Mathematical Sciences offers a graduate program of study leading to a Master of Science degree in computer science. There are three options: course work with comprehensive examination, project, or thesis. The program requires 30 graduate hours; at least 15 hours must be in 600-level courses, and at least 18 hours must be computer science (CSC) courses.

### A. Core Courses (6-21 hours)

Every student must complete:

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

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:

Computer Architecture	(CSC 561)
Operating Systems	(CSC 562)
Computer Networks	(CSC 567)
Theory of Computation	(CSC 553)
Algorithm Analysis	(CSC 555)

### B. Electives (9-24 hours)

With prior approval of the Director of Graduate Study, a student will select 9-24 hours of other 500- or 600-level courses from the following:

Any CSC course  
MAT 514, 515, 517, 531, 532, 541, 542, 549, 556, 593, 594, 615, 631, 632, 645, 646, 688, 689

STA 551, 552, 573, 574, 575, 651, 652, 671, 672, 673, 674, 675, 676, 677  
PHY 513  
MBA 608, 654

## C. Thesis, Project, or Comprehensive Examination

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

### Thesis (6 hours)

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 hours)

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 up to 3 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.

## DOCTORAL MINOR IN STATISTICS

Students pursuing a doctorate from other departments may obtain a statistics minor by completing 18 semester hours of graduate level statistics. STA 661 and 662 are required with the remaining hours being electives from STA 573, 574, 575, 593, 594, 670, 671, 672, 675, 676, and 677. STA 571 and 572 may be substituted for STA 661.

## SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN STATISTICS

The Department of Mathematical Sciences offers a graduate program of study leading to a 14 hour Post-Baccalaureate Certificate in statistics. The purpose of the certificate 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 is intended 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.

### A. Required Courses (8 hours)

STA 661/661L - Advanced Statistics in the Behavioral and Biological Sciences I (4)

STA 662/662L - Advanced Statistics in the Behavioral and Biological Sciences II (4)

### B. Electives (6 hours)

Students must complete two STA courses at the 500-level or above, excluding STA 571/571L, STA 572/572L, and STA 580.

## COMPUTER SCIENCE

### (CSC) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

#### 521. Computer Graphics and Image Processing (3:3).

*Pr. grades of at least C in 340, MAT 292 and MAT 353, or permission of instructor.*

Survey of graphics and image processing hardware, algorithms, data structures, and techniques.

#### 523. Numerical Analysis and Computing (3:3).

*Pr. grades of at least C in 130, in MAT 293 and in MAT 353.*

Number systems and errors, solutions of nonlinear and linear systems, eigenvalue problems, interpolation and approximation, numerical differentiation and integration, solution of differential equations. (Formerly CSC 543)

#### 524. Numerical Analysis and Computing (3:3).

*Pr. grade of at least C in 523.*

Continuation of 523 with special topics in numerical analysis, emphasis on applied mathematics. (Formerly CSC 544)

#### 526. Bioinformatics (3:3).

*Pr. permission of instructor.*

Problems and methods in bioinformatics including restriction mapping, map assembly, sequencing, DNA arrays, and sequence comparison.

#### 529. Artificial Intelligence (3:3).

*Pr. grade of at least C in 330.*

Knowledge representations. Resolution refutation systems. Best-first search algorithms. Heuristic, minimax, alpha-beta pruning techniques. Selected topics from machine learning, natural language processing, expert systems, neural networks. Functional or logic programming language. (Formerly CSC 559)

#### 539. Introduction to Compiler Design (3:3).

*Pr. grades of at least C in 261 and 330 or permission of instructor. Successful completion of 553 helpful.*

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.

#### 540. Human-Computer Interface Development (3:3).

*Pr. C or better in STA 271 and CSC 330 or permission of instructor.*

Survey of concepts and techniques for human-computer interface development. Topics include user-centered design, user interface programming, and usability evaluation.

#### 553. Theory of Computation (3:3).

*Pr. grade of at least C in MAT 353.*

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.

#### 555. Algorithm Analysis and Design (3:3).

*Pr. grade of at least C in 330.*

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.

#### 561. Principles of Computer Architecture (3:2:3).

*Pr. grades of at least C in 261, MAT 253 or permission of instructor.*

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.

#### 562. Principles of Operating Systems (3:3).

*Pr. grades of at least C in 261 and 340 or permission of instructor. Successful completion of 561 helpful.*

Techniques and strategies used in operating system design and implementation: managing processes, input/output, memory, scheduling, file systems, and protection.

#### 563. Basic Systems Administration Laboratory (1:0:3).

*Coreq. 562 and 567, or knowledge of operating systems and networks.*

Installing operating systems, peripherals, hardware, and software. Backups, recompiling the kernel (loading/unloading modules), providing web services, and user administration.



**564. Intermediate Systems Administration**

**Laboratory (1:0:3).**

*Pr. 563.*

Topics selected from routing, firewall, Primary Domain Controller, Backup Domain Controller, Domain Controller trust, SAMBA, DNS round robin, and PPP connectivity setup.

**565. Advanced Systems Administration**

**Laboratory (1:0:3).**

*Pr. 564.*

Automated installation, software installation, systems programming, system administration in a large organization. Projects will include departmental or university computer system work.

**567. Principles of Computer Networks (3:3).**

*Pr. grade of at least C in 261 and 330 or equivalent courses.*

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.

**568. Principles of Wireless Networks (3:3).**

*Pr. 330 and one of the following: 561 or 562 or 567 or permission of instructor.*

Digital communications, communication networks, wireless communication technology, wireless networking, wireless LANs and wireless network programming.

**570. Principles of Database and Knowledge-Base Systems (3:3).**

*Pr. grade of at least C in 330, or permission of instructor.*

Contemporary database and knowledge-base systems. Emphasis on relational, extended relational, deductive, and object-oriented models. Query processing, modeling and implementation of applications in these models.

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

*Pr. 330 and one of the following: 561, 562, 567, or 570; or permission of instructor.*

Modern development of cryptography and secure encryption protocols; program security and viruses, operating system protection, network and distributed system security, database security, and administering security.

**583. Firewall Architecture and Computer Security (3:3).**

*Pr. 567 and 580 or permission of instructor.*

Firewall hardware and software technologies. Architectures, protocols and their applications.

**589. Experimental Course.**

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

**593, 594. Directed Study in Computer Science (1-3), (1-3).**

**(CSC) COURSES FOR GRADUATES**

**621. Advanced Computer Graphics and Image Processing (3:3).**

*Pr. 521 or permission of instructor.*

Computer graphics: three-dimensional transformations, hidden line and surface removal, shading, modeling objects, compression. Image processing: transformations, enhancement, filtering and restoration, analysis, compression.

**626. Advanced Bioinformatics (3:3).**

*Pr. 526 or permission of instructor.*

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.

**640. Software Engineering (3:3).**

*Pr. 330, or permission of instructor.*

Organization and scheduling of software engineering projects and structured software design. Specification methods, metrics, software engineering tools, design, prototyping, version control, and testing.

**653. Advanced Theory of Computation (3:3).**

*Pr. 553, or permission of instructor.*

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).

**655. Advanced Topics in Algorithms (3:3).**

*Pr. grade of at least C in 555.*

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.

**656. Foundations of Computer Science (3:3).**

*Pr. MAT 353 or permission of instructor.*

Introduces the mathematical foundations that support advanced studies in computer science including computer programming and the analysis of algorithms.

**663. Advanced Topics in Computer Systems (3:3).**

*Pr. 330 and 567 or 561 or 562, or permission of instructor.*

Distributed and parallel systems. High-speed and wireless networks. Mobile computing. Communication, synchronization, distributed shared memory, real-time and fault-tolerant systems; current implementations. May be repeated for credit when topics vary.

**665. Advanced Wireless Networks (3:3)**

*Pr. 330 or equivalent and one of the following: 561 or 562 or 567 or permission of instructor.*

Wireless technology and architecture, wireless network types, wireless network design approaches, wireless application development and wireless network programming.

**667. Supervision of Basic Systems Administration (1:0:3).**

*Coreq. 562 and 567, or knowledge of operating systems and networks.*

Installing operating systems, peripherals, hardware, and software on heterogeneous platforms. Backups, recompiling the kernel (loading/unloading modules), providing web services, and user administration on heterogeneous networks. Installing patches and system updates. Introduction to team management strategies.

**668. Supervision of Intermediate Systems Administration (1:0:3).**

*Pr. 667.*

Supervision of team members in selected topics from routing, firewall, Primary Domain Controller, Backup Domain Controller, Domain Controller trust, SAMBA, DNS round robin, and PPP connectivity setup.

**669. Supervision of Advanced Systems**

**Administration** (1:0:3).

*Pr. 668.*

Automated installation, software installation, systems programming, system administration, and team supervision for a large organization. Projects will include supervision of, and participation in, departmental or university computer system work.

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

*330, or permission of instructor.*

Modern database models. User interface and operations. Applications design. Introduction to multi-database systems: interoperability and data integration. Selected topics of current interest.

**672. Database System Architecture** (3:3).

*Pr. 570 or 671, or permission of instructor.*

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.

**676. Topics in Database Systems** (3:3).

*Pr. 671 or permission of instructor.*

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.

**680. Advanced Topics in Computer Security** (3:3).

*Pr. 339 and 580.*

Topics in cryptography and computer security, including cryptographic protocols, Web server security, Java security, security in the healthcare domain, and experimental quantum cryptography.

**693. Advanced Topics in Computer Science** (3-6).

*Pr. permission of instructor.*

Algorithms, architecture, languages, systems, theory, or other areas of computer science. May be repeated once for credit.

**695. Current Problems in Computer Science** (3:3).

*Pr. permission of instructor.*

Topics of current research interest in computer science.

**698. Project in Computer Science** (3).

(Graded on S-U basis)

**699. Thesis** (1-6).

**711. Experimental Course.**

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

**801. Thesis Extension** (1-3).

**803. Research Extension** (1-3).

## MATHEMATICS

### (MAT) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

**503. Problem Solving in Mathematics** (3:3).

*Pr. grade of at least C in 191 and 303 or permission of instructor.*

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. This course can not be applied toward the requirements for the M.A. degree in mathematics.

**504. Foundations of Geometry** (3:3).

*Pr. grade of at least C in 292 or permission of instructor.*

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. This course can not be applied toward the requirements for the M.A. degree in mathematics.

**505. Foundations of Mathematics** (3:3).

*Pr. grade of at least C in 292 or 303 or permission of instructor.*

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. This course can not be applied toward the requirements for the M.A. degree in mathematics.

**513. Historical Development of Mathematics** (3:3).

*Pr. grade of at least C in 292.*

Study of the historical development of mathematics—not a history of the persons involved in this development. This course can not be applied toward the requirements for the M.A. degree in mathematics.

**514. Theory of Numbers** (3:3).

*Pr. grade of at least C in 311, or permission of instructor.*

Introduction to multiplicative and additive number theory. Divisibility, prime numbers, congruences, linear and non-linear Diophantine equations (including Pell's equation), quadratic residues, number-theoretic functions, and other topics.

**515. Mathematical Logic** (3:3).

*Pr. grade of at least C in 253 or 311, or permission of instructor.*

Formal languages, recursion, compactness, and effectiveness. First-order languages, truth, and models. Soundness and completeness theorems. Models of theories.

**516. Polynomial Rings** (3:3).

*Pr. grade of at least C in 311 or permission of instructor.*

Rings, integral domains, fields, division algorithm, factorization theorems, zeros of polynomials, greatest common divisor, relation between the zeros and the coefficients of a polynomial, formal derivatives, prime polynomials, Euclidean rings, the Fundamental Theorem of Algebra.

**517. Theory of Groups** (3:3).

*Pr. grade of at least C in 311 or permission of instructor.*

Elementary properties of groups and homomorphisms, quotients and products of groups, the Sylow theorems, structure theory for finitely generated Abelian groups.

**518. Set Theory and Transfinite Arithmetic (3:3).**

*Pr. grade of at least C in 311 or 395 or permission of instructor.*

The axioms of set theory, operations on sets, relations and functions, ordinal and cardinal numbers.

**519. Intuitive Concepts in Topology (3:3).**

*Pr. grade of at least C in 311 or 395 or permission of instructor.*

Basic concepts, vector fields, the Jordan curve theorem, surfaces, homology of complexes, continuity.

**520. Non-Euclidean Geometry (3:3).**

*Pr. grade of at least C in 311 or 395 or permission of instructor.*

The fifth postulate, hyperbolic geometries, elliptic geometries, the consistency of the non-Euclidean geometries, models for Euclidean and non-Euclidean geometries, elements of inversion.

**521. Projective Geometry (3:3).**

*Pr. permission of instructor.*

Transformation groups and projective, affine, and metric geometries of the line, plane, and space. Homogeneous coordinates, principles of duality, involutions, cross-ratio, collineations, fixed points, conics, ideal and imaginary elements, models, and Euclidean specifications.

**522. Hilbert Spaces and Spectral Theory (3:3).**

*Pr. grade of at least C in 311 or 395.*

Vector-spaces: basis, dimension, Hilbert spaces; pre-Hilbert spaces, norms, metrics, orthogonality, infinite sums. Linear subspaces; annihilators, closed and complete subspaces, convex sets. Continuous linear mappings; normed spaces. Banach spaces, Banach algebras, dual spaces. Reisz-Frechet theorem. Completion. Bilinear and sesquilinear maps. Adjoints. Operators in Hilbert space: isometric, unitary, self-adjoint, projection, and normal operations. Invariant subspaces. Continuous operators. Spectral theorems for a normal co-operator.

**531. Combinatorial Analysis (3:3).**

*Pr. grade of at least C in 253 or 295 or 311 or 395, or permission of instructor.*

The pigeon-hole principle, permutations, combinations, generating functions, principle of inclusion and exclusion, distributions, partitions, recurrence relations.

**532. Introductory Graph Theory (3:3).**

*Pr. grade of at least C in 310 and any one of the following courses: 253, 295, 311, 395, 531.*

Basic concepts, graph coloring, trees, planar graphs, networks.

**540. Complex Functions with Applications (3:3).**

*Pr. grade of at least C in 293.*

The complex number system, holomorphic functions, power series, complex integration, representation theorems, the calculus of residues.

**541, 542. Stochastic Processes (3:3), (3:3).**

*Pr. grade of at least C in 394 and either 353 or STA 351.*

Markov processes, Markov reward processes, queuing, decision making, graphs and networks. Applications to performance, reliability, and availability modeling.

**545. Differential Equations and Orthogonal Systems (3:3).**

*Pr. grade of at least C in 293 and 390 or permission of instructor.*

An introduction to Fourier series and orthogonal sets of functions, with applications to boundary value problems.

**546. Partial Differential Equations with Applications (3:3).**

*Pr. grade of at least C in 545.*

Fourier integrals, Bessel functions, Legendre polynomials and their applications. Existence and uniqueness of solutions to boundary value problems.

**549. Topics in Applied Mathematics (3:3).**

*Pr. grade of at least C in 293 and 390 or permission of instructor.*

Selected topics of current interest in applied mathematics. May be repeated for credit with approval of department head.

**556. Advanced Discrete Mathematics (3:3).**

*Pr. grade of at least C in 253 or permission of instructor.*

Advanced topics in discrete mathematics and their uses in studying computer science.

**589. Experimental Course.**

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

**591. Advanced Modern Algebra (3:3).**

*Pr. grade of at least C in 311.*

Set theory: sets, mapping, integers. Group theory: normal subgroups, quotient groups, permutation groups. Sylow theorems. Ring theory: homomorphisms, ideals, quotient rings, integral domains, fields, Euclidean rings, polynomial rings.

**592. Abstract Algebra (3:3).**

*Pr. grade of at least C in 591 or 311 with permission of instructor.*

Fields: extensions, transcendental elements, roots of polynomials, Euclidean construction, Galois theory, solvability of radicals. Linear transformations: characteristic roots, canonical forms of matrices, trace and transpose. Hermitian, unitary, and normal transformations.

**593, 594. Directed Study in Mathematics (1-3), (1-3).**

**595, 596. Mathematical Analysis (3:3), (3:3).**

*Pr. 395 or permission of instructor.*

Real number axioms, basic topology, sequences, series, continuity, differentiation. Riemann-Stieltjes integral.

**(MAT) COURSES FOR GRADUATES**

**606. Calculus for Middle Grade Teachers (3:3).**

*Pr. 505 or permission of instructor.*

History, developments, major concepts, and applications of differential and integral calculus covering functions of several variables. No credit toward mathematics degrees.

**607. Abstract Algebra for Middle Grade Teachers (3:3).**

*Pr. 303 and 505; or permission of instructor.*

Development and major concepts of abstract algebraic structures including groups, rings, fields, vector spaces, and matrix algebra. No credit toward mathematics degrees.

**623, 624. Numerical Mathematics (3:3), (3:3).**

*Pr. MAT 390, MAT 595, MAT 596, or equivalents.*

Functional analytic treatment of computation, approximation, optimization, interpolation, smoothing equations, linear systems, differential equations. Emphasis on the mathematical development and analysis of numerical techniques.

**631. Combinatorics (3:3).**

*Pr. 311 or permission of instructor.*

Topics include selections, arrangements, theory of generating functions, inclusion-exclusion principle, recurrences, Polya's theory, block designs, stirling numbers, coding theory.

**632. Graph Theory (3:3).**

*Pr. 631 or permission of instructor.*

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.

**645, 646. Approximation Theory (3:3), (3:3).**

*Pr. 390, 595, 596.*

Normed linear spaces. Convexity. Existence and unicity of best approximations. Tchebycheff approximation by polynomials and other linear families. Least-squares approximation and related topics. Rational approximation. The characterization of best approximations. The Stone Approximation Theorem. The Muntz Theorem. Polygonal approximation and bases. Approximation in the mean.

**647, 648. Linear Algebra and Matrix Theory (3:3), (3:3).**

*Pr. 310, 311 or permission of instructor.*

Vector spaces. Linear operators and similarity. The eigenvalue problem and a special decomposition theorem. Normal forms: Smith form for matrices, rational and Jordan forms. Spectral resolution of matrix functions. Special topics.

**649. Topics in Operations Research (3:3).**

*Pr. permission of instructor.*

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.

**650. Management Decision-Making Under Uncertainty (3:3).**

*Pr. permission of instructor.*

Models and techniques to be used in making decisions under uncertainty. Markov Chains, Linear Programming Under Uncertainty, and Chance-Constrained programming.

**659. Advanced Topics in Mathematics (3:3).**

*Pr. permission of instructor.*

Topics vary according to interest and demand, and include algebra, applied mathematics, combinatorics, dynamics, mathematical logic, topology, and other topics. May be repeated for credit when topic varies.

**688, 689. Mathematical Logic and Axiomatic Set Theory (3:3), (3:3).**

*Pr. 311, 394, or equivalents.*

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.

**690. Mathematics Seminar (2:2).**

*Pr. admission to candidacy for master's degree.*

Topics in mathematics suitable for development into a master's thesis. Current mathematical literature.

**691, 692. Modern Abstract Algebra (3:3), (3:3).**

*Pr. bachelor's degree with a major in mathematics. Credits equivalent to credits for mathematics 310, 311, 595, and 596, or permission of instructor and department head.*

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.

**693, 694. Complex Analysis (3:3), (3:3).**

*Pr. bachelor's degree with a major in mathematics. Credits equivalent to credits for mathematics 310, 311, 595, and 596, or permission of instructor and department head.*

The complex number system, holomorphic functions, power series, complex integration, representation theorems, the calculus of residues.

**695, 696. Real Analysis (3:3), (3:3).**

*Pr. bachelor's degree with a major in mathematics. Credits equivalent to credits for mathematics 310, 311, 595, and 596, or permission of instructor and department head.*

Lebesgue measure; the Lebesgue 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.

**697, 698. General Topology (3:3), (3:3).**

*Pr. bachelor's degree with a major in mathematics. Credits equivalent to credit for mathematics 310, 311, 595, and 596, or permission of instructor and department head.*

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.

**699. Thesis (1-6).**

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).**

**803. Research Extension (1-3).**

## COURSES PLANNED PRIMARILY FOR MATHEMATICS TEACHERS

The courses below are planned primarily for teachers who have a bachelor's degree with a major in mathematics. They are offered by special arrangement.

Prerequisites: The student is expected to have credits in courses equivalent to 191, 292, 293, 310, 311, or 390.

**613. Development of Mathematics (3:3).**

**614. Advanced Number Theory (3:3).**

**615. Symbolic Logic (3:3).**

**616. Polynomials over General Rings (3:3).**

**617. Algebraic Theory of Semigroups (3:3).**

**618. Transfinite Ordinal and Cardinal Numbers (3:3).**

**619. Conceptual Topology (3:3).**

**620. A Survey of Geometry (3:3).**

**621. Advanced Linear Geometry (3:3).**



## STATISTICS

**(STA) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES****551, 552. Introduction to Probability and Mathematical Statistics (3:3), (3:3).**

*Pr. grade of at least C in 351 and MAT 293 or permission of instructor.*

Events and probabilities (Sample Spaces), dependent and independent events, random variables, and probability distributions, discrete and continuous distributions, expectation, moment generating functions, point estimation, multivariate normal distribution, testing hypotheses, confidence intervals, correlation and regression, small sample distributions.

**571. Statistical Methods for Research I (3:3).**

*Coreq. 571L.*

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.

**571L. Statistical Methods Laboratory I (1:0:2).**

*Coreq. 571.*

Using statistical software packages for data analysis. Problems parallel assignments in 571.

**572. Statistical Methods for Research II (3:3).**

*Pr. 571 and 571L or permission of instructor. Coreq. 572L.*

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.

**572L. Statistical Methods Laboratory II (1:0:2).**

*Pr. 571 and 571L or permission of instructor. Coreq. 572.*

Using statistical software packages for data analysis. Problems parallel assignments in 572.

**573. Theory of Linear Regression (3:3).**

*Pr. grade of at least C in 352 and MAT 310, or 662, or permission of instructor.*

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.

**574. Theory of the Analysis of Variance (3:3).**

*Pr. 573 or permission of instructor.*

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.

**575. Nonparametric Statistics (3:3).**

*Pr. grade of at least C in 352 or 572 or 662 or permission of instructor.*

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.

**580. Biostatistical Methods (3:3).**

*Pr. grade of at least C in 271 or permission of instructor.*

Statistical methods for biological research including: descriptive statistics, probability distributions, parametric and nonparametric tests, ANOVA, regression, correlation, contingency table analysis.

**589. Experimental Course.**

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

**593, 594. Directed Study in Statistics (1-3), (1-3).****(STA) COURSES FOR GRADUATES****651, 652. Mathematical Statistics (3:3), (3:3).**

*Pr. 352 and either MAT 394 or MAT 395 or MAT 595.*

Requisite mathematics; distribution and integration with respect to a distribution. Theory of random variable and probability distributions. Sampling distributions, statistical estimation, and tests of significance. Random processes. Numerical examples.

**661. Advanced Statistics in the Behavioral and Biological Sciences I (3:3).**

*Pr. 271 or an equivalent introductory statistics course.*

*Coreq. 661L.*

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.

**661L. Advanced Statistics Laboratory (1:1).**

*Coreq. 661.*

Using statistical software packages for data analysis. Problems parallel assignments in 661. (Graded on S-U basis)

**662. Advanced Statistics in the Behavioral and Biological Sciences II (3:3).**

*Pr. 661 or permission of instructor. Coreq. 662L.*

Continuation of STA 661. Multiple regression and correlation, analysis of covariance, factorial ANOVAs, randomized block designs, multiple comparisons, split-plot designs, repeated measures.

**662L. Advanced Statistics Laboratory (1:1).**

*Coreq. 662.*

Using statistical software packages for data analysis. Problems parallel assignments in 662. (Graded on S-U basis)

**667. Statistical Consulting (1:1).**

*Pr. permission of instructor.*

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. (Graded on S-U basis. Credit is *not* applicable to a graduate plan of study.)

**670. Categorical Data Analysis (3:3).**

*Pr. 662 or permission of instructor.*

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.

**671. Multivariate Analysis (3:3).**

*Pr. 573 or 662 or permission of instructor.*

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.

**672. Applied Statistical Computing (3:3).**

*Pr. 572 or 662.*

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.

**673, 674. Statistical Linear Models I, II (3:3), (3:3).**

*Pr. 352 and MAT 310 or permission of instructor.*

Abstract vector spaces, inner product spaces, projections, the Spectral Theorem, least squares, multiple regression, ANOVA, multiple comparisons, data analysis.

**675. Advanced Experimental Design (3:3).**

*Pr. 561 or permission of instructor.*

Topics may 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.

**676. Sample Survey Methods (3:3).**

*Pr. 352 or 572 or 662 or permission of instructor.*

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.

**677. Advanced Topics in Data Analysis and Quantitative Methods (3:3).**

*Pr. 662.*

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.

**698. Project in Statistics (3).**

*Pr. permission of instructor.*

Directed research project in statistics. (Graded on S-U basis)

**699. Thesis (1-6).**

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).**

**803. Research Extension (1-3).**

## SCHOOL OF MUSIC

220 Music Building

(336) 334-5794

<http://www.uncg.edu/mus>

### Professors

**Kelly Burke**, D.M.A., Clarinet, chamber music, EastWind Trio d'Anches.

**William P. Carroll**, D.M.A., Choral conducting, University Chorale, (Director of Choral Activities and Chair, Division of Vocal Studies).

**John J. Deal**, Ph.D., Music Education (Dean).

**Robert Gutter**, M.M., University Symphony Orchestra, orchestral and instrumental conducting.

**Donald A. Hodges**, Ph.D., Music education (Director, Music Research Institute).

**George Kiorpes**, D.M.A., Piano, keyboard literature, piano pedagogy.

**Randy Kohlenberg**, Ph.D., Trombone, music education, Market Street Brass.

**John Locke**, Ed.D., Band conducting, music education, band literature (Chair, Division of Instrumental Studies, Director of Bands, Director of Summer Music Camps).

**Charles Lynam**, M.A., Voice.

**Carol Marsh**, Ph.D., 17th and 18th century dance, Renaissance and Baroque music history, viola da gamba.

**Eleanor McCrickard**, Ph.D., 17th century Italian instrumental music, Baroque cantata (Chair, Division of Composition/History/Theory).

**David L. Nelson**, Ph.D., Music theory (Associate Dean and Director of Academic Programs).

**John Salmon**, D.M.A., Piano, keyboard literature, jazz.

**J. Kent Williams**, Ph.D., Music theory and analysis, computer applications and programming, multimedia, music cognition, jazz.

### Associate Professors

**Dennis AsKew**, D.M.A., Tuba, brass pedagogy, chamber ensembles, Market Street Brass.

**Edward Bach**, D.M.A., Trumpet, chamber ensembles, Market Street Brass.

**Michael J. Burns**, D.M.A., Bassoon, wind chamber music, EastWind Trio d'Anches.

**Gregory Carroll**, Ph.D., Theory and analysis, composition, counterpoint, serial techniques, music appreciation, binaural sound and accelerated learning.

**Joseph DiPiazza**, D.M.A., Piano, keyboard literature.

**Deborah Egekvis**, D.M., Flute, chamber ensembles.

**Andrew Harley**, D.M.A., Accompanying, vocal coach.

**David Holley**, M.M., Opera, voice.

**Carla LeFevre**, D.M.A., Voice, song repertoire.

**Jack Masarie**, M.M., Brass specialist, horn, historical instrument performance and pedagogy, brass literature, brass pedagogy, Market Street Brass.

**Frank McCarty**, Ph.D., Music theory, American music.

**Cort McClaren**, Ph.D., Percussion, percussion ensemble, percussion pedagogy, instrumental music education, conducting.

**Scott Rawls**, D.M.A., Viola, chamber music, Contemporary music, McIver String Ensemble.

**Patricia Sink**, Ph.D., Music psychology and acoustics, measurement of music behaviors, music therapy and special music education, Choral/General music education (Chair, Music Education Division).

**Paul Stewart**, D.M., Piano, piano pedagogy (Chair, Division of Keyboard Studies).

**Nancy Walker**, D.M., Voice, lyric diction.

**Andrew S. Willis**, D.M.A., Piano, fortepiano, piano literature, early pianos, Eighteenth Century performance practice.

#### *Assistant Professors*

**Mary A. Barret**, D.M.A., Oboe and English horn, EastWind Trio d'Anches.

**Robert Bracey**, D.M.A., Voice.

**Guy Capuzzo**, Ph.D., Music theory.

**Gavin D. Douglas**, Ph.D., Ethnomusicology, music history, music ensemble.

**Mark Engebretson**, D.M.A., Composition, electronic music.

**John M. Fadial, Jr.**, D.M.A., Violin, McIver String Ensemble.

**Steve Haines**, M.M., Jazz, jazz composition.

**Elizabeth L. Keathley**, Ph.D., music history.

**Constance McKoy**, Ph.D., Music education, elementary choral/general music, multicultural music education.

**David B. Nolker**, Ph.D., Music education, secondary choral/general music, music supervision.

**Pierpaolo Polzonetti**, Ph.D., Musicology.

**Jennifer L. Stewart**, Ph.D., Music education.

**Steven Stusek**, D.M., Saxophone, chamber music.

**Donald G. Traut**, Ph.D., Music theory and analysis.

**Valerie L. Trollinger**, D.M.E., Music education, instructional technology.

**Brooks Whitehouse**, D.M.A., Cello, string chamber music, McIver String Ensemble.

#### *Lecturers*

**Robert Burns King**, M.S.M., Organ.

**Ellen C. Linton**, M.M., Voice.

**Mark Mazzatenta**, M.M., Guitar, jazz appreciation.

**Levone Tobin Scott**, M.M., Voice.

**Robert A. Wells**, D.M.A., Voice.

**Welborn E. Young**, D.M.A., Voice.

**Aspects of Music Study.** The School of Music is an accredited institutional member of the National Association of Schools of Music. The requirements for entrance and graduation as set forth in this *Bulletin* are in accordance with the published regulations of the National Association of Schools of Music. The School of Music is the representative of the state of North Carolina to the National Association of Music Executives in State Universities.

The School of Music enjoys national recognition as a leader in graduate music study. Strong curricular programs support the only Doctor of Musical Arts (in performance, conducting, and accompanying/chamber music) and Doctor of Philosophy (in music education) degrees offered in North Carolina. Within these doctoral programs the student may select, with the approval of the advisory committee, a variety of minors including the Post-Master's Certificate in music theory pedagogy. Master's degrees are offered in performance studies (voice, piano, organ, strings, early keyboard, individual woodwinds, brass, percussion), conducting, vocal pedagogy, piano pedagogy, woodwinds (multiple), and accompanying. In addition, master's programs are offered in music education, music theory, and composition. A large faculty of outstanding artists, teachers, and researchers supports a comprehensive program of study.

**Auditions.** Performance auditions/interviews are required for acceptance as a music major and for approval of the area of study. (M.M. in music education applicants may have the audition waived if the transcript shows satisfactory grades and hours in performance studies.) Auditions should be arranged in advance through the office of the Director of Academic Programs in the School of Music, preferably

on regularly scheduled audition dates (D.M.A. auditions are scheduled separately). Tape recorded auditions for provisional admission must be approved in advance by the Director of Academic Programs. A campus audition, however, will be required before full admission to a degree program may be confirmed or for a graduate assistantship. Ph.D. applicants should consult the Director of Graduate Study for specific requirements prior to scheduling an on-campus interview.

**Admissions.** Admission to graduate programs in music assumes undergraduate and, for doctoral applicants, graduate study appropriate to the proposed graduate program. Applicants without music degrees may be required to submit scores on the UNCG School of Music Diagnostic Examinations which will be used as further evidence of competencies when evaluating admission materials. Students may register for up to nine semester hours credit prior to formal admission into a graduate program.

**Performance Activities.** Qualified students may perform as soloists, members of major performance organizations, and chamber ensembles within the School of Music. Students are encouraged to audition for roles/positions as vocalists or instrumentalists in opera and musical theatre performances which the School of Music presents in cooperation with the Department of Theatre. Students are also afforded opportunities to audition for positions in the Greensboro Symphony Orchestra, North Carolina Symphony Orchestra, and for positions as church organists, vocal soloists, and directors.

**Recital and Concert Opportunities.** The University Concert/Lecture Series and the School of Music bring outstanding artists to campus, many of whom also present master classes or engage in informal musical discussions on campus. Students are invited to attend or participate in the many recitals and concerts given during the year by the School of Music faculty and students.

**Facilities.** The School of Music occupies a recently constructed, three-level, 130,000 square-foot facility. Located prominently on the corner of Market and McIver Streets, the School of Music is the northeast window to

the University. The music building, considered to be one of the largest of its kind in the southeast, is accessed easily from an adjacent parking deck and is within a short walking distance to the central portion of the campus and housing.

The “state-of-the-art” building features a 350-seat recital hall; a 120-seat organ recital hall; instrumental, choral, and percussion rehearsal halls; a unified music library; a computer laboratory; classrooms; seminar-conference rooms; faculty studios/offices; practice facilities; an acoustics research laboratory; a psychoacoustics laboratory; an electronic piano laboratory; electronic music studios, a music education methods room; administrative offices; faculty and student lounges; and storage.

Students in instrumental areas, although encouraged to own the best possible instruments for their personal use, are afforded access to the school’s large inventory of orchestral and keyboard instruments, including a new \$400,000 Andover tracker organ with 3 manuals, 35 ranks, and 30 stops.

**Performance Studies.** Advance approval is required for all registration in performance studies. Inquire at the School of Music Graduate Study office for additional information.

**Student Information Manual.** Additional policies and regulations are found in the Student Information Manual as well as the D.M.A. and Ph.D. Student Handbooks. These sources are made available to all music students after entrance requirements are met. Adherence to the contents of these publications is the responsibility of the student.



## SPECIFIC REQUIREMENTS FOR THE MASTER OF MUSIC

In all programs, 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. A written comprehensive examination in the final semester is required for all master's students except in music education. During the final semester of the master's program music education students must complete a portfolio that demonstrates advanced competencies.

### MASTER OF MUSIC IN MUSIC EDUCATION (34 HOURS)

#### A. Core (6 hours)

MUS 601- Research Methods in Music (3)  
One of the following: MUS 606, 611, 628, 660, 662

#### B. Professional (17 hours)

MUS 650, 639a or b, 2 credit hours of ensemble or performance study and select 9 hours from  
MUS 605, 633, 634 or 653

#### C. Music Electives (9 hours)

A minimum of two 3-hour courses is required

#### D. Portfolio (2 hours)

MUS 692a,b - Portfolio Development in Music Education (2)

### Elective Concentrations in Music Education

#### Elementary/General (34 hours):

Core - as listed above (6 hours)

Professional/Concentration (17 hours)

MUS 639a or b, 650, 633, 634  
Select one course from: MUS 605, 653  
Music Performance/Ensemble (2)

Concentration/Electives (9 hours)

MUS 645, 678  
Electives (3)

Portfolio - as listed above (2 hours)

#### Choral Literature/Conducting (34 hours):

Core - as listed above (6 hours)

Professional/Concentration (17 hours)

MUS 639a or b, 650, 680, 681, 682, or 688 (Choral Ensemble) (2)  
Select 9 hours from the following: MUS 605, 633, 634, 653

Electives (9 hours)

MUS 541 and/or 652 (Vocal Pedagogy or Voice) (6)

Portfolio - as listed above (2 hours)

#### String Instrument Pedagogy (34 hours):

Core - as listed above (6 hours)

Professional/Concentration (17 hours)

MUS 650, 639a or b  
Music Performance (Principal Instrument) (2)  
Select 9 hours from the following: MUS 605, 633, 634, 653

Concentration/Electives (9 hours)

MUS 603, Music Performance [Secondary Instrument(s)], 657

Portfolio - same as above (2 hours)

#### Winds and Percussion (34 hours):

Core - as listed above (6 hours)

Professional/Concentration (17 hours)

MUS 650, 639a or b  
Music Performance (Principal Instrument) (2)  
Select 9 hours from the following: MUS 605, 633, 634, 653

Concentration/Electives (9 hours)

MUS 604, 607, or 608  
Music Performance [Secondary Instrument(s)]  
MUS 657

Portfolio - same as above (2 hours)

#### Secondary Choral/General (34 hours):

Core - as listed above (6 hours)

Professional/Concentration (17 hours)

MUS 650, 639a or b, 633, 634  
Music Performance or Ensemble (2)  
Select 3 hours from the following: MUS 605, 653

Concentration/Electives (9 hours)

MUS 656, 678, Electives

Portfolio - same as above (2 hours)

## MASTER OF MUSIC IN PERFORMANCE

Enrollment in performance studies at the 651 level is required before the semester of recital performance.

Instrumental Division students must perform in an ensemble each semester. The ensemble will be selected by the Division Chair in consultation with the ensemble directors, the performance teacher, and the student.

## **Accompanying (32 hours)**

Nine hours of language are required for accompanying majors, one semester each of French, German, and Italian. Also required is the equivalent of MUS 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; these hours will NOT, however, count toward the M.M. in performance in accompanying degree program.

### **A. Core (6 hours)**

MUS 602 (601 optional)  
Three hours from one of the following: MUS 606, 611, 660, 662

### **B. Performance (piano) (9 hours)**

MUS 551/651  
MUS 652 (one hour) string instrument or harpsichord

### **C. Area Literature (10 hours)**

Two semesters of each: MUS 513b and 514b  
Select two from MUS 511, 521, 620, 621, 637, 670, 671, 673, 697

### **D. Ensemble (4 hours)**

MUS 696a

### **E. Accompanying Recital (two) (NC)**

MUS 600 - Recital (0)

Two full accompanying or chamber ensemble recitals are required. The 651 level must be achieved before jury approval of the second recital. The repertoire should include representative selections from vocal, string, and wind literature. The distribution and quantity of repertoire from the three areas is determined at the discretion of the teacher. At least one work played on the harpsichord should be included in the repertoire. For one of the required recitals, any part may be solo literature.

### **F. Music Electives (3 hours)**

## **Conducting (Choral) (32 hours)**

### **A. Core (6 hours)**

MUS 602 (601 optional)  
Three hours from one of the following: MUS 606, 611, 660, 662

### **B. Performance (Conducting) (8 hours)**

MUS 551/651 and/or 639b/629

### **C. Secondary Performance Study (Keyboard/Voice) (2 hours)**

MUS 652

### **D. Ensemble (2-4 hours)**

MUS 680, 682, 683, 688

### **E. Choral Literature (6 hours)**

MUS 528, 622, 628, (MUS 628 will not be used as a core course in the Choral Conducting program.)

### **F. Recital (NC)**

MUS 600 - Recital (0)

### **G. Music Electives (6-8 hours)**

Minimum of one 3-hour course required

## **Conducting (Instrumental) (32 hours)**

### **A. Core (6 hours)**

MUS 602 (601 optional)  
Three hours from one of the following: MUS 606, 611, 628, 660, 662

### **B. Performance (Conducting) (8 hours)**

MUS 551/651 and/or 639a

### **C. Performance (Keyboard Secondary) (2 hours)**

MUS 652

### **D. Ensemble (preferably large) (2 hours)**

### **E. Recital (NC)**

MUS 600 - Recital (0)

### **F. Music Electives (14 hours)**

Minimum of two 3-hour courses required

## **Early Keyboard Instruments (32 hours)**

MUS 302 or 303 Keyboard Harmony required (not graduate credit)

### **A. Core (6 hours)**

MUS 602 (required)  
Three hours from one of the following: MUS 606, 611, 660, 662

### **B. Performance (harpsichord or forte-piano) (8 hours)**

MUS 551/651  
Two hours at 651 required before the recital

### **C. Performance (second keyboard instrument — organ, fortepiano, harpsichord, clavichord) (2 hours)**

MUS 652

### **D. Area Literature (6 hours)**

Select from MUS 530 and 531  
MUS 613

### **E. Ensemble (2 hours)**

MUS 696a and 696d required

### **F. Recital (NC)**

MUS 600 - Recital (0)

## G. Music Electives (8 hours)

### **Keyboard, String, Wind, Percussion (32 hours)**

#### A. Core (6 hours)

MUS 602 (601 optional)

Three hours from one of the following: MUS 606, 611, 628, 660, 662

#### B. Performance (8 hours)

MUS 551/651

#### C. Area Literature (5 hours)

#### D. Ensemble (preferably large) (2 hours)

Required all semesters for Instrumental Division students

#### E. Recital (NC)

MUS 600 - Recital (0)

#### F. Music Electives (11 hours)

A minimum of two 3-hour courses required

### **Piano Pedagogy (32 hours)**

MUS 302 or 303 Keyboard Harmony or proficiency required (will not count toward the degree).

#### A. Core (6 hours)

MUS 602 (601 optional)

Three hours from one of the following: MUS 606, 611, 660, 662

#### B. Performance (6 hours)

MUS 551/651

#### C. Pedagogy (6 hours)

Six hours from the following: MUS 612, 616, 617, 672

#### D. Area Literature (6 hours)

Six hours from the following: MUS 613, 614, 615, 620

#### E. Lecture/Demonstration (2 hours)

MUS 610

#### F. Music Electives (6 hours)

### **Vocal Pedagogy (35 hours)**

Twelve (12) hours of language are required for voice majors—one semester each of French, German, and Italian plus a second semester to be selected from one of these three languages. Also required is the equivalent of MUS 170-Diction for Singers. Language and diction hours must be satisfactorily credited 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 Master's in Performance-Voice or Vocal Pedagogy.

#### A. Core (6 hours)

MUS 602 (601 optional)

Three hours from one of the following: MUS \*606, 611, 628, 660, 662

If MUS 606 is submitted as part of Area Literature requirement, an additional course (MUS 606 with different topic, 611, 628, 660, or 662) must be taken to satisfy core requirement.

#### B. Performance (voice) (8 hours)

MUS 551/651

#### C. Ensemble (preferably large) (2 hours)

#### D. Vocal Pedagogy (3 hours)

MUS 541 - Principles of Vocal Pedagogy (3)

#### E. Advanced Vocal Pedagogy (3 hours)

MUS 641 - Advanced Vocal Pedagogy (3)

#### F. Area Literature (6 hours)

Three of the 6 hour requirement may be satisfied by taking one of the following: MUS 511, 521, 621, or 606 when a vocal topic is covered.

#### G. Lecture/Demonstration and Paper (2 hours)

MUS 610 - Lecture-Demonstration (2)

#### H. Music Electives (5 hours)

Minimum of one 3-hour course required

### **Voice (32 hours)**

Twelve (12) hours of language are required for voice majors—one semester each of French, German, and Italian plus a second semester to be selected from one of these three languages. Also required is the equivalent of MUS 170-Diction for Singers. Language and diction hours must be satisfactorily credited 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 Master's in Performance-Voice or Vocal Pedagogy.

#### A. Core (6 hours)

MUS 602 (601 optional)

Three hours from one of the following: MUS \*606, 611, 628, 660, 662

If MUS 606 is submitted as part of Area Literature requirement, an additional course (MUS 606 with different topic, 611, 628, 660, or 662) must be taken to satisfy core requirement.

#### B. Performance (8 hours)

MUS 551/651

**C. Area Literature (6 hours)**

Three of the 6 hour requirement may be satisfied by taking one of the following: MUS 511, 521, 621, or 606 when a vocal topic is covered.

**D. Large Performance Ensemble (2 hours)**

**E. Recital (NC)**

MUS 600 - Recital (0)

**F. Music Electives (10 hours)**

MUS 675 required; a minimum of one 3-hour course required.

**Woodwinds (32 hours)**

**A. Core (6 hours)**

MUS 602/601

Three hours from one of the following: MUS 606, 611, 660, 662

**B. Performance (11 hours)**

MUS 551/651/652 (flute, oboe, clarinet, bassoon, saxophone)

(4 hours-principal, 4 hours-minor, 3 hours-secondary)

Must show 651 proficiency on principal instrument

Must show 551 proficiency on minor instrument (principal and minor instruments must be non-alike)

Must study for 1 hour credit on remaining 3 instruments (652) (jury required)

**C. Ensemble (preferably large) (2 hours)**

**D. Area Courses (6 hours)**

MUS 670 - Woodwind Literature (3)

MUS 604 - Woodwind Instrument Pedagogy (3)

**E. Recital (NC)**

MUS 600 - Recital (0)

Must include at least two instruments

**F. Music Electives (7 hours)**

Minimum of one 3-hour course

**MASTER OF MUSIC IN MUSIC THEORY (34 hours)**

**A. Core (6 hours)**

MUS 602 (required)

MUS 606 or 628

**B. Major Courses (18 hours)**

MUS 662, 644, 611, 654, 660, 690

**C. Document (2 hours)**

MUS 698 - Document in Music Theory

**D. Performance (2 hours)**

MUS 652, performance, composition, or conducting

**E. Electives (6 hours)**

Recommended: MUS 618, 619, history and literature, composition or arranging, improvisation, electronic music

**MASTER OF MUSIC IN COMPOSITION (32 hours)**

**A. Core (6 hours)**

MUS 602 - Research Seminar in Music History (3)

Three hours from one of the following: MUS 606, 611

**B. Composition (6 hours)**

MUS 551/651

Enrollment in composition studies at the 651 level is required before or during the semester of recital performance.

**C. Area Study (9 hours)**

MUS 660 - Theory and Analysis of Rhythm (3)

or MUS 662 - Schenkerian Analysis (3)

MUS 550 - Electronic Music (3)

MUS 654 - Computers in Music Research (3)

**D. Music Electives (8 hours)**

Minimum of one 3-hour course required. Should include MUS 507 and 508 if these or equivalents have not been included in the undergraduate course of study.

**E. Recital (NC)**

MUS 600 - Recital (0)

**F. Thesis (3 hours)**

MUS 699 - Thesis (3)

**SPECIFIC REQUIREMENTS FOR THE POST-MASTER'S CERTIFICATE IN MUSIC THEORY PEDAGOGY**

Within the Ph.D. or D.M.A. programs a student may elect a Post-Master's Certificate in music theory pedagogy (14 hours). The purpose is to provide the student with knowledge and skills necessary to be successful teaching music theory and ear training in higher education. See Director of Academic Programs for admission and exit requirements.

**Required Courses (14 hours)**

MUS 644 - Pedagogy of Music Theory (3)

MUS 662 - Schenkerian Analysis (3)

Select two from the following three courses:

MUS 611 - Seminar in Music Analysis (3)

MUS 660 - Theory and Analysis of Rhythm (3)

MUS 690 - Readings in Music Theory (3)



Two semesters of:

MUS 689 - Practicum in Theory Pedagogy (1)

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF MUSICAL ARTS IN PERFORMANCE**

The School of Music offers a graduate program of study leading to a 60 hour Doctor of Musical Arts degree in three areas of study:

1. Accompanying and chamber music
2. Orchestral instrument or instrumental conducting
3. Voice, keyboard, or choral conducting

A diagnostic examination is administered prior to the first semester enrollment.

A minor, or minors, 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*.

Students may not register for independent study as a substitute for existing courses. If study in literature and pedagogy or if special research interests warrant independent instruction, enrollment in MUS 797 is permitted with advance approval by the Dean of the School of Music.

### **Accompanying and Chamber Music**

#### **A. Performance (18 hours)**

MUS 751 - Piano Accompanying (12)  
MUS 652 - Harpsichord and/or Organ (2)  
MUS 696a - Small Ensemble (4)

#### **B. Research (3 hours)**

MUS 702 (MUS 602 or approved equivalent is a prerequisite to MUS 702. MUS 602 may be credited in electives.)

#### **C. Area Literature (10 hours)**

MUS 513b/514b - Song Repertory I/II (4)  
Two of the following courses: MUS 511, 521, 620, 621, 622, 628, 637, 797 (if focusing on keyboard or chamber-music literature) (1-6)

#### **D. Pedagogy (3 hours)**

Selected from: MUS 541, 612, 617, 641

#### **E. Music History/Theory (9 hours)**

At least 3 hours of MUS 606 (may be repeated for credit)  
At least 3 hours selected from: MUS 611, 660, 662

#### **F. Electives (5 hours)**

MUS 751 may not count as an elective

#### **G. Dissertation (12 hours)**

MUS 799 - Dissertation  
Four 2 credit-hour recitals and a 4 credit-hour written document.

## **H. Required Examinations**

Diagnostic, language, comprehensive, dissertation defense. See D.M.A. Handbook for details.

## **Orchestral Instruments or Instrumental Conducting**

### **A. Performance (12 hours)**

MUS 751 (After admission to candidacy MUS 751 enrollment is not required during the semester of a dissertation recital.)

### **B. Area Studies (9 hours)**

Determined by major (Ensembles will not count toward the requirement.)

Literature (3 hours): MUS 635, 670, 671, or 673

Pedagogy (3 hours): MUS 603, 604, 607, or 608

Instrumental Seminar: MUS 749

### **C. Music History/Theory (9 hours)**

At least 3 hours of MUS 606 (may be repeated for credit)

At least 3 hours selected from: MUS 611, 660, 662

### **D. Research (3 hours)**

The Advisory Committee will determine course best suited for student's needs. (Prerequisite for MUS 703 - master's-level research course as determined by the student's advisory committee)

MUS 701, 702, or 703

### **E. Electives (15 hours)**

No more than 6 hours of 751

Must include two (2) three-hour courses

### **F. Dissertation (12 hours)**

MUS 799 - Dissertation

Four 2-hour recitals and a 4-hour written document.

## **G. Required Examinations**

Diagnostic, language, comprehensive, dissertation defense. See D.M.A. Handbook for details.

## **Voice, Keyboard, or Choral Conducting**

### **A. Performance (12 hours)**

MUS 751 (After admission to candidacy MUS 751 enrollment is not required during the semester of a dissertation recital.)

### **B. Research (3 hours)**

MUS 702 (MUS 602 or approved equivalent is a prerequisite to MUS 702. MUS 602 may be credited in electives.)

### **C. Literature and/or Performance Practice (6 hours)**

Determined by major (Ensembles will not count toward the requirement.)

### D. Pedagogy (6 hours)

Determined by major (Ensembles will not count toward the literature/performance practice or the pedagogy requirement.)

### E. Music History/Theory (9 hours)

At least 3 hours of MUS 606 (may be repeated for credit)

At least 3 hours selected from: MUS 611, \*628, 660, 662

\*MUS 628 is not credited in this block for the choral conducting majors.

### F. Electives (12 hours)

No more than three hours of performance (751).

### G. Dissertation (12 hours)

MUS 799 - Dissertation

Four 2 credit hour recitals and a 4 credit hour written document.

Choral conducting majors: 6 hours of recital and a 6-hour written document. At least 2 of the 6 recital hours will be met by the presentation of a full-length concert involving a choral group and a single conductor. The other 4 hours will be distributed as the candidate's advisory committee deems appropriate.

### H. Required Examinations

Diagnostic, language, comprehensive, dissertation defense. See D.M.A. Handbook for details.

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN MUSIC EDUCATION

The School of Music offers a graduate program of study leading to a 69 hour Doctor of Philosophy degree. A diagnostic examination is administered prior to the first semester of enrollment.

### A. Music Education (18 hours)

Select from MUS 605, 618, 619, 633, 634, 645, 650, 653, 750, and 797

### B. Research (12 hours)

ERM 617, ERM 680, MUS 601, MUS 701

### C. Professional Education or Other Fields (9 hours)

Areas of study: history and philosophy, curriculum and pedagogy, administration, psychology and human development, computer science and information management

### D. Music Electives (12 hours)

Workshop credits applied toward the Ph.D. are limited to 3 hours.

### E. Music History and/or Theory (6 hours)

### F. Dissertation (12 hours)

MUS 799 - Dissertation

### G. Research and teaching skills proficiencies completed on an independent basis during course of study before comprehensive examination.

### H. Required Examinations

Diagnostic, comprehensive, dissertation defense. See Ph.D. Handbook for details.

A minor, or minors, 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*.

## (MUS) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 500. Organ Pedagogy (3:3).

*Pr. junior, senior, or graduate keyboard major or principal.*  
Study and evaluation of procedures used in the teaching of organ. Emphasis on skills and techniques through exercises and literature.

### 507. Modal Counterpoint (3:3).

*Pr. 202 and 206 or permission of instructor.*  
Contrapuntal techniques and standard forms of Renaissance sacred vocal repertoire. Analysis of music by such composers as Josquin, Palestrina, and Lassus. Standard writing techniques of motet and mass; aural training. (Spring)

### 508. Tonal Counterpoint (3:3).

*Pr. 202 and 206, or permission of instructor.*  
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. (Fall)

### 511. History of Opera (3:3).

*Pr. 333 or permission of instructor.*  
Principal opera composers and styles from Monteverdi to the present; analytical study of selected major works. Not offered every year. Open to all university students. (Odd Spring)

### 513a. Song Repertory I: Voice (1:0:2).

*Pr. voice 251 and courses in the grammar and/or the phonetics of the language (German for 513, French for 514), or Piano 251 and permission of instructor.*

Class study of selected songs with emphasis on stylistic elements. First semester: German lieder from Haydn through Strauss, Berg and Schönberg. Second semester: French song from Berlioz to present; modern English and American songs. Each semester may be repeated once for credit. Open to junior, senior, and graduate music majors. (Fall)

### 513b. Song Repertory I: Piano (1:0:2). (Fall)

### 514a. Song Repertory II: Voice (1:0:2). (Spring)

### 514b. Song Repertory II: Piano (1:0:2). (Spring)

### 521. History of Art Song. (3:3).

*Pr. 333 or permission of instructor.*

Detailed study of art songs representative of various styles and periods from 1650 to the present. Emphasis on music and poetic considerations and stylistic development of the major composers of the lied and melodie. Not offered every year. Open to all University students. (Odd Fall)

**525. Overview of Tonal Harmony and Form (3:3).**

*Pr. permission of instructor.*

Review of tonal harmony, voice-leading, and form. (Fall)

**526. Overview of Western Music History (3:3).**

*Pr. permission of instructor.*

Review of western European music history from the Greeks to the present day including the classical art tradition in America. (Spring)

**528. Choral Music since 1750 (3:3).**

*Pr. 333 or permission of instructor.*

Study of the significant genres and major composers of choral music since 1750; detailed examination of selected masterworks. (Even Fall)

**529. Renaissance Music (3:3).**

*Pr. 331 or permission of instructor.*

Comprehensive, historical survey of music of the fifteenth and sixteenth centuries with a detailed study of styles of representative composers evidenced in selected monumental works. Attention will be given to bibliography and discography for further study. Open to all University students. (Even Spring)

**530. The Baroque Period in Music (3:3).**

*Pr. 332 or permission of instructor.*

Comprehensive, historical survey of music of the Baroque era from Monteverdi through Bach and Handel with a detailed study of styles of representative composers evidenced in selected monumental works. Attention will be given to bibliography and discography for further study. Open to all University students. (Even Fall)

**531. Classicism and Romanticism in Music:**

**1750-1850 (3:3).**

*Pr. 333 or permission of instructor.*

Examination of the major contributions of Mozart, Haydn, Beethoven, Schubert, Berlioz, Schumann, etc., to the western tradition. Special attention to be given to the development of music for the symphony orchestra and the piano. Open to all University students by permission of instructor. (Odd Spring)

**532. The Post-Romantic Tradition in Music:**

**1850-1914 (3:3).**

*Pr. 333 or permission of instructor.*

Study of developments in the history of music from Wagner through early Schönberg. Special attention will be given to changes in styles and techniques as well as the interactions between music and the other arts. Open to all University students by permission of instructor. (Odd Fall)

**533. Twentieth-Century Music (c. 1890-1950) (3:3).**

*Pr. 333 or permission of instructor.*

Survey of composers and musical styles which emerged in Europe and the Americas from impressionism through the beginnings of electronic music. Open to all University students by permission of instructor. (Even Spring)

**534. Music Since 1945 (3:3).**

*Pr. 333 or permission of instructor.*

Study of creative trends and issues in music and related media in Europe and the United States since World War II. (Even Fall)

**538. The Symphonic Tradition (3:3).**

*Pr. 333, or permission of instructor.*

Advanced study of symphonic styles and techniques from Baroque era to present. Open to all University students. (Even Spring)

**541. Principles of Vocal Pedagogy (3:3).**

*Pr. senior or graduate standing as a voice major or principal or permission of instructor.*

Teaching process as applied to singing. Includes historical development and an examination and comparison of concepts and approaches past and present. (Fall)

**550. Electronic Music (3:2:2).**

*Pr. permission of instructor.*

Introductory course in electronic composition. Lecture and laboratory experience. Open to all University students. (Fall)

**566. 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. (Spring)

**589. Experimental Course.**

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

## (MUS) COURSES FOR GRADUATES

**600. Recital (0).** (Graded on S-U basis)

(Fall, Spring, and Summer)

**601. Research Methods in Music (3:3).**

*Pr. graduate music education major or permission of instructor.*

Writing skills, materials, and procedures utilized in music research; measurement, experimental design, theories/ procedures for evaluation, statistics, computer applications, and initiation of scholarly research. Computer fee charged. (Fall and Summer)

**602. Research Seminar in Music History (3:3).**

Methods and procedures used in historical research. Computer fee charged. (Fall and Spring)

**603. String Instrument Pedagogy (3:3).**

*Pr. bowed string principal or major or permission of instructor.*

Survey of string teaching philosophies, methods, and materials, and their applications. To include lab experience. (Odd Spring)

**604. Woodwind Instrument Pedagogy (3:3).**

*Pr. 351 performance level or permission of instructor.*

Survey of various philosophies, methods, and materials utilized in the teaching and performing of woodwind instruments. (Even Spring)

**605. The Measurement of Musical Behavior (3:3).**

*Pr. graduate music education major or permission of instructor.*

Review of standardized music tests and an examination of methods for developing tests related to the measurement of musical behavior. (Spring)

- 606. Seminar in Music History (3:3).**  
*Pr. 602 (601) or permission of instructor.*  
 Selected compositions, including contemporary writings about musical culture with reference to the composers. May be repeated once for credit when topic varies. (Fall, Spring, and Summer)
- 607. Brass Instrument Pedagogy (3:3).**  
*Pr. 351 performance level or permission of instructor.*  
 Survey of various philosophies, methods, and materials utilized in the teaching and performing of brasswind instruments. (Odd Fall)
- 608. Percussion Instrument Pedagogy (3:3).**  
*Pr. 351 performance level or permission of instructor.*  
 Survey of various philosophies, methods, and materials utilized in the teaching and performing of percussion instruments. (Even Fall)
- 609. Jazz Pedagogy (3:3).**  
*Pr. 202, 206 or admission into any UNCG graduate program in music or permission of instructor.*  
 Principles of jazz interpretation, improvisation, and arranging. Procedures for organizing and administering jazz programs. Survey of jazz materials. (Even Fall)
- 610. Lecture-Demonstration (2:1).**  
 A research project leading to a public lecture recital. (Graded on S-U basis) (Fall and Spring)
- 611. Seminar in Musical Analysis (3:3).**  
*Pr. graduate standing in music.*  
 Analysis of selected compositions representative of one style period of Western music. May be repeated once for credit when topic varies. (Fall, Spring, and Summer)
- 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. (Fall)
- 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. (Odd Fall)
- 614. Piano Literature II (3:3).**  
 Survey of piano literature from ca. 1825 to the present. (Even Spring)
- 615. Seminar in Nineteenth-Century Piano Literature (3:3).**  
*Pr. graduate keyboard majors or permission of instructor.*  
 Study in selected composers or genre of the nineteenth century; historical, stylistic, analytical, and performance practice aspects. May be repeated once for credit when topic varies.
- 616. Techniques of New Music for Piano (3:3).**  
*Pr. 500 level or above in piano, or with permission of instructor.*  
 Performance practices in twentieth-century piano music; technical, notational, and rhythmic considerations.
- 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.
- 618. Psychology of Music (3:3).**  
 The physical and psychological aspects of music involving human behavior. (Fall)
- 619. Acoustics of Music (3:3).**  
 Designed to develop an understanding of the production, transmission, and reception of musical sounds. (Odd Spring)
- 620. Seminar in Piano (3:3).**  
*Pr. permission of instructor.*  
 Study of a particular composer or genre of piano literature emphasizing stylistic features, performance problems, pedagogy, and historical perspectives. Topic to be announced. May be repeated once for credit when topic varies.
- 621. Seminar in Vocal Literature (3:3).**  
*Pr. permission of instructor.*  
 In-depth study of an area of vocal literature tracing the historical development and performance practice of that area. Topic to be announced. May be repeated once for credit when topic varies.
- 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. May be repeated once for credit when topic varies.
- 623. Jazz Arranging I (3:3).**  
*Pr. graduate standing in music or permission of instructor.*  
 Beginning study of language and techniques employed in arranging music for various jazz ensembles.
- 624. Jazz Arranging II (3:3).**  
 Advanced study of techniques and disciplines employed in arranging for jazz ensembles. (Even Spring)
- 625. Music and Culture of Sub-Saharan Africa (3:3).**  
 Traditional and popular musics in Africa in relationship to social and historical contexts; topics include regional styles, performers' roles, instruments, concepts and uses of music, and performance contexts.
- 626. Guitar Literature (3:3).**  
 Survey of guitar literature from the Renaissance to the present; detailed study of lute tablatures, instrument construction, and the development of technique. Open to all University students.
- 627. Issues in Multicultural Music Education (3:3).**  
*Pr. admission to a graduate program in music education or permission of instructor.*  
 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.
- 628. Choral Music of the Renaissance and Baroque (3:3).**  
*Pr. 331, 332, or permission of instructor.*  
 Survey of choral literature from the early fifteenth century to 1750. (Odd Fall)
- 629. Choral Laboratory III (2:1:2).**  
*Pr. admission to graduate program in conducting, or permission of instructor.*  
 Supervised practice in conducting choral rehearsals; comparative study of rehearsal procedures and of choral objectives; continued study of choral repertory. (Fall)
- 630. The Study of Phonetics as Applied to Singing (3:3).**  
*Pr. singing experience in Italian, French, and German.*  
 The International Phonetic Alphabet as applied to the singing of English, Italian, Church Latin, French, and German.



- 633. Music for Exceptional Children** (3:3).  
*Pr. 361 or permission of instructor.*  
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. Non-music majors may enroll. (Fall)
- 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. (Spring)
- 635. Percussion Literature** (3:3).  
Survey of percussion literature from the Medieval era to the present emphasizing the role of percussion in various musical setting. (Odd Spring)
- 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. (Odd Spring)
- 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. (Odd Fall)
- 639a,b. Advanced Conducting** (3:3), (3:3).  
*Pr. 472 or 419; permission of instructor required.*  
Advanced conducting skills including baton technique, score reading, rehearsal techniques, score analysis, repertoire, programming, and interpretation. 639a, Instrumental (Fall); 639b, Choral/instrumental (Summer).
- 640. Electroacoustic Music Composition** (3:3:3).  
*Pr. 350, 550, or permission of instructor.*  
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. (Spring)
- 641. Advanced Vocal Pedagogy** (3:3).  
*Pr. 541.*  
Practical application of proven pedagogical techniques in a supervised teaching situation. (Spring)
- 644. Pedagogy of Music Theory** (3:3).  
*Pr. graduate standing in music.*  
Survey of philosophies, curricula, course content, and teaching approaches for undergraduate courses in music theory and aural skills. (Even Fall)
- 645. Teaching Elementary Music: Theory and Practice** (3:3).  
*Pr. music teaching experience in elementary school or the equivalent of 465.*  
Emphasis on strategies and materials for developing children's musicianship and problem-solving skills. Consideration of current child development and learning theories to teaching elementary general music. (Odd Fall)
- 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. (Odd Summer)
- 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. (Fall)
- 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. (Even Spring)
- 654. Computers in Music Research** (3:3).  
*Pr. 601 or 602.*  
Use of computer systems for music research. (Even Spring)
- 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. (Odd Fall)
- 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. (Odd Spring)
- 658. Topics in Music Technology for Educators** (1:0:1).  
Advanced study of music technology with an emphasis on integration into the music classroom. May be repeated when topic varies.
- 659. Philosophy of Music** (3:3).  
*Pr. admission to master's or doctoral program in music.*  
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.
- 660. Theory and Analysis of Rhythm** (3:3).  
Survey of theories and analytical approaches regarding the temporal organization of music. (Odd Fall)
- 662. Schenkerian Analysis** (3:3).  
*Pr. 507 or 508 or equivalent.*  
Theories and analytical methods of Heinrich Schenker as applied to masterworks of the tonal repertory. Selected readings from Schenkerian literature. (Spring)
- 663. History of Jazz** (3:3).  
*Pr. 206, 301, 331, 332, 333.*  
Chronological survey of jazz music and jazz history. Introduction to standard reference works and investigation of socio-cultural aspects. (Even Spring)
- 668. Organ Literature** (3:3).  
Survey of organ literature from sixteenth century to present. Open to all graduate students by permission of instructor.
- 670. Woodwind Literature** (3:3).  
Survey of woodwind solo and chamber literature, 17th century to the present; historical perspectives, woodwind genres, performance practice, performances of representative works, and score analysis. (Even Spring)
- 671. String Solo Literature** (3:3).  
Survey of literature for the violin, viola, cello, and bass from the seventeenth century to the present. Emphasis on historical perspectives, score analysis, aspects of performance practice, and performance of representative compositions. (Even Fall)

**672. Piano Technique, A Pedagogical Survey (3:3).**

Chronological survey of theories of piano technique from the clavier methods of the early eighteenth century to the present. (Even Spring)

**673. Brass Solo Literature (3:3).**

Survey of brass solo literature from the seventeenth century to the present. Emphasis upon historical perspectives, aspects of performance practice techniques, performances of representative works, and score analysis. (Even Fall)

**675. Opera Performance Techniques (2:2:2).**

*Pr. 375 and/or permission of instructor.*

Techniques for the singer-actor; study of the materials and nature of music theatre; development of skills required in opera/musical theatre. May be repeated once for credit. (Fall)

**678. Orff in the Music Classroom (3:3).**

*Pr. advanced undergraduate or graduate standing in music or permission of instructor.*

Practical experiences in the Orff-Schulwerk process of music teaching. Recorder proficiency, Orff instrumental technique, and orchestration for Orff instrumentarium are emphasized. Nonmusic majors may enroll.

**679. Music Education Workshop (1-3).**

Activities and study involving specific experiences related to music education. 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. (Graded on S-U basis)

**687. Aural and Keyboard Skills for Music Theory (1:5:3).**

*Pr. admission to the master's degree program in music theory or the certificate program for music theory pedagogy.*

Instruction and practice leading to the development of aural and keyboard skills sufficient for instructors of music theory and ear training. May be repeated for credit.

**689. Practicum in Theory Pedagogy (1:0:2).**

*Pr. admission to the certificate program for music theory pedagogy.*

Supervised teaching of basic music theory and aural skills.

**690. Readings in Music Theory (3:3).**

*Pr. 602.*

Survey of the evolution and present state of the discipline of music theory. (Fall and Spring)

**692a,b. Portfolio Development in Music Education (1) (1)**

*Pr. acceptance in M.M. in music education or permission of instructor.*

Development of a portfolio that reflects the application of course work in music education to classroom teaching. (Fall and Spring)

**697. Directed Study in Music (1-6).**

*Pr. permission of supervising professor; Director of Graduate Study, and Dean.*

Supervised advanced research requiring a written document or composition. 697a, Music Education; 697b, Performance, Composition, Theory; 697c, Music History and Literature. (Fall, Spring, and Summer)

**698. Document in Music Theory (1).**

Development of research topic in music theory to publication stage. May be repeated for credit. (Fall and Spring)

**699. Thesis (1-6).**

Individual guidance in the development of a specific research problem. (Fall, Spring, and Summer)

**701. Research Methods in Music II (3:3).**

*Pr. 601 and permission of instructor.*

Advanced research methodology and procedures in music education. (Spring)

**702. Musicological Research for Performers (3:3).**

*Pr. 602, or its equivalent.*

Research problems and methodologies for doctoral-level performing musicians. Computer fee charged. (Spring)

**703. Research Methods for Performers (3:3).**

*Pr. admission to the D.M.A. degree program; completion of a 600-level research course at UNCG or equivalent.*

Survey of research methodology and approaches appropriate for doctoral students in performance and preparation for the completion of a D.M.A. dissertation document. (Spring)

**711. Experimental Course.**

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

**749. Seminar in Higher Education for Performers (3:3).**

*Pr. admission to the D.M.A. degree program.*

Issues related to teaching music performance in higher education. Topics include curriculum design, teaching methods, evaluation, promotion, school/departmental structure, job searching/resume preparation, copyright, publication, etc. (Fall)

**750. Doctoral Seminar (3:1:4).**

*Pr. 601, 650.*

Develop an understanding of functional aspects of teaching in higher education. Assignments in specific areas of professionalism, college curriculum, and research will provide direct experiences. (Spring)

**797. Directed Study in Music (1-12).**

*Pr. permission of supervising professor; Director of Graduate Study, and Dean, School of Music.*

Supervised advanced research requiring a written document or composition. 797a, Music Education; 797b, Performance, Composition, Theory; 797c, Music History and Literature. (Fall, Spring, and Summer)

**799. Dissertation (1-12).**

**801. Thesis Extension (1-3).**

**802. Dissertation Extension (1-3).**

**803. Research Extension (1-3).**

## ENSEMBLES

Open for credit to all students enrolled in the University. May be repeated for credit.

**680. University Women's Choir (1:0:3).**

Choral organization for women's voices. Membership by audition.

**681a. Men's Glee Club. (1:0:3).**

Choral organization for men's voices. Membership by audition.

**681b. Women's Glee Club (1:0:3).**

Choral organization for women's voices. Membership by audition.

- 682. University Chorale (1:0:3).**  
Mixed choral organization of approximately 50 singers. Membership by audition.
- 688. Chamber Singers (1:0:3).**  
Select mixed vocal ensemble of 16 graduate and advanced undergraduate singers. Membership by audition.
- 691. University Orchestra (1:0:4).**  
Full symphony orchestra, performing important works from the symphonic repertoire of the eighteenth, nineteenth, and twentieth centuries.
- 693. University Wind Ensemble (1:0:4).**  
Performance of selected works for wind ensemble including both original and transcribed literature. Advanced performers only. Membership by audition.
- 694a. Symphonic Band (1:0:3).**  
Performs literature from all eras, including contemporary works for this medium. Open to all University students.
- 694b. University Band (1:0:3).**  
Performs literature from all eras, including contemporary works for this medium. Open to all University students.
- 695. Jazz Laboratory Ensemble (1:0:3).**  
Performance of literature encompassing all of the jazz idioms, with emphasis on contemporary composition. Open to all students by audition and permission of director.
- 696. Small Ensemble (1:0:3).**  
Participation by advanced students in small groups, such as string quartets, and trios, brass and woodwind choirs, and vocal ensembles. Assignment by performance faculty.

## SCHOOL OF NURSING

112 Moore Building  
(336) 334-5010  
<http://www.uncg.edu/nur>

### *Professors*

- Hazel N. Brown, Ed.D.**, Parent Child nursing and nursing administration.
- Patricia A. Chamings, Ph.D.**, Adult health nursing.
- Lynne G. Pearcey, Ph.D.**, Psychosocial nursing, nursing administration, continuing education in nursing (Dean).
- Debra C. Wallace, Ph.D.**, Gerontology, minority health services and behaviors.

### *Visiting Professor*

- Charlotte Herrick, Ph.D.**, Psychosocial nursing and administrative systems.

### *Associate Professors*

- Beth E. Barba, Ph.D.**, Gerontological nursing, nursing home environments, end-of-life care.
- Nancy F. Courts, Ph.D.**, Adult health nursing, psychosocial interventions for patients/families with acute and chronic illness.
- Margaret J. Dick, Ph.D.**, Parent Child nursing.
- Luba L. Ivanov, D.N.S.**, Effects of migration on access and satisfaction with health services for Russian-speaking immigrants.
- Virginia B. Karb, Ph.D.**, Pharmacology in nursing, nursing education (Associate Dean).
- Laurie M. Kennedy-Malone, Ph.D.**, Community-gerontology nursing.
- Eileen M. Kohlenberg, Ph.D.**, Adult health nursing, nursing administration, nursing education (Assistant Dean; Director of Academic Programs and Graduate Study).
- Heidi V. Krowchuk, Ph.D.**, Parent Child nursing.
- Rebecca B. Saunders, Ph.D.**, Parent Child nursing, family relationships during pregnancy, neonatal development, curriculum in nursing education.
- Anita S. Tesh, Ed.D.**, Adult health nursing.

### *Clinical Associate Professors*

- Betsy Lehman, M.S.**, Family and community nursing.
- Linda McNeal, Ph.D.**, Adult health.
- Margo Packheiser, M.S.N.**, Adult/gerontological nursing.
- Jennifer Sandoval, Ph.D.**, Adult health.
- Lois VonCannon, M.S.N.**, Adult/gerontological nursing.

*Visiting Associate Professor*

**Marilyn Evans, Ph.D.**, Parent/infant health, media and technology.

*Assistant Professors*

**Julia W. Aucoin, D.N.S.**, Community health, nursing education, and personal space.

**Carol F. Baker, Ph.D.**, Health promotion with exercise and nutrition in chronically ill adolescents and adults.

**Robin Bartlett, Ph.D.**, Psychosocial nursing.

**Patricia B. Crane, Ph.D.**, Adult/gerontological nursing, heart disease, and administration.

**Jie Hu, Ph.D.**, Health-related quality of life and symptoms in older adults with chronic disease.

**Ellen D. Jones, D.N.**, Community and adult/gerontological nursing.

**Donald D. Kautz, Ph.D.**, Clinical reasoning and intimacy concerns of chronically ill elders.

**Susan Ann Letvak, Ph.D.**, Gerontological nursing and the aging nursing workforce.

**Lynne P. Lewallen, Ph.D.**, Pregnancy, breastfeeding, and nursing education.

**Eileen R. Rossen, Ph.D.**, Gerontological nursing, psychosocial nursing, and late life transitions.

*Visiting Assistant Professors*

**Ann Bland, Ph.D.**, Borderline personality disorders.

**Nancy Bruton-Maree, M.S.**, Adult health nursing, nurse anesthesia.

**Sandra M. Ouellette, M.Ed.**, Adult health nursing, nurse anesthesia.

*Lecturers*

**Emelia Amoako, M.S.N.**, Adult/gerontological nursing.

**Margaret Hancock, M.S.N.**, Women's health.

**Susan McMarlin, Ed.D.**, Nursing education.

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, administration, and clinical practice. The development of these functional competencies is founded upon concentration in a selected area of clinical practice and is supported by a strong research emphasis. Admission by The Graduate School does not guarantee admission to a specific concentration. The School is accredited by the National League for Nursing Accrediting Commission (NLNAC). Information about the graduate

program in nursing may be obtained from the NLNAC at 61 Broadway, New York, NY 10006, (212) 363-5555. The School of Nursing also was granted preliminary approval for accreditation by the Commission on Collegiate Nursing Education, One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, (202) 887-6791. The anesthesia concentration is accredited by the Council on Accreditation of Educational Programs/Schools, 222 South Prospect Avenue, Suite 304, Park Ridge, IL 60068-4010, (847) 692-7050.

In addition to the admission requirements set forth by The Graduate School, applicants to the Master of Science in Nursing degree program must complete the following prerequisites before admission to the program:

1. A minimum GPA of 3.0.
2. Current unrestricted licensure as a registered nurse in one of the fifty states or International licensure.
3. Baccalaureate degree in nursing from a program accredited by a nationally recognized accrediting agency.
4. Satisfactory score on Graduate Record Exam or Miller Analogies Test taken within five years.
5. A minimum of one year clinical experience full time; one year critical care experience required for anesthesia concentration.
6. Telephone interview required for nonresidential international students.

**Program Requirements:**

1. Evidence of current liability insurance coverage appropriate to concentration.
2. A three hour chemistry course for anesthesia concentration.
3. Competency in basic health assessment prior to NUR 642, 651, and 681.
4. Completion of inferential statistics course prior to enrollment in NUR 601.
5. Satisfactory completion of Advanced Cardiac Life Support (ACLS) for anesthesia students. All other concentrations require Cardiopulmonary Resuscitation (CPR) prior to enrollment in clinical practicums.
6. Anesthesia students must complete the statistics and health assessment prerequisites before completion of 12 semester hours of graduate courses toward the degree to continue in the program.

The Student Admission, Progression, and Appeals Committee reviews the credentials of each applicant. Final selection is based on many factors; no single admission criterion has a decisive influence on the applicant's acceptability. Exceptions to the requirements can be made on recommendation of the committee.



Prior to enrolling in the nursing curriculum, 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. Prior to enrollment in NUR 541 and all 600-level nursing courses, students must provide evidence of current CPR certification. Students in the anesthesia concentration also must provide evidence of Advanced Cardiac Life Support (ACLS). Additionally, students enrolled in the above courses must provide evidence of all immunizations identified on Parts A and B of the UNCG Health History and Immunization Form excluding the Meningococcal vaccine. Students should provide evidence of nursing licensure and CPR to the School of Nursing Graduate Program Assistant and evidence of health history and immunizations to the UNCG Student Health Services. Copies of all records should be retained by the student.

Students are responsible for all costs associated with their own health care. Students are encouraged to have health insurance, and to be familiar with its provisions.

### **Required Withdrawal:**

Withdrawal from the program will be recommended if the student:

1. Fails to register for two consecutive semesters (fall and spring) in the nursing curriculum,
2. Has earned a "C" in more than 6 semester hours of course work,
3. Has earned a "C" in any nursing specialty course,
4. Has earned a grade lower than a "C" in any course,
5. Has a GPA that indicates the inability to meet the 3.0 required for graduation,
6. Does not complete requirements for the degree within a five-year period after initial registration,
7. Is dismissed from the affiliated anesthesia schools.

**Readmission after Withdrawal.** Any student who is withdrawn or withdraws from the program must apply for readmission through normal admission procedures.

### **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 Admission, Progression, and Appeals Committee hears students appeals. Students may obtain the request form and discuss the appeals process with the Chair of the Committee, the Associate Dean (undergraduates), or the Associate Dean and Director of Graduate Study (graduate students).

## **GENERAL INFORMATION FOR M.S.N., M.S.N./M.B.A. AND CERTIFICATE CANDIDATES:**

### **Policy on Dismissal of Students who Present Physical and/or Emotional Problems that do not Respond to Treatment:**

1. 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.
2. 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 Department Chair within the School of Nursing. Upon determination by the faculty, Course Chair and Department Chair, 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 Dean of The Graduate School written notification of the recommendation. If the Dean of Nursing recommends dismissal from the School of Nursing, the Dean 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 Admission, Progression, and 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 Dean of The Graduate School.

3. Hearing Process—The chairman of the School of Nursing Student Appeals Committee will thereafter notify the student, the faculty member, Course Chair and Department Chair 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 Department Chair 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.

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.

4. 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 Dean of The Graduate School 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.

1. 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.
2. Definition—An unsafe practice is defined as:
  - a. 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).
  - b. an act or behavior of the type which violates the Code of Ethics for Nurses of the American Nurses' Association.

- c. 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.
  - d. 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.
3. 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 Department Chair within the School of Nursing.

The Course Chair and/or Department Chair 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 Department Chair 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 Dean of The Graduate School 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 Admission, Progression, and 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 Dean of The Graduate School.

4. Hearing Process—The Chair of the School of Nursing Admission, Progression, and Appeals Committee will thereafter notify the student, the faculty member, Course Chair and Department Chair 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 Department Chair 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.

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.

5. 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 Dean of The Graduate School 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.

### Additional Information

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.

Part-time study is facilitated by the curricular design, but 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.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN NURSING

The School of Nursing offers a graduate program of study leading to a Master of Science in Nursing degree. Students may choose one of several concentrations. The nursing administration and nursing education concentrations can be completed in **36** hours. The adult nurse practitioner/gerontological nurse practitioner concentration requires **50** hours for completion; the adult clinical nurse specialist requires **46** hours for completion; and the nurse anesthesia concentration requires **47** hours for completion.

### A. Required Core Courses (9 hours)

- NUR 601 - Critique and Utilization of Research in Nursing (3)
- NUR 610 - Theoretical Foundations of Advanced Nursing Practice (3)
- NUR 620 - Law, Policy, and Economics of Healthcare (3)

### B. Required Courses by Concentration

#### Nursing Administration (21 hours):

- NUR 540 - Budget Development and Analysis of Nursing Services (3)
- NUR 541 - Nursing Case Management (3)
- NUR 614 - Information Systems in Nursing Service Administration (3)
- NUR 641 - Nursing Administration (4)
- NUR 642 - Nursing Administration: Theoretical Applications (4)
- NUR 643 - Nursing Administration Practicum (4)

#### Nursing Education (24 hours):

- NUR 550 - Pathophysiology for Advanced Nursing (3)
- NUR 551 - Instructional Media and Technology in Nursing Education (3)
- NUR 615 - Foundations of Nursing Education (3)
- NUR 616 - Educational Process in Nursing (3)
- NUR 651, 652 - Advanced Clinical Nursing I, II (4) (4)
- NUR 653 - Practicum in Nursing Education (4)

### Adult Nurse Practitioner/Gerontological Nurse Practitioner (38 hours):

- NUR 550 - Pathophysiology for Advanced Nursing (3)
- NUR 681 - Advanced Health Assessment (4)
- NUR 682 - Health Promotion/Disease Prevention for Healthy Aging (3)
- NUR 683 - Clinical Management of the Older Adult I (6)
- NUR 684 - Pharmacotherapeutics for Nurse Practitioners (3)
- NUR 685 - Advanced Practice Nursing: Role, Theory and Practice (3)
- NUR 686 - Clinical Management of the Older Adult II (6)
- NUR 687 - Primary Care of the Adult (4)
- NUR 688 - Advanced Concepts in the Management of the Older Adult (4)
- NUR 689 - Primary Care of the Adult Practicum (2)

**Adult Clinical Nurse Specialist (34 hours):**

- NUR 550 - Pathophysiology for Advanced Nursing (3)
- NUR 657 - Clinical Nursing Management of the Adult I (6)
- NUR 658 - Clinical Nursing Management of the Adult II (6)
- NUR 659 - Advanced Adult Clinical Nurse Specialist Practicum (6)
- NUR 681 - Advanced Health Assessment (4)
- NUR 682 - Health Promotion/Disease Prevention for Healthy Aging (3)
- NUR 684 - Pharmacotherapeutics for Nurse Practitioners (3)
- NUR 685 - Advanced Practice Nursing: Role, Theory and Practice (3)

**Nurse Anesthesia (35 hours):**

- NUR 604 - Nurse Anesthesia Seminar (4)
- NUR 605, 606, 607, 608 - Scientific Foundations in Nurse Anesthesia I, II, III, IV (4) (4) (4) (4)
- NUR 671 - Clinical Practicum in Nurse Anesthesia I (4)
- NUR 672 - Clinical Practicum in Nurse Anesthesia II (4)
- NUR 674 - Clinical Practicum in Nurse Anesthesia IV (5)
- NUR 675 - Clinical Practicum in Nurse Anesthesia V (5)

**C. Electives (3 hours)**

With prior approval of the advisor, a student will select 3 hours from other 500- or 600-level nursing courses, or other related courses, for the nursing administration concentration.

**D. Comprehensive Examination**

This examination is completed in the process of meeting the requirements for the thesis or advanced nursing project. Consult with the advisor.

**E. Thesis or Advanced Nursing Project (1-6 hours)**

- NUR 698 - Advanced Nursing Project (1-6) or
- NUR 699 - Thesis (1-6)

The thesis or advanced nursing project is required for the nursing education, nursing administration, adult clinical nurse specialist and adult/gerontological nurse practitioner concentrations. Once a student enrolls in NUR 698, Advanced Nursing Project, or NUR 699, Thesis, the student must remain continuously enrolled for the course for a minimum of 3 credits and a maximum of 6 credits. Three credits are applied toward graduation and may be taken in one semester or divided over two or three semesters. Students who have not completed the Project/Thesis after registering for the first 3 credits must continue to register for NUR 698 or NUR 699 for one credit each succeeding semester until 6 credits are earned. If the Project is not completed after 6 credits are earned, the student should enroll for NUR 803, Research Extension, for 1-3 hours until completion. If the Thesis is not completed after 6 credits are earned, the student should enroll in NUR 801, Thesis Extension, for 1-3 hours credit until completion.

NUR 604, Nurse Anesthesia Seminar, will serve as the capstone experience for the nurse anesthesia concentration.

**Additional Information:**

The 36 hour program of study for concentrations in nursing education or administration is designed to be completed in three semesters of full-time study, beginning in August of one year with graduation in December of the following year. The adult nurse practitioner/gerontological nurse practitioner concentration and the adult clinical nurse specialist concentration may be completed in five semesters of full-time study, beginning in August of each year.

Admission to The Graduate School does not constitute admission to the anesthesia concentration; there is an additional admission process. Contact the School of Nursing for details about the anesthesia admission process. The nurse anesthesia concentration is designed to be taught over four semesters and one summer of full-time study concurrent with a noncredit clinical residency. Classes begin in August of one year with graduation in May of the second year. The non-credit clinical residency continues until August of the second year, and is required for certification. A modified M.S.N. program is available for CRNAs.

A modified M.S.N. program in nursing education is available for certified nurse practitioners (CNM, CRNA, FNP, etc.).

**SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN NURSING/MASTER OF BUSINESS ADMINISTRATION**

The School of Nursing and the Bryan School of Business and Economics offer a combined Master of Science in Nursing/Master of Business Administration degree. A minimum of 54 semester hours is required for this degree.

**Requirements for Admission**

To be considered for admission to the M.S.N./M.B.A. program, applicants must have obtained the following:

1. A baccalaureate degree in nursing from an accredited program.
2. A minimum GPA of 3.0.
3. Current unrestricted licensure as a registered nurse in one of the 50 states or International Licensure.
4. Satisfactory score on the GRE or GMAT taken within five years.



5. A minimum of one year of clinical nursing experience, full-time.

### Computer Literacy

Upon entry to the M.S.N./M.B.A. degree program, students should have a working knowledge of word processing and spreadsheet applications in a PC environment. Familiarity with Excel is preferred.

### Statistics

Completion of a statistics course prior to enrollment in NUR 601 is required. ECO 250 or MBA 600 is recommended to meet the program prerequisite for statistics.

### Clinical nursing requirements

Prior to enrolling in clinical practicums, students must provide evidence of:

1. 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.
2. Current CPR certification.
3. Evidence of immunizations identified on Parts A and B of the UNCG Health History and Immunization Form excluding the Meningococcal vaccine.

Students should provide evidence of nursing licensure and CPR to the School of Nursing Program Assistant and evidence of health history and immunizations to the UNCG Student Health Services. Copies of all records should be retained by the student.

### A. Required Courses (54 hours)

- NUR 610 - Theoretical Foundations of Advanced Nursing Practice (3)
- NUR 614 - Information Systems in Nursing Service Administration (3)
- MBA 602 - Presentation and Interpretation of Financial Statements (1.5)
- NUR 540 - Budget Development and Analysis of Nursing Services (3)
- NUR 620 - Law, Policy, and Economics of Healthcare (3)
- MBA 603 - Economic Analysis (1.5)
- NUR 601 - Critique and Utilization of Research in Nursing (3)
- NUR 641 - Nursing Administration (4)
- MBA 604 - Organizational Behavior (1.5)
- MBA 605 - Financial Management (1.5)
- NUR 642 - Nursing Administration: Theoretical Applications (4)
- MBA 606 - Marketing Management (1.5)
- MBA 607 - The Operations Function (1.5)
- NUR 643 - Nursing Administration Practicum (4)
- MBA 610 - Advanced Business Statistics (1.5)
- MBA 613 - Economic Policy and the Global Environment (1.5)

- MBA 616 - Managing in a Global Environment (1.5)
- MBA 617 - Management Science (1.5)
- MBA 620 - Competitive Analysis and Strategy Formulation (1.5)
- MBA 624 - Strategies for Managing Human Resources (1.5)
- MBA 628 - Business Strategy and Information Technology (1.5)
- MBA 625 - Corporate Strategy and the Finance Function (1.5)
- MBA 626 - Advanced Marketing Management (1.5)
- MBA 627 - Global Operations Strategy (1.5)
- MBA 629a - Creating and Sustaining Competitive Advantage (3)

## POST-BACCALAUREATE CERTIFICATE PROGRAMS

The School of Nursing offers Post-Baccalaureate Certificate programs in four areas: nursing administration, nursing case management, nursing education, and gerontological nursing.

### Admission Requirements

Students who have been granted a Bachelor of Science in Nursing degree from an accredited college or university and who have been admitted by The Graduate School may enroll for courses in the School of Nursing leading to a Post-Baccalaureate Certificate. Students are required to meet the same admission requirements for the certificate as for the existing MSN degree program.

### Plans of Study for Certificate

At least 12 credit hours must be successfully completed during a two-year period of time to earn the certificate. Credits generated 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.

### Nursing Administration

- NUR 540 - Budget Development and Analysis of Nursing Services (3)
- NUR 614 - Information Systems in Nursing Service Administration (3)
- NUR 620 - Law, Policy, and Economics of Healthcare (3)
- NUR 641 - Nursing Administration (4)

### Nursing Case Management

- NUR 540 - Budget Development and Analysis of Nursing Services (3)
- NUR 541 - Nursing Case Management (4)
- NUR 620 - Law, Policy, and Economics of Healthcare (3)
- NUR 641 - Nursing Administration (4)

### Nursing Education

- NUR 551 - Instructional Media and Technology in Nursing Education (3)
- NUR 615 - Foundations of Nursing Education (3)
- NUR 616 - Educational Process in Nursing (3)

### Gerontological Nursing

- NUR 561 - Scope of Gerontological Healthcare (3)
- NUR 581 - End of Life Care (3)

### Core and Support Courses

- NUR 505 - Computer Applications In Nursing (3)
- NUR 550 - Pathophysiology for Advanced Nursing (3)
- NUR 580 - Psychoimmunology and Holistic Care (3)
- NUR 601 - Critique and Utilization of Research in Nursing (3)
- NUR 610 - Theoretical Foundations of Advanced Nursing Practice (3)
- NUR 620 - Law, Policy, and Economics of Healthcare (3)
- NUR 692 - Independent Study (3)

Upon successful completion of the four courses, students receive a Post-Baccalaureate Certificate. If two or more courses are completed within the categories of nursing administration, nursing education, or gerontological nursing, the certificate will denote the specialty area(s). All courses must be completed in the nursing case management category to receive that certificate. 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.

### POST-MASTER'S CERTIFICATE PROGRAMS

The School of Nursing offers Post-Master's Certificate programs in three areas: nurse anesthesia, adult clinical nurse specialist, and adult nurse practitioner/gerontological nurse practitioner. Students are advised individually for these programs, based on the focus of the previous master's degree. Typical course requirements for these programs are listed below.

#### Adult Nurse Practitioner/Gerontological Nurse Practitioner (38 hours)

- NUR 550 - Pathophysiology for Advanced Nursing (3)
- NUR 681 - Advanced Health Assessment (4)
- NUR 682 - Health Promotion/Disease Prevention for Healthy Aging (3)

- NUR 683 - Clinical Management of the Older Adult I (6)
- NUR 684 - Pharmacotherapeutics for Nurse Practitioners (3)
- NUR 685 - Advanced Practice Nursing: Role, Theory and Practice (3)
- NUR 686 - Clinical Management of the Older Adult II (6)
- NUR 687 - Primary Care of the Adult (4)
- NUR 688 - Advanced Concepts in the Management of the Older Adult (4)
- NUR 689 - Primary Care of the Adult Practicum (2)

#### Adult Clinical Nurse Specialist (34 hours)

- NUR 550 - Pathophysiology for Advanced Nursing (3)
- NUR 657 - Clinical Nursing Management of the Adult I (6)
- NUR 658 - Clinical Nursing Management of the Adult II (6)
- NUR 659 - Advanced Adult Clinical Nurse Specialist Practicum (6)
- NUR 681 - Advanced Health Assessment (4)
- NUR 682 - Health Promotion/Disease Prevention for Healthy Aging (3)
- NUR 684 - Pharmacotherapeutics for Nurse Practitioners (3)
- NUR 685 - Advanced Practice Nursing: Role, Theory and Practice (3)

#### Nurse Anesthesia (38 hours)

- NUR 604 - Nurse Anesthesia Seminar (4)
- NUR 605, 606, 607, 608 - Scientific Foundations in Nurse Anesthesia I, II, III, IV (4) (4) (4) (4)
- NUR 671 - Clinical Practicum in Nurse Anesthesia I (4)
- NUR 672 - Clinical Practicum in Nurse Anesthesia II (4)
- NUR 674 - Clinical Practicum in Nurse Anesthesia IV (5)
- NUR 675 - Clinical Practicum in Nurse Anesthesia V (5)

### Additional Information for Post-Master's Certificate Programs:

Students interested in a Post-Master's Certificate program apply for admission through The Graduate School. Applicants must have completed a master's degree from an accredited program. GRE or MAT scores are not required. Licensure, liability insurance, and immunization requirements are the same as those listed on page 192.

Students will receive a certificate from The Graduate School and the School of Nursing upon completion of the required course of study. Students who complete the requirements are eligible to take the appropriate national certification examination as a Nurse Anesthetist or Medical Surgical Clinical Nurse Specialist or Adult Nurse Practitioner and Gerontological Nurse Practitioner.

## (NUR) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 505. Computer Applications In Nursing (3:2:3).

*Pr. basic understanding of microcomputers or permission of instructor. Not recommended for nursing administration majors.*

Introduction to computer applications in nursing. Practical experience with microcomputers and generic software applicable to patient care and nursing management. Lab assignments will vary to meet specific learning needs.

### 540. Budget Development and Analysis of Nursing Services (3:3).

Introduction to the principles of fiscal management, health care agency accounting practices and the nurse manager's role in the budgeting process.

### 541. Nursing Case Management (4:2:6 for Post-Baccalaureate Certificate) (3:2:3 for M.S.N.)

*Pr. licensure as a registered nurse.*

Theory and practice of nursing case management in health related agencies.

### 550. Pathophysiology for Advanced Nursing (3:3).

Physiological changes across the lifespan and common pathophysiological mechanisms.

### 551. Instructional Media and Technology in Nursing Education (3:3).

Selection/development, use, and evaluation of instructional media and technologies in schools of nursing, nursing staff development, and patient education.

### 561. Scope of Gerontological Healthcare (3:3).

Aging theories and concepts; demographics, health problems, treatments, supports, and the role of the gerontological healthcare professional.

### 580. Psychoimmunology and Holistic Care (3:3).

Mind-brain-body interactions and holistic views of health. Relation of integrative, alternative and complementary therapies to holistic care.

### 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.

### 589. Experimental Course.

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

## (NUR) COURSES FOR GRADUATES

(Admission to The Graduate School required for enrollment in 600-level courses.)

### 601. Critique and Utilization of Research in Nursing (3:3).

*Pr. one course in statistics that included inferential statistics (preferred within past five years).*

Development of knowledge and skill competencies basic to the critical interpretation and utilization of research findings in solutions. Application to nursing education, management, and practice problems.

### 604. Nurse Anesthesia Seminar (4:4).

*Coreq. 675*

Analysis of professional issues and research affecting anesthesia nursing practice.

### 605. Scientific Foundations in Nurse Anesthesia I (4:4).

*Pr. admission to the M.S.N. concentration in nurse anesthesia or enrolled in clinical concentrations. Pr. or Coreq. 610.* Advanced knowledge of pathophysiology, pharmacology, and anesthesia nursing care related to persons with neurological dysfunction.

### 606. Scientific Foundations in Nurse Anesthesia II (4:4).

*Pr. 605, 610 or permission of instructor. Pr. or Coreq. 601.* Advanced knowledge of pathophysiology, pharmacology, and anesthesia nursing care related to persons with cardiovascular and cellular dysfunction.

### 607. Scientific Foundations in Nurse Anesthesia III (4:4).

*Pr. 601, 606 or permission of instructor. Pr. or Coreq. 620.* Advanced knowledge of pathophysiology, pharmacology, and anesthesia nursing care related to persons with respiratory dysfunction.

### 608. Scientific Foundations in Nurse Anesthesia IV (4:4).

*Pr. 607 or permission of instructor.*

Advanced knowledge of pathophysiology, pharmacology, and anesthesia nursing care related to persons with hepatic, renal, or endocrine dysfunction.

### 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.

### 614. Information Systems in Nursing Service Administration (3:3).

*Pr. enrolled in administration concentration of M.S.N. program or permission of instructor.*

Prepares the student to apply principles and techniques of communication and computer technology in health care management settings.

### 615. Foundations of Nursing Education (3:3).

*Pr. or Coreq. 551 and 610.*

An exploration of nursing curriculum development within a broad context related to history, philosophy, and current trends.

### 616. Educational Process in Nursing (3:3).

*Pr. 551 and eligibility for admission to M.S.N. program or permission of faculty.*

Concepts of instructional design and educational process related to nursing education and practice.

### 620. Law, Policy, and Economics of Healthcare (3:3).

Law, health policy, and economics related to advanced nursing practice. Policy development, state and federal statutes, and economics affecting delivery of nursing and healthcare.

### 641. Nursing Administration (4:4).

*Pr. or Coreq. 610, 614.*

Nursing management within the health care system. Management functions of planning, organizing and staffing studied within the framework of leadership in health care organizations.

### 642. Nursing Administration: Theoretical Applications (4:2:6).

*Pr. 641, health assessment. Pr. or Coreq. 540, 601.*

Management functions of directing and controlling are studied within the framework of leadership in health care organizations.

- 643. Nursing Administration Practicum (4:1:9).**  
*Pr. 620, 642. Pr. or Coreq. 541.*  
 Application of theoretical frameworks of nursing administration to practice, roles of nurse managers, and collegial relationships with other professionals, representing nursing concerns to larger community.
- 651. Advanced Clinical Nursing I (4:2:6).**  
*Pr. health assessment. Pr. or Coreq. 550, 610.*  
 Development of clinical nursing competencies in preparation for educator role. Seminars, conferences, and practicum emphasize caregiver, collaborator, and teacher role components.
- 652. Advanced Clinical Nursing II (4:2:6).**  
*Pr. 651. Pr. or Coreq. 601.*  
 Continuing development of clinical nursing competencies in preparation for the advanced practice educator role. Seminars, conferences, and practicum emphasize consultant, manager, and researcher role components.
- 653. Practicum in Nursing Education (4:1:9).**  
*Pr. 616, 620, 652. Pr. or Coreq. 615.*  
 Practicum in nursing education environments to apply relevant concepts and theories. Concurrent seminar to examine issues in nursing education.
- 657. Clinical Nursing Management of the Adult I (6:3:9).**  
*Pr. 550. Pr. or Coreq. 601, 610, 681.*  
 Seminar and clinical course that focuses on evidence-based practice for the prevention of disease and maintenance and restoration of health in culturally diverse adult patients with acute and chronic problems.
- 658. Clinical Nursing Management of the Adult II (6:3:9).**  
*Pr. 684, 685, 657. Pr. or Coreq. 620.*  
 Seminar and clinical course that focuses on interdisciplinary collaboration for the maintenance or restoration of health in culturally diverse adult patients with acute and chronic problems.
- 659. Advanced Adult Clinical Nurse Specialist Practicum (6:1:15).**  
*Pr. 658.*  
 Emphasis placed on the clinical nurse specialist defining and evaluating clinical problems within organizations/networks and developing innovative, cost effective solutions as members of interdisciplinary teams within health care systems.
- 671. Clinical Practicum in Nurse Anesthesia I (4:12).**  
*Pr. admission to the M.S.N. nurse anesthesia concentration. Pr. or Coreq. 610. Coreq. 605.*  
 Delivery of basic anesthesia nursing care to persons in a variety of settings.
- 672. Clinical Practicum in Nurse Anesthesia II (4:12).**  
*Pr. 671. Pr. or Coreq. 601. Coreq. 606.*  
 Delivery of basic anesthesia nursing care to persons in a variety of settings continued.
- 674. Clinical Practicum in Nurse Anesthesia IV (5:15).**  
*Pr. 672. Pr. or Coreq. 620. Coreq. 607.*  
 Delivery of advanced anesthesia nursing care to persons in a variety of settings.
- 675. Clinical Practicum in Nurse Anesthesia V (5:15).**  
*Pr. 674. Coreq. 604, 608.*  
 Delivery of complex anesthesia nursing care to persons in a variety of settings.
- 681. Advanced Health Assessment (4:3:3).**  
*Pr. 3 credit hour baccalaureate level health assessment course, 550, 610. Coreq. 682.*  
 Builds upon prerequisite assessment skills and presents advanced principles of health assessment. Methodologies of data gathering, data analysis and theoretical integration emphasized in lecture and laboratory content.
- 682. Health Promotion/Disease Prevention for Healthy Aging (3:2:3).**  
*Pr. 550, 610. Coreq. 681. Pr. or Coreq. 601.*  
 Theories of aging, growth and development, stress, coping, and motivation applied through advanced practice nursing in a primary care setting.
- 683. Clinical Management of the Older Adult I (6:3:9).**  
*Pr. 681, 682. Coreq. 684.*  
 Major health problems of older adults residing in the community; knowledge necessary to manage these health problems collaboratively with other health care professionals.
- 684. Pharmacotherapeutics for Nurse Practitioners (3:3).**  
*Coreq. 683.*  
 Advanced principles of pharmacodynamics of major drug classes used in adults and older adults, including discussion of advanced nursing roles in prescription practices.
- 685. Advanced Practice Nursing: Role, Theory and Practice (3:3).**  
*Pr. or Coreq. 620.*  
 Professional development of the advanced practice nursing role in the health care delivery system.
- 686. Clinical Management of the Older Adult II (6:3:9).**  
*Pr. 684.*  
 Major health problems of elderly residing in institutionalized settings. Content reflects knowledge necessary to manage health problems in collaboration with physicians, social workers, and other health professionals.
- 687. Primary Care of the Adult (4:3:3).**  
*Pr. 686.*  
 Health behaviors of adults, promotion of healthy lifestyles, and the management of common acute and chronic health problems by an advanced practice nurse.
- 688. Advanced Concepts in the Management of the Older Adult (4:0:12).**  
*Pr. 686.*  
 Implementation and evaluation of advanced practice strategies and leadership role of the gerontological nurse practitioner.
- 689. Primary Care of the Adult Practicum (2:0:6).**  
*Pr. 687.*  
 Practicum for advanced nursing practice in primary health care for adults: promotion of healthy lifestyles; evaluation and management of acute and chronic health problems.
- 692. Independent Study (1-3).**  
 Guided readings, research, and individual project work under the direction of the School of Nursing faculty. May be used as part of minimum 36 hours required for the M.S.N. degree. May be repeated for a maximum of 6 hours credit.



**698. Advanced Nursing Project (1-6).**

*Pr. 601, 610, one support course and one specialty course.*  
Scholarly inquiry project developed by the student with faculty guidance. Advanced nursing project or 699 required for the M.S.N. See Thesis or Advanced Nursing Project on page 196. May be repeated for a maximum of 6 hours credit. (Graded on S-U basis)

**699. Thesis (1-6).**

*Pr. 601, 610, one support course and one specialty course.*  
Individual guidance and direction in research to address a clinical or nonclinical problem. Thesis or 698 required for the M.S.N. See Thesis or Advanced Nursing Project on page 196. May be repeated for a maximum of 6 hours credit. (Graded on S-U basis)

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF NUTRITION

318 Stone Building  
(336) 334-5313; FAX (336) 334-4129  
<http://www.uncg.edu/nutrition>

*Professors*

**Deborah E. Kipp**, Ph.D., R.D., Role of ascorbic acid in regulating collagen production and key aspects of bone remodeling (Chair of Department).

**George Loo**, Ph.D., Nutritional biochemistry; atherosclerosis and lipoprotein metabolism; cellular and molecular functions of phytochemicals and other natural products.

**Michael K. McIntosh**, Ph.D., R.D., Regulation of adipocyte growth and metabolism; energy metabolism, obesity, diabetes.

**Laura S. Sims**, Ph.D., Domestic nutrition policy and its implications, nutrition education, hunger and food assistance.

**Rosmary C. Wander**, Ph.D., Impact of dietary fat, including omega-3 fatty acids, on lipid metabolism and cardiovascular disease.

*Adjunct Professors*

**Robert Dillard**, M.D., Nutritional needs of pre-term infants, benefits of breast-feeding for full- and pre-term infants.

**Harvey W. Gruchow**, Ph.D., Epidemiology of heart disease and hypertension focusing on nutrition; infant mortality and adolescent pregnancy prevention.

**Mary K. Sanford**, Ph.D., Biological and nutritional anthropology; macro and trace minerals in ancient bone and hair.

*Associate Professors*

**Cheryl A. Lovelady**, Ph.D., R.D., Nutrition and women's health with emphasis on nutrient needs during lactation and exercise; assessment of energy intake and expenditure.

**Martha L. Taylor**, Ph.D., R.D., Nutritional status of high risk children and the elderly; health promotion/disease prevention in the community; nutrition education (Director of Graduate Study and Director, Dietetic Internship Program).

*Adjunct Associate Professors*

**Vincent C. Henrich**, Ph.D., Gene expression; regulation of steroid production and response; nuclear hormone receptors.

**Karen S. Katula**, Ph.D., Control of cell division, regulation of human cyclin B gene transcription, antioxidant regulation of gene expression and cell cycle.

*Assistant Professors*

**Keith Erickson**, Ph.D., Micronutrients and brain development, function, and neurotoxicity.

**Lauren Haldeman**, Ph.D., 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.

**Christina O. Lengyel**, Ph.D., R.D., Nutrition and health issues of the elderly, dietary assessment techniques used in long-term care (LTC), foodservice satisfaction among cognitively impaired and non-impaired elderly LTC residents.

**Ron F. Morrison**, Ph.D., Transcriptional control of adipocyte differentiation and gene expression, obesity, diabetes; cellular and molecular mechanisms coupling growth arrest and cell differentiation, cell cycle, cancer.

The Department of Nutrition offers graduate programs leading to the Master of Science (M.S.) and the Doctor of Philosophy (Ph.D.) degrees in nutrition. Both degrees 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. This Plan develops strengths in the area of interest the student has

The Master of Science has both a thesis and non-thesis option. The thesis option is research-based and designed to prepare students for research, administration and practitioner positions in nutrition, or for progression to the Ph.D. 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 (R.D.) credential must be obtained for a career in dietetics.

Students in these programs can apply to a dietetic internship (DI) program, including the program at UNCG, prior to completing the degree requirements. A separate application to a DI program is required and students must apply to such programs following the American Dietetic Association's computer matching application process. The UNCG DI program has a limited number of positions that are set aside for graduate students who wish to complete both the graduate degree and the DI program requirements. 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.

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.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE

The Department of Nutrition offers a graduate program of study leading to a Master of Science degree. This degree offers two options: a thesis option (37 hours minimum) and a non-thesis option (40 hours minimum).

### Thesis Option (37 hours minimum)

At least 26 hours must be in 600-level courses. The minimum requirements include:

#### A. Required Core (16 hours)

- NTR 609 - Seminar in Nutrition (4)
- 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)
- STA 571, 571L - Statistical Methods for Research I (4)  
or STA 661, STA 661L - Advanced Statistics in the Behavioral and Biological Sciences I (4)

#### B. 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 Individual Study in Nutrition (1-6)
- NTR 623 - Current Trends in Nutrition (3)
- NTR 653 - Problems in Food and Nutrition (2-4)
- NTR 670 - Minor Research (2-6)

#### C. Electives (6 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 3 additional hours in either NTR or other science courses at the 500- or 600-level.

#### D. Thesis (6 hours)

- NTR 699 - Thesis (6)

### Non-thesis Option (40 hours minimum)

At least 26 hours must be in 600-level courses. The minimum requirements include:

#### A. Required Core (15 hours)

- NTR 609 - Seminar in Nutrition (3)
- 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)

STA 571, 571L - Statistical Methods for Research I (4)  
or STA 661, 661L - Advanced Statistics in Behavioral  
and Biological Sciences I (4)

## **B. 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 Individual Study in Nutrition (1-6)  
NTR 623 - Current Trends in Nutrition (3)  
NTR 653 - Problems in Food and Nutrition (2-4)  
NTR 670 - Minor Research (2-6)

## **C. Electives (19 hours minimum)**

The student will select at least 19 hours from other 500- or 600-level courses in NTR, other science courses, HEA, or CED, as approved by the student's advisory committee.

For those students who are completing the Dietetic Internship requirements as part of their graduate program of study, 15 elective hours will come from the DI course requirements:

NTR 602 - Introduction to Clinical Dietetics (3)  
NTR 693 - Advanced Medical Dietetics (3)

Nine elective hours will be designated from the Supervised Practice component requirement:

NTR 606a - Practicum in Clinical Dietetics: Management (3)  
NTR 606b - Practicum in Clinical Dietetics: Clinical (3)  
NTR 606c - Practicum in Clinical Dietetics: Community (3)

Successful completion of these courses is required for the student to be eligible to take The American Dietetic Association's national examination to become a registered dietitian (R.D.).

## **D. Comprehensive Examination**

The written examination is offered three times each year. Please consult with the Director of Graduate Study for the dates.

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY**

The Department of Nutrition offers a graduate program of study leading to a Doctor of Philosophy degree (63 hours minimum). At least 42 hours must be in 600- or 700-level courses. Students entering the Ph.D. 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 evalu-

ation by the student's major advisor and the doctoral Advisory/Dissertation Committee.

## **A. Required Core Courses (16 hours)**

NTR 609 - Seminar in Nutrition (8)  
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)

## **B. Research Techniques (21 hours minimum)**

With approval of the Advisory/Dissertation Committee, a student will select a minimum of one statistics course (4 hours), NTR 673 (Nutrition Research Methodology - 3 hours), 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 Individual Study in Nutrition and Foodservice Systems (1-6)  
NTR 623 - Current Trends in Nutrition (3-12)  
NTR 653 - Problems in Food and Nutrition (2-4)  
NTR 670 - Minor Research (2-6)

## **C. 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.

## **D. 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.

## **E. Research and Dissertation (18 hours minimum)**

NTR 790 - Doctoral Research (6)  
NTR 799 - Dissertation Problem (12)

## **Policy on Continuous Enrollment**

If a student has completed all of the course requirements for the degree, including all credit hours for the M.S. thesis (NTR 699) or doctoral dissertation (NTR 799), and they have not completed the thesis, dissertation, or passed the M.S. non-thesis comprehensive exam, they are required to enroll in credit hours each and every semester until the thesis, dissertation, or exam is completed and they have graduated. The proper registration for this additional requirement is NTR 801, Thesis Extension, if they are completing a M.S. thesis or NTR

802, Dissertation Extension, if they are completing a Ph.D. dissertation. M.S. non-thesis students who have not passed the comprehensive exam should register for NTR 803, Research Extension. NTR 801, 802 and 803 are variable credit. It is up to the faculty supervisor of the research or academic advisor to determine how many credit hours per semester the student shall be required to register.

## 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.

### I. 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: (a) an inability and/or unwillingness to acquire and integrate professional standards into one's repertoire of professional behavior, (b) an inability to acquire professional standards skills in order to reach an acceptable level of competency, and (c) 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; (1) violation of professional standards or ethical codes, (2) inability or unwillingness to acquire and manifest professional skills at an acceptable level of competency, (3) behaviors that can reasonably be predictive of poor future professional functioning, such as extensive tardiness or poor compliance with supervisory requirements, (4) personal unsuitability to the profession, e.g., substance abuse, chronic and disabling physical problems, (5) 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.

### II. 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; (1) a formal reprimand, (2) an unsatisfactory grade (U) in a practicum course with the requirement that the course be repeated, whether it was an elective or required practicum, (3) personal therapy, (4) leave of absence, (5) required additional practicum or course work, (6) increased supervision (e.g., more frequent supervision, more than one supervisor), (7) formal probation, (8) recommendation of withdraw from the program or changing to another program, (9) recommendation of formal dismissal from the program by the Dean of The Graduate School.

### III. Due Process; Evaluation of Professional Impairment

1. 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.
2. 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.
3. 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.
4. 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 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.
5. 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.

6. 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.
7. 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 to student's program of study, or dismiss the student from the program, this recommendation will be forwarded to the Dean of the Graduate School who, upon further consideration, will notify the student in writing.

## (NTR) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

Students must earn a "C" or better in prerequisite courses for NTR 531, 560, and 573 in order to enroll in these classes.

- 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.
- 531. Nutrition and Human Metabolism (4:4).**  
*Pr. grade of C or better in 277, NTR 413, and CHE 205, 206 or their equivalent as determined by instructor.*  
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.
- 534. Nutrition and Human Metabolism Laboratory (2:1:3).**  
*Pr. general chemistry and organic chemistry with labs; 531 (may be taken concurrently).*  
Analytical procedures, their rationale and interpretations, applicable to the study of human metabolism.
- 543. Maternal and Infant Nutrition (3:3).**  
*Pr. 213 or equivalent, and BIO 277 or equivalent.*  
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.
- 550. Nutrition Assessment (3:2:3).**  
*Pr. BIO 277, NTR 213, 313. Coreq. 560 (human nutrition and dietetics concentration only).*  
Assessment of nutritional status of healthy and ill persons before initiation of medical nutrition therapy.
- 553. Child and Adolescent Nutrition (3:3).**  
*Pr. 213 or equivalent, and BIO 277 or equivalent.*  
Nutritional needs of children and adolescents; methods of evaluating nutritional status of these groups; effects of nutrition on development.

### **560. Advanced Nutrition (4:4).**

*Pr. grade of C or better in 213, 313, 531, and BIO 277, or equivalents as determined by the instructor.*  
Biochemical and physiological aspects of nutrient metabolism and utilization. Nutrient requirements for maintenance, growth, pregnancy, lactation, work and aging.

### **573. Medical Nutrition Therapy (4:3:2).**

*Pr. grade of C or better in 213, 313 (may be taken concurrently), 531, 550, 560, and BIO 277.*

Clinical aspects of nutrition. Development and use of therapeutic diets to combat nutritional diseases and psychological disorders.

### **576. Nutrition and Physical Fitness (3:3).**

*Pr. BIO 277 and NTR 213 or equivalent required; ESS 375 or 575 recommended.*

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. (Same as ESS 576)

### **589. Experimental Course.**

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

## (NTR) COURSES FOR GRADUATES

### **601. Directed Individual Study in Nutrition and Food-service Systems (1-6).**

(Graded on S-U basis)

### **602. Introduction to Clinical Dietetics (3:2:2).**

*Pr. admission into the DI program or 573 and 560.*

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. (Fall)

### **606a,b,c. Practicum in Clinical Dietetics (3-6), (3-6), (3-6).**

For Dietetic Internship students only. Practical experience in the professional areas of dietetics: management, clinical, and community. Required for Dietetic Internship students. Combination of credit not to exceed 9 s.h.

### **607. Nutrition Education (3:3).**

*Pr. 213 or equivalent or permission of instructor.*

Philosophy, principles, methods, and materials involved in nutrition education. Emphasis on development of nutrition education curriculum and programs in school and community.

### **609a,b. Seminar in Nutrition (1)(2).**

Review, analysis and presentation of recent research findings and issues in food and nutrition. 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)

### **619. Nutrition Consultation Methods (3:2:3).**

*Pr. 573, 560 or permission of instructor.*

Exploration of techniques and constraints for interviewing and eliciting change through nutritional consultation.

### **623. Current Trends in Nutrition (3:3).**

*Pr. a basic nutrition course and/or permission of instructor.*

Emphasis on current trends in nutrition research/education from a molecular, cellular and/or human perspective. May be repeated for credit when topic varies.

**625. Gene Expression and Protein Metabolism (2:4).**

*Pr. previous course in general nutrition, biochemistry and mammalian physiology required. Unconditional admission to the graduate program in NTR or other life sciences or permission of instructor.*

Integration of cell biology and protein metabolism in relation to gene expression and regulation of enzyme activity in mammalian cells. Critical analysis of recent literature. (Fall)

**626. Energy, Carbohydrate, Lipid Metabolism (2:4).**

*Pr. 625.*

Analysis of energy intake and metabolism; carbohydrate and lipid absorption, transport, and tissue-specific utilization. Clinical applications. Critical analysis of recent literature.

**627. Antioxidants and Bioactive Food Components (2:4).**

*Pr. 625.*

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.

**628. Vitamins and Minerals (2:4).**

*Pr. 625.*

Metabolism functions of selected vitamins. Regulation of selected trace metals emphasizing nutrient-gene interactions. Clinical applications. Critical analysis of recent literature.

**643. Nutrition and Aging (4:3:2).**

*Pr. 213, BIO 277 or equivalent, or permission of instructor.*

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.

**653. Problems in Food and Nutrition (2-4).**

*Pr. permission of instructor.*

Individual student problems related to food and nutrition. May be repeated for credit. (Graded on S-U basis)

**666. Teaching Practicum in Nutrition (3:3).**

*Pr. admission to the graduate program in food, nutrition, and food service management or permission of instructor.*

Provides a supervised, structured learning experience in teaching for graduate students in the Department of Nutrition and Foodservice Systems. Professors provide guidance for graduate students during the experience.

**670. Research Skill Development (2-6).**

May be repeated for credit. (Graded on S-U basis)

**673. Nutrition Research Methodology (3:3).**

*Pr. 531 or equivalent as determined by the Department.*

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.

**676. Nutrition and Physical Performance (3:3).**

*Pr. course work in biochemistry and physiology required, 531, 560 or equivalent courses, BIO 277.*

Effects of nutrition on physical performance, alternations in nutrient metabolism from increased activity, interaction of diet and exercise on aging and disease processes, training and competition diets examined.

**693. Advanced Medical Dietetics (3:3).**

*Pr. 573 or equivalent.*

Development of nutritional therapies for certain disease conditions. Evaluation of the physiological and biochemical bases for such therapies. (Fall)

**695. Nutritional Genomics (3:3).**

*Pr. permission of instructor.*

Comprehensive evaluation of principles and applicability of methodologies used to evaluate the regulation of gene expression in the field of nutrition science. May be repeated for credit.

**696. Nutritional Proteomics (3:3).**

*Pr. permission of instructor.*

Comprehensive evaluation of principles and applicability of methodologies used to evaluate protein expression and function in the field of nutrition science. May be repeated for credit.

**699. Thesis (1-6).**

Required of all candidates for the Master of Science degree. Credit may be divided over two or more semesters. (Graded on S-U basis)

**711. Experimental Course.**

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

**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. Approval of graduate faculty member required. (Graded on S-U basis)

**799. Dissertation Problem (1-12).**

*Pr. completion of oral and written comprehensive examinations.*

Required of all candidates for the Doctor of Philosophy degree. May be repeated for credit. (Graded on S-U basis)

**801. Thesis Extension (1-3).**

**802. Dissertation Extension (1-3).**

**803. Research Extension (1-3).**

## DEPARTMENT OF PHILOSOPHY

216 Foust Building

(336) 334-5059

<http://www.uncg.edu/phi>

### Professors

**Joshua Hoffman**, Ph.D., Analytical metaphysics (theory of substance, theory of categories), analytical philosophy of religion, history of philosophy.

**Jarrett Leplin**, Ph.D., Philosophy of science, epistemology.

**Terrance McConnell**, Ph.D., Ethical theory, medical ethics, political philosophy.

**Gary Rosenkrantz**, Ph.D., Metaphysics, epistemology, philosophy of mind, philosophy of religion (Head of Department).

**Michael Zimmerman**, Ph.D., Ethics, action theory.

### Associate Professor

**John King**, Ph.D., Epistemology, logic, history and philosophy of science, philosophy of mind.

### Adjunct Associate Professor

**John Young**, Ph.D., Philosophy of language, ethics, ancient and medieval philosophy, and philosophy of religion.

### Assistant Professor

**Janine Jones**, Ph.D., Philosophy of mind, philosophy of language.

(No graduate degree program offered; see Master of Arts in Liberal Studies program.)

## (PHI) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 520. Advanced Topics in Biomedical Ethics (3:3).

*Pr. 220 or permission of instructor.*

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. May be repeated for credit when topic varies.

### 523. Philosophy of Social and Behavioral Science (3:3).

Central 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.

### 525. Philosophy of Physical Science (3:3).

*Pr. one course in physical science and one in philosophy or permission of instructor.*

Current issues in the philosophy of science such as scientific progress and scientific change, scientific methods, relations between experiment and theory, scientific explanation, rationality and scientific realism, relations between philosophy of science and history of science. Examples drawn from modern history of physical science.

### 527. Philosophy of Biological Science (3:3).

*Pr. one course in biology and one in philosophy or permission of instructor.*

Examination of concepts of law, theory, explanation, evidence, classification, and reduction using examples 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.

### 545. Social Philosophy (3:3).

*Pr. one course in philosophy or permission of instructor.*

Topics from social, political, and legal philosophy, such as property, justice, punishment, liberalism, conservatism, and a study of such major figures as Hobbes, Rousseau, and Marx.

### 555. Epistemology (3:3).

*Pr. one course in philosophy or permission of instructor.*

Skepticism, the analysis of knowledge, confirmation and induction, a priori knowledge, knowledge and truth.

### 559. Philosophy of Mind (3:3).

*Pr. one course in philosophy or permission of instructor.*

The mind-body problem, identity theories, functionalism, reductive and eliminative materialism, behavioral and causal theories of mind.

### 565. Philosophy of Language (3:3).

*Pr. one course in philosophy or permission of instructor.*

Theories of truth, meaning, and reference. The origin and nature of human language and its relation to animal and machine language.

### 575. Advanced Logic (3:3).

*Pr. 311 or permission of instructor.*

Axiomatic first order quantification theory with completeness theorems. Numbers and sets. Paradoxes and Type Theory. Introduction to modal logic.

### 589. Experimental Course.

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

### 590. Aesthetics (3:3).

*Pr. 322 or permission of instructor.*

Readings in the major philosophies of art. Analysis of the justification of evaluative judgments about art, the nature of aesthetic concepts, artistic truth, the art object, and the aesthetic experience.

## (PHI) COURSES FOR GRADUATES

### 601. Advanced Topics in Philosophy (3:3).

*Pr. permission of instructor.*

Topics may include relativism, legal ethics, and artificial intelligence. May be repeated for credit when topic varies.

### 620. Ethics and Genetics (3:3).

*Pr. matriculation to third semester of M.S. genetic counseling program or permission of instructor.*

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.

### 711. Experimental Course.

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

## DEPARTMENT OF PHYSICS AND ASTRONOMY

101 Petty Science Building  
(336) 334-5844

<http://www.uncg.edu/phy>

### Professors

**Francis J. McCormack**, Ph.D., Kinetic theory of gases and plasmas, mathematical and computational physics.

**Gerald W. Meisner**, Ph.D., Experimental elementary particle physics, physics education, instructional use of telecomputing systems.

### Associate Professors

**Stephen C. Danford**, Ph.D., Observational stellar astronomy (Head of Department).

**Robert B. Muir**, Ph.D., Observational stellar astronomy, physics education.

**Promod Pratap**, Ph.D., Biophysics of biological membranes, biological energetics, thermodynamics of biochemical reactions.

### Assistant Professor

**Edward H. Hellen**, Ph.D., Biophysics, nonlinear dynamics, fluorescence techniques, nerve signal propagation.

(No graduate degree program offered.)

The Department of Physics and Astronomy offers courses which prepare students for graduate study or for careers in industry, government, or teaching. It also offers courses which may be used by teachers in elementary, middle, and secondary schools for licensure renewal.

## (PHY) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

**501, 502. Conceptual Physics for Teachers** (3:3), (3:3).

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.

**543. Biophysics** (3:3).

*Pr. PHY 211, 212 or 291, 292, MAT 191, BIO 355, CHE 111, 114, or permission of instructor.*

Cellular biophysics with emphasis on the physical properties of membranes, including membrane transport mechanisms and electrical properties of membranes. (Same as BIO 543)

**589. Experimental Course.**

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

## (PHY) COURSES FOR GRADUATES

**601. Teaching Concepts in Physics and Astronomy** (3:3).

*Pr. permission of instructor.*

Research in physics education and its implications for instruction.

**603, 604. General Physics for Teachers** (3:3), (3:3).

*Pr. one year of college physics, one year of college mathematics, or permission of instructor.*

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.

**605. Advanced-Placement Physics for Teachers** (3:3).

*Pr. permission of the instructor.*

Concepts of mechanics, heat and wave motion presented in terms of the calculus.

**606. Advanced-Placement Physics for Teachers** (3:3).

*Pr. permission of the instructor.*

Concepts of electricity and magnetism, optics and modern physics presented in terms of the calculus.

**607, 608. Modern Physics for Teachers** (3:3), (3:3).

*Pr. permission of instructor.*

Recent developments in physics.

**612. Experimental Physics for Teachers** (1-3).

*Pr. one year college physics, one year college mathematics, and permission of instructor.*

Laboratory study of basic experiments. Principles of experimentation, laboratory techniques, laboratory safety, and techniques of data analysis. With permission of instructor, may be repeated for credit.

**711. Experimental Course.**

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



## DEPARTMENT OF POLITICAL SCIENCE

237 Graham Building  
(336) 334-5989  
<http://www.uncg.edu/psc>

### *Professors*

**James Clotfelter**, Ph.D., Southern politics, public policy (health, defense).

**William Crowther**, Ph.D., Comparative politics, political economy, Eastern Europe, inter-ethnic relations.

**Ruth Hoogland DeHoog**, Ph.D., Public administration, urban management, privatization, organization theory and behavior (Head of Department).

**Charles L. Prysby**, Ph.D., Research methods, elections, voting behavior, political parties, southern politics, contextual analysis.

### *Associate Professors*

**Susan J. Buck**, Ph.D., Environmental policy and law, public policy, administrative law.

**Robert J. Griffiths**, Ph.D., Comparative and international politics, African politics, civil-military relations, politics of development.

**Kenneth A. Klase**, D.P.A., Public administration, public budgeting and finance, public financial management (Director of Graduate Study).

**Gregory E. McAvoy**, Ph.D., Public policy, research methods, environmental policy, program evaluation.

**B. David Meyers**, Ph.D., American foreign policy, American ethnics influence on foreign policy, American security assistance to Third World.

### *Assistant Professor*

**Eric A. Johnson**, Ph.D., Urban politics, community and economic development, public policy.

### *Lecturer*

**J. Alan Boyette**, Ph.D., State politics, federalism and intergovernmental relations, public policy (environment, education, campaign finance).

The Political Science Department offers the Master of Public Affairs degree in public affairs, the Master of Arts degree in political science, a Post-Baccalaureate Certificate in nonprofit management, and a Post-Baccalaureate Certificate in urban and economic development. The M.P.A. degree is intended for persons interested in professional positions

in public service who seek training for work 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 M.P.A. program has been accredited by the National Association of Schools of Public Affairs and Administration (NASPAA).

The Master of Public Affairs 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.

The M.A. degree in political science will be of interest to persons who wish to teach in community colleges and secondary schools or continue graduate study in a doctoral program or a professional school.

The nonprofit management Certificate is designed to meet the training needs of nonprofit managers and professionals in the Triad region. The urban and economic development Certificate is designed to meet the training needs of those currently working in or who plan to work in urban planning or community and economic development in the Triad region.

## SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN NON- PROFIT MANAGEMENT

The Department of Political Science offers a program of study leading to a Post-Baccalaureate Certificate in nonprofit management. Certificate graduates will be prepared for management positions in the nonprofit sector, including positions in human service agencies, foundations, or professional associations. The certificate program could prove to be useful to government and business professionals as well, especially if they have significant voluntary or nonprofit agency responsibilities. The program combines core courses and electives that allow a student some choice and tailoring to specific interests.

**Fifteen (15)** semester hours must be successfully completed during a five-year period to earn the certificate. A minimum of 12 semester hours must be completed at UNCG; at least 9 hours must be taken in the M.P.A. curriculum. Certificate students must meet all requirements for admission to The Graduate School. Students must maintain a minimum grade point average of 3.0 in all certificate courses. No more than 3 semester hours of C will count towards the certificate.

#### **A. Core Requirements (6 hours)**

PSC 540 - Nonprofit Management and Leadership (3)  
PSC 550 - Philanthropy and Resource Development (3)

#### **B. Choice Requirements (3 hours)**

Students must choose three of the following:

PSC 511B - Problems in Public Management: Marketing for Public and Nonprofit Agencies (1)  
PSC 511D - Problems in Public Management: Strategic Planning (1)  
PSC 511F - Problems in Public Management: Financial Management (1)  
PSC 511G - Problems in Public Management: Grant-writing (1)  
PSC 511N - Problems in Public Management: Nonprofit Law (1)

#### **C. Electives (6 hours)**

Students must take 6 hours in a combination of one-hour courses (PSC 511): strategic planning, marketing, legislative relations, financial management, volunteer management, media relations, oral communication skills, grantwriting, legal issues in nonprofit organizations; and/or two 3 hour courses from the M.P.A. curriculum or approved courses outside the department in human development and family studies, social work, public health, business administration, and/or counseling.

### **SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN URBAN AND ECONOMIC DEVELOPMENT**

The Departments of Political Science and Geography jointly offer a program of study leading to a Post-Baccalaureate Certificate in urban 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.

The certificate requires **18** semester hours of course work (12 hours of core courses and 6 hours of approved electives) and must be completed during a five academic year period. A minimum of 15 of these hours must be completed at UNCG. Certificate students must meet all requirements for admission to The Graduate School. Students must maintain a minimum grade point average of 3.0 in all certificate courses. No more than 3 semester hours of C will count towards the certificate.

#### **A. Required Core Courses (12 hours)**

GEO 502 - Urban Planning (3)  
GEO 533 - Industrial Development: State and Local (3)  
PSC 520 - The Urban Political System (3)  
PSC 630 - Community and Economic Development: Theory and Practice (3)

#### **B. Electives (6 hours)**

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 Development Policy (3)

### **SPECIFIC REQUIREMENTS FOR THE MASTER OF PUBLIC AFFAIRS**

The Department of Political Science offers a graduate program of study leading to a **40** hour M.P.A. degree. Students with no work experience in public or nonprofit agencies are also required to complete an additional **3** hour supervised internship.

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 develop a specialization in courses in political science and up to 9 hours in other departments in the University (e.g., geography, social work, public health education).

#### **A. Prerequisite (3 hours)**

The program requires students to have completed an undergraduate course in American government, politics, or public policy.

## B. Core Courses (23 hours)

The eight required courses are to be taken in approximately the following order, when possible:

- 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, with lab (4)
- PSC 604 - Public Personnel Management (3)
- PSC 511J - Legal Issues in Public Administration (1)
- PSC 612 - Organizational Behavior (3)
- One applied research tools course - choose from 503, 504, 610, or 611 (3)

## C. Electives (17 hours)

### Regularly offered courses:

- PSC 504 - Computer Applications in Public Administration (3)
  - PSC 510 - Topics in Public Policy (1-3)
  - PSC 511 - Problems in Public Management (1)
  - PSC 512 - Federalism and Intergovernmental Relations (3)
  - PSC 516 - Administrative Law (3)
  - PSC 520 - The Urban Political System (3)
  - PSC 530 - Administrative and Elected Leadership (3)
  - PSC 540 - Nonprofit Management and Leadership (3)
  - PSC 550 - Philanthropy and Resource Development (3)
  - PSC 610 - Public Policy Analysis (3)
  - PSC 613 - Local Government Administration (3)
  - PSC 615 - Human Resource Development and Performance Management (3)
- Students may take up to 9 hours from approved graduate courses in other departments.

## D. 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.

## E. Comprehensive Examination

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.

### M.P.A. with a Concentration in Nonprofit Management:

This concentration combines the M.P.A. 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 M.P.A.

### A. Required Courses (28 hours)

Students must complete all but one of the M.P.A. core courses (PSC 511J). The research tools requirement in the M.P.A. 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:

- 540 - Nonprofit Management and Leadership (3)

plus three of the following four one-hour Problems in Public Management:

- 511B - Marketing for Public and Nonprofit Agencies (1)
- 511D - Strategic Planning (1)
- 511F - Financial Management (1)
- 511G - Grant Writing (1)

### B. Electives (12 hours)

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; Recreation, Parks, and Tourism; or Sociology.

### C. Internship (3 hours)

An internship (695) is required for students not having prior experience in a professional or management position in a nonprofit agency.

### M.P.A. with a Concentration in Community and Economic Development:

This concentration combines the M.P.A. 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 M.P.A.

### A. Required Courses (35 hours)

Students must complete all of the M.P.A. core courses including the required research tools course. They must also complete 15 hours of course work related to community and economic development skills and knowledge. Required courses are:

- PSC 520 - The Urban Political System (3)
- PSC 620 - Urban Development Policy (3)
- PSC 630 - Community & Economic Development Theory & Practice (3)
- PSC 511J - Problems in Public Management: Legal Issues in Public Administration (1)

Plus one of the following courses:

GEO 502 - Urban Planning (3)

GEO 533 - Industrial Development: State and Local (3)

### B. Electives ( 5 hours)

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.

### C. Internship (3 hours)

An internship (PSC 695) is required for students not having prior experience in a professional or management position in community and economic development.

### M.P.A. with a Concentration in Recreation, Parks, and Tourism:

This concentration, offered in conjunction with the Department of Recreation, Parks, and Tourism, is designed to blend the professional preparation of the M.P.A. program with the understanding of the organizations that provide recreation, parks, and tourism services. The prerequisite, comprehensive examination, and experiential component requirements are the same as for the M.P.A.

### A. Required Courses (32 hours)

In addition to the eight core courses required by the M.P.A. degree, students must also take two courses in recreation, parks, and tourism (RPT):

RPT 511 - Advanced Concepts in Leisure Studies (3)

RPT 613 - Recreation, Parks, and Tourism Management (3)

plus one course from a recreation, parks, and tourism concentration:

RPT 526 - Tourism Management (3) **or**

RPT 627 - Conceptual Foundations of Travel and Tourism (3) **or**

RPT 634 - Advanced Procedures in Therapeutic Recreation (3)

### B. Electives (8 hours)

Electives can be selected from political science, recreation, parks, and tourism, or other relevant courses, as approved by the Director of Graduate Study.

### C. Internship (3 hours)

An internship (PSC 695) is required of students not having prior experience in a professional or managerial position in recreation, parks, or tourism.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS DEGREE

The Department of Political Science offers a graduate program of study leading to a 30 hour Master of Arts degree. Course offerings and the thesis for the degree focus on public administration and policy.

### A. Required Courses (6 hours)

Two courses must be taken within the first 18 hours:

PSC 601 - Politics of Public Policy (3)

PSC 602 - Quantitative Analysis and Program Evaluation (3)

### B. Electives (24 hours)

Students select from among departmental offerings. Up to 6 hours may be taken as independent study courses.

### C. Thesis

See the Director of Graduate Study for details.

PSC 699 - Thesis (3-6)

### D. Comprehensive Examination

A written comprehensive examination is required when 18 hours of course work have been completed.

## (PSC) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 501. Selected Topics in Political Science (1-3).

*Pr. major in political science or permission of instructor.*

Opportunity for advanced students to study in depth a topic of special interest. May be repeated for credit when topics vary.

### 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 the public sector.

### 504. Computer Applications in Public Administration (3:3).

Overview of computer applications in public administration, covering both specific applications and broader questions of design, management, and impact of information and decision support systems.

### 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.



**510. Topics in Public Policy (1-3).***Pr. permission of instructor.*

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.

**511. Problems in Public Management (1).***Pr. permission of instructor.*

Intensive examination of important current problems related to the management of public institutions. 511J, Legal Issues in Public Administration, is a required course. Students may repeat the course when topics vary for a maximum of six credit hours.

**512. Federalism and Intergovernmental Relations (3:3).***Pr. permission of instructor or 210, or 310; or graduate standing.*

Focuses on changing relationships of local-state-federal agencies, expanding role of regional cooperation and recent developments in sub-national governments.

**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.

**520. The Urban Political System (3:3).**

Examination of major topics in the study of urban government and politics, including citizen participation, interest groups, parties, types of elections, forms of government, community power, and racial politics.

**530. Administrative and Elected Leadership (3:3).***Pr. permission of instructor.*

Recruitment, selection, and roles of executives and legislators; organization and activities of the offices; and relationships among executive offices, administrative offices, and legislative bodies.

**535. Citizen Participation in Policy Making (3:3).***Pr. permission of instructor.*

Political participation and citizen involvement in governmental policy making. Both citizen-initiated and government-sponsored efforts to increase popular input will be analyzed. Assessment of the impact of citizen participation on policy-making in specific areas of policy and on the performance of government in general.

**540. Nonprofit Management and Leadership (3:3).***Pr. senior or graduate standing.*

Overview of major concepts and concerns of nonprofit organizations, including tax-exempt status, incorporation, nonprofit-government relations, board-director-staff relations, volunteers, service and program planning, implementation, resource development.

**550. Philanthropy and Resource Development (3:3).***Pr. senior or graduate standing.*

Major concepts, strategies, issues, and approaches to resource development and philanthropy in nonprofit and educational organizations.

**560. Special Topics in Public Administration (1-3).***Pr. permission of MPA Program Director or instructor.*

Specific topic identified by extension to basic title: e.g., Special Topics in Public Administration: Public Financial Management; Financial Analysis Techniques; Grants and Contract Administration. Students may repeat three credit hour courses when topics vary. One credit hour courses may be repeated for a maximum of three credit hours when topics vary.

**589. Experimental Course.**

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

**(PSC) COURSES FOR GRADUATES****600. Public Administration and Management (3:3).***Pr. admission to the M.P.A. program or permission of instructor.*

Political environment, structure and process of public bureaucracies; organizational theory; professional ethics; and administrative functions including management, budgeting, and personnel.

**601. Politics of Public Policy (3:3).***Pr. admission to the M.P.A. program or permission of instructor.*

Public policy process from agenda-setting to policy formation, legitimization, and implementation.

**602. Quantitative Analysis And Program****Evaluation (3:3).***Pr. admission to the M.P.A. program or permission of instructor.*

Basic principles of research design, measurement, data analysis, and computer usage for research in politics and public policy.

**603. Budgeting and Fiscal Administration (3:3).***Pr. 600 or permission of instructor.*

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. Must be enrolled in PSC 603 and PSC 603L at the same time.

**603L. Budget Analysis Laboratory (1:1)***Pr. 600 or permission of instructor.*

Problems and exercises designed to assist students in understanding public budgeting. Emphasis on analyzing and communicating budget data. Must be enrolled in PSC 603 and PSC 603L at the same time.

**604. Public Personnel Management (3:3).***Pr. 600 or permission of instructor.*

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.

**610. Public Policy Analysis (3:3).***Pr. 602.*

Approaches to analyzing public policy; cost-benefit analysis, decision-analysis, and other analytical methods used in policy development and evaluation.

**611. Program and Policy Evaluation (3:3).***Pr. 602 or permission of instructor.*

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.

**612. Organizational Behavior (3:3).**

*Pr. 600 or permission of instructor.*

Behavior of public and nonprofit organizations. Problems of leadership, group dynamics, conflict resolution, and organizational change.

**613. Local Government Administration (3:3).**

*Pr. permission of instructor.*

Administrative process, management, personnel, budget and finance, and intergovernmental relations in local government.

**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.

**620. Urban Development Policy (3:3).**

Examines nature and evolution of U.S. urban development policy, including urban renewal, the war on poverty, and empowerment zones.

**630. Community and Economic Development Theory and Practice (3:3).**

*Pr. permission of M.P.A. program director or instructor.*

Critical analysis of community and economic development theory and practice and its historical and theoretical roots, methods, strategies, and tactics.

**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.

**695. Public Affairs Internship (3-6).**

*Pr. 600, 601, 602, at least three other graduate level courses in political science, and permission of instructor.*

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.

**696. Directed Field Research (3-6).**

*Pr. 600, 601, 602, three other graduate level courses, and permission of instructor.*

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.

**697, 698. Special Problems in Political Science (1-3), (1-3).**

Independent study or research in political science. Prior consent of faculty member with whom student wishes to work.

**699. Thesis (1-6).**

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).**

**803. Research Extension (1-3).**

## DEPARTMENT OF PSYCHOLOGY

296 Eberhart Building

(336) 334-5013

<http://www.uncg.edu/psy>

### Professors

**Arthur D. Anastopoulos, Ph.D.**, Attention-Deficit/Hyperactivity Disorder in children, adolescents, and adults, including multi-method assessment, multi-modal treatment, parent-child interactions, and parent training.

**Susan D. Calkins, Ph.D.**, Social and emotional development in infancy and early childhood (Director of Graduate Study).

**Anthony DeCasper, Ph.D.**, Early development of human perception and learning from the prenatal period to the preschool years (Interim Head of Department).

**Robert Guttentag, Ph.D.**, Cognitive development, children's learning and remembering.

**R. Reed Hunt, Ph.D.**, Cognitive processes, memory, perception, information processing, and the history of psychology.

**Timothy Johnston, Ph.D.**, Comparative studies of behavioral development and evolution, and the history of developmental theories in psychology and biology.

**Susan P. Keane, Ph.D.**, Social development in children, including parent-child interactions, and the etiology, assessment, and treatment of peer difficulties and neglect.

**Cheryl Logan, Ph.D.**, Animal communication, especially the reproductive functions of mockingbird song, history of psychology.

**Rosemary Nelson-Gray, Ph.D.**, Adult depression and personality disorders; theory and techniques of behavioral assessment.

**Walter Salinger, Ph.D.**, Physiology of behavior, particularly pre- and postnatal neural development, infant and adult neural plasticity, visual physiology.

**John Seta, Ph.D.**, Processes related to social cognition and groups.

**Richard Shull, Ph.D.**, Choice, response strength, and conditioned reinforcement, using animal preparations.

**Jacquelyn White, Ph.D.**, Gender issues and interpersonal violence with a particular focus on intimate partner aggression and victimization.

### *Associate Professors*

**John Dunlosky**, Ph.D., Investigates processes involved in how people monitor and control their on-going learning of new material, as well as how aging in adulthood affects memory and consciousness.

**Thomas R. Kwapil**, Ph.D., Schizophrenia and related illnesses studied from experimental and developmental psychopathology perspectives.

**P. Scott Lawrence**, Ph.D., Behavior analysis of human behavior including language, autism, psychotherapy and health-related clinical problems.

**Terri L. Shelton**, Ph.D., Developmental psychopathology, assessment and treatment of young children.

**Edward J. Wisniewski**, Ph.D., Cognitive processes underlying concept formation and conceptual combination, judgment and decision making.

### *Assistant Professors*

**Wesley D. Allan**, Ph.D., Child anxiety disorders, focusing on social phobia and related family factors.

**Michael J. Kane**, Ph.D., Attention and memory, particularly where they interact in the “working memory” system and how they contribute to intelligence and higher-order cognitive processes.

**Matthew J. Paradise**, Ph.D., Adolescents at high-risk for psychopathology, contemporary statistical/methodological approaches in clinical research.

**Paul Silvia**, Ph.D., Self-awareness, self-regulation, cognition and emotion.

The Psychology Department offers graduate work leading to the Master of Arts and the Doctor of Philosophy degrees.

At both the M.A. and the Ph.D. 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 concentrations: (a) Clinical (Allan, Anastopoulos, Keane, Kwapil, Lawrence, Nelson-Gray, Paradise, Shelton)—includes research training and clinical training in a variety of service settings; (b) Developmental (Calkins, DeCasper, Guttentag, Hickling,

Johnston, Salinger)—includes basic research in behavioral, cognitive, language, and social development in infant, child, adolescent, and adult humans and in animals, (c) Cognitive (Dunlosky, Guttentag, Hunt, Kane, Wisniewski)—includes basic research in human memory, cognition, and language; (d) Social (Calkins, Logan, Seta, Silvia, and White)—includes basic research in social phenomena, e.g., aggression, attitudes, communication, gender relations, intergroup comparison, and social competence.

## GRADUATE DEGREES

The Psychology Department offers doctoral education with specializations in clinical, developmental, cognitive, and social. The clinical program is fully accredited by the American Psychological Association.

The mission of the department is to provide graduate training at the doctoral level. Consequently, students whose goal is a terminal master’s degree are not admitted. Students with master’s degrees from other institutions are welcome to apply to our Ph.D. program. Their past work is evaluated to determine which requirements of our program have been satisfied.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS

Although all students are expected to work towards a Ph.D. degree, completion of the following requirements permits students to apply for a program of study leading to a 30 hour Master of Arts degree (48 hours for clinical students).

### A. Required Core Courses (12 hours)

Each student must take at least one core course from four of six core areas:

#### Behavioral:

PSY 617 - Behavior Theory (3)

PSY 651 - Experimental Analysis of Operant Behavior (3)

#### Clinical:

PSY 661 - Psychological Disorders in Children (3)

PSY 662 - Psychological Disorders in Adults (3)

**Cognitive:**

PSY 612 - Psychological Perspectives on Language (3)  
PSY 652 - Cognitive Processes (3)

**Developmental:**

PSY 643 - Developmental Psychology (3)  
PSY 644 - Human Behavioral Development (3)

**Psychobiology/Neuroscience:**

PSY 625 - Advanced Animal Behavior (3)  
PSY 650 - Physiology of Sensory and Behavioral Processes (3)  
PSY 655 - Sensation and Perception (3)

**Social:**

PSY 646 - Social Bases of Personality (3)  
PSY 647 - Advanced Social Psychology (3)

Students in clinical psychology can use either PSY 661 or PSY 662 to fulfill one of their four core requirements at the master's level.

**B. Statistics and Methodology  
(6 hours for non-clinical students;  
9 hours for clinical students)**

STA 661, 662 - Advanced Statistics in Behavioral Science Research I, II (3) (3) or alternatives with permission of the Director of Graduate Study.  
PSY 624 - Research Methods in Clinical Psychology (3 - clinical students)

**C. Electives (6 hours for non-clinical students; 21 hours for clinical students)**

For non-clinical students, these 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.

For clinical students, the electives must include the following:

PSY 622 - Theory and Methods of Psychotherapy (3)  
PSY 623 - Theory and Methods of Personality Assessment (3)  
PSY 626 - Theory and Methods of Behavioral Assessment and Theory (3)  
PSY 640 - Theory and Methods of Intellectual Assessment (3)  
PSY 642 - Practicum in Clinical Intervention (8)  
PSY 661 - Psychological Disorders in Children (3) and/or PSY 662 - Psychological Disorders in Adults (3)

**D. Comprehensive Examination**

Successful completion of the core requirement satisfies the comprehensive examination requirement.

**E. Research and Thesis (6 hours)**

PSY 699 - Thesis (6)

**SPECIFIC REQUIREMENTS FOR THE  
DOCTOR OF PHILOSOPHY**

Students must satisfy all requirements for the M.A. degree as part of their Ph.D. requirement, and all courses taken to satisfy the M.A. degree may be applied towards the Ph.D. requirements. A minimum of 72 hours is required for the Ph.D. degree.

**A. Core Courses and Electives  
(minimum 30 hours)**

In addition to core courses and electives taken to satisfy the M.A. requirement, students take additional courses selected in consultation with their doctoral advisory committee. These courses will typically be psychology seminars (PSY 683). Clinical students must take at least two clinical seminars (PSY 683) and two non-clinical seminars (PSY 683).

**B. Statistics and Methodology (9 hours)**

If additional course work is required beyond that taken to satisfy the M.A. requirement, these courses are selected in consultation with the doctoral advisory committee.

**C. Research (minimum 24 hours)**

PSY 699 - Thesis (6)  
PSY 751 - Independent Doctoral Research (6)  
PSY 799 - Doctoral Dissertation Research (12-24)

**D. Additional Courses**

To meet the 72 hour minimum requirement, additional hours may be taken from courses or research (751, 799).

**E. Preliminary Examination**

This examination is scheduled in consultation with the doctoral advisory committee.

**F. Specific Minimum Requirements for the Clinical Concentration**

The clinical concentration requires a number of specific courses which brings the minimum required hours to 95. These requirements are:

Core courses (12) and advanced seminars (6) outside of clinical (one must be from the social area and one must be from psychobiology)  
Clinical courses, including two seminars (24)  
Statistics and methodology (9)  
Practicum (20) plus Internship  
Research (24)



## Policy on Professional Impairment

Clinical faculty bear a double loyalty—not only to their students, but also to the profession and to the public. On the one hand, clinical faculty have a responsibility to teach and supervise their students, which is typically done in the context of an amicable relationship. On the other hand, clinical faculty 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 the standards of the profession. In these cases, faculty are obliged to take action when they have determined the student is professionally impaired.

Specifically, the Accreditation Handbook of the American Psychological Association (1979) specifies that: “programs must develop an explicit, comprehensive system for evaluation” (p. 8); and “students who experience continued serious difficulties and do not function effectively in academic and/or interpersonal situations should be counseled early, made aware of career alternatives, and if necessary, dropped from the program” (page 14).

### I. 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: (a) an inability and/or unwillingness to acquire and integrate professional standards into one’s repertoire of professional behavior, (b) an inability to acquire professional skills in order to reach an acceptable level of competency, and (c) an inability to control personal stress, psychological dysfunction, and/or excessive emotional reactions that interfere with professional functioning” (Lamb, Presser, Pfost, Baum, Jackson, & Jarvis; *Professional Psychology: Research and Practice*, 1987, 18, 597-603).

Documents that describe standards of professional practice and local expected procedures include: APA Ethical Principles of Psychologists, APA Standards for Providers of Psychological Services, Joint Standards for Educational and Psychological Testing (laws and statutes that regulate professional practice within North Carolina), UNCG Psychology Clinic Manual.

Examples of behaviors which may be evidence of professional impairment include the following. This list contains examples, and is not intended to be definitive: (1) violation of professional standards or ethical codes, e.g., breaches of client confidentiality, or engaging in dual relationships with clients, (2) inability or unwillingness to acquire and manifest professional skills at an acceptable level of competency, (3) behaviors that can reasonably be predic-

tive of poor future professional functioning, such as extensive tardiness in client record-keeping or poor compliance with supervisory requirements, (4) personal unsuitability to the profession, e.g., substance abuse, chronic and disabling physical problems, (5) interpersonal behaviors and intrapersonal functioning that impair one’s professional functioning, such as psychopathology (including personality disorders), inability to exercise good judgment, poor interpersonal skills, and pervasive interpersonal problems.

### II. 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: (1) a formal reprimand, (2) an unsatisfactory grade (U) in a practicum course with the requirement that the course be repeated, whether it was an elective or required practicum, (3) reduced practicum case-load, (4) personal therapy, (5) leave of absence, (6) required additional practicum or course work, (7) increased supervision (e.g., more frequent supervision, more than one supervisor, more extensive use of video or audiotapes), (8) formal probation, (9) recommendation to withdraw from the program, (10) recommendation of formal dismissal from the program by the Dean of The Graduate School.

### III. Due Process: Evaluation of Professional Impairment

1. There is a written policy on professional impairment which is systematically distributed to all clinical students, with signatures evidencing student review of the policy.
2. All students routinely receive evaluations in writing, including written notification of problems, through semi-annual practicum evaluations and through annual letters prepared by the clinical faculty. Students may also receive in writing descriptions of specific incidences that may evidence professional impairment. Such written evaluation will also be placed in the student’s departmental file.
3. 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.
4. 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 Clinical Training, and will include the clinical faculty who are making judgments of serious professional impairment (e.g., student's faculty clinical supervisor or agency clinical supervisor and/or the Director of the UNGC Psychology Clinic), the Director of Graduate Study, and the student's advisor.

5. 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.
6. After receiving written notification, the student may request an appeal within 14 days to the Head of the Department of Psychology. The appeal panel will include some persons who are different from those making the original decision, such as a psychologist from the community, a faculty representative of The Graduate School, and a member of the faculty selected by the student.
7. The results of the hearing and appeal will be forwarded to the Head of the Psychology Department, who may accept, reject, or modify the recommendations. If the Department Head accepts a recommendation to dismiss a student from the program, this recommendation will be forwarded to the Dean of The Graduate School who, upon further consideration, will notify the student in writing.

## (PSY) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 515. History and Systems of Psychology (3:3).

*Pr. a minimum of 12 hours of psychology, including 121, senior standing, or permission of instructor.*

Discussion of prescientific thinking on psychological problems, origin of systems of psychology, and ways systems are reflected in contemporary psychology.

### 519. Special Topics in Psychology (3:3).

*Pr. appropriate introductory 200-level core course or equivalent, or permission of instructor.*

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. May be repeated for credit when topic varies.

### 589. Experimental Course.

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

## (PSY) COURSES FOR GRADUATES

### 601. Graduate Problems in Psychology (1 to 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. For students with a strong background in psychology; students should consult instructor before registering. (Graded on S-U basis)

### 602. Seminar in Systematic Issues (3:3).

*Pr. 515 or equivalent, or permission of instructor.*

Contemporary state of knowledge with regard to the logic and language of psychology.

### 604. Behavior of Individuals in Work Organizations (3:3).

*Pr. permission of instructor.*

Factors which determine 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.

### 608. Personality and Social Development (3:3).

*Pr. HDF 651 and HDF 652 or permission of instructor.*

Integrates theory and research focusing on dimensions of normal personal-social growth from infancy through childhood. Importance of peer and family relations in the development of social attitudes, self-concept, prosocial behaviors, social conformity, and moral reasoning. (Same as HDF 608)

### 611. Experimental Design in the Behavioral Sciences (3:3).

*Pr. STA 662 or permission of instructor.*

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.

### 612. Psychological Perspectives on Language (3:3).

*Pr. 481, or 483, or permission of instructor.*

Traditional psychological perspectives as they relate to language phenomena. Empirical questions and findings in comprehension and memory for language. Relationship between language and thought.

### 614. Child Language: The Psychological Perspective (3:3).

*Pr. undergraduate course in cognitive development or psycholinguistics, or permission of instructor.*

In-depth analyses of children's language acquisition and its role in the development of cognitive functioning. Methodologies, findings, and issues as they relate to more general psychological questions.

### 617. Behavior Theory (3:3).

*Pr. 515 or permission of instructor.*

Theories of behavior and learning, from 1900 until the present.

### 622. Theory and Methods of Psychotherapy (3:3).

*Pr. or co-requisite 661, 662 and permission of instructor.*

Psychotherapy concepts and research from interpersonal, behavioral, humanistic, and cognitive perspectives. Supervised introductory practicum experience in therapeutic methods.

### 623. Theory and Methods of Personality Assessment (3:3).

*Pr. or co-requisite 622, malpractice insurance, and permission of instructor.*

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.

- 624. Research Methods in Clinical Psychology (3:3).**  
*Pr. or co-requisite 622, STA 661 and 662, and permission of instructor.*  
 Broad-based methodological perspective on approaches to research in clinical psychology; personality, psychopathology, psychotherapy, epidemiology, behavioral medicine, and clinical child psychology.
- 625. Advanced Animal Behavior (3:3).**  
*Pr. 435, or 436, or 438, or permission of instructor.*  
 Current research and theories including development and evolution of behavior, sociobiology, behavioral genetics, behavioral ecology, and the use of comparative method. (Same as BIO 625)
- 626. Theory and Methods of Behavioral Assessment and Therapy (3:3).**  
*Pr. 622 and permission of instructor.*  
 Evaluation of research and theory underlying behavioral assessment and behavior therapy. Supervised introductory experiences in the use of behavioral assessment and therapy techniques.
- 640. Theory and Methods of Intellectual Assessment (3:3).**  
*Pr. 661, 662, malpractice insurance, and permission of instructor.*  
 Research and theory underlying intellectual assessment. Supervised introductory experience in the use of standardized intelligence tests, including evaluation and communication of test results.
- 642. Practicum in Clinical Intervention (1 - 6).**  
*Pr. 622, 661, 662, and malpractice insurance.*  
 Supervised application of psychological principles to the assessment and therapeutic change of individual or group behavior, generally with clients in the UNCG Psychology Clinic. Open to clinical psychology graduate students.
- 643. Developmental Psychology (3:3).**  
*Pr. 455, or 456, or 457, or permission of instructor.*  
 Systematic survey of the theories and content of developmental psychology. Developmental issues and research examined in areas including attention, memory, language, socialization, sex roles, and aggression.
- 644. Human Behavioral Development (3:3).**  
*Pr. 326 or 342, or permission of instructor.*  
 Theory and research on the biological-behavioral analysis of pre- and postnatal development; learning and perception, including biological factors, in infancy through childhood.
- 645. Cognitive Development (3:3).**  
*Pr. 455, or 456, or 457, or permission of instructor.*  
 Theory and research in relation to attention, memory, problem solving and language. Emphases on Piagetian and information-processing approaches.
- 646. Social Bases of Personality (3:3).**  
 Major personality theories; social bases of individual differences. Research methodologies and specific areas of research.
- 647. Advanced Social Psychology (3:3).**  
*Pr. 460, or 461, or 462 or permission of instructor.*  
 Theoretical concepts, research methodologies, and empirical findings; aggression, attitude change, attribution, and exchange theory.
- 650. Physiology of Sensory and Behavioral Processes (3:3).**  
*Pr. 435, 436, 438, or permission of instructor.*  
 Neural substrates of motivation, emotion, sleep, motor acts and coordination, learning, language, complex processes, and psychopathology.
- 650L. Physiological Psychology Laboratory (1:0:3).**  
*Pr. enrollment in or completion of 650.*  
 Fundamental neuroanatomy with guided dissections, experiments, demonstrations, and training in surgical and other techniques useful in understanding and executing research in physiological psychology. (Graded on S-U basis)
- 651. Experimental Analysis of Operant Behavior (3:2:3).**  
*Pr. 442, or 444, or permission of instructor.*  
 Research methods used in the study of operant behavior; current status of research and theory relevant to basic processes in operant behavior.
- 652. Cognitive Processes (3:3).**  
*Pr. 481, 483, or permission of instructor.*  
 Human intellectual functioning including pattern recognition, attention, memory, comprehension, reasoning, and problem solving.
- 655. Sensation and Perception (3:3).**  
*Pr. 435, or 436, or 438, or permission of instructor.*  
 Sensory/perceptual processes emphasizing visual and auditory systems from stimulus transduction to higher order information processing.
- 661. Psychological Disorders in Children (3:3).**  
*Pr. permission of instructor.*  
 Empirical approach to the etiology, assessment, and treatment of psychological problems of children, with an emphasis on development factors. Not intended for students without a strong background in abnormal psychology, child development, and developmental theory.
- 662. Psychological Disorders in Adults (3:3).**  
*Pr. permission of instructor.*  
 An empirical approach to the etiology, assessment and treatment of psychological problems of adults.
- 681. Family-Centered Interdisciplinary Practice: System of Care (3:3)**  
*Pr. exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, or permission of instructor.*  
 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 HDF 681, HEA 681, RPT 681, SWK 681)
- 683. Contemporary Problems (3:3).**  
*Pr. 600-level course in appropriate content areas.*  
 Specific course title identified each semester by subscript, e.g., Contemporary Problems: Advanced Research Methods in Developmental Psychology. May be repeated for credit when topic varies.
- 691. Advanced Clinical Topics in Couple and Family Counseling/Therapy (3:3).**  
*Pr. 622.*  
 Advanced seminar in the scientific foundations for practice of couple and family counseling/therapy. May be repeated for credit when topic varies.
- 699. Thesis (1-6).**
- 711. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

**721. Teaching of Psychology (1:2).**

*Pr. admission to the graduate program in psychology, or permission of instructor.*

Introduction to the principles and practices of good undergraduate teaching for graduate students in psychology. Covers basic issues such as course planning, teaching techniques, legal and ethical issues. (Graded on S-U basis.)

**751. Independent Doctoral Research (1-6).**

Individual work on psychological problems of special interest culminating in an intensive, critical review of the literature in a given field or a scientific investigation of a problem. Before registering, student should obtain the approval of a graduate faculty member who agrees to monitor and evaluate the proposed research. (Graded on S-U basis.)

**762. Advanced Practicum in Clinical Psychology (1-12).**

*Pr. 642, malpractice insurance.*

Supervised application of psychological principles to the assessment and therapeutic change of individual and group behavior, generally with clients in the UNCG Psychology Clinic. Open only to clinical psychology graduate students. (Graded on S-U basis)

**763. Internship in Clinical Psychology (1-12).**

*Pr. 642, 762, malpractice insurance.*

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. Open only to clinical psychology graduate students. (Graded on S-U basis)

**799. Doctoral Dissertation Research (1-24).**

**801. Thesis Extension (1-3).**

**802. Dissertation Extension (1-3).**

**803. Research Extension (1-3).**

## DEPARTMENT OF PUBLIC HEALTH EDUCATION

437 H.H.P. Building

(336) 334-5532

<http://www.uncg.edu/phe>

### Professors

**H. William Gruchow, Ph.D.**, Obesity prevention, men's health, philosophy of health (Director of Graduate Study).

**Keith A. Howell, Ph.D.**, Environmental health, genomic literacy, bioterrorism.

### Associate Professors

**Daniel L. Bibeau, Ph.D.**, Worksite and community health promotion/wellness programs, poverty and health (Head of Department).

**Karen King, Ph.D.**, Health education interventions with emphasis in child and adolescent health, HIV education, violence prevention.

**Lynette Lawrance, Ph.D.**, Women's and adolescent health issues, sexuality and tobacco education, school health programs.

**Kay Ann Lovelace, Ph.D.**, Organizational behavior and theory; conflict, collaboration, innovation and public health infrastructure.

**Paige Hall Smith, Ph.D.**, Women's health, breastfeeding, violence against women.

### Assistant Professors

**Robert E. Aronson, Dr.P.H.**, Grassroots development in U.S. and international settings, social inequities and health disparities, community health ethnography.

**Sharon D. Morrison, Ph.D.**, Immigrant and refugee health, health literacy, HIV/AIDS in international settings.

**Robert W. Strack, Ph.D.**, Adolescent health, photovoice methodology, community-based program planning and evaluation.

The Department of Public Health Education offers the Master of Public Health (M.P.H.) degree in community health education. The M.P.H. program is a professional preparation program for students interested in careers that involve the development and management of population-based health promotion and disease prevention activities within communities. The program is designed to meet the needs of qualified students from a variety of academic and professional backgrounds. In the program students receive academic preparation in the traditional public health fields of epidemiol-



ogy, statistics, environmental health, and health policy with course work and field-based 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.

Applicants can be admitted 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 two courses each summer, over three years.

The M.P.H. program is accredited by the Council on Education for Public Health. Additionally, the curriculum includes the development of graduate professional competencies recommended by the Society for Public Health Education and The American Association for Health Education.

## Admission

Admission into the M.P.H. program is based upon a review of each applicant's credentials by the Department and The Graduate School. Required items for admission include: completed application form, GRE or MAT scores, transcripts of all previous academic study, description of work experiences, three recommendation forms or letters, and a written statement of professional goals.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF PUBLIC HEALTH

The Department of Public Health Education offers a graduate program leading to a 48 hour M.P.H. degree. The degree consists of 42 semester hours of course work and a 6 hour internship/practicum in a community setting. A student may elect the thesis option in place of the internship/practicum. The courses are distributed in the following manner:

### A. Core Courses (18 hours)

- 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)

### B. Required Professional Courses (9 hours)

- HEA 603 - Community Health Analysis (3)
- HEA 609 - Community Health Interventions (3)
- HEA 625 - Community Health Research and Evaluation (3)

### C. Electives (12 hours)

Each student will take four elective courses chosen in consultation with his/her advisor.

### D. Application/Culminating Experiences (9 hours)

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. This is done through an internship/practicum in a community health agency or a community-based research thesis:

#### Internship/Practicum Option

- HEA 648 - Applied Program Planning (3)
- HEA 650 - Community Health Internship/Practicum (6)

#### Thesis Option

- HEA 699 - Thesis (6)
- An additional research methods course chosen in consultation with faculty advisor (3)

## (HEA) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 540. Seminar in Health (3:3).

Current problems, issues, and trends in health education and the health sciences, with emphasis on the analysis of research and literature.

### 589. Experimental Course.

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

## (HEA) COURSES FOR GRADUATES

### 600. Contemporary Problems in Health (3:3).

Current personal, community, and world health problems through critical analysis of literature and research.

### 601. Principles of Community Health Education (3:3).

*Pr. admission to the MPH program or permission of instructor.*

Factors affecting health and disease, principles underlying health education practice, and the role of health education in health promotion and disease prevention. (FA)

**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. (SP)

**603. Community Health Analysis (3:3).**

*Pr. admission to the MPH program or permission of instructor.*

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. (FA)

**604. Public Health Statistics (3:3).**

*Pr. admission to the MPH program or permission of instructor.*

Investigation of data sources and methods used to gather, analyze and interpret health data; emphasis on computer applications. (FA)

**606. Workshops in Health Education (1-3).**

Current and comprehensive health or health education concerns of schools and society. No more than three hours of this course may be applied to a graduate degree program.

**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. (FA)

**609. Community Health Interventions (3:3).**

*Pr. 601, 602, 604, 608.*

Overview of theories, successful intervention strategies, and methods of implementation across the social ecology and their application to the development of health education programs. (SP)

**612. Management of Community Health Organizations (3:3).**

*Pr. admission to a graduate degree program or permission of instructor.*

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. (SP)

**616. Workplace Health Promotion (3:3).**

*Pr. admission to a graduate degree program or permission of instructor.*

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.

**617. Conflict Resolution and Coalition Building (3:3).**

*Pr. admission to a graduate degree program or permission of instructor.*

Theory, analysis, and skill development in conflict resolution, negotiation, and coalition building for health education and human service professionals.

**620. School Health Programs (3:3).**

*Pr. 601, 602 or permission of instructor.*

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.

**625. Community Health Research and Evaluation (3:3).**

*Pr. 601, 602 and completion of or concurrent enrollment in 603, or permission of instructor.*

Issues, problems, and techniques involved in evaluation of community health education programs. (FA)

**635. Health Education in the Community and School (3:3).**

*Pr. permission of instructor.*

Planning, preparation, and presentation of health education information and programs for school and community groups.

**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.

**645. Health Policy (3:3).**

*Pr. admission to a graduate degree program or permission of instructor.*

Health policy process in the US; examination of historical and current health policy issues, and survey of methods for analyzing health policy options. (SP)

**648. Applied Program Planning (3:3).**

*Pr. 610, 611, 645 or permission of instructor.*

Methods and models of planning health education programs for various settings. (FA)

**650. Community Health Internship/Practicum (6).**

*Pr. 648 or permission of instructor.*

Supervised experience in the observation, delivery, and evaluation of health education services in community settings. May be repeated once for credit. (Graded on S-U basis) (SP)

**660. Human Sexual Relationships (3:3).**

The development of human sexuality and ensuing interpersonal relationships and sexual behavior in today's society. (SU)

**662. Gender and Health (3:3).**

*Pr. admission to a graduate degree program or permission of instructor.*

Health issues and health problems with respect to gender differences, similarities and historical conceptions.

**665. Violence and Public Health (3:3).**

*Pr. admission to a graduate degree program or permission of instructor.*

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.

**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.

**676. Problems Seminar (3).**

*Pr. previous course work in appropriate content areas or permission of instructor.*

Specific course title identified each semester by subscript, e.g., Problems Seminar: Professional Literature in Health Education. May be repeated for credit.

**680. Community Health Seminar (3:3).**

*Pr. or coreq. 648, 650 or permission of instructor.*

Culminating experience to help students synthesize and integrate community health education knowledge, theory, and principles. (SP)

**681. Family-Centered Interdisciplinary Practice: System of Care (3:3)**

*Pr. exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, or permission of instructor.*

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 HDF 681, PSY 681, RPT 681, SWK 681)

**695. Independent Study (1-3).**

*Pr. demonstrated competency for independent work and permission of departmental academic adviser and the instructor.* Intensive study in an area of special interest in health education. May be repeated once for credit.

**697. Community Health Field Project (1-3).**

*Pr. 601, 602, 603, and 605 or 625 or permission of instructor.*

Supervised community health education field project including a major literature-based paper. May be repeated for up to 6 credit hours, minimum of 3 credit hours required for graduation.

**698. School Health Field Project (1-3).**

*Pr. 601, 602, 620 and a related research or evaluation course or permission of instructor.*

Supervised school health setting project including a major literature-based paper. May be repeated for up to 6 credit hours, minimum of 3 credit hours required for graduation.

**699. Thesis (1-3).**

May be repeated for up to 6 credit hours, minimum of 3 credit hours required for graduation.

**711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF RECREATION, PARKS, AND TOURISM

420J HHP Building

(336) 334-5327

<http://www.uncg.edu/rpt>

*Professors*

**Stuart J. Schleien**, Ph.D., Therapeutic recreation, community inclusion, developmental disabilities, volunteerism (Head of Department).

**James R. Sellers**, Ed.D., Leisure services management, area and facility development, maintenance and operations, financing.

*Associate Professors*

**Leandra A. Bedini**, Ph.D., Therapeutic recreation, caregivers, women with disabilities, perceived stigma (Director of Graduate Study).

**Nancy J. Gladwell**, Re.D., Management, commercial recreation, organizational behavior (Director of Undergraduate Study).

*Assistant Professors*

**Erick T. Byrd**, Ph.D., Travel and tourism, sustainable tourism, tourism marketing.

**Charlensena F. Stone**, Ph.D., Therapeutic recreation, cultural competence, cultural diversity training.

The Department of Recreation, Parks, and Tourism offers the Master of Science (M.S.) degree in parks and recreation management. Students may choose one of the following three concentrations: leisure services management; therapeutic recreation; or travel, tourism, and commercial recreation.

### SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE IN PARKS AND RECREATION MANAGEMENT

**Requirements for admission to the program include:** an undergraduate GPA of 3.00, satisfactory scores on the Graduate Record Exam General Test (GRE) *or* the Miller Analogies Test (MAT), a current resume, a professional statement including career goals, and three references. Interviews are encouraged for all applicants and required for graduate assistants. Based on experience, recommendations, and interviews, provisional admission may be granted. Upon completion of 6 credits with a

grade of B (3.0) or better, a provisionally admitted student may be granted full graduate standing. The courses taken will count toward the degree. A student who does not have an undergraduate degree in recreation, parks, and tourism and/or appropriate professional experience will be required to take one course from his/her concentration; e.g., RPT 221 or 231 or 241. Students in the therapeutic recreation concentration will also be required to take RPT 332.

**Requirements for completion of the program include:** Of the 36 hours required, at least one-half the work credited toward the degree must be in 600-level courses or above, an overall average of B (3.0) or better, and successful completion of a capstone experience (e.g., thesis, project, internship/comprehensive examination). The student, after discussing career goals with his/her advisor, may choose either the thesis or non-thesis option. However, if the student selects the non-thesis option, the advisor will determine (based on amount of professional experience) whether the student completes a project or an internship and a comprehensive examination. For example, a student choosing the non-thesis option and having minimal professional experience will be required to complete an internship with a comprehensive examination. There is a five (5) academic year time limitation to complete the degree beginning with the first graduate course taken. Prerequisites do not count toward the time limit.

Students must meet with their advisor or the Director of Graduate Study *before* registering for any course work.

#### A. Required Core Courses (9 hours)

- RPT 611 - Foundations of Recreation, Parks, and Tourism (3)
- RPT 613 - Recreation, Parks, and Tourism Management (3)
- RPT 614 - Organizational Behavior in Recreation, Parks, and Tourism (3)

#### B. Concentration (6-9 hours)

##### Leisure Services Management: (9 hours)

- RPT 645 - Financial Trends in Recreation and Parks (3)
- RPT 646 - Seminar: Leisure Services Management (3)

Select one of the following:

- PSC 520 - The Urban Political System (3)
- PSC 600 - Public Administration and Management (3)
- PSC 613 - Local Government Administration (3)

- PSC 615 - Public Personnel: Development and Evaluation (3)

#### Therapeutic Recreation: (6 hours)

- RPT 633 - Professional Issues in Therapeutic Recreation (3)
- RPT 634 - Advanced Procedures in Therapeutic Recreation (3)

#### Travel, Tourism, and Commercial Recreation: (6 hours)

- RPT 626 - Tourism Management (3)
- RPT 627 - Conceptual Foundations of Travel and Tourism (3)

#### C. Research Techniques (9 hours)

- RPT 612 - Research Applications in Recreation, Parks, and Tourism (3)

Select one of the following:

- ERM 604 - Methods of Education Research (3)
- ESS 611 - Research in Physical Education I: Concepts of Inquiry (3)
- SOC 616 - Advanced Research Methods (3)

Select one of the following:

- \*ESS 610 - Statistics for Research in Health, Physical Education, and Recreation (3)
- ERM 617 - Statistical Methods in Education (3)
- \*Although students may select either ESS 610 or ERM 617, they are encouraged to register for ESS 610 if at all possible.

#### D. Electives (3-9 hours)

With the approval of his/her advisor, the student selects 3 to 9 hours of 500- to 700-level course work that constitute a specialized knowledge base relevant to the student's academic interests and goals.

#### E. Comprehensive Examination

For those students completing an internship as their capstone experience, successful completion of written and oral comprehensive examinations will be required in three areas: (1) General: core, (2) Specific: concentration/specialized line of study, and (3) Research: methods and statistics. If the examination is not passed, no more than one re-examination may be authorized by the examining committee.

#### F. Internship, Field Project, or Thesis (3-6 hours)

Select at least one of the following:

- RPT 697 - Internship in Recreation, Parks, and Tourism (3-6)
- RPT 698 - Field Project in Recreation, Parks, and Tourism (3-6)
- RPT 699 - Thesis (6)



## (RPT) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

- 511. Seminar in Recreation, Parks, and Tourism (3:3).**  
*Pr. 315, senior standing, or permission of instructor.*  
 Examination of current practices in recreation, parks, and tourism with emphasis on their impact in the delivery of programs and services, and their technological, economic, and political significance in society.
- 519. Directed Research (3).**  
*Pr. permission of instructor.*  
 Identification and investigation of research questions in recreation, parks, and tourism. Opportunity for students to conduct research with direction from scholars in the field.
- 589. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.

## (RPT) COURSES FOR GRADUATES

- 611. Foundations of Recreation, Parks, and Tourism (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.
- 612. Research Applications in Recreation, Parks, and Tourism (3:3).**  
*Pr. ERM 604 or ESS 611 or SOC 616; ERM 617 or ESS 610.*  
 Utilization and application of current data analytic procedures in leisure research in the context of various research methods.
- 613. Recreation, Parks, and Tourism Management (3:3).**  
*Pr. 611 or permission of instructor.*  
 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.
- 614. Organizational Behavior in Recreation, Parks, and Tourism (3:3).**  
*Pr. 613 or permission of instructor.*  
 Organizational behavior within recreation, parks, and tourism organizations. Managerial and organizational behavior, perception, motivation, diversity, power and politics, leadership, group dynamics, communications, conflict, and organizational design, culture and change.
- 626. Tourism Management (3:3).**  
*Pr. 324, 423, or permission of instructor.*  
 Study of the current trends and issues in travel and tourism; examination of ethical and legal issues, marketing and management strategies, and providers of tourism products and services.
- 627. Conceptual Foundations of Travel and Tourism (3:3).**  
*Pr. 611 or permission of instructor.*  
 Conceptual and theoretical foundations of travel and tourism and their application in research and practice.
- 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.
- 634. Advanced Procedures in Therapeutic Recreation (3:3).**  
*Pr. 611 or permission of instructor.*  
 Health care delivery service in community and medical arenas. Role of therapeutic recreation within that system. Administrative/managerial procedures.
- 645. Financial Trends in Recreation and Parks (3:3).**  
*Pr. 613 or equivalent, or permission of instructor.*  
 Study of financial trends in the public and private nonprofit sectors of recreation and parks. Emphasis on financing and acquiring recreation and park resources.
- 646. Seminar: Leisure Services Management (3:3).**  
*Pr. 613 or permission of instructor.*  
 Concepts, principles, and practices in recreation and park management. Emphasis on policy-making process; program, service, and event management; physical resources planning/management; legal environment/risk management; professionalism; issues and trends.
- 681. Family-Centered Interdisciplinary Practice: System of Care (3:3)**  
*Pr. exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, or permission of instructor.*  
 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 HDF 681, HEA 681, PSY 681, SWK 681)
- 695. Independent Study (3).**  
*Pr. permission of instructor.*  
 Independent study to support graduate-level research and demonstration projects under the close supervision of a graduate faculty member in RPT. May be repeated once for credit.
- 696. Directed Readings (3).**  
*Pr. permission of instructor.*  
 Opportunity to conduct in-depth study and library work on a particular topic in recreation, parks, and tourism under close supervision of a graduate faculty member in RPT. May be repeated once for credit.
- 697. Internship in Recreation, Parks, and Tourism (3-6).**  
*Pr. 611, 612, 613; either 626, 633, or 645.*  
 A supervised field experience including a final paper. (Graded on S-U basis)
- 698. Field Project in Recreation, Parks, and Tourism (3-6).**  
*Pr. 611, 612, 613; either 626, 633, or 645.*  
 A supervised field project including a major literature-based paper.
- 699. Thesis (1-6).**  
*Pr. 611, 612, 613; either ERM 604, ESS 611, or SOC 616; either ERM 617 or ESS 610; either 626, 633, or 645; either 627, 634, or 646.*  
 Individual guidance in the development and examination of a research problem.
- 711. Experimental Course.**  
 This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 801. Thesis Extension (1-3).**
- 803. Research Extension (1-3).**

## DEPARTMENT OF RELIGIOUS STUDIES

109 Foust Building  
(336) 334-5762  
<http://www.uncg.edu/rel>

### *Professor*

**Henry S. Levinson**, Ph.D., American religious thought, the pragmatic philosophical tradition, "religious experience" as a category of cultural interpretation and criticism, religious pluralism as actuality, as ideal, as problem.

### *Associate Professors*

**William D. Hart**, Ph.D., Religion, ethics, and politics.

**Derek Krueger**, Ph.D., Religions of late antiquity, history of Christianity, Byzantine studies (Head of Department).

**Charles D. Orzech**, Ph.D., History of religions, theory and method, Chinese Buddhism, Japanese Buddhism, esoteric Buddhism in East Asia (Head of Department).

**Bennett H. Ramsey**, Ph.D., Western religious thought (ethics, philosophy of religion, theology), religion in the Americas, feminist and African-American religious thought.

### *Assistant Professor*

**Gregory P. Grieve**, Ph.D., South Asian religion with an emphasis in Himalayan traditions.

(No graduate degree program offered; see Master of Arts in Liberal Studies program.)

## (REL) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

### 503. Topics in Religious Studies (3:3).

*Pr. permission of instructor.*

Study of the role, nature, and function of certain social forms of religious life, such as intentional community or religious leadership, through cross-cultural comparison or intensive study of one religious tradition.

### 589. Experimental Course.

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

## (REL) COURSES FOR GRADUATES

### 695. Independent Study (1-3).

*Pr. permission of department head and instructor.*

Directed program of reading, research, and individual instruction.

### 711. Experimental Course.

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

## DEPARTMENT OF ROMANCE LANGUAGES

321 McIver Building  
(336) 334-5655  
<http://www.uncg.edu/rom>

### *Professors*

**David A. Fein**, Ph.D., Medieval French literature, 15th century French literature, lyric poetry, teaching language through literature.

**Theresa A. Sears**, Ph.D., Medieval and Golden Age Spanish literature.

**Mark I. Smith-Soto**, Ph.D., 19th and 20th century Spanish American poetry.

### *Associate Professors*

**Roberto Campo**, Ph.D., 16th century French literature, poetic and aesthetic theory of antiquity and the Renaissance, laughter theory, orientalism (Director of French Graduate Study).

**Laura A. Chesak**, Ph.D., Contemporary Spanish American literature, Spanish American women writers (Director of Spanish Graduate Study).

**William O. Goode**, Ph.D., 17th century French literature and society, French classical drama, Corneille, Molière, Racine.

**Veronica Grossi**, Ph.D., Spanish American Colonial literature, critical and feminist theory, Spanish American women writers, Spanish American poetry and 20th century Mexican literature.

**Kathleen Koestler**, Ph.D., 19th century French literature.

**Carmen T. Sotomayor**, Ph.D., Contemporary Spanish literature, contemporary Spanish women writers (Interim Head of Department).

### *Assistant Professors*

**Will Derusha**, Ph.D., 20th century Spanish poetry and civilization, literary translation, liberation theology.

**Ana Hontanilla**, Ph.D., 18th and 19th century Spanish literature and cultural studies.

**Juana Suarez**, Ph.D., Latin American literature, 20th century cultural studies, film studies, literary theory, women's studies.

The Department of Romance Languages, as part of its commitment to further the study of foreign languages and literatures both regionally and nationally, offers the Master of Arts in Romance Languages and Literatures with a

concentration in French 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 Master of Education in curriculum and instruction with concentrations in French education or Spanish education is also offered in collaboration with the Department of Curriculum and Instruction in the School of Education (see the Department of Curriculum and Instruction for specific degree requirements). This program allows candidates to earn "M" licensure while completing the degree. Most graduate classes are offered in the late afternoon, evening, or online to accommodate in-service teachers.

It is assumed that the candidate for the M.A. will have an undergraduate program of 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). A 3.0 GPA is normal for admission to our graduate programs.

Students wishing to be considered for financial assistance should complete their applications by **March 15**, although applicants for admission only may be considered beyond that date. A limited number of assistantships and awards are available. Assistantships require service to the Department, either in teaching, research assistance, or other assigned responsibilities. Students must have completed a minimum of 18 hours of graduate level work in the discipline before they are eligible to become Teaching Assistants. Early submissions are essential for those seeking a tuition waiver.

## **SPECIFIC REQUIREMENTS FOR A MASTER OF ARTS WITH A CONCENTRATION IN FRENCH**

The Department of Romance Languages offers a graduate program of study with two options: thesis option requiring 30 hours of graduate study (24 hours course work and 6 hours thesis) and a comprehensive examination; non-thesis option requiring 30 hours of course work and a comprehensive examina-

tion. In both options, at least one half the work credited toward the degree must be in 600-level courses or above.

### **A. Core Courses in French (thesis option: 18-24 hours)**

In consultation with the Director of French Graduate Study, the student will select up to 24 hours of courses in French at the 500-level or above.

### **B. Core Courses in French (non-thesis option: 24-30 hours)**

In consultation with the Director of French Graduate Study, the student will select up to 30 hours of courses in French at the 500-level or above.

### **C. Electives Related Area (0-6 hours)**

With prior approval from the Director of French Graduate Study, a student may select up to 6 hours in a related area.

### **D. Foreign Language**

The student will demonstrate a reading knowledge of a language other than French and English. This requirement may be fulfilled in three ways: by passing a reading examination (contact the relevant Director of Graduate Study for details), by completing 204-level (or higher) course work in the additional language with a grade of B (3.0) or better, or by obtaining a score of 400 or higher on the department's Computerized Adaptive Placement Exam.

### **E. Reading List**

The student will read a prescribed list of major works of French literature.

### **F. Comprehensive Examination**

The student must pass a written comprehensive examination based on the Reading List and course work taken. Please consult with the Director of Graduate Study for French to set a date for this examination.

### **G. Thesis (thesis option only - 6 hours)**

FRE 699 - Thesis (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 defense of the thesis is required. Please consult with the Director of French Graduate Study for further information.

## SPECIFIC REQUIREMENTS FOR A MASTER OF ARTS WITH A CONCENTRATION IN SPANISH

The Department of Romance Languages offers a graduate program of study with two options: thesis option requiring 30 hours of graduate study (24 hours of course work and 6 hours of thesis) and a comprehensive examination; non-thesis option requiring 30 hours of course work and a comprehensive examination. In both options, at least one half the work credited toward the degree must be in 600-level courses or above.

### A. Required Course (3 hours)

One 600-level literature seminar (either SPA 603 or SPA 604).

### B. Core Courses in Spanish (15-21 hours)

In consultation with the Director of Spanish Graduate Study, the student must select courses at the 500-level or above as indicated:

Thesis option: at least 15 semester hours

Non-thesis option: at least 21 semester hours

### C. Electives (6 hours)

In consultation with the Director of Spanish Graduate Study, the student may elect to take either 6 hours of Spanish courses listed below or 6 hours of graduate courses in a related field.

### D. Foreign Language

Students will be expected to demonstrate a reading knowledge of another Romance Language, German, or Latin, by (1) completing 204-level (or higher) course work in the language with a grade of B or better, the course having been taken within the last five years; or, (2) passing a written sight-translation test to be arranged with the Director of Spanish Graduate Study, or (3) obtaining a score of 400 or higher on the department's Computerized Adaptive Placement Exam.

### E. 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 Spanish linguistics. Students should consult regularly with the graduate director, and with faculty specializing in the various areas, while working to complete preparation of the reading list.

## F. 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 the Director of Spanish Graduate Study for the dates of these examinations.

## G. Thesis (thesis option only - 6 hours)

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 Director of Spanish Graduate Study for further information.

SPA 699 - Thesis (6)

## FRENCH

### (FRE) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

#### 507. Teaching French Through French Literature (3:3).

*Pr. 353 or permission of instructor.*

Strategies for teaching the French language through its literature. All major genres represented.

#### 511. The Theory and Practice of French Translation (3:3).

*Pr. 315 or permission of instructor.*

An exploration of the theory and practice of translation from and into French.

#### 532. French Civilization (3:3).

*Pr. 332, 353, or 496, or permission of instructor.*

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.

#### 553. Topics in French Literary Movements (3:3).

*Pr. 353 or permission of instructor.*

In-depth study of a major literary trend: classicism, mannerisms, realism, naturalism, and others. May be repeated for credit when topic varies.

#### 554. Topics in French Fiction (3:3).

*Pr. 353 or permission of instructor.*

Studies in prose fiction—roman, conte, nouvelle, etc.—through a variety of critical and historical approaches, each topic focusing on one such approach. May be repeated for credit when topic varies.

#### 555. Topics in French Poetry (3:3).

*Pr. 353 or permission of instructor.*

Studies in French poetry through a variety of critical and historical approaches. May be repeated for credit when topic varies.

#### 556. Topics in French Theatre (3:3).

*Pr. 353 or permission of instructor.*

Studies in French theatre through a variety of critical and historical approaches. May be repeated for credit when topic varies.

#### 557. Advanced Topics in French Literature (3:3).

*Pr. 353 or permission of instructor.*

Nontraditional perspectives on literature in the French language: thematic topics, and others. May be repeated for credit when topic varies.



**558. Topics in Francophone Literature (3:3).**

*Pr. 353 or permission of instructor.*

Studies in Francophone literature through a variety of aspects or genres, each topic focusing on one such aspect or genre. May be repeated for credit when topic varies.

**561. The Auteur Director (3:2:3).**

*Pr. BCT 171 or ENG 330 or permission of instructor.*

Works of an individual film director. Subject differs from offering to offering. May be repeated for credit when topic varies. (Same as SPA 561)

**562. Studies in Film Genre (3:2:3).**

*Pr. BCT 171 or ENG 330 or permission of instructor.*

Technical, dramatic, social, and rhetorical dimensions of a film genre or genres. Subject differs from offering to offering. May be repeated for credit when topic varies. (Same as SPA 562)

**589. Experimental Course.**

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

**(FRE) COURSES FOR GRADUATES****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.

**653. Seminar in French Literature (3:3).**

Advanced study and investigation of current scholarship on a topic of French literature. May be repeated for credit when topic varies.

**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.

**693. Special Problems in French Language and Literature (3:3).**

Problems and areas of French and Francophone civilization, language, and literature. May be repeated for credit when topic varies, but no more than two (2) 693 courses may be applied toward graduate credit without permission of the Director of French Graduate Study.

**695. Independent Study (3:3).**

*Pr. permission of instructor and Director of French Graduate Study.*

Directed program of reading or research in an area of special interest in French studies.

**699. Thesis (1-6).****711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).****ITALIAN****(ITA) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES****517. The Auteur Director (3:2:3).**

*Pr. BCT 171 or ENG 330 or permission of instructor.*

Works of an individual film director. Subject differs from offering to offering. May be repeated for credit when topic varies. (Same as FRE and SPA 561)

**518. Studies in Film Genre (3:2:3).**

*Pr. BCT 171 or ENG 330 or permission of instructor.*

Technical, dramatic, social, and rhetorical dimensions of a film genre or genres. Subject differs from offering to offering. May be repeated for credit when topic varies. (Same as FRE and SPA 562)

**589. Experimental Course.**

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

**(ITA) COURSES FOR GRADUATES****711. Experimental Course.**

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

**ROMANCE LANGUAGES****(ROM) COURSES FOR GRADUATES****600. Methods of Teaching Romance Languages (3:3).**

*Pr. departmental appointment as a TA or any graduate student with an interest in applied linguistics.*

Methods and techniques for teaching Romance Languages at the college level.

**601. Research Methods and Critical Analysis (3:3).**

*Pr. admission to M.A. in romance languages or departmental permission.*

Research and analysis in literary and cultural criticism, emphasizing applications to Hispanic and/or French/Francophone literatures and cultures. Designed especially for entering M.A. students.

**SPANISH****(SPA) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

All courses taught in Spanish unless otherwise indicated.

**502. Topics in Spanish Literature (3:3).**

*Pr. one 400-level Hispanic literature course or departmental permission.*

In-depth study, through a variety of critical and historical approaches, based on themes, geographical areas, outstanding figures, genres, or periods. May be repeated for credit when topic varies.

**504. Topics in Spanish American Literature (3:3).**

*Pr. one 400-level Hispanic literature course or departmental permission.*

In-depth study, through a variety of critical and historical approaches, based on geographical areas, outstanding figures, genres, or periods. May be repeated for credit when topic varies.

**516. Introduction to Spanish Syntax (3:3).**

*Pr. 415 or departmental permission.*

Analysis of Spanish grammar: syntactic categories and phrase structure.

**532. Spanish Civilization (3:3).**

*Pr. one 400-level Hispanic literature course or departmental permission.*

Development of Spanish culture. Historical and geographical background for study of 20th century Spain. Special emphasis on customs, national traits, arts, and institutions.

**534. Spanish American Civilization (3:3).**

*Pr. one 400-level Hispanic literature course or departmental permission.*

Development of Spanish-American culture.

**561. The Auteur Director (3:2:3).**

*Pr. BCT 171 or ENG 330 or permission of department.*

Works of an individual film director. Subject differs from offering to offering. May be repeated for credit when topic varies. (Same as FRE 561)

**562. Studies in Film Genre (3:2:3).**

*Pr. BCT 171, or ENG 330, or permission of department.*

Technical, dramatic, social, and rhetorical dimensions of a film genre or genres. Subject differs from offering to offering. May be repeated for credit when topic varies. (Same as FRE 562)

**589. Experimental Course.**

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

**(SPA) COURSES FOR GRADUATES**

All courses taught in Spanish unless otherwise indicated.

**603. Seminar in Spanish Literature (3:3).**

*Pr. ROM 601 or permission of department.*

Advanced study and investigation of current scholarship on a topic of Spanish literature. May be repeated for credit when topic varies.

**604. Seminar in Spanish American Literature (3:3).**

*Pr. ROM 601 or permission of department.*

Advanced study and investigation of current scholarship on a topic of Spanish American literature. May be repeated for credit when topic varies.

**610. History of the Spanish Language (3:3).**

Phonological and morphological development of Spanish, with readings in the external history of the language.

**693. Special Topics in Spanish Language and/or Literature (3:3).**

*Pr. permission of instructor and Director of Spanish Graduate Study.*

Study of Hispanic language and literature.

**695. Directed Study (3).**

*Pr. permission of instructor and Director of Spanish Graduate Study.*

Directed program of reading or research in an area of special interest in Hispanic studies. Regular conferences with the instructor will be scheduled.

**699. Thesis (1-6).****711. Experimental Course.**

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

**801. Thesis Extension (1-3).****803. Research Extension (1-3).****DEPARTMENT OF SOCIAL WORK**

451 Graham Building

(336) 334-5147

<http://www.uncg.edu/swk>

*Professors*

**John Rife, Ph.D.**, 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 (Chair of Department and Director of Joint Master of Social Work program).

**Robert J. Wineburg, Ph.D.**, Relationship between federal domestic social welfare policy and local service provision, the involvement of religious organizations in local social service delivery and policy development.

*Associate Professors*

**Jacalyn A. Claes, Ph.D.**, Domestic violence, family and marital therapy, diversity and women's spirituality.

**Susan Dennison, M.S.W.**, School social work, clinical social work.

**Elisabeth P. Hurd, Ph.D.**, Families and children, interpersonal violence, law and social work, program evaluation.

**Elizabeth W. Lindsey, Ph.D.**, Services to individuals and families, homelessness, strength based practice.

*Assistant Professor*

**Samuel F. Parker, M.S.W.**, Family welfare, HIV and AIDS, mental health.

**Adjunct Faculty at North Carolina A & T State University***Professor*

**Sarah V. Kirk, Ph.D.**, Chair of Department of Sociology and Social Work

*Associate Professors*

**Joyce Dickerson, Ph.D.**

**James Johnson, M.S.W., J.D.**

**Wayne Moore, Ph.D.**

*Assistant Professors*

**Arnold Barnes, Ph.D.**

**John Steele, Ph.D.**

**Velma Tyrance, M.S.W.**

**JOINT MASTER OF SOCIAL WORK PROGRAM**

**Dr. John Rife (UNCG)**, Co-Program Director

**Dr. Sarah V. Kirk (NCA&TSU)**, Co-Program Director

The Joint Master of Social Work (M.S.W.) 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.

Successful completion of the degree requires 60 semester credit hours. Full-time and part-time options are available. The program is accredited by The Council on Social Work Education.

The curriculum has been designed by the joint faculty to provide students with *advanced generalist* social work education. The model for the curriculum is based on contemporary, state-of-the-art theory and practice methods. Courses reflect the theme of providing effective services to families in urban and rural North Carolina communities. The curriculum is organized by foundation, concentration, and field instruction. The primary purpose of the MSW program is to prepare students for advanced generalist social work practice.

#### **Program goals:**

1. To prepare graduate students for employment as advanced generalist social work practitioners in direct and indirect practice.
2. To provide students with a graduate advanced generalist social work curriculum which results in the acquisition and demonstration of:
  - a. Knowledge of human behavior and the social environment, social welfare policy, research, practice methods, cultural diversity, populations at-risk, social and economic justice, and social work values and ethics as a foundation for generalist social work practice.
  - b. Advanced generalist multicultural social work practice skills with individuals, families, groups, organizations, and communities.
  - c. The professional self as reflected in an affiliation with the profession of social work.
  - d. The values and ethics of professional social work practice as stated by the National Association of Social Workers Code of Ethics.
3. To provide professional service which ameliorates social problems, provides leadership and benefits our communities in North Carolina.

4. To conduct and disseminate research which contributes to the knowledge base for effective social work practice.

### **Curriculum Plan**

The curriculum design of the program provides students with a theoretical and applied education in social work to enhance and promote advanced generalist social work education. The program is organized to insure that all students, as advanced social work practitioners, will be prepared to independently engage in social work practice with individuals, families, small groups, organizations, and communities in their chosen area of practice. Students will also be prepared to serve as supervisors, managers, researchers and social planners. The concentration of the program is advanced generalist practice.

### **Foundation Year Curriculum**

In the foundation curriculum, students complete 30 semester hours of course work. Students complete courses in human behavior and social functioning, social welfare policy, social work practice and human diversity, social work practice with individuals and families, and social work practice with groups. Students also complete a second human behavior and social functioning course, social work practice with communities and organizations, social work research methods, and a six semester hour foundation field instruction placement and seminar. The purpose of the foundation course work is to prepare students for the advanced generalist practice year.

### **Advanced Generalist Curriculum**

In the advanced generalist concentration curriculum, students complete an additional 30 semester hours of course work. Students choose one of two advanced generalist practice areas: families and youth at-risk or mental health/health. Students complete two courses in their advanced generalist practice area, advanced courses in social welfare policy, administration, and research, and they complete two semesters of advanced generalist field instruction which includes a field seminar and a capstone project. Students also complete one graduate level elective. Choice of this elective requires the approval of the student's educational advisor.

### **Admissions**

A Joint Admissions Committee has been established for this program. It is comprised of faculty members from UNCG and faculty members from NCA&TSU. These committee members use a common evaluation system to review applications and recommend applicants for admission.

In addition to the admission materials set forth by The Graduate School, applicants must complete the following prerequisites to become eligible for admissions review:

1. Completion of a baccalaureate degree, with an overall minimum GPA of 2.5, from an accredited college or university in the United States or its equivalent in another country;
2. A "B" average or better in the undergraduate major;
3. An acceptable score on the GRE;
4. Applicants must show evidence of a liberal arts foundation to include the following minimum 30 credit hours:

18 Social and Behavioral Sciences\*  
6 Humanities  
3 Human Biology  
3 Statistics

\*(Political science, psychology, anthropology, economics, ethnic/global studies, history and sociology)

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. This determination shall be based on a review of the applicant's references and written personal statement.

Specific admission review procedures have been delineated. The Joint Admissions Committee has developed a review process that ensures a consistent and fair evaluation of applicants. All applicants will be notified of the Joint Admissions Committee decisions by The Graduate School.

The M.S.W. 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. Only students who have been admitted to the program and who have completed all required prerequisite course work may be admitted to practice courses and to the field instruction program. Specific policies governing student progression in the program may be found in the *JMSW Student Handbook* and in the *JMSW Field Instruction Handbook*.

Inquiries concerning the program should be addressed to the Department of Social Work, UNCG. Inquiries concerning admission to the program should be addressed to: The Graduate School, UNC Greensboro, 241 Mossman Bldg., Greensboro, NC 27402-6176, (336) 334-5596.

## **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 582. The second field instruction (SWK 606 and 616) 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 advisor in the Department of Social Work.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SOCIAL WORK**

The Department of Social Work offers a Joint Master of Social Work program with the Department of Sociology and Social Work at NCA&TSU. The program of study requires 60 hours and leads to the M.S.W. degree.

Both full-time and part-time program options are available. Students in the full-time option complete the required 60 hours during a two-year period; the part-time option takes three years. Admission, program, course, and curriculum requirements are the same for both program options. No academic credit is given for life or work experience. Students must complete courses in the prescribed sequence in order to progress successfully to completion of the degree program.

### **Part-time Program Option:**

#### **Year One: Foundation Courses (21 hours)**

##### **First Semester (Fall - 6 hours)**

SWK 502 - Social Welfare Policy and Analysis I (3)  
SWK 511 - Social Work Practice and Human Diversity (3)

##### **Second Semester (Spring - 6 hours)**

SWK 501 - Human Behavior and Social Functioning I (3)  
SWK 504 - Social Work Practice with Individuals and Families (3)

##### **Third Semester (Summer - 9 hours)**

SWK 560 - Social Work with Groups (3)  
SWK 516 - Field Instruction and Seminar (6)

#### **Year Two (18 hours)**

##### **First Semester (Fall - 6 hours)**

SWK 517 - Human Behavior and Social Functioning II (3)  
SWK 514 - Social Work Practice with Communities and Organizations (3)



**Second Semester (Spring - 6 hours)**

SWK 503 - Social Work Research Methods (3)  
 SWK 512 - Social Welfare Policy and Analysis II (3)

**Third Semester (Summer - 6 hours)**

SWK 513 - Research Design and Data Analysis for  
 Social Work Practice (3)  
 SWK 605 - Social Work in Administration (3)

**Year Three (21 hours)****First Semester (Fall - 9 hours)**

SWK 601 - Social Work with Families I (3) **or**  
 SWK 602 - Social Work in Health and Mental  
 Health I (3)  
 SWK 606 - Field Instruction and Seminar II (6)

**Second Semester (Spring - 12 hours)**

SWK 611 - Social Work with Families II (3) **or**  
 SWK 612 - Social Work in Health and Mental  
 Health II (3)  
 SWK 616 - Field Instruction and Seminar III (6)  
 Elective (3)  
 Capstone

**Full-time Program Option:****Year One: Foundation Courses (30 hours)****First Semester (Fall - 15 hours)**

SWK 501 - Human Behavior and Social  
 Functioning I (3)  
 SWK 502 - Social Welfare Policy and Analysis I (3)  
 SWK 511 - Social Work Practice and Human  
 Diversity (3)  
 SWK 504 - Social Work Practice with Individuals and  
 Families (3)  
 SWK 560 - Social Work with Groups (3)

**Second Semester (Spring - 15 hours)**

SWK 517 - Human Behavior and Social Functioning II (3)  
 SWK 514 - Social Work Practice with Communities and  
 Organizations (3)  
 SWK 503 - Social Work Research Methods (3)  
 SWK 516 - Field Instruction and Seminar (6)

**Year Two: Advanced Curriculum (30 hours)****First Semester (Fall - 15 hours)**

SWK 601 - Social Work with Families I (3) **or**  
 SWK 602 - Social Work in Health and Mental  
 Health I (3)  
 SWK 512 - Social Welfare Policy and Analysis II (3)  
 SWK 513 - Research Design and Data Analysis for  
 Social Work Practice (3)  
 SWK 606 - Field Instruction and Seminar II (6)

**Second Semester (Spring - 15 hours)**

SWK 611 - Social Work with Families II (3) **or**  
 SWK 612 - Social Work in Health and Mental  
 Health II (3)  
 SWK 605 - Social Work in Administration (3)  
 SWK 616 - Field Instruction and Seminar III (6)  
 One 3 hour elective

**(SWK) COURSES FOR M.S.W. MAJORS****501. Human Behavior and Social Functioning I (3:3).**

*Pr. admission to M.S.W. program.*

Theories of human behavior and intervention with people in a variety of systems viewed from biological, sociological, and psychological perspectives.

**502. Social Welfare Policy and Analysis I (3:3).**

*Pr. admission to the M.S.W. program.*

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.

**503. Social Work Research Methods (3:3).**

*Pr. admission to the M.S.W. program.*

Research methodology as it relates to the professional practice of social work. Examines quantitative and qualitative methods as means for solving social problems.

**504. Social Work Practice with Individuals and Families (3:3).**

*Pr. admission to the M.S.W. program.*

Defines and describes direct social work practice; knowledge, skills and values necessary to provide a wide scope of developmental, preventive and therapeutic services to individuals and families.

**511. Social Work Practice and Human Diversity (3:3).**

*Pr. admission to the M.S.W. program.*

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.

**512. Social Welfare Policy and Analysis II (3:3).**

*Pr. admission to the M.S.W. program and 501, 502, 503, 504 and 560.*

Reviews outcomes of social work practice in legislation, administrative and judicial directives, rulings and interpretations in the area of government; accountability of the delivery systems to their clients.

**513. Research Designs and Data Analysis for Social Work Practice (3:3).**

*Pr. admission to the M.S.W. program and 501, 502, 503, 504 and 560.*

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.

**514. Social Work Practice with Communities and Organizations (3:3).**

*Pr. admission to the M.S.W. program and 501, 502, 503, 504 and 560.*

Practice in macro social work with broad scale social systems. Students acquire knowledge, analytical skills and professional behavior appropriate for work with groups, communities and organizations.

**515. Human Behavior and Social Functioning II (3:3).**

*Pr. admission to the M.S.W. program and 501, 502, 504, and 560.*

Provides students with concepts and knowledge necessary to understand family development, functioning, stress and diversity. Emphasizes the bio-psycho-spiritual nature of people in their family environment.

**516. Field Instruction and Seminar (6:0:24).**

*Pr. admission to the M.S.W. program and 501, 502, 503, 504 and 560.*

Application of theories and concepts to the role of a professional social work practitioner within the client system of various field agency experiences. Field seminar and field practicum run concurrently. (Graded on S-U basis)

**522. Comparative Study of Cross-cultural Social Work Practice (3:3).**

*Pr. 501, 502, 503, 504, 511, 514, 515, 516, 560, or permission of instructor.*

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. May be repeated for credit when topic varies.

**560. Social Work with Groups (3:3).**

*Pr. admission to the M.S.W. program.*

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 for 600-level courses: admission to the M.S.W. program and completion of all first year courses: 501, 502, 503, 504, 511, 512, 513, 514, 515, 516 and 560.

**601. Social Work with Families I (3:3).**

Advanced generalist social work practice with families, theory and intervention strategies, the influence of culture and gender upon family functioning, and use of self as a professional practitioner.

**602. Social Work in Health and Mental Health I (3:3).**

Advanced generalist social work practice in health and mental health, theory and intervention strategies, current policy initiatives, and social work roles.

**605. Social Work in Administration (3:3).**

Advanced generalist social work practice in social work administration, theory and practice strategies, the influence of culture and gender upon managerial practice, and the use of self as a professional practitioner.

**606. Field Instruction and Seminar II (6:0:24).**

*Pr. 516.*

Field instruction and placement in a human services agency three days per week; opportunity to apply theory and practice interventions learned in the classroom with clients in agency settings. (Graded on S-U basis)

**611. Social Work with Families II (3:3).**

*Pr. 601.*

Expansion of knowledge, skill and understanding of the major conceptual frameworks and interventive strategies in the family field.

**612. Social Work in Health and Mental Health II (3:3).**

*Pr. 602.*

Second of two courses; assessment and treatment of knowledge, values, and skills for interventions with client physical or psychiatric problems.

**616. Field Instruction and Seminar III (6:0:24).**

*Pr. 516 and 606.*

Field instruction and field seminar. (Graded on S-U basis)

## **(SWK) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES**

**510. Selected Topics in Social Work (1-6).**

*Pr. permission of instructor.*

Opportunity for students to study in depth a topic of special interest. May be repeated for credit when topics vary.

**520. Methods and Practice of Family and Marital Therapy (3:3).**

*Pr. permission of instructor.*

A 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 are also discussed.

**529. Human Services for Immigrants and Refugees (3:3).**

*Pr. 351 or permission of instructor.*

The history of immigration and its role in the U.S.A., immigrants in North Carolina and their process of integration, cross-cultural competency, and the challenges in services delivery to immigrants.

**530. Social Agency Program Development (3:3).**

*Pr. permission of instructor.*

Organization of new agencies or those initiating additional services. Needs assessment, resource development, agency operations, and relationships with funding agencies.

**550. Social Services in Health Care (3:3).**

*Pr. permission of instructor.*

Examination of social services in health care settings. Emphasis on organizational context, interdisciplinary cooperation, and skill required for work in primary care setting.

**551. Special Problems in Social Work (1-3).**

*Pr. permission of instructor.*

Opportunity for student to pursue intensive independent study of particular topic under the direction of social work faculty member.

**554. Social Work with People Who are Mentally Ill (3:3).**

*Pr. 351 or permission of instructor.*

Will provide knowledge and skills necessary for practicing effective social work with people who are mentally ill and their families.

**555. Substance Abuse and Social Work Practice (3:3).**

*Pr. 351 or permission of instructor.*

The issues of substance abuse and addiction and their impact on clients and their families. Social work assessment and intervention methods will be taught.

**570. Social Services for the Aging (3:3).**

*Pr. permission of instructor.*

Systematic study of social work approaches to providing services to the aging. Primary focus will be on current policies, services, and models of practice.

**582. School Social Work (3:3).**

*Pr. permission of instructor.*

Examination and understanding of school social work services with emphasis on professional standards, cultural sensitivity, accountability, and program planning.

**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.

**585. Social Work with Families in Crisis (3:3).**

*Pr. 310, 311, 312 and 351 or HDF 212 and HDF 410 or permission of instructor.*

Social work practice with families in crisis, with a focus on problems currently faced by families and strategies to help them.

**589. Experimental Course.**

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

**(SWK) COURSES FOR GRADUATES**

**681. Family-Centered Interdisciplinary Practice: System of Care (3:3)**

*Pr. exposure to System of Care through departmental courses before enrollment, basic research methods and basic statistics course, or permission of instructor.*

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 HDF 681, HEA 681, PSY 681, RPT 681)

**711. Experimental Course.**

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

**803. Research Extension (1-3).**

**DEPARTMENT OF SOCIOLOGY**

337 Graham Building

(336) 334-5295

<http://www.uncg.edu/soc>

*Professors*

**Rebecca G. Adams**, Ph.D., Friendship, community, aging, research methods.

**Steve Kroll-Smith**, Ph.D., Social psychology, environment, health (Head of Department).

**William T. Markham**, Ph.D., Stratification, formal organizations, voluntary associations, community.

**James C. Petersen**, Ph.D., Applied sociology, organizations, science and technology studies, medical sociology.

*Associate Professors*

**Kenneth D. Allan**, Ph.D., Theory, culture, self, institutions.

**Julie V. Brown**, Ph.D., Sociology of health, Soviet and Russian society, occupations and professions, comparative and historical sociology (Director of Graduate Study).

**Paul Luebke**, Ph.D., Sociology of politics, social movements, social change, and comparative societies.

**Sandra D. Westervelt**, Ph.D., Sociology of law, crime and deviance, sociology of culture.

*Assistant Professors*

**Aqueil Ahmad**, Ph.D., Global society, global deviance, social psychology.

**Shelly L. Brown**, Ph.D., Sociology of education, race and ethnicity, research methods.

**Steven R. Cureton**, Ph.D., Juvenile delinquency, race and crime, gangs.

**Jill E. Fuller**, Ph.D., Gender and stratification, research methods and data analysis, family.

**Gwen Hunnicutt**, Ph.D., Homicide studies, stratification and crime, cross-national crime.

**David F. Mitchell**, Ph.D., Urban sociology, population studies, research methods, data analysis.

The program leading to a Master of Arts degree in sociology prepares students for further study, for research and administrative positions in public or private organizations, and for teaching sociology in a variety of settings. The commitment is to a broad general base. Special interests may be pursued in particular substantive, applied or cognate courses and extended in the writing of the thesis.

**SPECIFIC REQUIREMENTS FOR THE MASTER OF ARTS**

The Department of Sociology offers a graduate program of study leading to a Master of Arts degree. Two options are available: **Thesis option** requiring 30 hours of graduate study including 6 hours of thesis. At least 15 hours must be at the 600-level. **Non-thesis option** requiring 36 hours of graduate study including a 6 hour internship. At least 18 hours must be at the 600-level or above.

**A. Required Core Courses for Thesis and Non-thesis Options (12 hours)**

SOC 614 - Contemporary Sociological Theory (3)

SOC 616 - Advanced Research Methods (3)

SOC 618 - Advanced Data Analysis (3)

SOC 620 - Seminar in Sociology (3)

**B. Electives for Thesis Option (12 hours)**

With prior approval of the advisor, a student will select a minimum of 12 hours from other 500- or 600-level sociology courses, or from other social science courses.

### C. Electives for Non-thesis Option (18 hours)

With prior approval of the advisor, a student will select a minimum of 18 hours from other 500- or 600-level sociology courses, or from other social science courses.

### D. Comprehensive Examination

Successful completion of a thesis-proposal defense, or the completion of a satisfactory report following an internship assignment, satisfies the comprehensive examination requirement.

### E. Thesis (6 hours)

SOC 699 - Thesis (6)

### F. Internship (6 hours)

SOC 695 - Internship (6)

### Master of Arts with a Concentration in Criminology

The Department of Sociology offers a concentration in criminology. Students completing this concentration may elect either the thesis or non-thesis option. The requirements are as follows:

#### A. Required Core Courses for Thesis and Non-thesis Options (21 hours)

SOC 614 - Contemporary Sociological Theory (3)  
 SOC 616 - Advanced Research Methods (3)  
 SOC 618 - Advanced Data Analysis (3)  
 SOC 620 - Seminar in Sociology (3)  
 SOC 651 - Criminology (3)  
 SOC 653 - Deviance and Social Control (3)  
 SOC 655 - The Sociology of Law (3)

#### B. Electives for Thesis Option (3 hours)

With prior approval of the advisor, a student will select a minimum of 3 hours from other 500- or 600-level sociology courses, or from other social science courses.

#### C. Electives for Non-thesis Option (9 hours)

With prior approval of the advisor, a student will select a minimum of 9 hours from other 500- or 600-level sociology courses, or from other social science courses.

#### D. Comprehensive Examination

Successful completion of a thesis-proposal defense, or the completion of a satisfactory report following an internship assignment, satisfies the comprehensive examination requirement.

### E. Thesis (6 hours)

SOC 699 -Thesis (6)

### F. Internship (6 hours)

SOC 695 - Internship (6)

### (SOC) COURSES FOR ADVANCED UNDERGRUATES AND GRADUATES

#### 501, 502. Selected Topics in Sociology (3:3), (3:3).

*Pr. major in sociology or permission of instructor.*

Opportunity for advanced students to study topics or issues of special interest in a formally organized course.

#### 526. Comparative Minority Relations (3:3).

*Pr. 6 hours in sociology or permission of instructor.*

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.

#### 533. Political Sociology (3:3).

*Pr. one course in the field of large-scale social organization, or permission of instructor.*

Influence of social values and social forces upon government policy, and of government policy upon society. Examination of conflicting political sociological theories.

#### 543. Urban Sociology (3:3).

*Pr. 6 hours of sociology at 300 level or above, or permission of instructor.*

Urban growth, mobility, ethnic composition, spatial and social patterns, conflict and change. Comparisons between American and non-American urbanization for purposes of planning and development.

#### 552. Sociology of Science and Technology (3:3).

*Pr. 6 hours of sociology at 300 level or above, or permission of the instructor.*

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.

#### 553. Sociology of Occupations and Professions (3:3).

*Pr. 3 hours of sociology or permission of instructor.*

Nature and significance of work; cultural perspectives on work; occupational choice; socialization into work endeavors; career patterns; control of occupations and professions; labor and leisure; relationships to community and society.

#### 555. Sociology of the Family (3:3).

*Pr. 301, 302, and 335, or permission of instructor.*

Critical examination of various ways of studying the family, with consideration given to methodology, statistical treatment of the data, and substantive findings.

#### 561. Sociology of Leisure (3:3).

*Pr. 101 or permission of instructor.*

Sociological inquiry into the nature and uses of leisure in human societies. Among topics considered are sports, play and games, popular culture and high culture, the relationship of work to time and leisure, leisure services and public policy.



**562. Sociology of Education (3:3).**

*Pr. 6 hours of sociology at 300 level or above, or permission of instructor.*

Education as a dynamic and changing social system. Internal processes and structure of educational institutions and their interdependent relations with the enviroing society.

**571. Advanced Topics in Social Psychology (3:3).**

*Pr. 3 hours in sociology and 3 hours in psychology or permission of instructor.*

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.

**572. The Small Group (3:3).**

*Pr. 3 hours in sociology and 3 hours in psychology or permission of instructor.*

How small groups form, function and dissolve, considering especially the fundamental process involved: communication, conformity, cohesiveness, leadership, and status differentiation. Theory, research, and practical application are equally emphasized.

**574. Socialization (3:3).**

*Pr. 6 hours of sociology or permission of instructor.*

Examination of fundamental theories of socialization and resocialization. Emphasis on studies dealing with the relationships between culture, society, and the individual throughout the life cycle.

**589. Experimental Course.**

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

**(SOC) COURSES FOR GRADUATES****601. Seminar in Sociological or Criminological Analysis (3:3).**

*Pr. permission of instructor.*

Intensive work at an advanced level on a selected topic in sociology or criminology.

**605. Seminar in Management Organization Theory (3:3).**

*Pr. permission of instructor.*

Management organization theory and structure. Construction of organizational models.

**614. Contemporary Sociological Theory (3:3).**

*Pr. 490 or permission of the instructor.*

Selected major theoretical perspectives: functionalism, conflict, and alternative models.

**615. The Logic of Sociological 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 science.

**616. Advanced Research Methods (3:3).**

The function of theory in research, concept formation, study design, data collection and analysis.

**618. Advanced Data Analysis (3:2:2).**

*Pr. 302 or permission of instructor.*

Application of advanced statistical concepts and procedures in multivariate analyses of discrete and continuous data.

**619. Practicum in Evaluative Research (3:1:6).**

*Pr. permission of the instructor and one course in statistics and research methods.*

Organizations and social action programs. Students prepare, organize, and carry out evaluative research of their own interest under the guidance of the instructor.

**620. Seminar in Sociology (3:3).**

*Pr. twelve hours of sociology at the undergraduate level.*

Fundamental theory in three substantive areas with application to specific research problems. May be repeated once for credit when topic varies.

**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. (Formerly SOC 521)

**627. Social Conflict (3:3).**

*Pr. 12 hours of sociology or history at the undergraduate level.*

Theoretical and empirical examination of the genesis, structure, processes, and consequences of social conflict in simple and complex societies.

**628. Social Movements (3:3).**

*Pr. one course in large-scale organization, or permission of instructor.*

Sociological approaches to social movements emphasizing their genesis, structure, resources and consequences for simple and complex societies.

**636. Seminar in Stratification Theory and Research (3:3).**

*Pr. 342 or equivalent, or permission of instructor.*

Basic systems of social stratification. Theoretical and methodological trends.

**643. Seminar in Urban Society (3).**

*Pr. graduate standing and background in sociology or other social or behavior science.*

Contemporary theory and research on urban social structure, conflict, and change.

**646. Teaching and Learning Sociological Concepts (3:3).**

*Pr. admission to graduate program in sociology.*

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.

**651. Criminology (3:3).**

*Pr. six hours of sociology at 300-level or permission of instructor.*

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.

**653. Deviance and Social Control (3:3).**

*Pr. six hours of sociology at 300-level or permission of instructor.*

Comparative examination of societal responses to deviance. Theoretical and empirical analysis of conceptions of deviance and institutions of social control in different types of societies. Globalization and social control.

**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. (Formerly Law and Society)

**661. Sociology of Health.** (3:3).

*Pr. 101 or permission of instructor.*

American Health Care System. Organization, utilization, effectiveness, cost; roles of providers, consumers; the context of care and the place of government.

**686. Social Aspects of Aging** (3:3).

*Pr. 3 hours in sociology or permission of instructor.*

Structural and social psychological theories of aging. Substantive topics determined by students. Focus on critical review of current research.

**695. Internship** (3-6).

*Pr. twenty-one hours in sociology at 500-level or above.*

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.

**697, 698. Special Problems in Sociology** (3:3), (3:3).

*Pr. permission of faculty member with whom students wish to work.*

Independent study or research.

**699. Thesis** (1-6).

**711. Experimental Course.**

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

**801. Thesis Extension** (1-3).

**803. Research Extension** (1-3).

## **DEPARTMENT OF SPECIALIZED EDUCATION SERVICES**

341A Curry Building

(336) 334-5843

<http://www.uncg.edu/ses>

*Professors*

**Marilyn Friend**, Ph.D., Interpersonal and interprofessional collaboration, inclusive school practices, special education service delivery systems, education of students with learning and behavior disabilities (Chair of Department).

**Edgar H. Shroyer**, Ph.D., Signing systems and signing variations, educational interpreting, curriculum development, methods of teaching the deaf, deaf culture.

**Ada L. Vallecorsa**, Ph.D., Literacy assessment and instruction in special education, program evaluation, teacher education.

*Associate Professors*

**Mary V. Compton**, Ed.D., Deaf teachers and deaf culture, social interaction of young deaf children, telecommunications discourse, narrative analysis, naturalistic inquiry method, interpersonal communication and deafness (Director of Education of Deaf Children Program).

**Judith A. Niemeyer**, Ph.D., Early childhood special education, social interaction, inclusion, family involvement (Director of Graduate Study and Coordinator of Birth-Kindergarten Program).

*Assistant Professors*

**Pamela Baker**, Ed.D., Special education (K-12), education of students with emotional or behavioral disorders, differentiated instruction and behavior management, leadership, teacher self-efficacy.

**Stephanie A. Kurtts**, Ph.D., Inclusive education, online collaborative practice, universal design for learning, mild/moderate disabilities, peer coaching, differentiated instruction.

**Mary Murray**, Ed.D., Early childhood special education, low-incidence disabilities, inclusion, family-centered practices, leadership, distance education.

The primary goal of the Department of Specialized Education Services 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 and special 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 or Doctor of Philosophy.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN SPECIAL EDUCATION WITH LICENSURE IN LEARNING DISABILITIES (LD) OR BEHAVIOR/EMOTIONAL DISABILITIES (BED)**

The Department of Specialized Education Services offers a graduate program of study leading to a 39 hour M.Ed. degree in special education and advanced licensure in learning disabilities (LD) or behavior/emotional disabilities (BED). At least 33 hours in the program of study must be in 600-level courses.

### **Option 1: For students already holding a license in special education**

#### **A. Advanced Core (18 hours)**

CUI 614 - Word Study (3)  
ERM 604 - Methods of Educational Research (3)  
SES 641 - Assessment of Individuals with Special Needs (3)  
SES 643 - Issues in Educating Individuals with Special Needs (3)  
SES 647 - Collaboration and Consultation in Education (3)  
SES 652 - Instructional Methods and Programming Practices: LD, MR, BED (3)

#### **B. Categorical Emphasis (12 hours)**

##### **LD Option**

SES 648 - Secondary Programming for Learning Disabled Adolescents (3)  
SES 649 - Practicum in Special Education (LD focus) (3-6)  
SES 655 - Introduction to Learning Disabilities (3)  
SES 656 - Methods for Teaching Students with Learning Disabilities (3)

##### **BED Option**

SES 649 - Practicum in Special Education (LD focus) (3-6)  
SES 657 - Introduction to Behavior/Emotional Disabilities (3)  
SES 658 - Methods for Teaching Students with Behavior/Emotional Disabilities (3)  
SES 659 - Behavior Management (3)

#### **C. Advanced Area of Focused Study (9 hours - select one)**

These credits are determined with approval of the advisor:

Assistive Technology Emphasis: SES 662, CUI 610, LIS 647, 648, 672  
Reading Emphasis: CUI 615, 616, 617a, 617b, 635  
Leadership Emphasis: ELC 615, 660, 687, 691, 694, 670  
Birth-Kindergarten Emphasis: SES 601, 602, 603  
Alternative Emphasis: courses with a single theme, approved by advisor

### **Option 2: For students who do not hold a license in special education**

#### **A. Prerequisites (3-6 hours)**

CUI 617a - Diagnosis and Correction of Reading Problems (3)  
SES 540 - Introduction to Exceptional Individuals (3)

#### **B. Basic Core (9 hours)**

SES 543 - Inclusion of Individuals with Special Needs (3)  
SES 642 - Instructional Practices I: LD, MR, BEH (3)  
SES 660 - Families, Schools, and Students with Exceptionalities (3)

#### **C. Advanced Core (18 hours)**

CUI 614 - Word Study (3)  
ERM 604 - Methods of Educational Research (3)  
SES 641 - Assessment of Individuals with Special Needs (3)  
SES 643 - Issues in Educating Individuals with Special Needs (3)  
SES 647 - Collaboration and Consultation in Education (3)  
SES 652 - Instructional Methods and Programming Practices: LD, MR, BED (3)

#### **D. Categorical Emphasis (12 hours)**

##### **LD Option**

SES 648 - Secondary Programming for Learning Disabled Adolescents (3)  
SES 649 - Practicum in Special Education (LD focus) (3-6)  
SES 655 - Introduction to Learning Disabilities (3)  
SES 656 - Methods for Teaching Students with Learning Disabilities (3)

##### **BED Option**

SES 649 - Practicum in Special Education (LD focus) (3-6)  
SES 657 - Introduction to Behavior/Emotional Disabilities (3)  
SES 658 - Methods for Teaching Students with Behavior/Emotional Disabilities (3)  
SES 659 - Behavior Management (3)

### **Additional Requirements for ALL Special Education M.Ed. Students**

#### **Portfolio**

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.

### 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.

## SPECIFIC REQUIREMENTS FOR POST-BACCALAUREATE ALTERNATIVE INITIAL TEACHER LICENSURE

This program is designed to provide initial teacher licensure in special education: general curriculum to individuals who have an undergraduate degree in a field other than 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 their course work, students have numerous opportunities to use cases and problem-based learning that includes appropriate implementation of inclusive practices.

Students also have an option for transitioning from this program into the M.Ed. program in which they may earn an additional license in learning disabilities (LD) or behavior/emotional disabilities (BED). Up to 18 credit hours of 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 Advanced Master's Degree in Special Education (with LD and BED options) provided a student meets all admission requirements of the Graduate School and the Department of Specialized Education Services and the application is completed during the first 12 credit hours taken in the PAIL program. Admission to the Post-Baccalaureate Alternative Initial Teacher Licensure program

does not constitute admission to the Advanced Master's Degree program in Special Education nor any other Graduate School degree program.

### Special Education: General Curriculum (27 hours)

- CUI 617a - Diagnosis and Correction of Reading Problems (3)
- CUI 617b - Advanced Strategies in Diagnosis and Correction (3)
- CUI 654 - Teaching Models and the Analysis of Instruction (3) or CUI 669 - Educational Implications of Learning and Developmental Theory (3)
- SES 540 - Introduction to Exceptional Individuals (3)
- SES 641 - Assessment of Individuals with Special Needs (3)
- SES 642 - Instructional Practices I: LD, MR, BEH (3)
- SES 660 - Families, Schools, and Students with Exceptionalities (3)
- SES 661 - Teaching Students with Disabilities (6)

### PAIL with M.Ed. and Licensure in Learning Disabilities (LD) or Behavior/Emotional Disabilities (BED) (51 hours)

Courses listed in General Curriculum plus the following 27 hours:

- CUI 614 - Word Study (3)
- ERM 604 - Methods of Educational Research (3)
- SES 643 - Issues in Educating Individuals with Special Needs (3)
- SES 647 - Collaboration and Consultation in Education (3)
- SES 652 - Instructional Methods and Programming Practices: LD, MR, BED (3)

### Categorical Course Work (choose one option):

#### LD Option

- SES 648 - Secondary Programming for Learning Disabled Adolescents (3)
- SES 655 - Introduction to Learning Disabilities (3)
- SES 656 - Methods for Teaching Students with Learning Disabilities (3)
- SES 661 - Teaching Students with Disabilities (6)

#### BED Option

- SES 657 - Introduction to Behavior/Emotional Disabilities (3)
- SES 658 - Methods for Teaching Students with Behavior/Emotional Disabilities (3)
- SES 659 - Behavior Management (3)
- SES 661 - Teaching Students with Disabilities (6)

### Add-on Licensure

Beginning with the Fall 2004 semester, add-on licensure is available only to students who have completed a master's degree AND hold a teaching license in special education. If you have questions about add-on licensure, please contact the department.



## **SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION IN SPECIAL EDUCATION WITH A CONCENTRATION IN BIRTH-KINDERGARTEN: INTERDISCIPLINARY STUDIES IN EDUCATION AND DEVELOPMENT**

The Departments of Specialized Education Services and Human Development and Family Studies (School of Human Environmental Sciences) offer a joint program of study leading to a 39 hour M.Ed. degree. Those who do not have an initial teaching license in B-K will be required to take prerequisite courses to fulfill this requirement. Upon completion of this program of study, students will be eligible for "M" license in birth-kindergarten.

### **A. Research Requirements (9 hours)**

- ERM 604 - Methods of Educational Research (3)
- HDF 641 - Contemporary Research in Family Studies (3)
- HDF 651 - Contemporary Research in Human Development (3)

### **B. Theory and Practice Requirements (21 hours)**

- HDF 609 - Advanced Early Childhood Educational Theory and Practices (3)
- HDF 583 - Leadership and Mentoring Roles in Educating Young Children (3)
- HDF 632 - Infant Development (3)
- HDF 660 - Families of Individuals with Special Needs (3)
- SES 601 - Programs and Policies in Early Intervention (3)
- SES 602 - Theory and Practice in Early Intervention (3)
- SES 603 - Preschool Disabilities: Assessment and Evaluation (3)

### **C. Practicum (6 hours)**

- SES 604 - Internship in Early Childhood (6)

### **D. Electives (3 hours)**

With advisor's approval, students complete 3 semester hours of elective credit.

### **E. Professional Portfolio**

Prior to completion of the program, each student will be expected to complete a professional portfolio. This portfolio will demonstrate their mastery of skills and knowledge in the program competency areas. The portfolio will be developed and submitted to the student's advisor and be evaluated by a team of two faculty and one practicing professional.

## **SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY IN SPECIALIZED EDUCATION**

The Department of Specialized Education Services offers a graduate program of study leading to a Ph.D. in specialized education for students interested in special education, deaf education, early intervention, or interpreting. The program requires a minimum of 66 credit hours beyond the master's degree program, 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 and research, including the research component, are listed below. Students in the SES doctoral program are required to successfully complete all coursework listed below. Additional course requirements are determined on an individual basis and in consultation with the student's major advisor and advisory/dissertation committee.

### **A. Required Core Courses (15 hours)**

- SES 750 - Introduction: Doctoral Studies in Specialized Education (3)
- SES 752 - Interpersonal and Inter-organizational Collaboration (3)
- SES 754 - Special Education Policy and Law (3)
- SES 756 - Seminar: Accountability in Specialized Education Services (3)
- SES 758 - History and Future of Specialized Education (3)

### **B. Research/Inquiry Requirements (21 hours)**

- ERM 642 - Evaluation of Educational Programs (3)
- ERM 680 - Intermediate Statistical Methods in Education (3)
- ERM 681 - Design and Analysis of Educational Experiments (3)
- SES 775 - Directed Doctoral Research (3)
- SES 760 - Advanced Seminar: Single Subject Research Design (3)
- Alternative course in qualitative research methods

### **C. Professional Practices (3-6 hours minimum)**

- SES 749 - Internship in Special Education (3)
- \*SES 762 - Supervision of Student Teaching: Specialized Education (3)
- \*SES 764 - College Teaching Practicum (3)

\*Pending approval

## D. Specialization (15-21 hours minimum)

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. This course work may be in the areas of counseling, educational leadership, teacher education, human development and family studies, psychology, or others.

## E. Dissertation (12 hours minimum)

SES 799 - Dissertation

Each candidate for a doctoral degree must prepare and present a dissertation that focuses on some aspect of specialized education, that is, in one of the four areas noted above. 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) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 540. Introduction to Exceptional Individuals (3:3).

*Pr. PSY 221 and 426 or equivalent and permission of instructor.*

Introductory course designed to survey the field of exceptional children. Major attention focused on characteristics of the exceptional child. (May not be taken by students who have credit for PSY 502)

### 543. Inclusion of Individuals with Special Needs (3:3).

*Pr. permission of instructor.*

Explores critical issues, service delivery alternatives, and promising practices that promote responsible inclusion of individuals with special needs in integrated learning environments.

### 555. Sign Language III (3:3).

*Pr. 335 or permission of instructor.*

Advanced manual communication with emphasis on interpreting and translating for deaf adults in specialized setting.

### 557. Interpreting: English to ASL I (3:3)

*Pr. 555 or permission of instructor.*

Develop skills in producing a linguistic and culturally equivalent ASL message from an English source message. Emphasis on rehearsed and spontaneous consecutive interpreting exercises.

### 558. Interpreting: English to ASL II (3:3).

*Pr. 557.*

Develop skills in producing a linguistic and culturally equivalent ASL message from an English source message. Emphasis on simultaneous interpreting.

### 572. The Profession of Interpreting (3:3).

An overview of the profession of interpreting including its history, current issues, roles and responsibilities, ethical standards, analysis of the interpreting process, assessment instruments and organizations/resources.

### 577. Auditory-Oral Communication Practices with Deaf Students (3:3).

*Pr. 240 or equivalent and CSD 334.*

Principles and strategies for developing and maintaining spoken language and using residual hearing and speechreading in children with hearing impairments.

### 578. Language Teaching Methods with Deaf Students (3:3).

*Pr. 240 or equivalent.*

Principles and strategies for developing English language proficiency in deaf and hard of hearing students. Emphasis on integration of English instruction with academic content.

### 589. Experimental Course.

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

## (SES) COURSES FOR GRADUATES

### 601. Programs and Policies in Early Intervention (3:3).

Issues, trends, and policies in early intervention as relates to programs for infants and young children with disabilities; legislation, service delivery models, policy issues, family roles, and research outcomes.

### 602. Theory and Practice in Early Intervention (3:3).

*Pr. 601; HDF 609 or permission of instructor.*

Analysis of theoretical perspectives, instructional programming and strategies, and research outcomes for infants, toddlers, and preschoolers with disabilities in inclusive settings and their families.

### 603. Preschool Disabilities: Assessment and Evaluation (3:3).

*Pr. 601 or permission of instructor.*

Conceptual knowledge and practical application of assessment techniques and procedures for infants, toddlers and preschoolers with disabilities. Introduction to program evaluation in early intervention programs.

### 604. Internship in Early Childhood (6:3:3).

*Pr. 601; 602; 603; HDF 609; HDF 632 or permission of instructor.*

Supervised internship in early childhood focused on the individual students career goals. Specific internship project must be approved by the student's advisor and course instructor.

### 608. Seminar in Early Childhood Education (3:3).

*Pr. permission of instructor.*

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.

### 613. Education of the Multihandicapped Deaf Child (3:3).

Characteristics of severely handicapping conditions existing with deafness. Effects on educational, psychosocial, and vocational achievement.

### 615. Seminar on Deafness (3:3).

*Pr. courses in appropriate content area and admission to appropriate degree program, or permission of instructor.*

Studies dealing with specialized areas of deafness of professional concern. Topic to be announced each semester course is offered. May be repeated for credit when topic varies.

### 616. Preschool Hearing-Impaired Children (3:3).

*Pr. CSD 307 and a course in early childhood development, admission to appropriate degree program, or permission of instructor.*

Characteristics and management of hearing-impaired children, educational techniques.

**617. Teaching Reading to Hearing-Impaired Individuals (3:3).**

*Pr. 578, and CUI 517, or equivalent preparation, admission to appropriate degree program, or permission of instructor.*  
Research on the reading abilities of deaf individuals. Techniques of writing and rewriting materials, and methods of teaching deaf individuals to read.

**641. Assessment of Individuals with Special Needs (3:3).**

*Pr. permission of instructor.*  
Provides a knowledge base, guided practice, and practical application of assessment practices for making eligibility and instructional planning decisions for individuals with special needs, with emphasis on authentic assessment practices. For special education majors.

**642. Instructional Practices I: LD, MR, BEH (3:3).**

*Pr. permission of instructor.*  
Emphasizes curricular and instructional practices, service delivery alternatives, and procedures for developing appropriate educational programs and services for individuals with mild to moderate disabilities. For special education majors.

**643. Issues in Educating Individuals with Special Needs (3:3).**

*Pr. permission of instructor.*  
Explores critical issues and strategies in developing, implementing, evaluating, and financing programs and services for individuals with special needs.

**645. Advanced Seminar in Exceptional Individuals (3:3).**

*Pr. 540, 544, and permission of instructor.*  
Research and current issues in the psychology and education of exceptional children. May be repeated for credit when topic varies.

**647. Collaboration and Consultation in Education (3:3).**

*Pr. permission of instructor.*  
Provides a knowledge base, guided practice, and practical application of consultation skills and consultation-based services needed for implementing effective instructional programs for individuals with special needs. For special education majors.

**648. Secondary Programming for Learning Disabled Adolescents (3:3).**

Intended for educators, principals, counselors, and administrators interested in the development and design of secondary programs for the mildly handicapped adolescent.

**649c, d. Practicum in Special Education (3:3), (3-6).**

*Pr. core courses and permission of program coordinator.*  
Supervised experience in clinic or school settings in special education designed to offer opportunities for practice of skills and professional development within program goals. (649c is prerequisite to 649d)

**650. Independent Study (1-3).**

*Pr. admission to appropriate degree program or permission of instructor and major advisor.*  
Topic to be determined by faculty advisor and student.

**652. Instructional Methods and Programming Practices: LD, MR, BED (3:3).**

*Pr. permission of instructor.*  
Curricular and instructional practices, behavioral interventions, and procedures for developing appropriate educational programs and services for students with mild to moderate disabilities.

**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.

**656. Methods for Teaching Students with Learning Disabilities (3:3).**

*Pr. or Coreq. 655.*  
Addresses broad array of instructional strategies for working with students with learning disabilities using a clinical teaching model. Academic and social skills addressed as are learning strategies.

**657. Introduction to Behavior/Emotional Disabilities (3:3).**

Addresses history of BED, characteristics of learners with BED across the lifespan, legislative and legal issues for the BED field, and services and interventions for these individuals.

**658. Methods for Teaching Students with Behavior/Emotional Disabilities (3:3).**

*Pr. or coreq. 657.*  
Addresses broad array of instructional strategies for working with students with behavior/emotional disabilities using contemporary educational and therapeutic practices to address instructional as well as social/emotional needs.

**659. Behavior Management (3:3).**

Concepts, skills, and practices for understanding and using principles of behaviorism in the education of students with behavior/emotional disabilities as well as other needs.

**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.

**661. Teaching Students with Disabilities (3-6).**

*Pr. admission to PAIL program; permission of instructor.*  
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. May be repeated for credit. (Graded on S-U basis)

**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.

**688. Contemporary Problems Seminar (1-3).**

*Pr. advanced master's or doctoral standing, or permission of instructor.*

Specific course title identified each semester by subscript (e.g., Contemporary Problems Seminar; Issues in Professional Negotiations). May be repeated for credit when topic varies.

**711. Experimental Course.**

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

**747. Seminar in Special Education (3:3).**

*Pr. 540 or permission of instructor.*  
Current trends and issues in the field of special education. May be repeated for a total of nine semester hours credit when topic varies.

**749a. Internship: Provision of Special Education Services (3:3).**

*Pr. permission of instructor.*

In-depth internship experience. Supervised practice in delivery of special education services.

**749b. Internship: Supervision of Special Education Services (3:3).**

*Pr. CUI 685 or SES 655, 749a or its equivalent and permission of instructor.*

In-depth internship experience. Concentrated practice in the supervision of special education services and development of instructional programs under direct faculty supervision.

**750. Introduction: Doctoral Studies in Special Education (3:3).**

*Pr. admission to Ph.D. in special education or permission of instructor.*

Issues and trends in specialized education leadership personnel; critical analysis of professional literature and grant proposals; writing for publication; ethics for research and practice; dissertation and research requirements.

**752. Interpersonal and Inter-organizational Collaboration (3:3).**

*Pr. admission to Ph.D. in special education or permission of instructor.*

Advanced knowledge and skills for understanding, implementing, and evaluating collaboration in intra-organizational and inter-organizational situations encountered in providing services to individuals with disabilities or other special needs.

**754. Special Education Policy and Law (3:3).**

*Pr. admission to Ph.D. in special education or permission of instructor.*

The philosophy and theoretical perspectives relating to the study of leadership, policy development, and specialized education law and their integration into diverse organizational settings.

**756. Seminar: Accountability in Specialized Education Services (3:3).**

*Pr. admission to Ph.D. in special education or permission of instructor.*

Examine the influence of legislation, governmental agencies and professional associations in shaping preschool, K-12, university, and agency programs, and actions needed to meet these accountability standards.

**758. History and Future of Specialized Education (3:3).**

*Pr. admission to Ph.D. in special education or permission of instructor.*

Overview of the history of special education with implications for facilitation of more effective practice in the field.

**760. Advanced Seminar: Single Subject Research Design (3:3).**

*Pr. admission to Ph.D. in special education or permission of instructor.*

Understanding the rationale, purpose, design, analysis and implementation of single subject research. Implementation within classroom settings will be discussed.

**775. Directed Doctoral Research (3:3).**

*Pr. admission to Ph.D. in special education and permission of instructor.*

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. May be repeated once for credit.

**790. Independent Doctoral Study (1-3).**

*Pr. admission to Ph.D. in special education and permission of instructor.*

Advanced guided readings, research, and individual project work under the direction of a graduate faculty member. May be repeated for credit.

**799. Dissertation (1-12).**

*Pr. admission to candidacy for the Ph.D. in special education and permission of instructor.*

Individual direction in the development and execution of the doctoral dissertation.

**802. Dissertation Extension (1-3).**

**803. Research Extension (1-3).**

## DEPARTMENT OF TEXTILE PRODUCTS DESIGN AND MARKETING

210 Stone Building  
(336) 334-5250

<http://www.uncg.edu/t dm>

### Professors

**Carl L. Dyer**, Ph.D., Economic and marketing issues in the textiles and apparel complex; international trade and retailing; structure, competition, and consumers.

**Charles J. Kim**, Ph.D., Sensory and instrumental evaluation of fabric hand, pesticide residue removal from protective clothing, performance analysis of consumer and industrial textiles.

### Adjunct Professor

**B. Kay Pasley**, Ed.D., (Interim Chair of Department).

### Associate Professors

**Barbara J. Dyer**, Ph.D., Marketing, marketing strategy, new product development, sales, internal and external professional relationships in marketing and sales.

**Peter Kilduff**, Ph.D., Corporate strategy, management of technology, market analysis, industry evolution and organization, global retailing.

**Martha R. McEnally**, Ph.D., Brand management, consumer behavior, and international marketing.

### Assistant Professor

**Nancy J. Nelson**, Ph.D., Issues of gender and feminist theory with respect to social, cultural, and historic aspects of clothing and textiles.



*Visiting Assistant Professor*

**Jill Y. Amidon**, Ph.D., Quality issues, economics and marketing of textile products, merchandising.

**Kenneth J. Gruber**, Ph.D., Application of research design and methods, statistical applications, and social-psychological processes relating to consumer behavior.

The Department of Textile Products Design and Marketing offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees. Course work and research integrate the social sciences, business and economics, humanities, and the natural sciences and relates these areas of study to textile products.

Graduate courses focus on **textile products marketing and economics** with the emphasis on consumer behavior, production and management, and on textile products end use performance. Students are encouraged to select supporting course work in related disciplines such as business, economics, sociology, psychology, chemistry, statistics and computer science.

Applicants for the M.S. and Ph.D. degree programs in textile products design and marketing must submit a 250-500 word statement indicating (1) their reasons for pursuing graduate study in this field,

(2) their previous experience and training in this or related fields, (3) their professional goals and reasons for choosing this program, and (4) whether attendance will be full-time or part-time. This statement and all application materials requested by The Graduate School (application form, transcripts, recommendations, GRE scores) must be sent to The Graduate School. An interview with graduate faculty of the Department is recommended.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF SCIENCE**

The Department of Textile Products Design and Marketing offers a graduate program of study leading to a Master of Science degree in textile products marketing with both a thesis and a non-thesis option. The thesis option requires a minimum of 30 hours with a minimum of 15

hours in 600- or 700-level courses. The non-thesis option requires 36-39 hours with at least 18 hours in 600- or 700-level courses.

### **Textile Products Marketing - Thesis Option (minimum 30 hours)**

The thesis option is focused on research in textile products marketing. It is designed to prepare students for research in markets for textile products, research in behavior of consumers of textile products, and management positions in textile products industries.

#### **A. Required Core Courses (7 hours)**

TDM 530 - Economics of the Textile and Apparel Complex (3)  
TDM 614 - Analysis of Fibers and Fabrication (3)  
TDM 682 - Graduate Seminar (1)

#### **B. Research Techniques (11 hours)**

MBA 642 - Marketing Research: Gathering Original Data (1.5) **and** MBA 643 - Marketing Research: Data Analysis (1.5) **or** IAR 645, Seminar in Housing and Interior Architecture (3)  
STA 571, 571L - Statistical Methods for Research I (4)  
STA 572, 572L - Statistical Methods for Research II (4)

#### **C. Area of Specialization (6 hours)**

TDM 560 - Textile Products Marketing (3)  
TDM 562 - Behavior of Textile Products Consumers (3)

#### **D. Research and Thesis (6 hours)**

TDM 699 - Thesis (6)

#### **E. 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 Textile Products Design and Marketing. The committee must be chosen and a program of study approved no later than the second semester enrolled in graduate courses.

### **Textile Products Marketing - Non-thesis Option (36-39 hours)**

The non-thesis option prepares students for management, consultant, market analysis and professional positions in the textile products marketing (and apparel, home furnishings, household textiles, consumer and industrial textiles) and retail industries. This option allows the student considerable flexibility to pursue areas of interest. An advisory committee must be chosen and a program of study approved no later than the second semester enrolled in graduate courses.

### A. Required Core Courses (13 hours)

TDM 530 - Economics of the Textile and Apparel Complex (3)  
 TDM 560 - Textile Products Marketing (3)  
 TEM 562 - Behavior of Textile Products Consumers (3)  
 TDM 614 - Analysis of Fibers and Fabrication (3)  
 TDM 682 - Graduate Seminar (1)

### B. Research Techniques (9-11 hours)

MBA 642 - Marketing Research: Gathering Original Data (1.5) and MBA 643 - Marketing Research: Data Analysis (1.5) or MBA 617 - Management Science (1.5) or IAR 645, Seminar in Housing and Interior Architecture (3)  
 STA 571, 571L - Statistical Methods for Research I (4)  
 STA 572, 572L - Statistical Methods for Research II (4)  
 or  
 MBA 600 - Business Statistics (1.5) and MBA 610 - Advanced Business Statistics (1.5) and research techniques (3-4) approved by advisor.

### C. Electives (12-14 hours)

The student will select 12-14 hours, as approved by the student's advisory committee, depending upon whether 11 or 9 research techniques hours were taken.

### D. Culminating Experience (0-3 hours)

The culminating experience will consist of  
 (1) a written comprehensive examination or  
 (2) a comprehensive project/paper, or a capstone, experiential, integrative course for 3 credit hours. Consult the Director of Graduate Study for dates of the written comprehensive examination. The preferred integrative, experiential course is MBA 629 - Creating and Sustaining Competitive Advantage. For the comprehensive project/paper, the preferred course is TDM 684 - Problems in Textile Products Marketing.

## SPECIFIC REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY

The Department of Textile Products Design and Marketing offers a graduate program of study leading to a Doctor of Philosophy degree in textile products marketing requiring a minimum of 54 hours (minimum of 82 hours beyond the B.S.). This program is designed to prepare students for college or university teaching and research, for research and product development or textile products marketing in corporate and/or academic environments. The focus of this program is textile products marketing. At least 30 hours must be in 600/700-level courses.

### A. Advanced Textile Products Design and Marketing Courses (13 hours)

TDM 630 - Economics of Textile Products (3)  
 TDM 660 - International Textile Products Marketing (3)  
 TDM 662 - Textile Products Consumer Research (3)  
 TDM 689 - Seminar in Textile Products Design and Marketing (1)  
 TDM 712 - Theory Development in Textile Products Marketing (3)

### B. Research Techniques (8 hours)

STA 661, 661L - Advanced Statistics in Behavioral Science Research (4)  
 STA 662, 662L - Advanced Statistics in Behavioral Science Research II (4)

### C. Related Disciplines (12 hours)

With prior approval by the Advisory/Dissertation Committee, the student will select 12 hours from 600- and 700-level courses in the Bryan School of Business and Economics.

### D. Research and Dissertation (18 hours)

TDM 790 - Independent Doctoral Research (6)  
 TDM 799 - Dissertation Problem (12)

### E. Teaching (3 hours)

TDM 765 - College Teaching Practicum in Clothing and Textiles (3)

### F. Preliminary and Final Oral Examination

### G. 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 Textile Products Design and Marketing, and one member must be from outside the Department. The committee must be chosen no later than the second year enrolled in graduate courses.

## (TDM) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

#### 513. Textile Products Analysis and Standards (3:3).

*Pr. grade of C or better in 211, 312, or their equivalent as determined by the instructor.*

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. (Alt SP)

#### 530. Economics of the Textile and Apparel Complex (3:3).

*Pr. grade of C or better in ECO 201 or its equivalent as determined by the instructor, or graduate standing, or permission of instructor.*

Economics and social aspects of production, distribution, and utilization of apparel and textiles.

**545. Experimental Product Design (3:2:3).**

*Pr. grade of C or better in 342, 441, 443, and 444 or their equivalent as determined by the instructor, or permission of the instructor.*

Interrelationship of factors involved in textile product design for the mass market; use of industrial design processes and equipment, cost analysis, and production methods. (SP)

**560. Textile Products Marketing (3:3).**

*Pr. grade of C or better in 261, MKT 320 or their equivalent as determined by the instructor, or permission of instructor.*

An intensive analysis of marketing principles applied to the textile products industry. (FA)

**562. Behavior of Textile Products Consumers (3:3).**

*Pr. grade of C or better in 321, MKT 320 or their equivalent as determined by the instructor, or permission of instructor.*

Study of environmental, individual, and psychological influences on behavior of consumers in the textile products consumption process. (SP)

**563. Analysis of the Textile Products Industry (3:3).**

*Pr. grade of C or better in MKT 320 or their equivalent as determined by the instructor, or permission of instructor.*

Analysis of the textile products industry from raw materials through consumption. Examination of production and marketing of textile products, technological developments, and domestic and global market strategies. (SU)

**582. Problems in Textile Products Design and Marketing (2-6).**

Individual study.

**589. Experimental Course.**

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

**(TDM) COURSES FOR GRADUATES****614. Analysis of Fibers and Fabrication (3:3).**

*Pr. 211, CHE 106, or permission of instructor.*

Analysis of textile products including chemical and physical properties and recent technological advances. Identification and evaluation of industry issues and problems. (Alt FA)

**615. Advanced Textiles and Experimental Methods (3:2:3).**

*Pr. 614, CHE 205 or 351, or permission of instructor.*

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. (Alt SP)

**630. Economics of Textile Products (3:3).**

*Pr. 530 and MBA 603 or permission of instructor.*

Application of techniques of economic theory to demand and supply conditions in the clothing and textiles industry. Studies the economic basis of contemporary issues related to production. (Alt FA)

**642. Advanced Experimental Product Design (3:1:6).**

*Pr. 241, 341, and 545.*

Advanced pattern making, grading methods, and techniques for the apparel industry.

**660. International Textile Products Marketing (3:3).**

*Pr. 560 or permission of instructor.*

International textile products marketing environment; global markets, marketing programs and organizations. (Alt SP)

**662. Textile Products Consumer Research (3:3).**

*Pr. 562 or permission of instructor.*

Current theories and research in textile products consumer research. Application of consumer behavior models to textile products marketing through individualized research products. (Alt SP)

**663. Experience in Textile Products Business Abroad (3:3).**

*Pr. 560 or equivalent, or permission of instructor.*

International textile business environments, including cultural, political and business issues involved in conducting textile business in a specific country. Overview of specific country's relations with United States; country may vary. May be repeated for credit with different country. (Alt SP)

**681. Directed Individual Study in Textile Products Design and Marketing (1-6).****682. Graduate Seminar (1:1).**

May be repeated once for credit when topic varies. (FA)

**683. Problems in Textile Products Design (1-3).****684. Problems in Textile Products Marketing (1-3).****685. Problems in Textiles (1-3).****686. Readings in Textile Products Design (1-3).****687. Readings in Textile Products Marketing (1-3).****688. Readings in Textiles (1-3).****689. Seminar in Textile Products Design and Marketing (1:1).**

Study, reporting, and discussion of current research.

May be repeated for credit when topic varies. (SP)

**690. Minor Research (2-6).****699. Thesis (1-6).****711. Experimental Course**

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

**712. Theory Development in Textile Products Marketing (3:3).**

*Pr. 630, 660, 662, or permission of instructor.*

Examination of business related marketing theories to textile products marketing. Analysis of marketing theories, models, and conceptual frameworks. Includes business to business, consumer goods, customer relationship, and economic theories. (Alt SP)

**713. Qualitative Methodology in Textile Products Research (3:3).**

Exploration of development and use of qualitative research methodology in textile products research. Focus on application of qualitative methodology to address diverse research problems, procedures for data collection and approaches to analysis.

**765. College Teaching Practicum in Textile Products Design and Marketing (3).**

*Pr. admission to doctoral program in textile products design and marketing and permission of instructor.*

Supervised, structured experiences in planning, teaching, and evaluating a college level course. Professors provide guidance and mentoring of graduate students during the experience.

**790. Independent Doctoral Research (3).**

*Pr. STA 661, 662.*

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).

**799. Dissertation (1-12).**

Required of all candidates for the Doctor of Philosophy degree. Credit may be divided over two or more semesters.

**801. Thesis Extension (1-3).****802. Dissertation Extension (1-3).****803. Research Extension (1-3).**

## DEPARTMENT OF THEATRE

202 Taylor Building  
(336)334-5576

<http://www.uncg.edu/the>

*Professors*

**Deborah L. Bell**, M.F.A., Costume design and history, costume construction/crafts, make-up, millinery, commedia dell'arte (Director of Graduate Study).

**Alan D. Cook**, M.F.A., Acting, directing, dramaturgy, playwriting, African theatre.

**Robert C. Hansen**, Ph.D., Theatre history and literature, musical theatre, scenography, Asian theatre.

**Thomas W. Humphrey**, M.F.A., Directing and acting (Head of Department).

*Associate Professors*

**John Gulley**, M.F.A., Directing and acting.

**Randall J. McMullen**, M.F.A., Scene design, scenography, drafting, scene painting.

**Marsha McMann Paludan**, Ph.D., Acting, movement/voice for the actor, Alexander Technique, dance, T'ai Chi, directing, performance art.

**John Wolf**, M.F.A., Lighting design, computer aided design, stage management, sound.

**James M. Wren**, M.F.A., Acting, directing, musical theatre, period acting styles.

*Assistant Professors*

**Cynthia Barrett**, M.F.A., Voice, speech, and acting.

**Rachel Briley**, M.F.A., Theatre for Youth, theatre critical literacy, drama-in-education, theatre-in-education, early elementary education, deaf theatre.

*Lecturers*

**Jody Cauthen**, M.F.A., Theatre management, arts management.

**Lorraine Shackelford**, M.F.A., Theatre education, acting, choreography, musical theatre, directing, and sign language/deaf theatre.

The Department of Theatre offers two graduate degrees: the M.F.A. in drama (with concentrations in acting, design, directing, and theatre for youth) and the M.Ed. in theatre education. The M.F.A. 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 M.Ed. is a degree for K-12 theatre educators who are seeking advanced instruction and teaching licensure in theatre. Both the M.F.A. and the M.Ed. are accredited by the National Association of Schools of Theatre.

The Department 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 Department's extensive theatre production program which includes UNCG Theatre, N.C. Theatre for Young People, Studio Theatre, Workshop Theatre, and UNCG Summer Repertory Theatre.

The Department utilizes office, classroom, laboratory, studio, and performance space in the Taylor, Aycok, Brown, and Curry buildings. The Department's faculty is composed of talented artists and scholars with excellent reputations as teachers. Graduate students are expected to collaborate and work closely with faculty on creative and research projects during their course of study.

Admission to the Department's degree programs is very competitive. The requirements stated below are minimum requirements, and marginal compliance with them does not automatically imply admission.

VISIONS students are restricted from taking any 500-level course without the permission of the Department Head and course instructor. Only officially admitted M.F.A. and M.Ed. students 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 departmental handbooks that can be obtained from the Department's Main Office, Room 202, Taylor Building.



## MASTER OF FINE ARTS

Four concentrations are offered in the M.F.A. in drama by the Department of Theatre. Candidates may select a concentration in acting, design, directing, and theatre for youth. For admission to a major in acting, design, directing, or theatre for youth, the candidate must demonstrate a competence in theatre through submission of an undergraduate transcript and a detailed resume of theatre experience. Applicants in acting are required to audition and be interviewed. Applicants in directing, theatre for youth, and design must submit a portfolio and be interviewed.

### SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN DRAMA WITH A CONCENTRATION IN ACTING

The Master of Fine Arts in drama with a concentration in acting is a 60 hour degree. The program can usually be completed in six semesters (three years) for students on assistantships. Students entering the program normally have an undergraduate degree in theatre with a strong background in acting. Exceptions are occasionally made for students with significant professional experience. Students admitted without the appropriate undergraduate background in theatre will be expected to complete remedial work, in addition to normal degree requirements. Students must audition to be accepted into the program.

The M.F.A. with a concentration in acting is dedicated to the development of the advanced actor for the professional and academic theatre. Students take classes in voice, movement, contemporary and period scene study, acting for the camera, audition techniques, dialects, 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 past experience in summer theatre or a professional equivalent.

### A. Major Studies (required of all students - 42 hours)

THR 531 - Acting V(3)  
 THR 532 - Period Acting I (3)  
 THR 539 - Professional Theatre Audition Techniques (3)  
 THR 600 - Introduction to Graduate Study (3)  
 THR 603 - Seminar in Acting (3)  
 #THR 621 - Advanced Dynamics: Movement (3)  
 #THR 622 - Advanced Dynamics: Voice (3)  
 THR 631 - Studies in Acting: Contemporary (3)  
 THR 632 - Contemporary Acting II (3)  
 THR 633 - Period Acting II (3)  
 THR 690 - Graduate Practicum in Theatre (9 - three sections at 3 hours each)  
 THR 699 - Master Production in Theatre (3)  
 # 1 hour course. Must take three times to complete 3 hours credit.

### B. Academic Studies (6 hours)

Students must select a minimum of two courses from the following:

BCN 515 - Film Theory (3)  
 BCN 528 - Studies in Media Genres (3)  
 \*THR 500, 501, 502 - Theatre History I, II, III (3-9)  
 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 (3)  
 THR 602 - Seminar in Drama and Theatre History (3)  
 MUS 511 - History of Opera (3)  
 ENG 540 - Shakespeare: Eight Plays (3)  
 ENG 555 - English Renaissance Drama (3)  
 ENG 556 - English Drama of the Restoration and Eighteenth Century (3)  
 ENG 582 - Modern Drama (3)  
 ENG 640 - Studies in Shakespeare (3)  
 \* Required if not in undergraduate academic background.

### C. Supportive Studies (12 hours)

Students must select a minimum of four courses from the following:

\*THR 510 - Directing II (3) or THR 610 - Applied Play Directing (3)  
 THR 534 - Acting for the Camera (3)  
 THR 596 - Applied Theatre II (1-4)  
 THR 620 - Stage Dialects (3)  
 THR 695 - Independent Study (1-3) or THR 696 - Advanced Experimentation (3)  
 DCE 550 - Creative Process: Dance Perspective (3)  
 \*Required courses.

### D. Qualifying Paper

All candidates must write a 10-12 page essay during their second semester in the program. The essay is intended to assess the candidate's writing, analytical, and research abilities. The paper will be evaluated as part of the candidate's first spring semester review.

## E. 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.

### SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN DRAMA WITH A CONCENTRATION IN DESIGN

The Master of Fine Arts in drama with a concentration in design is a 60 hour degree. The program can usually be completed in six semesters (three years) by students on assistantships. Students entering the program normally have an undergraduate degree in theatre and a background in design/technical theatre. Exceptions are occasionally made for students with significant practical experience and/or undergraduate preparation in related fields such as art, engineering, architecture, and fashion. Students admitted without appropriate undergraduate background in theatre arts will be expected to complete remedial work in addition to normal degree requirements. Students must submit a portfolio for review for admission to the program.

The M.F.A. with a concentration in design 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, craftsmen, and teachers to work in professional entertainment industry and higher education.

### A. Major Studies (required of all M.F.A. design candidates - 39 hours)

- THR 503, 504 - Period Styles in Performance Design I & II (3-6)
- THR 551 - Advanced Scene Design (3)
- THR 560 - Advanced Costume Design (3)
- THR 570 - Advanced Lighting Design (3)
- THR 600 - Introduction to Graduate Study (3)
- #THR 651 - Scene Design Seminar (3)
- #THR 660 - Costume Design Seminar (3)
- #THR 671 - Lighting Design Seminar (3)
- THR 685 - Seminar in Scenography (3)
- THR 690 - Graduate Practicum in Theatre (3 sections at 3 hours each - 9)
- THR 699 - Master Production in Theatre (3)
- #Students are required to take two 600-level seminars.

## B. Academic Studies (6 hours)

Students must select a minimum of two courses from the following:

- BCN 515 - Film Theory (3)
- BCN 528 - Studies in Media Genres (3)
- \*THR 500, 501, 502 - Theatre History I, II, III (3-9)
- 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 (3)
- THR 602 - Seminar in Drama and Theatre History (3)
- MUS 511 - History of Opera (3)
- ENG 540 - Shakespeare: Eight Plays (3)
- ENG 555 - English Renaissance Drama (3)
- ENG 556 - English Drama of the Restoration and Eighteenth Century (3)
- ENG 582 - Modern Drama (3)
- \* Required if not in undergraduate academic background.

## C. Supportive Studies (15 hours)

Students must select a minimum of five courses from the following:

- BCN 509 - Media Sound Production (3)
- BCN 512 - TV and Film Lighting (3)
- THR 540 - Advanced Stage Crafts (3)
- THR 541 - Technical Direction (3)
- THR 542, 543 - Scene Painting I, II (3-6)
- THR 544 - Computer Assisted Drafting (3)
- THR 545 - Scene Drafting and Construction (3)
- THR 548 - Stage Millinery and Accessories (3)
- THR 549 - Historical Costume Pattern Drafting and Draping (3)
- THR 552 - Multi-Set Design Techniques (3)
- THR 575 - Theatrical Sound Design and Technology (3)
- THR 651 - Scene Design Seminar (3)
- THR 660 - Costume Design Seminar (3)
- THR 670 - Production Design for Film (3)
- THR 671 - Lighting Design Seminar (3)
- THR 695 - Independent Study (1-3) or THR 696 - Advanced Experimentation (3)
- HID 535 - Lighting and Wiring Design (2)
- HID 536 - History of Decorative Arts (3)
- TDM 572 - The Age of Couture (3)
- TDM 573 - History of Textiles (3)

## D. Qualifying Paper

All candidates must write a 10-12 page essay during their second semester in the program. The essay is intended to assess the candidate's writing, analytical, and research abilities. The paper will be evaluated as part of the candidate's first spring semester review.

## E. 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.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN DRAMA WITH A CONCENTRATION IN DIRECTING**

The Master of Fine Arts in drama with a concentration in directing is a **60 hour** degree. The program can usually be completed within six semesters (three years) by students on assistantships. The program seeks to admit only students who have undergraduate theatre degrees. Students admitted without appropriate undergraduate background in theatre will be expected to complete remedial work in addition to normal degree requirements. Students must interview and provide a portfolio than can include promptbooks, production photos, video tapes, directorial position papers, and/or dramaturgical research guides on past productions.

The M.F.A. with a concentration in directing is designed to develop directors trained in the best tradition of becoming theatre artists/teachers to work in professional as well as college and university theatre. Students take a core of courses in directing, theatre history, dramatic theory and criticism, and dramatic literature. The core is designed to provide a basis for synthesizing the historical-theoretical-literary area of directing with production.

### **A. Major Studies (required of all students - 39 hours)**

- THR 503, 504 - Period Styles in Performance Design I & II (6)
- THR 600 - Introduction to Graduate Studies (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 631 - Studies in Acting (3)
- THR 690 - Graduate Practicum in Theatre (3 sections at 3 hours each - 9)
- THR 699 - Master Production in Theatre (3)

### **B. Academic Studies (12 hours)**

Students must select a minimum of four courses from the following:

- BCN 515 - Film Theory (3)
- BCN 528 - Studies in Media Genres (3)
- THR 500, 501, 502 - Theatre History I, II, III (3-9)
- 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 (3)
- THR 602 - Seminar in Drama and Theatre History (3)

- MUS 511 - History of Opera (3)
- ENG 540 - Shakespeare: Eight Plays (3)
- ENG 555 - English Renaissance Drama (3)
- ENG 556 - English Drama of the Restoration and Eighteenth Century (3)
- ENG 582 - Modern Drama (3)
- ENG 640 - Studies in Shakespeare (3)

\*Required courses.

\*\*Required if not in undergraduate academic background.

### **C. Supportive Studies (9 hours)**

Students must take the following courses:

- THR 584 - Theatre Management (3)
- Two additional courses in consultation with advisor (6)

### **D. Qualifying Paper**

All candidates must write a 10-12 page essay during their second semester in the program. The essay is intended to assess the candidate's writing, analytical, and research abilities. The paper will be evaluated as part of the candidate's first spring semester review.

### **E. 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.

## **SPECIFIC REQUIREMENTS FOR THE MASTER OF FINE ARTS IN DRAMA WITH A CONCENTRATION IN THEATRE FOR YOUTH**

The Master of Fine Arts in drama with a concentration in theatre for youth is a **60 hour** degree. The program can usually be completed in six semesters (3 years) for students on assistantships. The program follows the guidelines established by the American Alliance for Theatre and Education and seeks to admit only candidates with undergraduate theatre degrees who demonstrate a desire to work with young people through creative drama and theatre for young audiences. Students admitted without appropriate undergraduate background in theatre will be expected to complete remedial work in addition to normal degree requirements. Students must interview and provide a portfolio that can include promptbooks, production photos, directorial position papers, and/or dramaturgical research guides on past productions and/or a record of theatre for youth activities.

The M.F.A. with a concentration in theatre for youth seeks to train theatre artists to take leadership roles in the growing field of theatre for youth. Students will have classes in creative drama, children's theatre, puppetry, and directing, as well as having the opportunity to select electives from a variety of courses. The student and advisor work closely together to develop an individualized program of courses and experiences tailored to each student's career goals. Internships are required and are individually arranged by the student and advisor.

### A. Major Studies (required of all students - 39 hours)

- THR 515 - Creative Dramatics for School and Community (3)
- THR 516 - Puppetry (3)
- THR 517 - Children's Theatre For School and Community (3)
- THR 596 - Applied Theatre II (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 615 - Advanced Creative Drama (3)
- THR 690 - Graduate Practicum in Theatre (3 sections at 3 hours each - 9)
- THR 699 - Master Production in Theatre (3)

### B. Academic Studies (12 hours)

Students must select a minimum of four courses from the following:

- BCN 515 - Film Theory (3)
- BCN 528 - Studies in Media Genres (3)
- \*\*THR 500, 501, 502 - Theatre History I, II, III (3-9)
- 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 (3)
- THR 602 - Seminar in Drama and Theatre History (3)
- MUS 511 - History of Opera (3)
- ENG 540 - Shakespeare: Eight Plays (3)
- ENG 555 - English Renaissance Drama (3)
- ENG 556 - English Drama of the Restoration and Eighteenth Century (3)
- ENG 582 - Modern Drama (3)
- ENG 640 - Studies in Shakespeare (3)
- \* Required Courses.
- \*\*Required if not in undergraduate academic background.

### C. Supportive Studies (9 hours)

Students must select a minimum of three courses from the following:

- \*THR 584 - Theatre Management (3)
- THR 621 - Advanced Dynamics: Movement (1)
- THR 622 - Advanced Dynamics: Voice (1)
- \*THR 631 - Studies in Acting (3)

- THR 695 - Independent Study (1-3) **or**
- THR 696 - Advanced Experimentation (3)
- LIS 554 - Materials for Adolescents (3)
- LIS 556 - Materials for Children (3)
- \*Required courses.

### D. Qualifying Paper

All candidates must write a 10-12 page essay during their second semester in the program. The essay is intended to assess the candidate's writing, analytical, and research abilities. The paper will be evaluated as part of the candidate's first spring semester review.

### E. 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.

## SPECIFIC REQUIREMENTS FOR THE MASTER OF EDUCATION DEGREE IN THEATRE EDUCATION

The Department of Theatre offers a graduate program leading to a 37 hour Master of Education in theatre education. This is a degree program designed for in-service K-12 teachers holding North Carolina "A" level teaching licensure in theatre arts who are seeking advanced training, professional development, and "M" licensure in theatre arts.

Students with adequate undergraduate preparation, including an "A" level teaching licensure, can usually complete the course of study in three semesters or one academic year and a summer session. The Summer Institute for Theatre Education (SITE) is offered each year in a fifteen-day intensive summer session. Students may earn up to 9 semester hours of graduate level credit toward the degree during each annual session. Students may also take some required professional education classes during SITE or the regular summer sessions.

An applicant must submit a Statement of Purposes and Goals (1 to 3 pages), to be accompanied by a resume of theatre and theatre education experience. Students must earn acceptable scores on the general section of the GRE. Applicants with outstanding undergraduate



grade records and relevant professional experience may request that the GRE be waived. Prior to admission, applicants must interview with the Director of Theatre Education. Topics of discussion for the interviews will be determined from the applicant's college transcripts, professional resume, and statement of goals.

### A. Program Requirements

Students must take a required core of three professional education courses (9 hours):

- CUI 545 - Diverse Learners (3) **or** CUI 622 - Differentiated Instruction (3)
- CUI 616 - Literacy Development and Instruction Across the Grades (3) **or** CUI 635 - Reading in the Secondary School and Content Areas (3)
- CUI 669 - Educational Implications of Learning and Development (3)

Students must take the following three required theatre courses (9 hours):

- THR 600 - Introduction to Graduate Study (3)
- THR 615 - Advanced Creative Drama (3)
- THR 682 - Seminar in Teaching Methods for Theatre Education (3)

Students must select four applied theatre courses in consultation with the Director of Theatre Education (12 hours). Students must take courses from at least two categories. Individualized programs of study are designed according to (1) grade level (K-12) of teaching, (2) individual undergraduate program preparation, (3) professional theatre experience or professional teaching experience.

### Theatre History/Dramatic Literature/Theory and Criticism:

- THR 601 - Drama Theory and Criticism (3)
- THR 602 - Seminar in Drama/Theatre History (3)
- THR 680 - Seminar in Playwriting (3)
- Or other appropriate course

### Directing:

- THR 610 - Applied Play Directing (3)
- THR 611 - Advanced Play Directing (3)
- THR 613 - Directing Seminar (3)
- Or other appropriate course

### Acting:

- THR 534 - Acting for the Camera (3)
- THR 581 - Advanced Oral Interpretation (3)
- THR 603 - Acting Seminar (3)
- THR 631 - Studies in Acting (3)
- Or other appropriate course

### Technical Theatre/Design:

- THR 540 - Advanced Stagecrafts (3)
- THR 551 - Advanced Scene Design (3)
- THR 560 - Advanced Costume Design (3)
- THR 570 - Advanced Lighting Design (3)

THR 575 - Theatrical Sound Design and Technology (3)  
Or other appropriate course

Students must take two production field experience courses (4 hours):

- THR 695 - Independent Study (cumulative portfolio - 1)
- THR 696 - Advanced Experimentation (3)

### B. Cumulative Portfolio

The culminating experience of the degree program is in the preparation and presentation of the cumulative portfolio which demonstrates (1) student achievement of five core competencies required for "M" licensure of a master teacher of theatre arts, (2) student commitment to professional development, leadership, and collaboration, and (3) a process requiring students to continually reflect upon and demonstrate the influences that the content and experiences in the degree program had upon their teaching.

The development of the portfolio is an ongoing process that begins from the first semester of study. The Cumulative Portfolio Committee (CPC) is created to guide and review the portfolio process. This committee is comprised of three theatre faculty members: the Director of Theatre Education (chair), the Department Head, and the student's advisor for THR 696. During the final semester of the degree program, the candidate enrolls in THR 695 to facilitate the development and final preparation of the cumulative portfolio. The student begins consultation with the committee regarding the portfolio upon completion of THR 696, but no later than 18 semester hours into the program of study. During the final semester of study in the program, the candidate submits the portfolio for review, and subsequently, does an oral presentation to the CPC. The committee evaluates the portfolio project as satisfactory or unsatisfactory, based upon the candidate's mastery of the advanced competencies of a master teacher in theatre arts. For detailed information about the cumulative portfolio, see the Department's *Theatre Education Handbook* and/or *Graduate Handbook*.

### C. Licensure

Students will earn a North Carolina "M" license upon the completion of the degree program. Individuals who do not hold "A" level teaching licensure in K-12 theatre arts must complete requirements for "A" licensure as defined by the B.F.A. in theatre education through the University's licensure only program prior to applying to the M.Ed.

## (THR) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

### 500, 501, 502. Theatre History I, II, III (3:3).

Specific conditions under which the great plays of the world have been produced. First semester: the beginnings to 1600; second semester: 1600-1850; third semester: 1850 to the present.

### 503, 504. Period Styles in Performance

#### Design I & II (3:3), (3:3).

*Pr. admission to appropriate degree program or permission of instructor.*

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.

### 505. American Theatre History (3:3).

*Pr. junior standing for undergraduates, or permission of instructor.*

Development of Theatre in America from its beginnings to the present. Includes a consideration of theatre artists and companies, audiences, performance spaces, production and business practices, plays, and playwrights.

### 506. Non-Western Theatre and/or Film (3:2:3).

Dramatic literature, theatre, and/or film in India, China, Japan and Africa. Topic varies with instructor. May be repeated for a maximum of 6 credit hours when topic varies.

### 510. Directing II (3:3).

*Pr. 201, 410, two theatre courses, or permission of instructor.*  
Involves the student in the theory and practice of contemporary plays.

### 515. Creative Dramatics for School and Community (3:2:2).

*Pr. admission to appropriate degree program or permission of instructor.*

Research and literature of creative dramatics for children, ages 5 through 14. Practice in leading groups of children in creative dramatics.

### 516. Puppetry (3:2:2).

*Pr. admission to appropriate degree program or permission of instructor.*

Scope and development of puppetry throughout the world. Practical experience in the design, making, and performing of puppets.

### 517. Children's Theatre for School and Community (3:2:2).

*Pr. admission to appropriate degree program or permission of instructor.*

Research and literature of children's theatre, methods of producing plays with children in school and community situations.

### 531. Acting V (3:1:4).

*Pr. 331, 332 and admission to appropriate degree program or permission of instructor.*

Practical application of Stanislavski's Method of Physical Action. Advanced scene study and role preparation with emphasis on the plays of Chekhov, Shaw, Ibsen, Strindberg, and American neoclassic dramatists.

### 532. Period Acting I (3:1:4).

*Pr. 231, 232, and ENG 227 and admission to appropriate degree program or permission of instructor.*

Study and practice of Shakespearean acting styles. Performance emphasizing manners, movement, and vocal delivery of the Elizabethan period.

### 534. Acting for the Camera (3:2:2).

*Pr. admission to appropriate degree program or permission of instructor.*

Practical experience in camera technique for actors in dramatic film and television production. For advanced undergraduates and graduate students in theatre.

### 539. Professional Theatre Audition Techniques (3:3).

*Pr. 231, 232, 331, 332 and admission to appropriate degree program or permission of instructor.*

Audition theory, technique, and practice for theatre, television, and films.

### 540. Advanced Stagecrafts (3:2:3).

*Pr. 140 and admission to appropriate degree program or permission of instructor.*

Study of advanced scenic construction, property construction, and rigging techniques for the stage. Supervised laboratory work in wood, plastics, metal, and other materials.

### 541. Technical Direction (3:3).

*Pr. 140 and 351, or 370, and junior, senior, or graduate standing, and admission to appropriate degree program or permission of instructor.*

Theatrical technical direction with emphasis on organizational, managerial, and problem-solving duties and responsibilities. Lecture combined with practical projects.

### 542. Scene Painting I (3:1:4).

*Pr. 140 and 351 and admission to appropriate degree program or permission of instructor.*

Tools, materials, and techniques of scene painting.

### 543. Scene Painting II (3:1:4).

*Pr. 140, 351, and 542 and admission to appropriate degree program or permission of instructor.*

Advanced problems in scene painting.

### 544. Computer Assisted Drafting (3:1:6).

*Pr. 545, or HID 111 and 112, or ART 222 or equivalent technical drawing aptitude and admission to appropriate degree program.*

Fundamental principles and application of 3d design utilizing a DOS based drafting and design program.

### 545. Scene Drafting and Construction (3:3).

*Pr. 351 and admission to appropriate degree program or permission of instructor.*

Advanced problems in scene construction combined with the development of scene drafting skills and techniques. Offered in alternate years.

### 548. Stage Millinery and Accessories (3:1:4).

*Pr. admission to appropriate degree program or permission of instructor.*

Historical millinery and accessories in relation to stage adaptation; design and construction techniques.

### 549. Historical Costume Pattern Drafting and Draping (3:1:6).

*Pr. admission to appropriate degree program or permission of instructor.*

Historical pattern-making techniques for stage costumes; theory and practice in costume construction.

### 551. Advanced Scene Design (3:1:6).

*Pr. 351 and admission to appropriate degree program or permission of instructor.*

Advanced problems of scene design for single set productions in performance.

**552. Multi-set Design Techniques (3:1:6).**

*Pr. 351 and admission to appropriate degree program or permission of instructor.*

Advanced problems in scene design for multi-set productions in performance.

**560. Advanced Costume Design (3:2:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Advanced problems in costume design for performance.

**570. Advanced Lighting Design (3:2:3).**

*Pr. 370 and admission to appropriate degree program or permission of instructor.*

Advanced problems in lighting design for performance.

**575. Theatrical Sound Design and Technology (3:3).**

*Pr. 140, 145 and admission to appropriate degree program or permission of instructor.*

Theory, aesthetics, and technology of theatrical sound design.

**581. Advanced Oral Interpretation (3:3).**

*Pr. 381 or graduate standing.*

Audiences, materials, and procedures of readers' theatre. Practice in advanced principles of oral interpretation of literature.

**584. Theatre Management (3:3).**

*Pr. drama major, and admission to appropriate degree program or permission of instructor.*

Theatre organization and operation. Practical problems of financing, promoting, and staffing various theatre programs.

**586. Stage Management (1-2).**

*Pr. 122 and 541, or permission of instructor.*

The role of the stage manager. Supervised participation as a stage manager in the theatre production program. May be repeated for a total of three credits.

**587. Theatre Field Studies (1-3:3).**

Guided off-campus study in the communication and theatre disciplines. Travel required. Site and topic will vary from semester to semester. May be repeated for up to 4 credit hours.

**589. Experimental Course.**

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

**595. Directing Practicum (1:0:3).**

*Pr. 410 and admission to appropriate degree program or permission of instructor.*

Practice in directing a play; preparation of a 20 to 30-minute play or excerpt and presentation in the Workshop Theatre. May be repeated for a total of two credits.

**596. Applied Theatre II (1-4:0:3-12).**

*Pr. 291 and admission to appropriate degree program or permission of instructor.*

Intensive experience in one or more areas of theatre production.

**(THR) COURSES FOR GRADUATES****600. Introduction to Graduate Study (3:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Development of research and writing skills, introduction to grant writing, and professional presentations. Consideration of issues in teaching. Required of M.Ed. and M.F.A. degree candidates.

**601. Drama Theory and Criticism (1-3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Major concepts representative of Aristotelian drama and the chief artistic and philosophical trends underlying much of contemporary or non-Aristotelian drama. May be repeated for a maximum of 3 hours credit.

**602. Seminar in Drama and Theatre History (3:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Investigation of special topics in drama and theatre history. Topics vary each semester. May be repeated twice for credit when topic varies.

**603. Acting Seminar (3:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Historical and theoretical perspectives related to acting. Topics vary each semester. May be repeated for a maximum of 9 hours credit.

**610. Applied Play Directing (3:1:4).**

*Pr. admission to appropriate degree program or permission of instructor.*

Guided study and practice in developing directorial approaches and techniques through scene work and the production of a complete play.

**611. Advanced Play Directing (3:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Problems of play directing emphasizing the use of modified proscenium, arena, thrust, and experimental forms of stages.

**612. Directing Period Plays (3:3).**

*Pr. 610 or 611 and admission to appropriate degree program or permission of instructor.*

Theories of directing and their application in the direction of period plays.

**613. Directing Seminar (3:3).**

*Pr. 610 or 611 and admission to appropriate degree program or permission of instructor.*

Investigation in the art of directing. Topics vary each semester. May be repeated for credit.

**615. Advanced Creative Drama (3:3).**

*Pr. 515 and admission to appropriate degree program or permission of instructor.*

Current trends and advanced philosophies in creative drama and aesthetic education. Practical experience arranged with classes in local schools.

**620. Stage Dialects (3:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Stage dialects most frequently used by the actor: Standard British, Cockney, Irish, Scots, French, German, Italian, Russian, Japanese, Brooklynese, American Southern.

**621. Advanced Dynamics: Movement (1:0:3).**

*Pr. admission to appropriate degree program or permission of instructor.*

Movement laboratory for the advanced actor. May be repeated for a total of three credits.

**622. Advanced Dynamics: Voice (1:0:3).**

*Pr. 621 and admission to appropriate degree program or permission of instructor.*

Voice and movement laboratory to develop skills necessary for the performance of classical text. May be repeated for a total of three credits.

- 631. Studies in Acting** (3:3).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Special studies and practices in acting techniques. Emphasis on contemporary drama.
- 632. Contemporary Acting II** (3:1:4).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Contemporary ensemble acting techniques and their application to ensemble style and playing.
- 633. Period Acting II** (3:1:4).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Study and practice of acting styles from the periods of Classical Greek, Roman, Medieval, Restoration/Georgian, Victorian/Edwardian drama.
- 645. Advanced Theatre Graphics** (3:2:3).  
*Pr. admission to appropriate degree program.*  
Theatre graphics for performance design; drafting, perspective, figure drawing, and rendering.
- 651. Scene Design Seminar** (3:3).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Topics in scene design. Topics may vary with each course offering.
- 660. Costume Design Seminar** (3:3).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Topics in costume design. Topics may vary with each course offering.
- 670. Production Design for Film** (3:2:3).  
History, theory and practice of production design in film from 1895 to the present.
- 671. Lighting Design Seminar** (3:3).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Topics in lighting design. Topics may vary with each course offering.
- 680. Seminar in Playwriting** (3:3).  
*Pr. permission of instructor.*  
Theory and practice of writing plays for stage production. May be repeated once for credit.
- 682. Seminar in Teaching Methods for Theatre Education** (3:3).  
*Pr. must hold "A" licensure; permission of instructor.*  
Explores current pedagogical practices, issues, and trends in the K-12 theatre arts classroom.
- 685. Seminar in Scenography** (3:2:3).  
Scenographic theory and practice for performance design.
- 690. Graduate Practicum in Theatre** (3:0:9).  
*Pr. admission to appropriate degree program and permission of instructor.*  
Guided practice under rigorous artistic standards in carrying out major responsibilities in UNCG Theatre or Theatre for Young People major productions.
- 695. Independent Study** (1-3).  
*Pr. admission to appropriate degree program or permission of instructor, major advisor and Department Head.*
- 696. Advanced Experimentation** (3:1:4).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Preparation for the evaluation of experiences in the creative processes of theatre, broadcasting, or film. Analysis, documentation, and critical evaluation of the specific experience.

- 698. Graduate Internship** (3).  
*Pr. Second or third year standing in the graduate program.*  
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.
- 699. Master Production in Theatre** (3:0:9).  
*Pr. admission to appropriate degree program or permission of instructor.*  
Research, development, and execution in acting, directing, or design of a major theatrical production.
- 711. Experimental Course.**  
This number reserved for experimental courses. Refer to the Course Schedule for current offerings.
- 803. Research Extension** (1-3).

## **WOMEN'S AND GENDER STUDIES**

200 Foust Building

(336) 334-5673

<http://www.uncg.edu/wms>

### **Coordinating Council:**

#### *Professors*

**Mary Ellis Gibson, Ph.D.**, Feminist theory, women writers, Southern women writers, Victorian studies, modernism (Director of Women's and Gender Studies; Department of English).

**Diane L. Gill, Ph.D.**, Sport and exercise psychology, social psychology and gender issues in sport and exercise, physical activity and psychological well-being across the life span (Department of Exercise and Sport Science).

**Jacquelyn W. White, Ph.D.**, Social psychology, sexual assault, violence against women, gender issues, research methodology (Department of Psychology).

#### *Associate Professors*

**Elizabeth Chiseri-Strater, Ph.D.**, Ethnography, rhetoric and composition, gender and pedagogy (Department of English).

**Paige Hall Smith, Ph.D.**, Breast feeding, women's health, violence against women (Department of Public Health Education).

#### *Assistant Professors*

**Robert E. Aronson, Dr.P.H.**, Men's health issues, masculinities, social inequities, health disparities, HIV/AIDS (Department of Public Health Education).



**Karin Baumgartner**, Ph.D., German literature, criticism, film, gender and literature (Department of German, Russian, and Japanese Studies).

**Daniel H. DeGooyer, Jr.**, Ph.D., Social and communication theory, small group and organizational communication (Department of Communication).

**Jennifer M. Keith**, Ph.D., Eighteenth century and Romantic British literature, sensibility, women poets (Department of English).

**Juana Suarez**, Ph.D., Latin American literature, 20th century cultural studies, film studies, literary theory, women's studies (Department of Romance Languages).

**Leila Villaverde**, Ph.D., Philosophy of education, feminist and gender theory, gender and education (Department of Educational Leadership and Cultural Foundations).

Faculty members affiliated with the Women's and Gender Studies Program are housed in departments throughout the College and Schools. Interested students should contact Dr. Elizabeth Chiseri-Strater, Director of Women's and Gender Studies Graduate Program.

## POST-BACCALAUREATE CERTIFICATE PROGRAM

The Women's and Gender Studies Program offers a program of study leading to a Post-Baccalaureate Certificate in women's and gender studies. Holders of the certificate are prepared for interdisciplinary teaching as well as for careers in nonprofit, governmental, and corporate venues. The certificate program also prepares students for 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 practicum integrating theory and practice.

### Admission Requirements

Students who have at minimum been granted a bachelor's degree from an accredited college or university and who have been admitted by The Graduate School may enroll for courses leading to a Post-Baccalaureate Certificate in women's and gender studies. All students are required to meet the general admission requirements of The Graduate School and to complete a statement of goals to be reviewed by the Director of the Women's and Gender Studies Graduate Program. If applying for

the Post-Baccalaureate Certificate, no test scores (GRE, MAT) are required. If applying for the Post-Baccalaureate Certificate along with another degree program, please refer to the degree granting department for admission test requirements. Because of the interdisciplinary nature of the program, candidates may present a baccalaureate degree in any field; in their statement of goals candidates for admission will be asked to describe how their previous study and experience have prepared them for the certificate program.

## SPECIFIC REQUIREMENTS FOR THE POST-BACCALAUREATE CERTIFICATE IN WOMEN'S AND GENDER STUDIES

Fifteen (15) credit hours must be successfully completed during a five-year period to earn the certificate. A minimum of 12 semester hours must be taken at UNCG; 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 a core course (3 hours), either a practicum (3 hours) or independent study (3 hours), and a minimum of 9 hours of electives. Students enrolled in a graduate degree program must take at least 3 credit hours of course work (exclusive of the practicum) outside the degree-granting department.

### A. Required Core Courses (3 hours)

Students must take at least one of the following. Additional courses from this category may count as electives.

- CST 659 - Gender and Communication Theory (3)
- ENG 531 - Feminist Theory and Women Writers (3)
- ENG 688 - Women's Rhetoric and Feminist Pedagogy (3)
- HDF 607 - Feminist Theory and Research Methodologies (3)

### B. Practicum (3 hours)

Required of students taking the certificate who are not enrolled in a degree program at UNCG. 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.

- WGS 601 - Women's and Gender Studies Practicum (3)

### C. Independent Study (3 hours)

Required of students who are enrolled in a degree program at UNCG. A research or creative project related to women's and gender studies.

WGS 600 - Independent Study (3-6)

### D. Electives (9 hours)

Minimum of 9 hours chosen from among the following or other courses as approved by the advisor and the chair of the Women's and Gender Studies Graduate Program Committee:

- CED 574A - Contemporary Topics in Counseling: Counseling Women (3)
- CST 659 - Gender and Communication Theory (3 - if not taken to meet core requirement)
- CUI 555 - Multicultural Education (3)
- ELC 609 - Epistemology and Education (3)
- ELC 664 - Foundations of Interpretive Inquiry (3)
- ENG 531 - Feminist Theory and Women Writers (3 - if not taken to meet core requirement)
- HDF 607 - Feminist Theory and Research Methodologies (3 - if not taken to meet core requirement)
- HDF 662 - The Family in Comparative Perspective (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)
- ESS 532 - Women in Sport and Physical Activity (3)
- ESS 630 - Sport and Society: Socioeconomic and Gender Relations (3)
- MLS 610 - Culture and Ideas (3 - when focus is on gender)
- MLS 620 - Human Nature and Society (3 - when focus is on gender)
- WGS 600 - Independent Study (3 - if not taken to meet requirement)
- WGS 601 - Women's and Gender Studies Practicum (3 - if not taken to meet requirement)

Many graduate courses focusing on gender are offered under special topics numbers. Each semester the Director of the Women's and Gender Studies Graduate Program will designate courses that meet WGS certificate requirements. Students should check the Women's and Gender Studies Program website or the Schedule of Courses for a current listing.

### (WGS) COURSES FOR ADVANCED UNDERGRADUATES AND GRADUATES

#### 589. Experimental Course.

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

### (WGS) COURSES FOR GRADUATES

#### 600. Independent Study (3-6).

Independent study of specialized topics. Requires written plan, permission of sponsoring instructor, and approval of Women's and Gender Studies Program graduate director.

#### 601. Women's and Gender Studies Practicum(3).

*Pr. completion of a minimum of 6 hours course work in the WGS Post-Baccalaureate Certificate program or permission of instructor.*

Supervised experience in research, teaching or workplace internships relevant to women's and gender studies. (Graded on S-U basis)

#### 711. Experimental Course.

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

#### 803. Research Extension (1-3).