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UNIVERSITY *of*  
NORTHERN COLORADO



**GRADUATE CATALOG**  
GREELEY, COLORADO

**EFFECTIVE DATES**

**AUGUST 15, 2009**

**TO**

**AUGUST 14, 2010**

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# CALENDAR

FALL	2009	2010
Residence Halls Open	Aug 20, Thurs	Aug 19, Thurs
Classes Begin	Aug 24, Mon	Aug 23, Mon
Labor Day Holiday (UNC Closed)	Sept 7, Mon	Sept 6, Mon
Fall Break (No Classes)	Nov 25-27 Wed-Fri	Nov 24-26 Wed-Fri
Thanksgiving Holiday (University Closed)	Nov 26-29 Thurs-Sun	Nov 25-28 Thurs-Sun
Final Exam Week	Dec 7-11 Mon-Fri	Dec 6-10 Mon-Fri
Graduate Commencement	Dec 11, Fri (7:00 p.m.)	Dec 10, Fri (7:00 p.m.)

Fall/Spring Interim	2009-10	2010-11
Interim Session Begins	Dec 14 Mon	Dec 13, Mon
Interim Session Ends	Jan 8, Fri	Jan 7, Fri

SPRING	2010	2011
Residence Halls Open	Jan 8, Fri	Jan 7, Fri
Classes Begin	Jan. 11, Mon	Jan 10, Mon
Martin Luther King Day (UNC Closed)	Jan. 18, Mon	Jan 17, Mon
Spring Break (No Classes - UNC Open)	Mar 13-21 Sat-Sun	Mar 12-20 Sat-Sun
Final Exam Week	May 4-8, Mon-Fri	May 10 -14 Mon-Fri
Graduate Commencement	May 7, Fri (7:00 p.m.)	May 6, Fri (7:00 p.m.)

SUMMER	2010	2011
Residence Halls Open	May 16, Sun	May 15, Sun
<b>12-wk Session Begins</b> -Memorial Day Holiday (Univ. Closed) -July 4th Holiday (Univ. Closed) -Session Ends	May 17, Mon May 31, Mon  July 5, Mon  Aug. 6, Fri	May 16, Mon May 30, Mon  July 4, Mon  Aug 5, Fri
<b>1st 6-wk Session Begins</b> -Memorial Day Holiday (Univ. Closed) -Session Ends	May 17, Mon  May 31, Mon  June 25, Fri	May 16, Mon  May, 30 Mon  June 24, Fri
<b>2nd 6-wk Session Begins</b> -July 4th Holiday (Univ. Closed) -Session Ends	June 28, Mon  July 5, Mon  Aug. 6, Fri	June 27, Mon  July 4, Mon  Aug 5, Fri
<b>8-wk Session Begins</b> -July 4th Holiday (Univ. Closed) -Session Ends	June 7, Mon July 5, Mon  July 30, Fri	June 6, Mon July 4, Mon  July 29, Fri
Graduate <b>Commencement</b>	Discontinued. Graduating students can march in either spring or fall ceremony	

**Note:** Please reference the academic calendar at [www.unco.edu/regrec/calendars](http://www.unco.edu/regrec/calendars) for further detailed information.

## University of Northern Colorado Affirmative Action/Equal Opportunity Policy

Human Resource Services is responsible for implementation of affirmative action, programs and coordination of Title VI and VII of the Civil Rights act of 1964, Title IX of the Education Amendments of 1973, the Vietnam Era Veteran's Readjustment Act of 1974, and Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. For more information about these provisions or about issues of equity or fairness, or claims of discrimination contact the AA/EEO/Title IX Officer, Marshall Parks, Director, Human Resource Services, University of Northern Colorado, Carter Hall 2002, Greeley, CO 80639, or call 970-351-2718.

### **Disclaimer:**

*The content of this document is provided for the information of the student. It is accurate at the time of printing but is subject to change from time to time as deemed appropriate by the University President or Board of Trustees in order to fulfill the University role and mission or to accommodate circumstances beyond their control. Any such changes may be implemented without prior notice, without obligation and, unless specified otherwise, are effective when made. The Catalog posted at <http://catalog.unco.edu> may reflect current information that was not available at the time of this publication. The calendar is a projection of the course of events for the 2006-2007 academic years*

*and represents the best judgment of the administration and staff. It is subject to change due to forces beyond the control of University employees or as deemed necessary by the University staff in order to fulfill educational objectives.*

*The faculty and staff of the University of Northern Colorado reserve the right to terminate or modify program requirements, content, and the sequence of the program offerings from semester to semester for educational, operational or financial reasons that are deemed sufficient to warrant such actions.*

**U.S. POSTMASTER: Send address changes to University of Northern Colorado, Academic Affairs, Campus Box 9, Greeley, CO 80639-0001**

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## THE UNIVERSITY OF NORTHERN COLORADO



### *Welcome from President Kay Norton*

*I invite you to read through the University of Northern Colorado's Academic Catalog and discover the wealth of programs you have to choose from.*

*As you do, keep in mind that the requirements and program options are not the core of our University. Its people are. Our faculty, staff and administration are committed to your success. Our faculty are active professors, scholars and researchers who bring to their classrooms the latest information and practices from their field. Faculty-student interaction is the hallmark of a Northern Colorado education. You'll find faculty who are dedicated to teaching excellence.*

*Pursuing a graduate education will be one of the most important and rewarding endeavors of your life. Whatever your chosen field, your efforts will be rewarded, both during your time at Northern Colorado and throughout the rest of your life. We invite you to join our community and allow us to assist you with this exciting journey.*

### DESCRIPTION OF THE UNIVERSITY

The University of Northern Colorado commits to the success of its students by providing a solid liberal arts foundation, relevant professional coursework and real-world experiences in an environment where faculty and staff value personal attention as a key to learning.

The university offers over 100 undergraduate and 100-plus graduate programs of study spread among five colleges: Humanities and Social Sciences, Business, Education and Behavioral Sciences, Natural and Health Sciences, and Performing and Visual Arts. Over 2,000 courses are available.

Approximately 12,000 students from 46 states and 51 countries attend classes on our beautiful 260-acre campus. The student population is 61 percent female, 39 percent male and 15 percent minorities.

Our libraries include James A. Michener Library, home to the author's literary legacy, and Skinner Music Library, one of a handful of music libraries in the nation dedicated exclusively to research materials, media and supportive information required by the nation's most rigorous music schools.

More than 130 student organizations on campus include 15 honoraries and leadership organizations, nine fraternities and seven sororities. Northern Colorado is a member of the NCAA Division I Big Sky Conference.

Located in Greeley, the university is just an hour's drive north of Denver. The greater Greeley area's population of nearly 100,000 enjoys a variety of activities - shopping, athletics, nightlife, a symphony orchestra, theater and much more.

With its rich 118-year history, dedicated faculty, active students and NCAA Division I athletic teams, the University of Northern Colorado is large enough to provide true university opportunities and small enough to treat students as individuals - it's a place where you can stand out, not just fit in.

### MISSION STATEMENT OF THE UNIVERSITY OF NORTHERN COLORADO

The University of Northern Colorado shall be a comprehensive baccalaureate and specialized graduate research university with selective admission standards. The University shall offer a comprehensive array of baccalaureate programs and master's and doctoral degrees, primarily in the field of education. The University of Northern Colorado has statewide authority to offer graduate programs for the preparation of education personnel.

### UNIVERSITY OF NORTHERN COLORADO POINTS OF PRIDE

- We are one of only three recipients of the prestigious Christa McAuliffe Award for Excellence in Teacher Preparation from the American Association of State Colleges and Universities in 2007.
- Typically, 96 percent of our bachelor degree recipients are employed or attending graduate school one year after graduation.
- Our Monfort College of Business is the first and only business school to receive the Malcolm Baldrige National Quality Award from the Office of the President of the United States.
- We are designated by the Colorado Legislature as the primary institution for undergraduate and graduate teacher education in the state of Colorado.
- Our undergraduate-only business program is the only one in the world to be accredited by AACSB International in both business and accounting.
- The University Symphony Orchestra was named the Best U.S. College Orchestra in 2007, the sixth time in the past nine years.
- Hispanic Studies faculty members and students are working with the Smithsonian Institution on the Braceros Project, preserving memories and artifacts of U.S. farm factory workers.
- Forbes Magazine recently ranked Greeley as one of the top places in the country for business and careers, and named Weld County as having the fastest rising standard of living in America over the past five years.
- Down Beat Magazine has rated the University Jazz Band the No. 1 college jazz band in America the past two years.
- We prepare more than 800 teachers per year, putting UNC among the top 5 percent of producers of teachers in the U.S.
- Our graduating nursing students regularly score in the top 15 percent on the national licensing exam for registered nurses.
- Our James A. Michener Library is home to the bulk of the UNC alumnus and Pulitzer Prize-winning author's writing and publishing legacy.
- One-third of the Colorado Teacher of the Year award winners are University of Northern Colorado alumni.

- Spending by the university, our employees and our students pumps nearly \$350 million into the Colorado economy.
- We prepare more public school music, theater and art teachers than any college or university in the region.
- Our nursing education doctoral program is one of only six in the nation, and our online doctoral program is one of only three in the nation.
- The Jazz Studies program has won more than 100 Down Beat Magazine awards in the last 30 years.
- Graduating business students score in the top 10 percent on nationwide standardized exit exams.
- The university's Rocky Mountain Cancer Rehabilitation Institute is the only comprehensive cancer rehabilitation facility of its kind, providing individualized prescriptive exercise and dietary intervention in the recovery of cancer treatment-related symptoms.

## NORTHERN COLORADO TRADITIONS

Traditions at the University of Northern Colorado reflect our rich 118-year history.

### Cranford Cornerstone

Much celebration surrounded the laying of the cornerstone of the first building constructed at the new State Normal School in Greeley in 1890. Later named Cranford Hall after the businessman who donated most of the land for the school, the building eventually fell victim to the ravages of time and a fire. Cranford Hall demolished in 1972, but its cornerstone was salvaged. It can still be seen in the shade of the trees near the west entrance to Carter Hall.

### Gunter Hall

When Gunter Hall was renovated in 1996, architects were directed to retain as many of the 1928 building's features as possible, including the center court of the gym floor, original building murals and the famous Gunter bells, which had been replaced three times prior to the renovation. Although the bells' rings are now electronically generated, they still proudly mark the passing of time across the Northern Colorado campus.

### Northern Vision

"Northern Vision," the 12-foot-high, 2,000-pound bronze sculpture of a bear on the north lawn of the University Center, has watched intently over campus since only 2004. Created and donated by local sculptors at the behest of some persuasive Northern Colorado alumni, the eye-catching piece of art faces southeast toward the UC - the campus's student hub - symbolizing the university's focus on its students.

## ACCREDITATION AND AFFILIATION

Since 1916, the University has been fully accredited by the North Central Association of Colleges and Schools. Various academic programs currently have special accreditation by the following:

- American Assembly of Collegiate Schools of Business
- National University Continuing Education Association
- American Chemical Society
- American Psychological Association
- American Speech-Language-Hearing Association
- Colorado Department of Education
- Colorado State Board of Accountancy
- Colorado State Board of Nursing
- CAATE: Commission on Accreditation of Athletic Training Education
- Commission on Collegiate Nursing Education
- Council for Accreditation of Counseling and Related Educational Programs
- Council for Education of the Deaf
- Council on Education for Public Health (probation)
- Council on Rehabilitation Education
- National Association of Schools of Music
- National Association of School Psychologists
- National Association for Sport and Physical Education/ North American Society for Sport Management
- National Council for Accreditation of Teacher Education
- The Commission on Accreditation for Dietetics Education
- Society for Public Health Education.

The institution currently holds membership in the American Association of State Colleges and Universities, American Council on Education, American Association of Colleges for Teacher Education, Teacher Education Council of State Colleges and Universities, the Council of Graduate Schools in the United States, Project 30 Alliance, the Western Association of Graduate Schools, the American Assembly of Collegiate Schools of Business, Colorado Thirty Group and other educational organizations.





# GRADUATE SCHOOL - THE UNIVERSITY OF NORTHERN COLORADO

*Graduate School at the University of Northern Colorado UNC is a specialized graduate research institution, which offers Master's, Doctoral, and Specialist in Education programs. Many licensure and certificate programs are also available through our on and off-campus initiatives for individuals pursuing their professional career in schools and communities.*

*Please review our graduate programs, courses, and Graduate School policies and procedures. UNC offers graduate students a unique experience in graduate education; we look forward to supporting your advanced education.*

## OFFICE OF THE GRADUATE SCHOOL

**Location:** Carter Hall 2007    **Telephone:** 970.351.2831  
**Assistant Vice President for Research and Dean of the Graduate School and International Admissions:** **Robbyn R. Wacker, Ph.D.**

### INTRODUCTION

The first graduate degree, a master's degree, was offered by UNC in 1913. In 1929 the Doctor of Education was added, in 1934 the Doctor of Philosophy, in 1954 the Educational Specialist, in 1975 the Doctor of Arts, and in 1984 the Doctor of Psychology was added. The Doctor of Audiology, was added in 2003, and the Doctor of Nursing Education was added in 2004.

Graduate study at UNC involves the graduate student studying under the direction of a qualified member of the graduate faculty. Thus, graduate credit is awarded for courses of study taught by duly appointed members of the graduate faculty who meet the criteria established by the faculty constitution and the bylaws of the graduate faculty. The exchange of information, ideas, and values that takes place between the graduate faculty and highly qualified students is the essence of graduate education.

Students seeking graduate credit must display evidence of superior academic aptitude, achievement, and motivation. Moreover, the demonstration of competence in the discipline as evidenced by written and oral exams, thesis, research projects, directed studies, and internships is an integral part of the graduate education experience. Through cooperative efforts of the graduate faculty, the Graduate Council, and the Graduate School, the university seeks to establish an environment in which the graduate student and the graduate faculty can achieve the traditional goals of graduate education.

Rules and regulations contained herein are intended to help the graduate faculty and the graduate student to accomplish the intent and purposes of graduate education.

**Graduate Council.** The Graduate Council is a representative faculty council established to represent the graduate faculty. It is the responsibility of the council to recommend policies governing graduate programs and requirements at the university. It sets minimum standards for admission to the Graduate School at UNC. The council is comprised of representatives from the graduate faculty elected to serve three-year terms.

**Graduate Faculty.** Graduate faculty are appointed by the University President after being recommended by the academic unit, the academic dean, the Graduate Council, and the Graduate Dean.

At the time of appointment, graduate faculty are authorized to teach graduate courses, act as program advisors for graduate students, serve on doctoral committees, and serve on other university committees pertaining to graduate education at UNC. Graduate credit can be granted for courses taught by a faculty member who has been appointed to the graduate faculty or to the graduate lecturer faculty. No graduate credit can be granted for any course taught by a faculty member who is pursuing an advanced degree at this institution. Graduate faculty members are noted in the listing of UNC faculty in this publication.

In addition to the activities established for graduate faculty, members may receive a doctoral research endorsement. Only faculty who have the doctoral research endorsement may serve as research advisors on doctoral student committees.

Upon approval by the school, the academic dean, and the Assistant Vice President for Research and Dean of the Graduate School and International Admissions may appoint selected individuals as graduate lecturer faculty for a four-year period. These faculty may teach specific courses that are approved and/or perform other designated graduate responsibilities.

## ACADEMIC RECOGNITION GRADUATE DEAN'S

### CITATION FOR EXCELLENCE

The Graduate Dean's Citation for Excellence is awarded each semester to students nominated by their school in recognition of superior achievement in their graduate studies. Each school may recommend graduate students completing their programs during a specific term (fall, spring or summer) provided they meet these minimum criteria:

- a cumulative graduate grade point average of at least 3.75, and documented evidence of superior accomplishment while a graduate student at UNC.

The nomination should be supported by:

- written recommendations from graduate faculty of the academic program outlining the student's accomplishments and/or,
- special recognition by an agency or organization (outside UNC) for scholarly accomplishment, academic achievement or contributions to society, and a student resume or vita.

Awardees are reviewed by the Executive Committee of the Graduate Council. Their recommendations for awards are forwarded to the Graduate Dean for final selection. The total number of awards will not exceed 3% of the graduating class.

### CITATION FOR OUTSTANDING THESIS AND DISSERTATION

The Graduate Dean's Citation for Outstanding Thesis and Dissertation may have four awards each semester: two for outstanding master's thesis and two for outstanding doctoral dissertation. Faculty may nominate a thesis or dissertation by submitting a letter of nomination that specifies contributions of the study to the discipline.

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    Teaching Emphasis (49)  
Music M.M. (50)  
    Collaborative Piano Emphasis (50)  
    Conducting Emphasis (50)  
    Instrumental Performance Emphasis (50)  
    Jazz Studies Emphasis (50)  
    Music Education Emphasis (51)  
    Music History and Literature Emphasis (51)  
    Music Theory and Composition Emphasis (51)  
    Vocal Performance Emphasis (51)  
Nursing M.S. (52)  
    Clinical Nurse Specialist in Chronic Illness (CNS) Emphasis (52)  
    Education Emphasis (52)  
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Physical Education M.A.T. (52)  
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Reading M.A. (53)  
Rehabilitation Counseling M.A. (53)  
School Counseling M.A. (54)  
School Library Education M.A. (54)  
Sociology M.A. (55)  
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Biological Education Ph.D. (63)  
Chemical Education Ph.D. (64)  
Counseling Psychology Ph.D. (65)  
Counselor Education and Supervision Ph.D. (66)  
Educational Leadership Ed.D. (67)  
Educational Mathematics Ph.D. (68)  
Educational Psychology Ph.D. (69)  
Educational Studies Ed.D. (69)  
Educational Technology Ph.D. (70)  
Higher Education and Student Affairs Leadership Ph.D. (71)  
Human Rehabilitation Ph.D. (71)  
Music D.A. (72)  
    Collaborative Piano Emphasis (72)  
    Conducting Emphasis (72)  
    Jazz Studies Emphasis (72)  
    Music History and Literature Emphasis (72)  
    Music Performance Emphasis (72)  
    Music Composition Emphasis (72)  
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School Psychology Ph.D. (74)  
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## ADMISSIONS

Faculty members in each degree program establish admissions standards for the specific degree program which often exceed the minimum standards. Applicants should consult program brochures, school offices or faculty in the degree program(s) of interest to them for any additional submission requirements.

If programs set deadlines for review of applications for admission for any term, they must allow sufficient time for Graduate School handling and evaluation. This typically means they must ask students to submit materials early enough to allow at least 5 working days for the Graduate School to complete all processing upon receipt of a completed application prior to sending it to the program for screening. It is particularly important for programs requiring GRE's and having early admission deadlines to notify applicants of this requirement. The Graduate School does not set standard priority admission deadlines, but encourages each program to determine what specific deadlines they will use and to work closely with the Graduate School to ensure these deadlines are feasible.

### Admission Application Checklist

1. Complete the appropriate application forms
2. Obtain one official transcript from ALL institutions (except UNC)
3. Submit Graduate Record Examination (if applicable)
4. Obtain letters of recommendation (if applicable)
5. Check program requirements
6. Include the non-refundable application fee
7. Submit all required application materials to the Graduate School

For additional information refer to the Graduate School application or online at: <http://www.unco.edu/grad/>

### Admission Expiration

Upon approval from the program, admission to any graduate program will remain valid for one calendar year following the first day of the applicant's proposed semester of enrollment. If a student does not begin coursework during that year, the student may be required to submit a new application with the appropriate processing fee and satisfy the new admission requirements.

### Conditional Admission

Conditional admission refers to applicants admitted pending the receipt of admission requirements specified by the Graduate School. No student will be permitted to register for an additional semester, receive financial aid or take the comprehensive examination or its equivalent unless the specified requirement(s) is met during the first semester of the student's program.

### Provisional Admission

Provisional admission refers to applicants admitted pending the completion of certain requirements stipulated by the program which must be met before granting regular admission. A student has one year to meet all requirements. No student will be permitted to register for an additional semester, receive financial aid or take the comprehensive examination or its equivalent unless the specified requirement(s) is met during the first semester of the student's program.

## MASTER'S DEGREE, SPECIFIC REQUIREMENTS

Master's degrees (M.A., M.A.T., M.M., M.P.H., M.S.) are awarded for a level of academic accomplishment substantially beyond that required for the baccalaureate degree. Programs consist of a coherent pattern of courses, seminars, and supervised learning experiences that culminate in a

comprehensive examination and, in some cases, a thesis. Master's programs require a minimum of 30 semester hours beyond the baccalaureate degree plus additional time in preparation for comprehensive examinations and/or thesis writing.

### MASTER'S ADMISSION

Each applicant to a master's degree program must possess a baccalaureate degree from an accredited college or university and have a grade point average of 3.00 or better [on a 4.00 point scale] on the most recent 60 semester hours.

If someone is recommended for admission who does not meet the Graduate School standard, a rationale must be provided stating the factors which were considered in recommending the student: GPA in the discipline, maturity, letters of recommendation, samples of their work, GRE scores or other compelling factors. All recommendations for admission below the 3.00 will be reviewed by the Graduate Dean or his/her designee.

### DOUBLE MAJOR

Only one degree will be awarded (e.g. M.A., M.A.T., M.M., M.P.H., M.S.) and only one degree will be reflected on the transcript, but both majors will be noted. The student must specify, therefore, which degree is to be used for degree purposes. Double majors must meet all requirements and must apply for, take, and pass the comprehensive examination or approved equivalent in each major. No degree will be awarded until all requirements for both majors are complete.

If a student is interested in obtaining two master's degrees, it is recommended that they complete one degree program completely before applying to the other. Students are commonly advised that it is most often to their advantage to seek a higher degree (specialist or doctorate) upon completion of a master's degree rather than obtaining two master's degrees. Additional consultation from the student's program advisor or the Graduate School regarding a decision to declare a double major or to seek two master's degrees should be pursued.

## SPECIALIST DEGREES, SPECIFIC REQUIREMENTS

**Specialist in Education degrees (Ed.S.)** are awarded for concentrated study and investigation beyond the master's degree. Programs are designed on an individual basis and are sharply focused on a particular academic goal. Specialist programs may cut across school lines but are not offered in all discipline areas.

A student entering a specialist degree program who possesses a master's degree must earn a minimum of 30 semester hours of graduate credit beyond the master's degree. A student entering a specialist degree program who possesses only a baccalaureate degree must earn a minimum of 60 semester hours of graduate credit beyond the baccalaureate degree. Schools may have requirements that exceed the minimum standards established by the university.

### SPECIALIST ADMISSION

Each applicant to a specialist degree program must possess a baccalaureate degree from an accredited college or university and have a grade point average of 3.00 or better [4.00 point scale] on the most recent 60 semester hours and an adequate academic background in the proposed area of specialization as defined by the program through which the specialist degree is to be awarded. Those applicants having a GPA less than 3.00 may be considered for admission. If someone is recommended for admission who does not meet the Graduate School standard, a rationale must be provided stating the factors which were considered in recommending the student: GPA in

the discipline, maturity, letters of recommendation, samples of their work, GRE scores or other compelling factors. All recommendations for admission below the 3.00 will be reviewed by the Graduate Dean and his/her designee.

## DOCTORAL DEGREES, SPECIFIC REQUIREMENTS

**Doctor of Audiology degrees (Au.D.)** are awarded for completion of the professional practitioner program designed for entry level activity as an audiologist. Audiologists are professional practitioners responsible for the prevention, diagnosis, treatment and management of hearing disorders in children and adults.

**Doctor of Arts degrees (D.A.)** are awarded for completion of content-oriented programs to prepare the candidate for a career in college or university teaching. The student is expected to specialize in a specific field of study but is not expected to specialize in a single facet of the chosen field. General components of the program include coursework in the major area, supervised practica in college teaching, and a dissertation involving a significant teaching/education problem(s) or a traditional research topic. Students are offered considerable flexibility in program development. The degree is not research-oriented, but the recipient will demonstrate research competence by preparing a dissertation designed to support college/university teaching.

**Doctor of Education degrees (Ed.D.)** are awarded for completion of professional or practitioner programs designed to prepare candidates for positions of leadership in all fields including elementary and secondary education, higher education, business, industry, government, and the military. These doctoral programs prepare graduates for service in instructional, supervisory, and administrative capacities.

**Doctor of Philosophy degrees (Ph.D.)** are awarded for completion of the research degree granted only to students who have 1) mastery of definite fields of knowledge to the extent they are familiar both with what has been done in their specific field and with the potentialities and opportunities for further advances, 2) a demonstrated capacity to do original and independent scholarly investigation or creative work in their specific field, and 3) the ability to integrate their specific field or specialization with the larger domains of knowledge and understanding.

**Doctor of Psychology degrees (Psy.D.)** are awarded for completion of the counseling psychology program. A Psy.D. in counseling psychology indicates that the degree holder has specialized training in the area of psychological aspects of counseling/therapy and human behavior. The degree is a professional/practitioner degree at the highest level of university training.

**Post-Doctoral Programs** of research and advanced study are available in selected areas to persons holding the earned Doctor of Arts, Doctor of Education, Doctor of Philosophy, or Doctor of Psychology degree. Work at the post-doctoral level may be taken in areas such as educational leadership and policy studies, educational technology, educational psychology, counseling psychology, elementary education, special education, applied statistics, and other disciplines.

The specific research project or program of study is planned by the post-doctoral student in conference with a faculty committee appointed to advise the student throughout the program and to assess the student's progress at the end of the program.

Admission information is available in the Graduate School. Post-doctoral admission is granted on an individual basis.

## DOCTORAL ADMISSION

Each applicant for the doctoral degree must:

- Possess a baccalaureate degree from an accredited college or university,

- Submit three letters of recommendation confirming that the applicant has the ability to do doctoral work in the proposed discipline(s),
- Have a minimum level of achievement combining GPA and GRE performance.
- GRE scores must be less than five years old.

Doctoral applicants meet the Graduate School minimum criteria for admission if they have a GPA of at least 3.0 on a 4.0 scale on the most recently completed degree, scores of at least 400 on both the verbal and quantitative sections of the GRE-General Test with a combined score of at least 1000 and an analytical writing score of at least 3.5. A higher GRE score can compensate for a lower GPA and a higher GPA can compensate for a lower test score. For doctoral applicants who do not meet Graduate School requirements, the Graduate School will consider school recommendation for admission. A written explanation must accompany the recommendation explaining circumstances and factors considered justifying acceptance of the applicant.

The doctoral programs at UNC do not utilize quantitative rating systems and standard criteria weightings as sole determining factors for decisions concerning the acceptance of doctoral applicants. Quantitative information such as GPA or GRE scores is considered in combination with qualitative information derived from letters of recommendation, applicant goal statements, as well as past academic and professional accomplishments. Because of the specialized nature of doctoral work, it is incumbent on the faculty to utilize their professional judgment in determining to what extent a student is qualified for entry into a particular program. The information requested by each school upon which their decision is to be based, gives the faculty the opportunity to thoroughly and carefully evaluate the strengths and potential of each applicant.

Each application introduces a unique combination of qualifications for a program of doctoral study. Decisions to accept or not accept a potential doctoral student must thoroughly consider all of the information pertinent to the applicant's qualifications including sensitivity to diverse applicant backgrounds. Only in this way can strict adherence to and consideration of affirmative action policies be maintained. The doctoral student selection process thus avoids undesirable, restrictive, and potentially capricious decisions that can arise from over-reliance on purely quantitative selection criteria.

Schools offering doctoral programs may recommend admission based upon supplemental/alternate criteria that have been established by the major school and approved by the Graduate Council.

## Master's Enroute to the Doctoral Degree

Students who have been admitted to a doctoral program may complete a master's degree in the same discipline enroute to completion of the doctoral degree if this option has been previously requested by the program and approved as a program modification for this degree program through the curriculum approval process. Students should contact the Graduate School for details concerning this policy.

## INTERNATIONAL ADMISSION

Admission requirements for UNDERGRADUATE International Students are found in the UNC Undergraduate catalog at: <http://catalog.unco.edu> or call 970/351-2881. You may also contact the International Admissions Coordinator in the Graduate School at 970/351-1811.

An international student is a student who is not a citizen of the United States or classified by United States Immigration and Naturalization Service as a resident alien. International applicants must meet English proficiency requirements as well as academic and financial requirements before being fully admitted to the university. Admission for refugee, asylee or "undocumented" status students is also processed in the Graduate School/International Admissions office if it is determined Intensive English Language training is needed. The application requirements differ somewhat for students of



this status. Please contact the International Admissions Coordinator at 970.351.1811 for assistance, or visit the Graduate School/International Admissions office website at [www.unco.edu/grad](http://www.unco.edu/grad).

All application materials and all related credentials must be received by the Graduate School no later than 60 calendar days before the semester that the student wishes to enroll. All international applicants must take these steps to be considered for admission:

1. Obtain the appropriate International Application for Admission forms from the Graduate School.
2. Complete the forms and return them along with the non-refundable application fee.
3. Submit financial documents verifying funding to support the cost of attending UNC for one academic year.
4. Submit official transcripts, mark sheets, diplomas and certificates from each college or university attended. If they are not in English, submit a notarized English translation with each document.
5. Copies of the biopage of your passport and your student visa (if you have one). Graduate Record Examination (GRE) scores are required for all doctoral programs and many masters programs. Check with your program area for further requirements. Submit GRE scores sent from ETS directly to UNC. The scores must be no more than five years old. UNC school code is 4074. Your program may require other examinations.
6. International students who are not native speakers of English are required to provide evidence of English language proficiency by submitting one of the following:
  - a. Official score reports of current Test of English as a Foreign Language (TOEFL). Minimum scores for **undergraduate** admissions are: 520 (paper-based), 190 (computer-based), and 70 (internet-based) - with cut scores no lower than: Listening (16), Reading (16), Speaking (16), and Writing (18). **Graduate and undergraduate business** program admissions are: 550 (paper-based), 213 (computer-based), and 80 (internet-based) - with cut scores no lower than: Listening (18), Reading (20), Speaking (18), and Writing (20).
  - b. The Intensive English Language test (IELT) is also accepted, with a minimum score of 6.0 for **undergraduate** admissions and 7.0 for **graduate and undergraduate business** program admissions.
  - c. Completion of a college degree program from an accredited U.S. institution within the previous two years.
  - d. Students without the above can apply for admission to UNC's Intensive English Language program. See <http://www.unco.edu/cie/esl/IELP.htm> for further information.

Academic programs on campus may have higher or additional English proficiency requirements including screening or testing for English proficiency. The applicant is responsible for determining whether the school has additional language requirements. Upon application approval, international applicants will be sent a letter of admission and the proper immigration forms will be issued.

### Conditional Admission - International

International applicants whose academic record is sound but whose English language proficiency fails to meet the UNC minimum admission standard may be granted a conditional admission to UNC. However, as the condition for admission, they must first study Intensive English to improve their proficiency. Based on their TOEFL score at the time of admission and their score on UNC's Academic English Assessment, they will either start with English full-time, or they will qualify to take part-time English and part-time courses toward their degree (Bridge Program). Students in the Intensive English program register as full-time students at UNC, but may not be released from conditional admission status until approved to do so by the Coordinator of the Intensive English Language Program. Students enrolled in this program will receive all the benefits and services provided to full-time students at UNC.

## The Intensive English Language Program - International

The cost of the English Language Program is \$300 per credit hour.

**Qualification Criteria.** A TOEFL is not required for international students to be considered for admission to the Intensive English Language Program at UNC. Students are only required to submit a full UNC application, official copies of their most recent transcripts, and financial documentation to be qualified for admission to the Intensive English Language Program.

**Classes Offered in the IELP.** The purpose of the program is to increase the language proficiency of students to a level at which they can fully benefit from being a regular student at UNC. Classes offered include: Low Basic, High Basic, Low Intermediate, High Intermediate, Low Advanced, High Advanced, and Graduate-Prep levels. Courses include English reading, writing, listening, speaking and grammar. The IELP is offered fall semester, spring semester, and during one summer session each year.

**Length of the IELP.** The length of the program varies for each student, depending upon TOEFL score, the score the student achieves on the IELP Entrance Assessment Test administered by the Center for International Education, and performance in the CIE English classes. For more details about the program see <http://www.unco.edu/cie/esl/IELP.htm>.

For information regarding English proficiency requirements and admission to the Intensive English Language Program, please contact the Center for International Education or visit the Intensive English Language Program website: [www.unco.edu/cie/esl/IELP.htm](http://www.unco.edu/cie/esl/IELP.htm)

The Intensive English Language Program provides two tracks of study:

- Track One: ENGLISH ONLY (Basic, Intermediate, and Advanced levels). Full-time study is 18 credit hours per week and there are five 8-week sessions offered in one year. Therefore, an international student can complete our Intensive English program in one year, plus one 8-week session. No TOEFL is required to enter full-time study in this program.
- Track Two: BRIDGE – INTENSIVE ENGLISH + COURSEWORK TOWARD A MAJOR (Advanced and Graduate levels). Normally, students in this track take 6-8 credits of Intensive English plus 4-6 credits toward their major. No TOEFL is required to enter the Intensive English portion of this program. Conditional admission can be granted with the provision that the student successfully completes all of the Intensive English coursework required by the Academic English Assessment given upon arrival at UNC.

## THE CENTER FOR INTERNATIONAL EDUCATION

The Center for International Education provides support through ongoing orientation, advising, cultural, social and educational activities for students from other countries and American students interested in studying abroad. The Center offers services related to immigration and cross-cultural programming for the entire university community. In addition, a comprehensive English program is offered for international students who need to improve their English proficiency in order to pursue a degree at an English-speaking university. Courses are offered every semester for Basic, Intermediate, Advanced and Graduate-level students.

### ORIENTATION

An orientation for new graduate students is held prior to fall semester and provides information about important services, issues, and policies for graduate students. For information about the orientation, please call the Graduate School and International Admissions Office at 970-351-2831, after July 1.

## INTERDISCIPLINARY STUDIES: GRADUATE INTERDISCIPLINARY DEGREE

The Graduate Interdisciplinary Degree Program is designed to be a rigorous program providing the opportunity to qualified students to meet career goals by combining two or more disciplines into a single degree program. To ensure the quality of the program, the student will require close supervision, participation, and coordination from all assigned committee members from each discipline concerned. It is imperative that the program be truly interdisciplinary and represent an integration of the subject matter of the component disciplines. Programs that parallel other degree programs are not acceptable as interdisciplinary degree programs. Applicants for the Graduate Interdisciplinary Degree Program are encouraged to consult with the Graduate School prior to submitting their applications. Applicants must follow the student administered application procedure. The complete application packet should include the following:

### Interdisciplinary Admission Application

1. Complete the Graduate School application and submit the \$50 non-refundable application fee.
2. One official copy of the applicant's transcripts from all colleges and universities attended (except UNC).
3. If applying for a doctoral program, one official copy of the applicant's GRE General Test scores (not more than five years old) sent from Educational Testing Service to the Graduate School.
4. Three letters of recommendation from appropriate professional sources attesting to the applicant's ability to pursue the intended graduate interdisciplinary program.
5. A detailed written statement of career goals and objectives and a rationale for pursuing the proposed interdisciplinary program. This must be a compelling statement clarifying why no single existing degree program could satisfy these goals.
6. Identify the two primary disciplines which will be combined in the proposed program. At least one of the primary disciplines listed must offer a program leading to the desired degree, (i.e. MA, MAT, MM, MPH, MS, DA, or EdD). Secondary disciplines may also be included.
7. A current resume that summarizes academic and professional experiences, activities, publications, and other pertinent information.

**Preliminary Review.** The Graduate Interdisciplinary Degree Coordinating (GIDP) Committee, comprised of coordinators from each college, will conduct a preliminary review of all application materials from each applicant who satisfies the minimum admission requirements of the Graduate School. Applicants who do not meet the minimum admission requirements of the Graduate School will be denied admission.

If the GIDP Committee is not satisfied with the application, the Graduate School will notify the applicant of the committee's concerns. The applicant may resubmit their application materials after addressing the concerns of the GIDP Committee. If the GIDP Committee is satisfied with the application, the Graduate School will forward the application materials to the appropriate programs for evaluation.

Upon receipt of the application materials from the Graduate School, the Graduate Coordinators, and the faculty in the appropriate disciplines evaluate the application and recommend to the Graduate School that the applicant be granted or denied provisional admission status. Each discipline must recommend provisional admission and must designate graduate faculty advisors before the Graduate School will grant provisional admission status.

### Provisional Admission

When notified of provisional admission status, the student and the designated Graduate Faculty advisors must prepare a Proposed Plan of Study which must be submitted to the Graduate School on the "Graduate Interdisciplinary Degrees

Plan of Study" at <http://www.unco.edu.grad.forms/GIDPPlan.pdf>. Regular admission is contingent upon final review and acceptance of the Proposed Plan of Study by the GIDP Committee. Provisionally admitted students are allowed to complete a maximum of 15-semester hours of coursework applicable to the degree program. Students are encouraged to prepare and submit a Proposed Plan of Study as soon as possible.

However, there is not a limit to the amount of deficiency coursework that can be taken while on provisional admission status.

**Program Criteria.** The Plan of Study must meet the following criteria:

1. If the graduate faculty advisors determine a student has any deficiencies in his/her background, the proposal must list the course work necessary to alleviate those deficiencies. (Deficiency courses must be completed at the earliest possible date).
2. SRM 600 or one of the research oriented substitute courses approved by the Graduate Council (master's) or a 12 hour research core (doctoral) must be proposed. The proposal must also contain at least one additional research method, statistics, or applied research course (i.e. computer science, tests measurements, etc.).
3. **Secondary disciplines** are defined as those disciplines in which nine (9) to eleven (11) semester hours of course work are proposed at the master's level or those disciplines in which nine (9) to fourteen (14) semester hours of course work are proposed at the doctoral level. If identified in the Proposed Plan of Study, these disciplines must assign an advisor and approve the selected course work.
4. Proposed courses must be offered with sufficient frequency to allow completion of the degree requirements within a reasonable amount of time, e.g. two years for a thirty (30) semester hour program or three to four years for a sixty-four (64) semester hour program. Furthermore, research and library resources must be available to facilitate the completion of the thesis, if applicable, or dissertation.
5. No more than nine (9) semester hours, individually or in combination, of courses numbered 508, 513, or 622 may be proposed or counted in the degree program.
6. Proposed Plan of Study must conform to all other Graduate School policies and procedures, e.g. transfer of credit. Prior to submission to the Graduate School, the *Graduate Interdisciplinary Degrees Plan of Study* form must be signed by the student, all graduate faculty advisors, and all primary and secondary school directors. Until an approved plan of study is filed with the Graduate School, a hold is placed on an interdisciplinary student's ability to register for classes.
7. **Master's Degree:** Proposed course work must equal at least thirty (30) semester hours of graduate level courses plus any deficiency coursework. At least twelve (12) semester hours of graduate level course work must be proposed in each of at least two primary disciplines. Courses numbered 622 and 699 may not be used to meet this requirement. If a thesis is proposed, the thesis must be a minimum/maximum of six (6) semester hours. One of the designated advisors must be named as the Program Advisor.
8. **Doctoral Degree:** Proposed course work must equal at least sixty-four (64) semester hours beyond a master's degree excluding any deficiency coursework. If an applicant does not hold a master's degree, the proposed course must equal at least (94) ninety-four semester hours. At least fifteen (15) semester hours of graduate-level course work must be proposed in each of at least two primary disciplines. If an applicant does not hold a master's degree, the proposed course work in each of at least two primary disciplines must equal a minimum of eighteen (18) semester hours. Courses numbered 622, 797 and 799 may not be used to meet this requirement. The plan of study must include four (4) semester hours of proposal (797) and twelve (12) semester hours of doctoral dissertation (799).

When there are only two primary disciplines proposed,

one of the two designated graduate faculty advisors must be named as the program advisor. In addition, the two designated advisors and the student must recommend at least one additional graduate faculty advisor, subject to approval by his/her school director and the Dean of the Graduate School.

All Graduate School policies apply to interdisciplinary students. Please see [Interdisciplinary Studies: Graduate Interdisciplinary Degree—on page 88](#)

## REGISTRATION

### REGISTRATION PROCEDURES

A student must be registered to attend class. The Schedule of Classes can be found by accessing URSA "Look Up Classes" or [www.unco.edu/sched](http://www.unco.edu/sched). Registration is continuous. Current students are assigned times during the last part of the academic semester when they may register for courses offered in the following semester. Registration consists of the following processes:

- Check Registration Status on the Student Tab/Registration Tools in URSA
- Payment of student account

### DIRECTED STUDIES

Directed Studies are available in most disciplines. These are identified within this publication by course number 622. The Directed Study course provides a vehicle to allow a qualified student to receive University credit for an individualized investigation under the direct supervision of a UNC faculty member. For more information, refer to the UNC Catalog or contact the Registrar's Office, (970) 351-2231.

Because Directed Studies with the number 622 are at the graduate level, the faculty member providing the supervision must be approved to teach graduate-level courses. No faculty member will be authorized to supervise a directed study during a semester that he/she is not actually employed on-campus at UNC.

The investigation must be on a specific topic that is not duplicated by an existing course within the University's curriculum. The nature of the study must involve intensive use of relevant literature, materials, or techniques, and the study report must reflect a synthesis of the information or techniques acquired. The following policies apply for registration in Directed Studies courses:

1. A Directed Study course may be for no more than four semester hours of credit per academic semester, with no more than six credits of Directed Studies taken in any semester. A study may be further limited to the maximum number of credits listed in this catalog.
2. The student should apply through the program in which he or she is doing the study.
3. Permission to engage in a directed study for credit must be approved by the student's program advisor, the faculty member supervising the study, and the school director of the major program. The Non-Scheduled Course form to be presented at the Registrar's Office at the time of enrollment must bear the signatures of the supervising faculty member and the school director. A rationale for course credit form should be completed and filed in the academic program. Forms are available only through the school in which the study is supervised.

Separate policies exist for distribution of critiqued and graded copies of a completed Directed Study, based on whether the study was completed at the graduate or undergraduate level. A student should consult with either the Graduate School or the dean of the college in which the Directed Study is to be undertaken for the appropriate policy.

- Students receiving graduate credit for a 622-numbered course must submit two copies of a final report to the supervising faculty member. While the final report may be in the nature of a scholarly research paper, it may also take

the form of a report or a summary of activities undertaken. The format and writing style of the final report must be in keeping with the style manual used by the discipline concerned. It is the student's responsibility to acquire the appropriate style manual for reference. The faculty member must submit one copy of the final report to the appropriate office with the final grade assignment.

### SCHEDULE CHANGES (ADDS/DROPS)

Schedule changes may be handled through Web Registration ([www.registrar.unco.edu/registration/index.html](http://www.registrar.unco.edu/registration/index.html)) or at the Registrar's Office. After the deadline posted on the Registrar's website, students may not enroll in additional full term courses or drop full term courses in which they are currently registered.

The number of credits for which a student is registered at the time of the add/drop deadline determines tuition and fee charges. Drops differ from withdrawals since drops are not recorded on the student's transcript and withdrawals are recorded on the transcript (see next section).

### TWO-CLASS-HOUR DROP OPTION

A faculty member may drop a student from a class during the Drop period if the student has not attended the first two-50 minute sessions. The student must notify the instructor if he or she cannot attend during this time. Not all instructors will exercise this option; thus, a student cannot expect that the failure to attend the class will automatically cause him or her to be dropped. Consequently, the student must follow the procedures listed on the Registrar's website at [www.registrar.unco.edu](http://www.registrar.unco.edu).

### WITHDRAWAL FROM CLASS

When a student registers for a class, he or she is considered to be a member of the assigned class. Students are responsible for confirming their schedule by web or in person.

The student may drop a class during the Drop period, normally the first 10 class days of a semester for full-term courses. The dates of the Drop period each semester are listed on the Registrar's website at [www.registrar.unco.edu](http://www.registrar.unco.edu).

Students may withdraw from individual classes in person or on the web. The first date to withdraw from an individual course is the first class-day immediately after the drop deadline. The last date to withdraw from an individual course is the midpoint of the semester. Withdrawal deadlines for each semester are also noted on the Registrar's Website. The withdrawal deadline for an individual short-term class occurs when the class had held 50% of its meetings. A "W" appears on the transcript for each class from which a student withdraws. Students may withdraw from all classes at the Registrar's Office through the twelfth week of the term.



## STUDENT RESOURCES

### FINANCIAL AID

Financial aid is awarded to assist students with meeting college costs such as tuition, fees, books, food, housing and transportation. The Office of Financial Aid administers several types of state and federal aid programs including grants, loans, employment, scholarships and veterans' benefits. The following represents the types of assistance available as of this printing.

**Educational Loans.** UNC participates in the following programs: Federal Perkins Loans, Federal subsidized and unsubsidized Stafford Loans and Parent Loans for Undergraduate Students (PLUS). Eligibility for Federal Perkins Loans and Subsidized Stafford Loans is based upon need, as determined by the completion of the Free Application for Federal Student Aid (FAFSA). This application is available online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Loan funds plus interest must be repaid to the lending institutions, usually after graduation. Some loans have cancellation and deferment provisions.

**Grant Funds.** Grant funds are awarded on the basis of financial need. These funds do not require repayment unless the student does not complete the term in which the funds are received. Grant funds available at UNC include the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Colorado Student Grant and the Colorado Leveraging Educational Assistance Partnership Program, Academic Competitiveness Grant and National SMART Grant.

**Graduate Assistants, Teaching Assistants, Graduate Research Assistants.** Graduate Assistantships are available through the individual academic and administrative departments. Awards are usually comprised of a monthly stipend, as well as, a tuition scholarship, based proportionally on the stipend in exchange for a work assignment. Assistantships do not pay for undergraduate course work. These tax qualifying awards are disseminated according to individual program budgets. For more information students should contact their program.

**Student Employment.** UNC offers a number of employment opportunities. Federal and State Work Study programs provide on-campus and off-campus jobs to students demonstrating financial need. Colorado No-Need Work Study is available on a limited basis to undergraduate Colorado residents who do not qualify for other forms of financial assistance and apply by the priority deadline of March 1. For those students who do not qualify for the Work Study programs there are part-time hourly positions both at the University and off campus.

**Scholarships.** Scholarship funds do not have to be repaid and are usually awarded on the basis of academic performance, talent, athletic ability and other criteria determined by the donor.

**Veterans' Benefits.** Eligibility for veterans' benefits is certified through the Financial Aid office.

### ACADEMIC PROGRESS STANDARDS

The Office of Financial Aid is responsible under state and federal regulations for establishing and monitoring minimum acceptable progress for the continuation of financial aid eligibility. The standard of satisfactory progress must include a student's total academic history at UNC.

In order to be eligible to receive financial aid, the student must be making satisfactory progress toward a degree program, regardless of whether he/she has previously received financial assistance. For a more detailed explanation of these policies, refer to the Standards of Satisfactory Academic Progress available in the Office of Financial Aid at [www.unco.edu/ofa/downloads/2008-2009/sap-grad.pdf](http://www.unco.edu/ofa/downloads/2008-2009/sap-grad.pdf).

All graduate students pursuing a Master's, Specialist or Doctoral degree must meet the following:

UNC Cum Grade Point Average	Completion Rate	Maximum Hours
3.0 cum GPA at the end of semester	Must satisfactorily complete with a grade of D or better, including S and NR, at least 80% of the hours you attempt during the academic year.	Master's Degree — may attempt a maximum of 75 semester hours at UNC which includes a maximum of 6 credit hour limitation for thesis.
2.0 cum GPA at the end of any semester	Attempted hours include those for which you receive a U,F,W or UW.	Education Specialist Degree — may attempt a maximum of 100 semester hours at UNC.
Reminder: GPAs do not transfer from one institution to another.	Must complete at least half-time hours. If you totally withdraw, you will be on suspension. No report (NR) grades are permitted for approved courses up to the maximum for the following:  Masters = 12 credit hours Education Specialist = 15 credit hours  Doctoral = 20 credit hours	Doctoral Degree — may attempt a maximum of 140 semester hours at UNC which includes a maximum of 12 credit hour limitation for dissertation.

### How to Apply for Aid

To qualify for "need-based" programs, the student must demonstrate "financial need" or a difference between the cost of education and what the family (both student and parents) can reasonably afford to pay toward that cost. The family's income and assets are reviewed to calculate the family contribution in a process called "Need Analysis." UNC uses the Free Application for Federal Student Aid (FAFSA) to initiate this process. Completion of the FAFSA means the student is applying for all state and federal aid programs offered at UNC with the exception of scholarship programs.

The FAFSA form is available on-line at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). To receive the maximum amount of funding, the application must be received by the need analysis service by **March 1** preceding the award year. An application processed after March 1 will be considered late and the applicant will have limited funding opportunities.

### How To Apply for a UNC Scholarship

Students must be admitted to UNC to be considered for scholarships. Eligibility for some scholarships is based on information obtained from the admission application. All students are encouraged to complete the UNC Universal Scholarship Application for scholarships every year. Please visit the Graduate School website for more information [www.unco.edu/grad](http://www.unco.edu/grad).



## Refund and Repayment

Tuition adjustments resulting from a complete withdrawal from the University may affect the financial aid the student has received. Credit balances are returned to financial aid accounts. Students can refer to [www.unco.edu/acctservices/bursar/accrec.htm](http://www.unco.edu/acctservices/bursar/accrec.htm) for more explanation.

Any student withdrawing totally from the University who has received her/his financial aid for that semester may be required to repay the financial aid. For a more detailed explanation of these policies, refer to "Return of Title IV Fund Policy" on the website at [www.unco.edu/ofa/downloads/2008-2009/withdraweffects.pdf](http://www.unco.edu/ofa/downloads/2008-2009/withdraweffects.pdf).

## Award

Financial aid is awarded on the basis of "need" and may include a package of grants, loans and employment.

Financial aid is available in limited amounts to help students finance school expenses. However, while college costs continue to rise, federal and state aid does not rise at the same rate. Consequently, families must increasingly rely upon their own funds to pay for school. Students are expected to arrive on campus with funds to use for books, tuition, fees, housing and utility deposits and other expenses associated with the beginning of the year.

Financial aid funds usually are available at the beginning of each semester as a credit to charges on the student's bill. A refund will be deposited to the student's checking account if the aid exceeds all institutional charges.

Financial aid awards are offered for an academic year (Fall/Spring). A separate application is required for funding during the summer session. Contact the office for dates and more details.

Renewal of financial aid is not automatic. A new FAFSA for the next academic year must be submitted early enough to meet our **priority filing date of March 1**. The student's academic progress as well as financial need determine the continuance of funding. Visit our web site at [www.unco.edu/ofa](http://www.unco.edu/ofa).

## HOUSING AND RESIDENCE LIFE

[www.unco.edu/housing](http://www.unco.edu/housing)

Student housing at UNC is known as the Department of Housing and Residence Life and provides housing for more than 3,200 undergraduate students in traditional residence halls and apartment style facilities.

Services and programs assist students in transition to UNC, support their academic success and facilitate the development of life-long friendships. Students are encouraged to participate in activities, programs and leadership opportunities provided by staff and the Residence Hall Association. Numerous employment opportunities are also available to students within the residence halls.

Residence halls and apartments are situated on two separate campuses known as Central Campus and West Campus. The Central Campus residence halls are located on a beautiful, tree-lined area and include Belford, Decker, Gordon, Brown, Lujan, Dickeson, Bond, Hansen-Willis, Sabin, Snyder, Wiebking and Wilson halls. These halls house between 28 and 280 students and are a five-minute walk from the University Center. West Campus residence halls are located west of the University Center and house between 440 and 612 students per hall. These buildings include Harrison, Lawrenson, Turner halls and the New West Campus Residence Hall. Many students enjoy the opportunity to live on theme floors including: business community, Cumbres, elementary education, honors, performing and visual arts, education, quiet life-style, and wellness living. These floors offer programs, activities and experiences centered around the respective theme.

Each residence hall is served by a twenty-four hour, staffed, customer service desk. In addition, professional and student staffs live in the halls and are available for assistance and support. Centrally located dining facilities are located on both

campuses and provide air-conditioned dining as well as the convenience of Gourmet-to-Go take-out meals. Laundry facilities, study lounges and television lobbies are also available for student use.

Residence halls and apartments are available for students with disabilities on both campuses and include numerous accommodations and helpful features. Housing and Residence Life staff are interested in working with any student to review accommodations to ensure rooms and apartments are ready prior to arrival. Please contact Housing and Residence Life as early as possible to ensure timely planning and preparation of a room or apartment.

The University Apartment complex is a five-minute walk from Central Campus and provides housing to upper division students. Single students and students with families are welcome to apply for housing in these two-bedroom, furnished and unfurnished apartments. Utilities provided in the rent charge include cable television, high-speed internet, gas, local phone services, electric, water, sewer and trash services. Long distance telephone service is to be paid for by the resident. Additional amenities include centrally located laundry, playground, a fitness room, and a community center with large screen television.

The Housing and Residence Life web site provides detailed descriptions and floor plans for review as well as answers to commonly asked questions about living in any facilities on campus. Access the web site at [www.unco.edu/housing](http://www.unco.edu/housing).

## HOUSING AND RESIDENCE LIFE, DINING SERVICES

The University operates seventeen residence halls, one apartment complex, and several auxiliary houses. Rooms and apartments house between one and six persons per unit. The University requires all freshmen under age 20 who have earned less than 20 semester hours to live on campus and carry one of the Traditional Meal Plans offered to freshmen, unless living with parents within the allowable 20 mile commuting distance of campus. For more information contact the Department of Housing and Residence Life at (970) 351-2721 or [www.unco.edu/housing](http://www.unco.edu/housing).

## Room and Board Rates by Semester

Residence Halls, 2009-2010*	Semester Rate
Harrison*	\$1,832.00
Belford, Decker, Gordon, Sabin, Snyder, Turner, Wiebking and Wilson	\$2,025.00
Bond, Brown, Dickeson, Hansen-Willis, Lujan, and New Hall South and North	\$2,218.00
Lawrenson*†	\$2,270.00
Off Campus Properties *†	\$2,270.00
University Apartments†	Monthly Rates
<u>10-Month Lease</u>	
Unfurnished	\$650.00/apt \$325.00/person
Furnished	\$700/apt \$350.00/person
<u>12-Month Lease</u>	
Unfurnished	\$630.00/apt \$315.00/person
Furnished	\$680.00/apt \$340.00/person
<u>Month-to-Month Lease</u>	
Unfurnished	\$730.00/apt \$365.00/person
Furnished	\$780.00/apt \$390.00/person

\*Break housing included in Lawrenson Hall, Harrison Hall and off-campus properties.

†Lawrenson, University Apartments and off-campus properties do not require a meal plan for non-freshmen students.

Meal Plans, 2009-2010*	Semester Rate
250 Meal Plan + Dining Dollars	\$2,510.00
200 Meal Plan + Dining Dollars	\$2,060.00
19 Meal Plan + Dining Dollars	\$2,060.00
15 Meal Plan	\$1,963.00
14 Meal Plan	\$1,936.00
Bear Plans:	
160 Meals	\$1,420.00
120 Meals	\$1,075.00
80 Meals	\$725.00
50 Meals	\$460.00
25 Meals	\$230.00

\*For current tuition and pricing, visit [www.unco.edu/acctservices/budget/costs.htm](http://www.unco.edu/acctservices/budget/costs.htm).

## Room and Board Withdrawal Costs

Students totally withdrawing from their classes during a semester will be assessed room and board charges according to the pro-rata percentage assessment in the Total Withdrawal Section of the appropriate Registrar's Office homepage site at [www.registrar.unco.edu/registration/course/withdrawal.html](http://www.registrar.unco.edu/registration/course/withdrawal.html).

**Note:** 100% of non-refundable fees will be assessed. Some federally-funded aid programs mandate a different withdrawal/cancellation computation. See [www.registrar.unco.edu](http://www.registrar.unco.edu) each term for exact dates.

## DINING SERVICES

UNC Dining Services provides students, faculty, staff, and guests with a variety of meals in three dining settings. Tobey-Kendel Dining Room and Holmes Dining Hall provide an "all you care to eat" menu seven days a week with take-out meals provided Monday-Friday at both "Gourmet to Go" locations. Students can also choose to have a "Bear On The Run" for times when they want a hot meal but don't have time to sit down and eat in the dining room. Meal plans are also accepted for lunch at the UC Food Court. Varied menu choices encourage the practice of good nutrition, and a Registered Dietitian is on staff to assist with any special dietary needs. The Dash is available at both Holmes Dining Hall and Tobey-Kendel Dining Room and can accommodate students with special dietary needs or food allergies as well as to give customers an area where they can consistently find healthy items that follows specific nutritional guidelines. UNC students living off campus, at University Apartments or in Lawrenson Hall (excluding freshmen under age 20) can purchase either a Bear Plan or a Traditional Meal Plan. Students can use their Dining Dollars to purchase food and beverage items at any of our Retail Dining locations.

The University Center also provides services for the cash customer through Starbucks®, Taco Bell Express™, the UC Food Court and UC Food Court Express window. Coffee and light snacks are available at 3 Coffee Corner Locations, located in Michener Library, Kepner Hall and Turner Hall. Dining Services also provides Catering for special occasions, Athletics Concessions for sporting events and campus activities, and Vending throughout campus. For more information, contact the Dining Services Office at (970) 351-2652 or visit [www.unco.edu/dining](http://www.unco.edu/dining).

## Room and Board Withdrawal Costs

Students totally withdrawing from their classes during a semester will be assessed room and board charges according to the pro-rated percentage assessment in the Total Withdrawal Section of the appropriate Registrar's Office homepage site at [www.registrar.unco.edu/registration/course/withdrawal.html](http://www.registrar.unco.edu/registration/course/withdrawal.html).

**Note:** 100% of non-refundable fees will be assessed. Some federally-funded aid programs mandate a different withdrawal/cancellation computation. See [www.registrar.unco.edu](http://www.registrar.unco.edu) each term for exact dates.

## Semester Bear Plans

Dining facilities on campus provide convenience and economy. Student ID cards allow meal plan holders to dine in Holmes Dining, Tobey-Kendel Dining Room, and at the University Center Food Court. Cash and credit cards are accepted in all dining rooms and at Retail Dining operations.

UNC Dining Services offers Bear Plans to residents of Lawrenson Hall (excluding freshmen under age 20), University Apartments, as well as off-campus students. For daily menus, please call the Food Line at (970) 351-3663. For weekly menus, or more information, contact the Dining Services Office at (970) 351-2652, or [www.unco.edu/dining](http://www.unco.edu/dining).

## RATES

All rates quoted in this Catalog are approved by the Board of Trustees and are subject to change.

Rates quoted in the print and CD catalog relate to the 2008-2009 academic year. Rates for the 2009-2010 academic year, which begins with Fall semester 2008, were not available at the print publication of this document.

Updated information about tuition and fees will be available from Accounts Receivable after June 30 of each year.

\*For current tuition and pricing, visit [www.unco.edu/costs](http://www.unco.edu/costs).

**Undergraduate Student Definitions.** A student is considered to pay undergraduate tuition rates if he or she has not previously earned a baccalaureate degree.

## STUDENT FEES

General University, student and health service fees are committed to support essential student activities and programs, the Student Health Center and the Student Representative Council. Every student must pay these fees each semester, whether or not he/she makes use of the privileges and activities underwritten by the fees.

\*For current tuition and pricing, visit [www.unco.edu/costs](http://www.unco.edu/costs).

### Other Fees

In addition to general tuition and fees, and room and board rates for students who choose to purchase those services, a number of other fees have been established by the Board of Trustees. Such fees assessed for employment opportunity assistance services, transcripts, etc., refer to [www.unco.edu/costs](http://www.unco.edu/costs) for more information.

### Payment

By applying for admission, registering for classes or allowing charges to be added to their account, the student represents to UNC that they have the intention and ability to pay and they promise to pay for all charges placed on their account as well as any service charges or collection costs, if any, that may be due.

The University of Northern Colorado uses a secure electronic billing (e-billing) system. The student will receive notification of an available electronic bill (e-bill) via an e-mail sent to his or her university-assigned e-mail (BearMail) address. E-bill notifications will be sent only to the student unless the student has added an authorized payer to their student account and the authorized payer has submitted a valid e-mail address for receipt of e-bill notifications. Payment is due on or before the **Payment Due Date** shown on the electronic bill. Failure by a student or an authorized payer to check e-bill availability will not constitute valid grounds for waiving late-payment penalties or registration, grade, diploma or transcript holds.

Payments from Financial Aid will be automatically posted to the student's UNC bill. Any excess funds will be deposited to the student's checking account.

A service charge of 1.75% of the unpaid balance will be added to the student's account if payment is not received in the Cashier's Office by the due date. Service charges are figured on the student's account by applying the service charge rate to the previous balance owed at the billing date minus any credits made to the account during the previous billing cycle. The annual percentage rate (APR) that corresponds to this service charge is 21%.

The University will accept payment on the student's account by cash, check, money order, Visa, MasterCard, Discover, direct payment through financial aid and through the Credit Available for Student Employees at UNC (CASE-UNC). To learn more about the CASE-UNC plan please contact the Office of Student Employment in Carter Hall. Payments are accepted in person at the Cashier's Office in Carter Hall. Payments can also be made with MasterCard, Visa, Discover or check (ACH) through the Web. Visit our website: [www.unco.edu/acctservices/bursar/accrec.htm](http://www.unco.edu/acctservices/bursar/accrec.htm).

**The University of Northern Colorado will not register a student, release a diploma, provide a transcript, or supply employment opportunity assistance and other University services to any student or former student who has an outstanding financial obligation to the University other than a loan that is not yet due or on which payments are up-to-date. Also, failure to pay a financial obligation to the University when it is due may result in the student's account being placed with a collection agency and such**

**action reported to a credit bureau. In addition, the student's account may be charged legally allowable collection charges and attorney fees needed to collect or enforce the student's indebtedness.**

**Registration Cancellation.** The last day to drop all advance registered classes, without being assessed a fee is the first class day of each semester. During the Drop period, if a student drops all classes, he/she will incur a minimum charge of 10 percent (10%) of tuition and fees. When applicable, the student will also pay the new enrollment fee and housing deposit. Therefore, it is strongly recommended to drop all the classes by the first day of the semester to avoid a minimum 10% late withdrawal charge. The minimum 10% withdrawal charge does not apply if the student drops individual classes as a part of the schedule adjustment process.

**Fees for Class Withdrawals.** Withdrawal from an individual class is permitted until the midpoint of the course. Students can withdraw from individual classes via the Web through URSA or in person. The student must initiate the process of withdrawing from ALL classes in the Registrar's Office. A total withdrawal may be initiated through Friday of the 12th week of the term.

Changes in tuition, fees, and other charges can occur during the Add and Drop periods if the individual credit hours change from part-time to full-time or vice versa. After the Drop deadline, no changes in tuition and fees will occur unless the student totally withdraws from all classes. In this instance, the student is assessed a percentage of the tuition and fee costs based on the number of credits registered for and the date at the time of withdrawal.

To determine the actual percentages of tuition and fees and the varying withdrawal dates, refer to the Total Withdrawal Section in the appropriate Registrar's homepage site at [www.registrar.unco.edu/registration/course/withdrawal.html](http://www.registrar.unco.edu/registration/course/withdrawal.html).

Students who need to withdraw from all of their classes must do so by Friday of the 12th week (see above Registrar's Office site for actual date). This is the LAST day that students can withdraw from all classes for the semester.

**Note:** 100% of non-refundable fees will be assessed. These fees include course fees and online fees, graduation, health insurance, housing damages, ID card replacement, instructional fees, lab equipment not returned, library fines, lost athletic equipment, lost library books, new student fee, parking fines, phone features, returned check service charges, unpaid cash advances, etc. Some federally funded aid programs mandate a different withdrawal computation.

All amounts owed to the University are due and payable as of the date of the withdrawal. Only charges for tuition, general student service fees, room and board may be pro-rated based on the date of the withdrawal. All other charges are not pro-rated or refunded.

Individual classes may be dropped or added during the Add and Drop periods at no charge. Students with room and board are assessed amounts based upon rates, policies and procedures explained in the Residence Life contractual materials.

If a more complete explanation of the above policies is required or if individual circumstances warrant review, the student should contact the Bursar's Office.

## TUITION CLASSIFICATION: NON-RESIDENT, RESIDENT

Tuition and Fees are calculated on the total cumulative hours that a student is enrolled in each academic term.

Students auditing a course (taking it for no credit) are required to pay the same tuition and fees required when the course is taken for credit.

Tuition and fees for classes taken through Extended Studies may differ from on-campus charges and are subject to the Colorado Commission on Higher Education Extended Studies policies.

\*For current tuition and pricing, visit [www.unco.edu/costs](http://www.unco.edu/costs).



## TUITION CLASSIFICATION: OUT-OF-STATE AND IN-STATE

Students who are classified as in-state are permitted to enroll at the University at a significantly lower tuition rate because the University is assisted by the taxpayers of Colorado in addition to the student tuition and fees. The determination of a student's tuition status is provided for under State Law Title 23, Article 7, Colorado Revised Statutes 1997 Repl. Vol., 1994 Supplement.

A person who has been domiciled in Colorado for one year or more immediately preceding registration may be eligible for in-state tuition classification. A domicile is a person's true, fixed and permanent home and place of habitation. It is the place where the student intends to remain and where he/she expects to return to when he/she leaves, without intending to establish a new domicile elsewhere. It differs from the notion of residence or mere physical presence within the state. A person may have several places of residence, but may have only one true domicile at a given time.

A person is capable to begin establishment of a Colorado domicile if he/she is 22 years of age or if he/she has been emancipated. Evidence of emancipation includes the person's ability to meet all financial obligations including the cost of education, along with an affidavit from the student's parents stating their relinquishment of any claim or right to the care, custody and earnings of the minor.

Evidence that a Colorado domicile has been established includes the observance of all mandatory duties imposed on domiciliaries. State requirements concerning auto registration, driver's license and payment of state income tax must be met for the full one-year period.

A student's tuition classification is determined before or at the time of admission. If at a later date, the student thinks the classification is no longer correct, he/she must petition for a change in tuition classification.

Petitions can be submitted to the Tuition Classification Specialist in the Registrar's Office (Carter 3002) no later than the first day of classes for the given school term that the student desires a change in classification. Any student who is denied in-state classification after petitioning may appeal that decision in writing to the Tuition Classification Appeals Committee. The appeal must be submitted to the Tuition Classification Specialist no later than 10 days after the denial has been sent to the student. The decision rendered by the Tuition Classification Appeals Committee is the final University determination.

Petitioning for in-state tuition classification requires the student to complete a detailed form available in the Registrar's Office (Carter 3002). This form and other relevant information will be reviewed and a decision rendered in accordance with the state law and authorized procedures.

Armed Forces personnel and their dependents should contact the Tuition Classification Specialist for information regarding qualification for the lower in-state tuition rate

## WESTERN REGIONAL GRADUATE PROGRAM (WICHE)

Participating in WGRP (WICHE) are fourteen western states. If you are a resident of one of these states, and the program you wish to attend is in WGRP, you are eligible to participate. This allows students to pay tuition at the resident rate. The participating states include: Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming. For more information, please go to the Graduate School Website. [www.unco.edu/grad/pdf/wrgp.pdf](http://www.unco.edu/grad/pdf/wrgp.pdf)

## ALUMNI RELATIONS

[www.uncalumni.org](http://www.uncalumni.org).

Alumni Relations provides the link between the University and its graduates, offering news and information of other graduates and current campus events and coordinating the efforts of chapters throughout the country.

## BOOKSTORE

<http://www.bncollege.com>

Barnes & Noble College Bookstore, located on the lower level of the University Center, provides course textbooks and general reading books. Barnes & Noble also sells a large selection of University of Northern Colorado imprinted clothing, greeting cards, posters, school and art supplies and other necessities for students. Additional services include book buyback, special order books and book information. Barnes & Noble also serves as a ticket outlet for all UNC events. Patrons may purchase tickets to Athletics, Performing and Visual Arts, Club Sports and Student Activities events.

## BURSAR, OFFICE OF

[www.unco.edu/acctservices/bursar/accrec.htm](http://www.unco.edu/acctservices/bursar/accrec.htm)

Accounts Receivable, Loans Receivable, Collections and the Cashier's Office) prepares student billings; disperses financial aid; collects tuition, fees, room and board and other related charges; maintains and collects Federal Perkins Loans and university loans, and handles the cashier functions for the entire University.

## CAMPUS RECREATION

[www.unco.edu/campusrec](http://www.unco.edu/campusrec)

The Campus Recreation Center is a multi-purpose facility designed to serve the recreational and fitness needs of the students and employees at the University of Northern Colorado. The Department of Campus Recreation strives to provide activities and services for persons of all ability levels with varied interests, as well as create a supportive environment to ensure every participant has a positive and successful experience. Large activity spaces are available for strength training and conditioning, as well as three multi-purpose gymnasiums with hardwood floors (featuring a total of six basketball courts), and indoor 1/10 mile jogging track, three racquetball courts, an indoor climbing wall, two group fitness rooms, locker rooms, swimming pool and meeting spaces. Life Fitness, Precor, Cybex and Nautilus cardiovascular and weight equipment are available in our strength and conditioning area. As part of the student fee package, students are automatically members of the Campus Recreation Center and only need to bring their student ID to gain access to the facility.

The Fitness and Wellness programs provide integrated programs, resources and services, in order to promote healthy lifestyles, create opportunities for positive behavior modification and enhance student academic success. Approximately 35 Group Fitness classes are offered per week, in over 15 different class formats, including kickboxing, yoga, cycling, aquafit, circuit training and step. Personal Training services provide one-on-one instruction, incorporating cardiovascular, strength and body composition assessments, goal setting and health education with challenging workouts designed for your specific needs. Wellness Education programs and services include CPR and First Aid certification classes, meditation, and special events.

Intramural sports offer participants the opportunity to play organized sports in a recreational but competitive atmosphere, learn new sports skills, recreate in a social environment, and have fun with fellow friends and students. Each year, the Intramural Sports program offers a wide variety of team sports, team and individual tournaments, and rotating special events. Men's, women's, and coed divisions are offered in all sports. Club Sports provide opportunities to participate in competitive and recreational sports, and also



learn valuable life skills in organization, communication and leadership. Club Sports have been established to promote and develop the interests and skills of their members in a particular sport or recreational activity.

Campus Recreation has a variety of special events, activities and programs throughout the year ranging for all ability levels. Programs include RecFest, Climbing for Cans, Texas Hold'em tournaments, Video Game Nights, Movie Nights (in the pool and wall), Springfest and more. Visit our website for more information and an updated calendar of programs and events.

## THE CENTER FOR INTERNATIONAL EDUCATION

[www.unco.edu/cie](http://www.unco.edu/cie).

One of the major goals of the Center for International Education is to enhance the intellectual and cultural development of the university community by providing our visiting scholars and students the best opportunities for educational advancement. The academic support services provided by the Center are orientation activities and seminars.

- Immigration document processing and counseling
- Intensive English Language programs
- International student and scholar advising
- Cross cultural activities

## EXTENDED STUDIES, OFFICE OF

[www.unco.edu/extendedstudies](http://www.unco.edu/extendedstudies).

The Office of Extended Studies provides support services for academic colleges offering off-campus degree, certificate and licensure programs in Colorado. The Office of Extended Studies offers undergraduate career and professional development courses in Greeley and throughout the state as credit, non-credit for Continuing Education Units (CEU's). Contract courses are offered in collaboration with school districts and other sponsoring agencies. Independent study credit courses, offered by faculty in many programs, provide a flexible opportunity for students on and off campus to earn credit.

## INFORMATION TECHNOLOGY

<http://www.unco.edu/it>

Information Technology provides a variety of services designed to assist students in the pursuit of their academic careers. Computer labs, open to all students, are strategically located throughout the campus with the flagship facility, the Computer Commons, being located in the University Center and offers extended hours of availability. Access to campus computing resources and the Internet is provided through direct connections in the residence halls via a high speed data network called ResNet. The University also offers wireless internet connectivity in all academic buildings, the University Center, and Carter Hall. For additional information please access the Information Technology Website at <http://www.unco.edu/it>.

Information Technology also manages and operates Bear Logic, the campus technology store. Students, faculty and staff may obtain software and purchase computer supplies and equipment. For complete information about any of the services provided by Information Technology or help with technical problems call the Technical Support Center at (970) 351-4357 (351-HELP) or 1-800-545-2331.

## STUDENT ACTIVITIES

The Office of Student Activities provides students with involvement and leadership opportunities that enhance the academic experience. Students practice leadership skills, responsible citizenship, and develop management skills while making new friends and having fun.

**Charters student clubs and organizations.** Students may become involved in one of the 130 student groups which include academic societies, international, social, and political clubs and honorary organizations.

**Community Connections.** Students volunteer for community service activities such as Best Buddies, Spring Break Service Trips (a national program for service projects), Habitat for Humanity, and other Weld County service agency programs.

**Drug, Alcohol & Tobacco Education Program.** This nationally recognized program educates the campus community about alcohol, tobacco and other drug issues. The program supports alcohol-free alternative activities, provides training and education to students, staff, and faculty and refers students needing assistance with alcohol, tobacco or other drug problems to campus and community resources.

**Gay, Lesbian, Bisexual, Transgender Resource Office.** This office seeks to offer education and support to students, faculty and staff through student panels, educational programming, social and support groups, and a library of related materials.

**Student Representative Council (SRC).** This is the UNC student government comprised of nine officers, four voting representatives from the colleges and Residence Hall Association, three non-voting members, and representatives from PASC, SPEEC, GSA and the faculty. SRC activities include allocation of student fees, voicing student concerns and issues to the campus and community and supervising four services which are the Center for Peer Education, Legal Services, Off-Campus Housing and National Student Exchange.

**Graduate Student Association (GSA).** The Graduate Student Association is an organization that allows graduate students and faculty from all disciplines to interact and achieve higher standards of thinking and research excellence. The GSA provides students with the information they need to obtain research tools, be reimbursed for research expenses, and present their research in a professional manner.

**University Program Council (UPC).** This student-run, student-funded organization sponsors lectures, movies, comedians, concerts and other special events at low or no cost to students. Students obtain leadership experience in all aspects of program and event management while having fun and meeting new people.

## STUDENT SUPPORT SERVICES

Every student has specific and changing needs for emotional, physical, and social support or assistance that must be met to fulfill personal and academic goals. UNC provides a comprehensive range of support services.

**The Assault Survivors Advocacy Program (ASAP)** provides sexual assault prevention education as well as comprehensive advocacy services to student survivors of sexual assault. This includes emotional support, information, referral, and advocacy through the medical, legal, judicial and administrative systems.

**The UNC Counseling Center** provides psychological and psychiatric services to UNC students. In addition to individual, couples and group counseling, the Center provides consultation to faculty, staff and parents who are concerned about students. The UNC Counseling Center also presents campus-wide educational programs and workshops such as test anxiety reduction, coping with change, time management and a wide variety of other mental health topics focused on the prevention of distress and difficulties and the development of positive life coping skills. The UNC Counseling Center is located in Cassidy Hall and can be contacted at (970) 351-2496.

**The Student Health Center** provides primary health care services to UNC students. Appointments can be scheduled with physicians and nurse practitioners. Walk-ins are welcome. The Center is located on the first floor of Cassidy Hall. The Health Center is able to do insurance billing for most insurance plans.

The Women's Resource Center provides educational programs, speakers, performers, resources and opportunities for students interested in women's initiatives and women's leadership. The Center is located in Scott-Willcoxon Hall. The Scott-Willcoxon Hall also houses the Stryker Institute for Leadership Development.

## CAREER SERVICES

This office helps students and alumni choose their academic majors and careers, obtain internships and full-time professional jobs and apply to graduate schools. The services include testing, career counseling, career planning classes and workshops, resume critiques, practice interviews, internship and job fairs, on-campus interviews, career and job search resources. The office is located on the second floor of the University Center.

For more information, access the Career Services website at [www.unco.edu/careers](http://www.unco.edu/careers), email [career\\_services@unco.edu](mailto:career_services@unco.edu) or call (970) 351-2121.

## DISABILITY SUPPORT SERVICES (DSS)

This office provides equal opportunities for students with documented disabilities to pursue their educational goals through access, accommodations and advocacy. Services include interpreters, test accommodations, textbook conversion to alternative format, assistive technology and training, learning strategy workshops and TTY. DSS can also assist students with specific needs such as orientation training and obtaining volunteer note takers. SEED (Supporting and Empowering through Education about Disabilities), a student organization, is also available.

Students must submit disability documentation to DSS, meet with the director to discuss eligibility and services, and request disability accommodations in a timely manner. Call (970) 351-2289 (voice and TTY) or e-mail [ann.anderson@unco.edu](mailto:ann.anderson@unco.edu).

## MULTICULTURAL AFFAIRS, OFFICE OF

This office coordinates the programs of UNC's cultural centers, the Center for Human Enrichment and Cumbres. Centers and services include:

- **Asian/Pacific American Student Services** provides academic and cultural programs/events, advising, a resource room, computer labs, and support with emphasis on Asian/Pacific American students but is open to all students.
- **Cesar Chavez Cultural Center** provides cultural, social and academic support to all students, with a focused emphasis on the Hispanic/Latino student, as well as programs, cultural events, a resource room, and support to students in cultural, social and academic areas.
- **Marcus Garvey Cultural Center** provides academic, cultural and social support to African-American students, as well as programs, cultural events and resources for all students throughout the year.
- **Native American Student Services** enhances the diversity of the University through cultural programming and events. Academic, cultural and social support is also provided to all students with an emphasis on Native American students.

## THE UNIVERSITY CENTER

Located at the corner of 10th Avenue and 20th Street, the University Center (UC) provides cultural, educational, social, leisure, and co-curricular activities for the University community and guests.

The UC houses the Center for International Education, Career Services, and is the home for Student Activities.

A variety of merchants serve the campus community on the UC lower level including several food vendors (Starbucks, Food Court and Taco Bell Express), the Barnes & Noble College Bookstore, FedEx Kinkos Copy Center, Bear Logic, Ticket Outlet in Barnes & Noble, Wells Fargo Customer Service Center, James Campus Salon, and vending areas.

The UC Computer Commons offers students 24-hour access during the week and provides students with IBM compatible and Macintosh computers.

Lounges, meeting rooms, grand ballrooms, and other facilities are also available. The University Center hosts an exceptional range of events and programs with attendance surpassing 200,000 annually.

UNC Card as a discounted calling card. As a financial tool, the UNC Card functions as an ATM/Debit Card and permits direct deposit of financial aid and student payroll checks to a free Wells Fargo Bank account. For alternative bank options, stop by the Card Office.

The UNC Card Office is located on the main level of the University Center adjacent to the Center for International Education and the Wells Fargo Customer Service Center is located on the lower level.

## UNIVERSITY LIBRARIES

The **James A. Michener Library**, named for one of America's most popular authors (a UNC alumnus and former faculty member), maintains a primary collection of approximately 1.5 million units of hardbound volumes, periodicals, monographs, government documents, archival materials, maps, software programs, videos, and microforms. Opportunities to borrow materials are available to all Colorado citizens. Services include bibliographic instruction in the state-of-the-art Instruction Center, interlibrary loan, reference, circulation, electronic reserves, and access to information via on-line systems and the Internet.

Access to library materials and resources is provided through *The Source*, an on-line Public Access Catalog. In cooperation with the Colorado Alliance of Research Libraries, access is provided to the holdings of libraries throughout Colorado as well as the collections of hundreds of libraries across the country. In addition, indexed access is provided to more than 3 million articles and databases, including full-text.

The Interlibrary Loan Service obtains library materials for UNC students and faculty from within the state and nation as well as from foreign libraries. The University Libraries also has a service that allows students to request materials directly from Colorado libraries participating in *Prospector*. Through the on-line catalog *The Source*, *Prospector* provides the student direct access to and the ability to borrow materials from more than twenty participating libraries in Colorado and Wyoming.

The **Adaptive Technology Room**, located on the main level of Michener Library, is available to individuals with disabilities who use assistive technology to retrieve and view information. The hardware/software includes: screen reading software, screen enlarging software, scan/read software, Braille translating software, Braille printer, trackball, large monitor, internet access, and closed circuit television. UNC students may be trained to use the technology at **Disability Support Services**, (970) 351-2289.

The **University Libraries** have been designated as the repository for the works of James A. Michener. The **James A. Michener Special Collection** includes manuscripts, personal papers, research materials and publications that are available

to researchers, faculty, and students who want to further explore the works of the famous author. The **University Archives** provides access to materials dealing with the history of the University.

The **Skinner Music Library** includes a listening laboratory, a bibliographic instruction classroom, a group study room, study alcoves and carrels. Comprehensive holdings of scores, recordings, periodicals, and monographs are available to the academic community.

## UNIVERSITY POLICE DEPARTMENT (UNCPD)

The UNCPD provides law enforcement services to the campus. It is staffed 24 hours a day year-round with professional, full-time, state-certified police officers. This office is responsible for preventive police patrols, traffic and parking enforcement, response to medical calls, crime prevention efforts, as well as criminal investigations. The UNC Police Department is accredited by the Colorado Association of Chiefs of Police on Professional Standards. You may visit our website at <http://www.unco.edu/police>.

# POLICIES AND PROCEDURES

## DEAN OF STUDENTS, OFFICE OF

This office seeks to enhance and recognize student learning and personal responsibility through:

- Resolving student issues which may include consultation with faculty and staff;
- Serving as an information and referral center for the campus community;
- Coordinating a student recognition and awards program for academic and leadership achievement; and
- Holding students accountable who have exhibited conduct incompatible with the academic mission of the University.

To contact this office, call (970) 351-2796 or visit e-mail [www@unco.edu/dos](mailto:www@unco.edu/dos).

## Student Conduct Code

Students and recognized student organizations at the University of Northern Colorado possess certain rights and responsibilities designed to promote a safe and respectful living and learning environment. The University values freedom of expression and the respectful exchange of diverse viewpoints. By choosing to attend the University of Northern Colorado, students agree to uphold standards of conduct that have been developed to guarantee students freedom to learn and to protect the fundamental rights of others. In an effort to foster tolerance, civility, and accountability, the student conduct process aims to serve as a learning experience that can result in growth and personal understanding of one's responsibilities and privileges within both the university community and the greater community.

The University of Northern Colorado Student Conduct Code shall apply to conduct that occurs on University premises, at University sponsored activities, and to off-campus conduct that adversely affects the University community, poses a threat to safety of persons or property, or damages the institution's reputation or relationship with the greater community. In addition, University of Northern Colorado, in collaboration with the Greeley community, may respond to student violations of community-based laws and ordinances designed to protect civility and quality of life. The Dean of Students or designee shall decide whether the Student Conduct Code shall be applied to conduct occurring off campus, on a case by case basis, at his/her sole discretion.

Each student shall be responsible for his/her conduct from the time of application for admission through the actual awarding of a degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment (and

even if his or her conduct is not discovered until after a degree is awarded). The Student Code shall apply to a student's conduct even if the student withdraws from school while a disciplinary matter is pending.

## Conduct — Rules and Regulations

Any student found to have committed or to have attempted to commit the following misconduct is subject to disciplinary action:

Acts of dishonesty, including but not limited to the following:

1. Cheating, plagiarism, or other forms of academic dishonesty.
  - a. Furnishing false information to any University official.
  - b. Forgery, alteration, or misuse of any instrument of identification, University document, or record.
2. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other University activities, including its public service functions on or off campus, or other authorized non-University activities when conduct occurs on University premises.
3. Physical abuse, verbal abuse, threats, intimidation, coercion, and/or other conduct which threatens or endangers the health or safety of any person, including the student.
4. Repeated conduct which would cause a reasonable person to fear for his/her safety or to alter his/her activities in response to the repeated conduct. Such repeated conduct may include, but is not limited to, any of the following: following, approaching, contacting, or placing under surveillance a person, a member of that person's family, or close acquaintance, whether or not conversation ensues.
5. Harassment, which consists of any verbal, visual, written or physical conduct that is sufficiently severe, persistent or pervasive that it adversely affects, or has the purpose or logical consequence of interfering with any student's educational program or creates an intimidating, hostile or offensive environment within the University community.
  - a. Sexual Harassment, which includes, but is not limited to non-consensual verbal or physical conduct related to sex which unreasonably interferes with an individual's work, educational, or social performance or creates an intimidating, hostile, or offensive work, educational, or social environment; or is a violation of an individual's privacy, at the University, on University-owned or controlled property, at university sponsored or supervised activities, or at functions of recognized student organizations.
  - b. Bias-Related Harassment, which includes harassment of a person or group because of factors such as race, ethnicity, religion, gender, sexual orientation, age, creed, national origin, disability, political affiliation or veteran status.
6. Sexual Misconduct, which is defined as:
  - a. Sexual conduct that is without consent by any party. It is the obligation of any person to obtain active consent from the other person prior to sexual contact. Examples of misconduct include, but are not limited to, touching another's genitals/breasts without consent; having sexual contact with someone whose decision making ability is compromised (e.g. from alcohol or drug usage); or continuing sexual activity after either party has made it clear verbally or by conduct, that they do not wish to have physical contact.
  - b. Obscene or indecent behavior, which includes, but is not limited to, exposure of one's sexual organs or the display of sexual behavior that would reasonably be offensive to others; deliberate observation of others for sexual purposes without their consent; taking or posting of photographs/images of a sexual nature without consent; possession or distribution of illegal pornography; or viewing or posting pornography in public venues.
7. Theft of and/or damage to property of the University or property of a member of the University community or



- other personal or public property, on or off campus.
8. Hazing, defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, a group or organization. The express or implied consent of the victim will not be a defense. Apathy or acquiescence in the presence of hazing are not neutral acts; they are violations of this rule.
  9. Failure to comply with directions of University officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to these persons when requested to do so.
  10. Unauthorized possession, duplication or use of keys to any University premises or unauthorized entry to or use of University premises.
  11. Violation of any University policy rule, or regulation published in hard copy or available electronically on the University website, including, but not limited to, the Residence Life Handbook, Student-Athlete Handbook, UNC Computer, Internet & Electronic Communications Policies and Procedures, or any academic college policies.
  12. Violations of federal, state, and municipal laws, or any other conduct not included above, which unreasonably interferes with the operations of the University, and the pursuit of its educational purposes and objectives or the rights of others, or which renders a person or organization unfit or unsuitable for continued association or affiliation with the University.
  13. Use, possession, manufacturing, or distribution of marijuana, heroin, narcotics, or other controlled substances except as expressly permitted by law.
  14. Public intoxication, use, possession, manufacturing, or distribution of alcoholic beverages except as expressly permitted by University regulations or by law. Alcoholic beverages may not, in any circumstance, be used by, property of a member of the University community or possessed by or distributed to any person under twenty-one (21) years of age.
  15. Possession of firearms, ammunition, explosives, other weapons, or dangerous chemical on University premises or use of any object in a way that harms, threatens, or causes fear to others on or off campus. Weapons include, but are not limited to, any object or substance designed to inflict a wound, cause injury, or incapacitate, including, but not limited to, all firearms, pellet guns, switchblade knives, or instruments designed to look like any of the above. Concealed weapons may only be carried by sworn law enforcement officers. All other concealed weapons, whether carrying with a lawful permit or otherwise, are strictly prohibited on all campus premises.
  16. Participating in an on-campus or off-campus demonstration, riot or activity that disrupts the normal operations of the University and/or infringes on the rights of other members of the University community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area.
  17. Obstruction of the free flow of pedestrian or vehicular traffic on University premises or at University sponsored or supervised functions.
  18. Conduct that is disorderly, lewd, or indecent; breach of peace or aiding, abetting, or procuring another person to breach the peace on University premises or at functions sponsored by, or participated in by, the University or members of the academic community. Disorderly conduct also includes, but is not limited to, any unauthorized use of electronic or other devices to make an audio or video record of any person without his/her knowledge, or without his/her effective consent when such a recording is likely to cause injury or distress.
  19. Abuse of the Student Conduct System, including but not limited to:
    - a. Failure to obey the notice from a Student Conduct Board or University official to appear for a meeting or hearing as part of the Student Conduct System.
    - b. Falsification, distortion, or misrepresentation of information before a Student Conduct Board.
    - c. Disruption or interference with the orderly conduct of a Student Conduct Board proceeding.
    - d. Institution of a student conduct code proceeding in bad faith.
    - e. Attempting to influence the impartiality of a member of a Student Conduct Board prior to, during, and/or during the course of, the Student Conduct Board proceeding.
    - f. Harassment (verbal or physical) and/or intimidation of a member of a Student Conduct Board prior to, during, and/or after a student conduct proceeding.
    - g. Failure to comply with the sanction(s) imposed under the Student Conduct Code.
    - h. Influencing or attempting to influence another person to commit an abuse of the student conduct system.
  20. Intentional initiation or circulation of any false report, warning, or threat of fire, bombs, or explosives on University-owned or controlled property, at University-sponsored or supervised functions or at functions or facilities of recognized student organizations.
  21. Retaliation against any individual. Retaliation is defined as any conduct which serves as a reprisal with the intent of causing physical or psychological pain. Retaliation includes, but is not limited to, unwelcome or repeated contacts by telephone, by letter, in person, or by third party; damaging or vandalizing personal property; offensive acts/gestures; overt threats, whether or not they were actually carried out; or any conduct that would instill fear and trepidation in the victim.

**The entire Student Code of Conduct, including hearing procedures and definitions of terms, can be found on the Dean of Students Office website at [www.unco.edu/dos/handbook](http://www.unco.edu/dos/handbook).**

## PLAGIARISM

The following is the approved definition of plagiarism: Plagiarism is the act of appropriating the written, artistic, or musical composition of another, or portions thereof; or the ideas, language, or symbols of same and passing them off as the product of one's own mind. Plagiarism includes not only the exact duplication of another's work but also the lifting or a substantial or essential portion thereof.

Regarding written work in particular, direct quotations, statements which are a result of paraphrasing or summarizing the work of another, and other information which is not considered common knowledge must be cited or acknowledged, usually in a form of a footnote. Quotation marks or a proper form of indentation shall be used to indicate all direct quotes.

As long as a student adequately acknowledges his/her sources and as long as there is no reason to believe that the student has attempted to pose as the originator, the student will not be charged with plagiarism even though the form of the acknowledgement may be unacceptable. However, students should be aware that most professors require certain forms of acknowledgement and some may evaluate a project on the basis of form.

## ACADEMIC FREEDOM, RIGHTS AND RESPONSIBILITIES OF STUDENTS

The University has established policies and procedures that reflect concern for student freedom, rights and responsibilities. Essentially, students can expect protection against improper academic evaluation and protection of the right to due process in academic and disciplinary proceedings. The student can also expect to be held responsible for performance and conduct in the classroom and on the campus.



For more information, students should obtain a copy of the Student's Rights and Responsibilities document from the Dean of Students' Office, University Center.

## ATTENDANCE

Regular attendance in all classes is assumed. Each instructor determines the relationship between class attendance, the objectives of the class and the student's grade. The instructor is responsible for informing students of attendance policies and the effect of attendance on their grade. The student is responsible for knowing the policy of each course in which he or she enrolls.

Only the instructor can approve a student request to be absent from class. The student is responsible for requesting such approval when absence is unavoidable.

Students involved in University-sponsored activities may need to be excused from a class, lab, or studio meeting. In all instances it is the student's responsibility to present a written request for permission for the absence from the instructor. The student must also discuss how the absence will affect his/her ability to meet the course requirements. Students should do this as early in the semester as possible. While instructors should seek to the greatest extent possible, consistent with course requirements, to make reasonable accommodations for a student involved in University-sponsored activities, students should recognize that not every course can accommodate absences, and neither the absence (nor the notification of an absence) relieves them from meeting the course requirements.

In recognition of the diversity of the student body, the University provides that a student may request an excused absence from class for participation in religious observances. In such instances, it is the student's responsibility to request, in writing, that the instructor permit the absence. The student must also discuss how the absence will affect the student's ability to meet the course requirements. A student should make any such requests before the course drop deadline for the semester.

Attendance during the first two class sessions is required. The instructor has the option to drop a student from class if he or she does not attend the first two hours during which the class meets, in order to allow other students to enroll. Not all instructors will exercise this option; therefore, a student should not assume that non-attendance will automatically drop him or her from class.

## AUTHORIZED UNIVERSITY CREDITS

Graduate credit is granted for courses taught by a faculty member who has been appointed to the Graduate Faculty or appointed as a Graduate Lecturer. With the exception of special assignments for XXX 513 courses approved by the college and Graduate Dean, no graduate credit is granted for any course taught by a teaching assistant who is pursuing an advanced degree at this institution, or a faculty member who has not been approved for Graduate Faculty or Graduate Lecturer status.

## COURSE DESIGNATIONS

**Subject.** Each course is assigned a subject code that identifies the discipline, field or program offering the course. For example, course numbers in Audiology and Speech-Language Sciences are preceded by ASLS; course numbers in Mathematics are preceded by MATH; and courses in Visual Arts are preceded by ART.

**Numbers.** Five groups are identified by course numbers, generally to indicate the difficulty of a course and its location on a continuum of study that leads to general mastery of the content and methodology of a discipline:

- Basic skills courses - 001 through 099 range are not counted in cumulative credits, total credits toward graduation, grade-point-average, nor for financial aid purposes.
- Lower division courses - the 100 range for freshmen and the 200 range for sophomores.

- Upper division courses - the 300 range for juniors and the 400 range for seniors.
- Master's level courses - the 500 and 600 ranges. Juniors and seniors with a cumulative grade-point-average of 3.00 or higher may be admitted to 500-level courses but no undergraduates may be admitted to course numbers above the 500 range.
- Doctoral and Specialist level courses - the 700 range.

Occasionally, courses that do not appear in the Catalog may appear in the Schedule of Classes ([www.unco.edu/sched/](http://www.unco.edu/sched/)). These course numbers end in "98" and are considered experimental. For example, an experimental course in geology might be GEOL 398. Courses ending in "98" cannot be used to meet Liberal Arts Core requirements.

## COURSE LOAD

Course load limitations for graduate students apply to any combination of all courses taken on-campus, off-campus, or on-line while an individual is enrolled as a graduate student in a graduate degree program, a nondegree certification program, or any combination thereof. The maximum load for a graduate student is 17 hours per semester. This information may vary during summer terms; students should check the Registrar's Website ([www.registrar.unco.edu](http://www.registrar.unco.edu)) for correct information.

- **Financial aid and verification of enrollment.** Full-time enrollment in nine credit hours for graduate students.
- **Half-time classification.** Graduate students enrolled in five to eight credit hours are classified as half-time. Part-time enrollment is four credit hours or less.
- **Overload.** More than 17 credit hours per semester for graduate students is considered an overload.

Graduate students receive overload approval from their academic advisor. Students who have lower than a 3.00 GPA but have extenuating circumstances may petition for an overload to the dean of the Graduate School. All approvals must be forwarded to the Graduate School.

## COLORADO RECIPROCAL COURSE AGREEMENT

A full-time graduate student on one campus may take one approved course per term without additional tuition at one of the following institutions: the University of Colorado, Colorado State University, and Colorado School of Mines. Such work will appear on the UNC transcript. Doctoral students may count the work toward their residency requirement.

Those students interested in this opportunity may obtain the guidelines and the proper form in the Registrar's Office. Forms must be completed and approved before the term that a student proposes to take a course.

## CONTINUOUS REGISTRATION FOR GRADUATE STUDENTS

All graduate students are required to register continuously from the time they first enroll in their graduate degree program until the semester or term in which they graduate.

Students must be enrolled for at least 1 credit hour each academic semester (fall and spring).

Students must also register for at least 3 semester hours the semester (or summer term) in which they take examinations (including written and oral comprehensive examinations or approved equivalent and dissertation defenses) and the semester (or summer term) in which they graduate.

Transfer of credit from other institutions will not be considered in lieu of continuous registration.

Satisfying the continuous registration requirement and maintaining status as a graduate student will allow students to utilize various University facilities or faculty time.

**Failure to Follow Continuous Registration Policy for Graduate Students.** Effective fall 2009, the University's policy will require a continuous registration fee of \$150 per semester for all graduate students (both on-and off-campus) who are not registered for academic courses.

Students who fail to register continuously for one year will be notified with a letter of warning. At the beginning of the fourth semester of non-enrollment the student will be classified as inactive. Inactive students will need to re-apply to the Graduate School, repay application fee and be re-accepted by their program and the Graduate Dean if they wish to resume their studies. Acceptance is not guaranteed. Additional coursework and examinations may be required for students who are re-admitted.

## **COURSE REPEAT POLICY**

Although approved courses may be repeated for credit, some courses may have limits to the amount of credit earned. Repeated courses are recorded on the transcript for every individual registration; all letter grades count toward the cumulative grade point average. A non-repeatable course may be repeated but will be counted in total credits toward graduation only one time.

## **COURSEWORK COUNTED IN NEXT HIGHER DEGREE**

While completing one degree, students may count a maximum of 12 graduate credits applicable to the next higher degree. Such dual enrollment is limited to two consecutive semesters. All credits applicable to graduate degrees must be earned within the time limits specified for each degree program. The initial date for the next higher degree will be the date of the first course credits counted toward that degree. Students will be accountable for the final examination in the courses taken for the next higher degree.

If students desire to count work toward the next higher degree, they must have:

1. applied for and been admitted to the next higher degree program;
2. applied for graduation in the current degree program;
3. submitted a "Petition to Count Work Toward the Next Higher Degree" form to the Graduate School before starting any courses that are to count on the next higher degree. [www.unco.edu/grad/forms/GS2001.pdf](http://www.unco.edu/grad/forms/GS2001.pdf)

Seniors registering for master's degree work according to this procedure will continue to be classified as undergraduates until they have been awarded their baccalaureate degrees.

## **CREDIT BY COURSE NUMBER**

Graduate students may not count courses numbered 100-499 toward graduate degree programs; courses numbered 700-799 may be taken for specialist or doctoral credit only. Upon prior written permission of the instructor, the major advisor, and the school director, an undergraduate student may take 500-level courses. Only those undergraduate students who have been previously approved to count work toward the next higher degree will be permitted to take 600-level courses.

Courses at the university are sequentially numbered. courses numbered 100-499 are for undergraduate credit, and courses numbered 500 to 799 are for graduate credit.

## **DISTANCE DELIVERED COURSE CREDIT**

Courses delivered through alternative means (e.g., distance delivery, independent studies, communications technology or computer assisted delivery) must be approved by the sponsoring school, college dean and the Dean of the Graduate School to be considered for graduate program credit. Courses shall have a defined relationship and applicability to degree and/or licensure programs as electives, support courses, or courses that fulfill program requirements.

## **ENRICHMENT CREDITS FROM OTHER INSTITUTIONS**

At the request of the student or the school, the Graduate Dean may approve the graduate student to attend another accredited institution offering graduate degrees to earn a maximum of 10 semester hours of specific course credit.

## **FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT**

The University maintains an educational record for each student who is or has been enrolled at the University. In accordance with the Family Educational Rights and Privacy Act of 1974, as amended, the following student rights are covered by the Act and afforded to all eligible students at the University. See [www.unco.edu/regrec/FERPA/FERPA.htm](http://www.unco.edu/regrec/FERPA/FERPA.htm) for "eligible student" definition.

1. The right to inspect and review information contained in the student's educational records.

Students should submit to the Registrar's Office written requests that identify the record(s) they wish to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected.

2. The right to request amendment of the contents of the student's educational records if believed to be inaccurate, misleading, or otherwise in violation of the student's privacy or other rights.

Any student who believes that his/her education records contain information that is inaccurate or misleading or is otherwise in violation of his/her privacy or other rights or who believes that his/her records have been or are being maintained or processed in violation of his/her privacy or other rights, may discuss his/her concerns informally with the Registrar's Office. If the decision of that person is in agreement with the student's request, the appropriate records shall be amended and the student shall be notified in writing of the amendment(s). If the decision is not in agreement, the student shall be notified within thirty (30) calendar days that the records will not be amended and the student shall be notified by the official of the student's right to a hearing.

Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to prevent disclosure without consent, with certain exceptions, of personally identifiable information from the student's educational records. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. "School officials" shall mean any person who is a trustee, officer, agent or employee of the University. "Legitimate educational interest" shall mean any authorized interest or activity undertaken in the name of the University for which access to an education record is necessary or appropriate to the proper performance of the undertaking. It shall include, without limitation, access by a student's instructor, division head, dean, the chief academic administrator, the president, a trustee, the custodian of the University records, the alumni administrator, legal counsel, the financial aid administrator, administrators charged with maintaining education records, the staff and subordinates of the foregoing, and others authorized by the President to the extent the foregoing persons are acting within the course and scope of their employment or authority.
4. The right to file complaints with the U.S. Department of Education concerning alleged failures by the University to comply with the provisions of the Act. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue S.W., Washington, D.C. 20202-4605.

Each of these rights with any limitations or exceptions is explained in the University's policy statement, a copy of which may be obtained from the Registrar's Office.

The University may provide "Directory Information" in accordance with the provisions of the Act without the written consent of an eligible student unless it is requested in writing that such information not be disclosed (see below). The items listed below are designated as Directory Information and may be released about any student for any purpose at the discretion of the University unless a written request for nondisclosure is on file:

- Category I: Name, address(es), e-mail address, birth date, telephone number(s), dates of attendance, classification, and enrollment status.
- Category II: The most recent institution attended, major field of study, honors, awards and publications, degree(s) conferred and conferred date(s), degrees pursued or being pursued.
- Category III: Past and present participation in officially recognized sports and activities, physical factors of athletes (height and weight).

Currently enrolled students may prohibit general disclosure of this Directory Information by notifying the Registrar's Office in writing within 10 calendar days after the first scheduled class-day of each fall term. The University will honor the request until the student notifies the Registrar's Office in writing of intent to allow release of Directory Information. The student should carefully consider the consequences of any decision to withhold Directory Information. Regardless of the effect upon the student, the University assumes no liability that may arise out of its compliance with a request that such information be withheld. It will be assumed that the failure on the part of a student to request the withholding of Directory Information indicates the student's consent to disclosure.

Directory information may be disclosed through a variety of methods including, but not limited to, paper, electronic, voice and other means. Any questions concerning the student's rights and responsibilities under the Family Educational Rights and Privacy Act should be referred to the Registrar's Office.

## FINAL EXAMINATIONS

All final examination periods are 150 minutes in length. Examinations are conducted in the same classroom used throughout the semester unless alternative arrangements are made with the room scheduling department in the Events/Scheduling Office at the University Center.

Faculty should alert students to changes in final examination times or locations before the testing date. With the approval of the school director, the final examination may be eliminated by an instructor who considers it unnecessary. If no final examination is given, class will continue through the last week of the semester. In such cases, classes will meet at the times shown on the final examination schedule. The Final exam schedule is available at [www.registrar.unco.edu](http://www.registrar.unco.edu).

Each student registered for credit in a course must attend the final examination unless the student has made prior arrangements to be excused by the instructor. In extreme instances, a final examination may be rescheduled by the instructor, provided the change is coordinated with the appropriate dean's office and approved by the school director.

- If a student has three or more final examinations scheduled for one day, the student may negotiate a time change with the instructors involved. This negotiation should take place not less than one week before the scheduled examinations. If the parties involved cannot find a mutually agreeable time, the Office of Academic Affairs will indicate courses for which a change must be made. Laboratory sessions will not meet during the final examination period. Laboratory examinations should be given before final examination week.

## FULL-TIME AND PART-TIME ENROLLMENT STATUS

Full-time status for the health insurance requirement and verification of enrollment for health insurance purposes is nine credit hours. Some health insurance carriers require enrollment in a minimum of 12 credits. Check with your health insurance company for their minimum enrollment requirement.

Full-time for financial aid purposes and enrollment verification is 9 credit hours or more. Enrollment in 5 to 8 credit hours are classified as half-time. Less than half-time or part-time is 4 credit hours or less.

## GRADE POINT AVERAGE

The University operates on a 4.00 grade point system. Under "Grading" in this section of the catalog, the "Standard Grading" table contains the grade point value of individual grades.

To compute a grade point average, first remove all basic skills courses (course numbers 001-099) and all courses that carry the grades: S, U, W, UW, NR, I, NC, and grades with a period or asterisk(s). Multiply the credit hours for each remaining course by the grade point value of the grade. Total the credit hours and grade points. Divide the grade points by the credit hours. Grade point averages are calculated to 3 decimal points and displayed as two decimal points rounded on academic transcripts and degree evaluations.

If a course is repeated, all graded earned are used in determining the GPA. Grade received at other institutions are not included in the UNC GPA.

### GPA Example:

Grade	Credit	Points	GPA
A = 4.000	3	12.000	
B- = 2.667	5	13.335	
C+ = 2.334	3	7.002	
I = N/A	N/A	N/A	
<b>Total</b>	11	32.337	= 2.939 GPA

## GRADE SUBMISSION AND CORRECTIONS

Faculty must submit grades via the Web to the Registrar's Office by 5 pm of the third working day after the end of a course. Grade changes or corrections must be submitted within the first two weeks of the following semester. Spring term grade changes are also due the first two weeks of Summer term. Grade change requests are submitted on special grade report forms signed by the instructor and school director. Forms are available from program offices. No grade change request forms delivered by students will be accepted. Additional information is available at [www.registrar.unco.edu](http://www.registrar.unco.edu).



## GRADING

Standard Grading	Quality Points
A = superior	4.00
A- = A minus	3.67
B+ = B plus	3.34
B = above average	3.00
B- = B minus	2.67
C+ = C plus	2.34
C = average	2.00
C- = C minus	1.67
D+ = D plus	1.34
D = poor, passing	1.00
D- = D minus, passing	0.67
F = failure	0.00
S = satisfactory - credit granted	++
U = unsatisfactory - no credit	+
IP = in progress	+
I = incomplete	+
UW = unauthorized withdrawal	+
W = approved withdrawal	+
NC = no credit (audit)	+
NR = no report	+
NG = no grade	+
CR = credit granted	++
Grade* = basic skills, fresh-start, and grade forgiveness	+
Grade** = fresh-start prior to March 1993	++
Grade(.) = basic skills	+

+Credits not used to compute grade point average (GPA) and not counted toward graduation.

++Credits not used to compute GPA but counted toward graduation.

A "W" indicates an approved withdrawal from the course and is assigned only when the student has completed the official withdrawal processes.

A "UW" indicates an unauthorized withdrawal and is assigned **only** when the student has **never** attended the class for which he/she enrolled.

An "I" is assigned due to unanticipated circumstances the **last week** of the term that make the student unable to complete course requirements within the allotted time (e.g. he/she missed the final examination due to sickness, an emergency in the family).

The instructor must submit to the school director, a written notice of the specific coursework to be completed before the final grade is determined; a copy is kept in the school and one is provided to the student.

To amend a grade of "I" with an earned grade on a student's transcript, the student must complete all incomplete course work by the last day of the **next semester, including summer term**.

If the course requirements are not completed within the time limitation and the grade received in the Registrar's Office, the grade will be recorded on the academic record as a failing or unsatisfactory grade. Student may petition for a one-term extension through the Registrar's Office if extenuating circumstances are warranted. For more information contact the Registrar's office (970) 351-2231.

The grade of "NR" is used for honors courses, theses, dissertations, and other courses that have been granted approval for "NR" grading. The "NR" is assigned when the coursework requires longer than a semester to complete. The "NR" will be replaced by the appropriate grade when the work is completed.

**Each course syllabus will include specific grading and evaluation method.**

## IMMUNIZATION REGULATION

[www.unco.edu/shc](http://www.unco.edu/shc)

Colorado State law requires that students who were born after January 1, 1957, show proof of immunization prior to registering for classes. The required immunizations are against mumps (two doses), measles, (two doses), and rubella (two doses). **All on-campus students who are admitted to UNC must submit a Certificate of Immunization form. Students must submit a completed Certificate of Immunization form to Student Health Services before they will be allowed to register for classes. Students who fail to comply with this requirement will not be allowed to register for classes.**

Individuals who are unable to be immunized due to medical, religious, or personal reasons are exempt from this regulation if they provide a signed Certificate of Exemption form. In the event of an outbreak of illness on campus, individuals who do not have proof of immunization or who have signed a Certificate of Exemption form will be subject to exclusion from classes and quarantine.

It is a UNC requirement for all incoming international students from countries where TB is endemic to undergo TB screening at the start of their first semester at UNC. Proof of a TB screening test must be submitted to Student Health Services by the 10th day of classes of their first semester at UNC. Students who fail to comply with this requirement will have a hold placed on their registration. Students should contact the Center for International Education (CIE) office at (970)351-2396 for additional information about this requirement.

The meningitis vaccine is not currently required, however it is highly recommended. Colorado state law does require that you provide the University with acknowledgement that you have received information regarding meningitis. This is accomplished as part of the online housing contract. Please discuss with a health care professional. Students interested in getting the meningitis vaccine should contact the Student Health Center at (970)351-2412 to make an appointment.

## INSURANCE REQUIREMENT FOR ALL STUDENTS

UNC's Board of Trustees requires that all students registered for at least 9 or more on-campus credit hours have health insurance. International students who are registered for at least 9 or more on-campus credit hours must also have health insurance.

Students enrolled for 9 or more on-campus credit hours will automatically be enrolled in the UNC Student Health Insurance Plan. If the student wishes to waive the UNC plan, they will need to complete an online waiver form and provide the requested information to show coverage with comparable insurance coverage by the 10th day of classes.

Students who have an URSA account may log into [www.ursa.unco.edu](http://www.ursa.unco.edu), click on the Financial tab and locate the link to the "UNC Student Health Insurance Plan Online Waiver System" (SHIP). Students who have been admitted,



but do not have a URSA account, will need to access the URSA home page at [www.ursa.unco.edu](http://www.ursa.unco.edu), and create a student account from the link titled "NEW STUDENTS START HERE". Once your account has been established, follow the steps above to access the online waiver.

Any student who enrolls in the University's health insurance plan during spring semester is automatically covered by that insurance during summer session with no additional premium. The University does not require students registered only for summer session to purchase its student health insurance plan or demonstrate possession of an acceptable insurance plan.

Students enrolled in the student insurance may purchase coverage for their spouse and children. Intercollegiate athletes may also purchase the student insurance along with a sports rider to cover intercollegiate injuries. Please contact the insurance office at (970) 351-1915 for additional information.

Students enrolled for less than 9 hours of classes are not eligible to participate in the UNC SHIP. Students enrolled at the Lowry campus or in an Extended Studies Program are not eligible to participate in the UNC SHIP. They may, however, contact Academic Health Plans at (888) 308-7320 for assistance in finding individual coverage.

## LAWFUL PRESENCE

As of August 1, 2006, Colorado House Bill 1023 requires that all students age 18 or older who apply for and receive certain public benefits through a state institution of higher education must demonstrate lawful presence. Some of the public benefits include the College Opportunity fund, in-state tuition, some types of state or institutional financial aid, WUE/WICHE, departmental scholarship or any other state-funded benefits that provide financial assistance. For more information please access [www.registrar.unco.edu](http://www.registrar.unco.edu).

## MULTIPLE NUMBERED COURSES

Upon approval by the Graduate Council, courses numbered 400-599 may be double-numbered allowing undergraduate and graduate students to enroll simultaneously. All double-numbered courses may also be offered independently at either the graduate or undergraduate level. No course identified as an undergraduate Liberal Arts Core course may be double-numbered. At least two-thirds of a student's master's degree program must be in courses that are not double-numbered courses or in courses that have been taught solely as 500-level or above graduate courses.

The following guidelines will be utilized in the process of evaluating new course proposals involving multiple numbering:

- All programs requesting approval of multiple numbered courses must demonstrate in the rationale of the course proposal the academic value of and need for the proposed course in this format.
- In situations where a nongraduate degree program is seeking to include a multiple numbered course in its offerings that is intended to serve other units of the university, the requesting program must include supporting materials from those units.
- Nongraduate degree programs requesting approval of multiple numbered courses must demonstrate that the necessary expertise to teach the course exists in the faculty of that program.
- The practice will be to limit the number of graduate level courses offered by non-graduate degree programs. The specific number of courses will be determined on a case by case basis.
- All new requests for multiple numbered courses should try to pair a 500 level course with a 400 level course.
- Many course proposals are submitted with little or no distinction made in the qualitative differences between the graduate and undergraduate components of the course. It is the concern of the Graduate Council that the significant differences in this regard should be clearly articulated in terms of all aspects of the proposed course. It is considered

insufficient to require graduate students to perform the same work as undergraduate students, but at a significantly higher level of accomplishment, without a clear delineation of those qualitative criteria. It is also considered insufficient to merely require a research paper/project of a brief nature, as the "graduate" component of the course. Therefore, all new course proposals must clearly distinguish, in the syllabus, the qualitative differences between the graduate and undergraduate components of the course. The significant differences in this regard should be clearly articulated in terms of expectation of outcomes, specific course content, course delivery, and evaluation of work.

Multiple numbered courses are generally discouraged on the grounds that the practice tends to limit the expectations of the graduate component of the course by grouping together undergraduate and graduate level students. While this may be seen to be challenging and advantageous to the undergraduate students, the concern exists that graduate students will not be presented with true graduate-level education because of "watering down" the content to meet the needs of the undergraduate students.

## NAME CHANGE

[www.unco.edu](http://www.unco.edu)

Application for admission to the University requires students to use their legal name. The legal name must be the name that is recorded with the Social Security Administration. The same is true for a student to change his/her name; the University will require proof of that legal name by evidence of the social security card. The legal name is imperative at both the state and federal level reporting (i.e. financial aid, College Opportunity Fund, employment.)

## OFF-CAMPUS ACTIVITY AND FIELD TRIP DISCLAIMER

As part of the courses and extracurricular activities offered by the University, students will be encouraged to attend campus events or engage in off-campus activities as a supplement to their on-campus instruction and education. These activities may include travel to foreign countries or other states as well as in-state field trips. Students may be expected to provide their own transportation to and from such activities, or the University may arrange or otherwise provide transportation.

- Under any circumstance, however, the University requires its students to maintain appropriate insurance and be responsible for their conduct and activities at all times, on- or off-campus. The University requires its students to comply with all laws and to assume all responsibility and liability for their actions and conduct while attending, being involved in or traveling to and from any off-campus activities, whether for required or voluntary activities.

## PARKING REGULATIONS

The mission of UNC Parking Services is to manage an efficient and self-supporting system of parking lots for the campus. We will design and maintain our lots to enhance safety and an orderly traffic flow. We will enforce Parking Rules and Regulations so that our patrons receive the best service possible. Students, faculty or staff who wish to park on campus can purchase a parking permit from Parking Services (Gray Hall) or go online at [www.unco.edu/parking](http://www.unco.edu/parking). Visitors and short-term guests can purchase Visitor's Permits at Parking Services or Daily Permits from one of the many dispenser units located across campus. UNC's parking lots are enforced all year, as per the signage at the entrance to each lot. No tax revenue, student fees or tuition funds are received or used for parking facilities.

## SEMESTER SYSTEM

The University of Northern Colorado follows the early semester system in which the academic year is divided into two instructional semesters of approximately 15 weeks each. The academic year (fall, spring) begins in late August and concludes in mid-May, with a vacation break between the semesters. Courses are offered online during the vacation break starting after fall courses have ended and finishing prior to spring courses starting. A full slate of courses is offered during the summer semester. Students enrolling in the University for the first time may do so before the beginning of any semester.

## TRANSCRIPTS

Official transcript requests are made through the Registrar's Office. There is a fee for each transcript ordered. Appropriate request procedures and fee payment options are outlined at [www.registrar.unco.edu](http://www.registrar.unco.edu).

## TRANSFER CREDIT

A student who wishes to transfer credit must obtain and complete a *Petition to Count Work in a Degree Program* form at [www.unco.edu/grad/forms/PTCW.pdf](http://www.unco.edu/grad/forms/PTCW.pdf) and must obtain an official transcript(s) showing the course(s) to be transferred. The student must then present the completed petition and transcript to the program advisor for approval or disapproval. If the program advisor approves and signs the petition, it must be sent to the Graduate School for final approval/disapproval. This process must occur no later than three weeks prior to the end of the semester that the student plans to graduate. Courses requested for transfer must meet all criteria for credit transfer (see general transfer policies) to be approved by the Graduate School.

- Transfer work is not used in the calculation of the graduate grade point average.
- Graduate credit earned in off-campus or extension courses is not transferable unless it is acceptable to the major school and to the Graduate School.
- Transfer credit will not be accepted if the work was used to obtain a degree or is included as part of another degree at any institution.
- Transfer work must be approved by the school and must be "A" or "B" work.
- Transfer credit cannot be used to meet any residency requirement.
- Transfer credit cannot be used to make up "D," "F," or "U" grades received in required courses. Courses graded "S/U" are not transferable unless documentation can be obtained from the originating institution stating that the "S" grade granted is equivalent to an "A" or "B" grade.
- All program requirements, including transfer work, must be completed within the time limits of the degree program, i.e., five years for the master's degree, six years for the specialist degree, or eight years for the doctoral degree.
- Transfer courses must be numbered as graduate level according to the course numbering system at the originating institution.
- Transfer courses must be from accredited institutions of higher education that offer equivalent level degrees (e.g., doctoral degrees if transferring graduate credit into a doctoral program).

## UNCLASSIFIED COURSE CREDIT

A maximum of nine semester hours of course work taken while in an unclassified status may be used toward a graduate degree program (no more than one semester of full time enrollment). Unclassified status refers to a student who has at least a baccalaureate degree and has not been admitted into a graduate degree program or is not seeking admission into a graduate degree program.

The Graduate School may place holds on the registration of students that have taken the maximum hours and have not been admitted. Course registration will be suspended until an admission decision has been made. Thus, the student's application must be complete and the program faculty must recommend either a regular admission or must deny admission by the end of the first semester or the completion of nine semester hours.

## VARIABLE TOPIC COURSES

A maximum of nine semester hours, individually or in combination, of courses numbered 508, 513, or 622 may be counted toward a graduate degree except

- **Master's:** A maximum of three semester credits of 513 (Professional Renewal) may be counted toward the master's degree.
- **Specialist:** For baccalaureate only students, a maximum of 12 semester hours of 508, 513 or 622, individually or in combination, will be counted toward a specialist degree.

## WITHDRAWAL FROM THE UNIVERSITY

[www.registrar.unco.edu](http://www.registrar.unco.edu)

A student may withdraw completely from the University through the 12th week of the semester. Students must start the process at the Registrar's Office. Depending upon the date the withdrawal is initiated, a percentage of tuition and fees may be assessed.

Students who receive financial aid and then withdraw during a semester that they received aid may be required to repay a proportionate amount to the financial aid account. Information about a specific repayment amount is available from the Office of Financial Aid.



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# GRADUATE PROGRAM REQUIREMENTS

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## PROGRAM INFORMATION

### ADVISING

Each student will be assigned an academic advisor upon acceptance into a graduate program. Only members of the graduate faculty are authorized to serve as program advisors for graduate students. The program advisor is responsible for helping students understand the expectations and requirements of their academic programs and planning their programs to satisfy all requirements. The program advisor is responsible for assisting students with questions regarding their academic programs such as expectations for comprehensive examinations, theses, or internships, as guided by school, university and Graduate School policies and procedures. The program advisor is also responsible for professional advising and guidance including assisting students with planning for their academic and professional future.

It is the responsibility of the school to notify the Graduate School of the advisor assignment and any change in advisor assignment. Any advisor-approved deviations from published program requirements or plans of study are communicated to the Graduate School, in writing, by the program advisor to assist the graduation check process.

The importance of the program advisor cannot be overstated. Program advisement includes all aspects of students' present and future academic and professional planning. It is often the program advisor who is able to help students conceptualize their academic program within the context of their own professional goals and aspirations. This responsibility is likely to involve extensive discussions of academic or professional goals well beyond the current program.

### CHANGE OF MAJOR

Currently enrolled graduate students may change their major from one graduate program to another or from one emphasis to another with the approval of the school for both program areas and final approval by the Graduate School.

If a student is admitted in a degree program and if the student desires to change programs, the student must complete a *Request for Change of Major* form and receive appropriate school approvals: [www.unco.edu/grad/forms/RequestChangeMajor.pdf](http://www.unco.edu/grad/forms/RequestChangeMajor.pdf)

Note: A change of emphasis is equivalent to a change of major.

### COMPREHENSIVE EXAMINATIONS

Also see specific degree requirements. Records of written comprehensive examinations are maintained in the program area for a period of 12 calendar months. These examinations are to be confidential and only available to the student who completed an exam and school faculty to address potential appeals and/or questions of administration and grading procedures. Students may request to review their comprehensive examination but may not be allowed access to written responses of other students. Past comprehensive examination responses with identification removed can be used by program faculty as models for instructional purposes.

### GRADUATION REQUIREMENTS

Graduation requirements are checked in accordance with one specific university Catalog. The Catalog used to meet graduation requirements is normally the one published for the academic year during which the student first enrolls after admission to the university. The student must specify the Catalog under which he/she wishes to be evaluated and must meet all requirements in that Catalog.

The student may select any subsequent Catalog up to and including the current one, provided the student was in attendance at the university during that academic year. However, a student may not choose to meet some requirements in one Catalog and other requirements in another Catalog.

### LETTER OF COMPLETION

Usually, an official transcript is proof of completion of a degree. If a student needs proof of the degree prior to the availability of official transcripts with degree indicated, he/she may contact the Graduate School in writing, for a letter of completion. A letter of completion can be issued only after all the degree requirements have been officially verified as complete, including posting of grades for the current semester by the Registrar.

### PETITION FOR EXCEPTION

Graduate students may petition for exceptions to certain procedures, rules, policies, and requirements. The *Graduate Student Petition for Exception* forms are available in school offices or on the Graduate School website [www.unco.edu/grad/forms/GS2008.pdf](http://www.unco.edu/grad/forms/GS2008.pdf). When petitioning for an exception to a rule, policy or requirement, the student will explain how the exception would enhance the academic program, allow the continuation of a productive academic program, allow recovery from lost opportunity due to health or traumatic events or allow the student to profit from unique educational opportunities impeded by Graduate School regulations. When requesting an extension of program time limit, the student will describe specific steps, proposed scheduling and evidence of progress toward completing program requirements. Signatures of the program advisor and school director indicating approval of and support for the request will be required on this form prior to submitting the request to the Graduate School.

### PROGRAM TERMINATION

A student's degree program may be terminated for one or more of the following reasons:

- Based on an overall evaluation of a student's progress, the major school recommends that the student's program be terminated;
- the school declines to issue a letter of continuation based on an overall evaluation of a specialist or doctoral student's progress;
- in order to remain in a graduate program, a graduate student must maintain a cumulative grade point average of 3.00 in graduate level courses. A graduate student may not graduate with a cumulative grade point average below 3.00. If student's cumulative grade point average drops below 3.00 after taking at least 9 graduate level credit hours, a warning letter will be sent to the student. The degree program of a student who has been sent a warning letter will be terminated if the student's grade point average is below 3.00 after completing an additional 9 or more graduate level credit hours in which grades of "A," "B," "C," "D," or "F" are earned. All grades earned during the semester that the 9th hour is earned are used in the calculation of the grade average;
- fails the retake of the written comprehensive examination or its approved equivalent;
- fails the retake of the oral comprehensive examination; or
- submits an unsatisfactory thesis or dissertation.

### Readmission Subsequent to Program Termination

A student whose degree program has been terminated may be admitted to a different degree program. The following policies apply:

- The student may apply for admission only to a different degree program.
- If admitted, the student must complete all standard requirements of the program to which he/she has been admitted.

- A maximum of 9 semester hours from the terminated program may be counted in the new program if approved by the new program advisor and the Graduate School.

If the student's former program was terminated due to failure of the retake of the comprehensive examination or its equivalent, the student will be allowed only one opportunity to pass the comprehensive examination or approved equivalent in the new program.

## RESEARCH INVOLVING HUMAN SUBJECTS

### Internal Review Board (IRB)

Before any research involving human subjects can be conducted under the auspices of the university, an Internal Review Board (IRB) review is required. Data from human subjects are not to be collected until written approval is received from the university Internal Review Board. The main considerations and responsibilities of the IRB are to assure that ethical standards and the protection of human rights are maintained in any research conducted while at UNC.

Researchers are advised to obtain and submit an IRB packet early in their research process to allow time for a thorough review. Graduate students and faculty members can request an IRB packet from the Sponsored Programs and Academic Research Center (SPARC) or from the SPARC website.

## STUDENT LIABILITY

To protect against liability claims, all research involving subject consent requires a statement informing potential subjects that their participation is not covered by university liability insurance. The subject consent form must include the following statement:

*If injuries occur during the course of research, subjects are advised that the University of Northern Colorado is a publicly-funded institution of higher education and as such, liability may be limited under and governed by the Colorado Governmental Immunity Act.*

The State of Colorado's Risk Management Division (the unit responsible for UNC's liability insurance) has concluded that student researchers are not protected by the state against claims unless they are student employees, interns, or authorized volunteers assigned to a research project (most student researchers would not be). This means that most graduate students working on their master's theses or doctoral dissertations are not protected by the state of Colorado against claims resulting from their research.

This decision has serious implications for student researchers who are working with human subjects. Any student researcher who is placing subjects at some level of risk should be concerned. For example, student researchers are engaged in a variety of activities that could potentially harm their subjects (e.g., they draw blood, conduct therapy sessions, evaluate physical conditioning). Regardless of how responsible researchers may be, accidents can happen. Though the researcher is ultimately responsible for the health and safety of research subjects, low risk research, as defined by Health and Human Services (HHS) Guidelines and described in the IRB instruction packet, may not be recommended for special liability insurance coverage.

For moderate to high risk procedures, the IRB committee will strongly recommend that student's purchase liability insurance either through a professional association or an alternative source.

## MASTER'S DEGREE REQUIREMENTS

### Drop of Double Major

A student with a double major may drop one of the majors before taking either comprehensive examination only if he/she has a UNC grade point average of 3.00 in the major being dropped. Once a student has taken the comprehensive examination for one of the majors, neither major can be dropped.

## COURSES AND CREDIT HOURS

The university requires a minimum of 30 semester hours for a master's degree. This includes at least 24 semester hours of discipline content courses. Chemistry and Biological Sciences master's programs require a minimum of 20 semester hours of discipline content courses. Programs may have requirements that exceed the minimum standards established by the university.

A maximum of three semester credits of 513 (Professional Renewal) may be counted toward the master's degree.

### Transfer Credit

**Master's and Specialist Degree Policy.** Students must complete a minimum of 24 credits through the University of Northern Colorado as part of their master's degree or post-master's specialist degree. Thus, students can transfer up to six (6) credits from another accredited institution, that offers graduate degrees, into a 30 credit hour master's or specialist degree program. If the program requirements exceed the minimum 30 credits, students are allowed to transfer additional credits as determined by the school or program faculty. Students without a master's degree must complete 48 semester credit hours at UNC of the 60 required credits for a specialist degree. Students are encouraged to check school policies regarding transfer of credit.

These policies allow programs that exceed the 30 credit minimum for a master's/specialist to establish school transfer limits and guidelines that exceed minimum requirements. As long as the minimum number of credits through UNC are observed, transfer credit allowances to students will be determined by program faculty and can vary on a case by case basis. The Graduate School will not approve students for graduation with fewer than the required UNC credits.

## PROGRAM REQUIREMENTS

### Comprehensive Examinations

#### Thesis Committee

Each master's student who will be writing a thesis must have a thesis committee of at least two members from within their school or program. The thesis committee must be comprised of faculty members who have Doctoral Research, Graduate Faculty or Graduate Lecturer status as approved by the Graduate School.

#### Master's Thesis in Lieu of Comps

Whether the master's thesis is to be completed as an additional program requirement or as a project in lieu of the written comprehensive examination, a thesis committee of at least two graduate faculty members is required. If the thesis is in lieu of the written comprehensive examination, school procedures for determining comprehensive examination eligibility are to be used prior to conducting the thesis research and at least two signatures from graduate faculty members must be obtained to indicate the successful completion of the thesis.

If the master's thesis is required in addition to the comprehensive examination, the student needs only to submit the thesis signed by two graduate faculty members to the Graduate School upon completion. The Graduate Dean will be the final approval signature on the thesis.

If the student plans to complete a thesis, whether in lieu of the comprehensive examination or in addition, the student must register for a minimum of six (6) semester hours of 699-Thesis. No more than six hours of thesis may be applied to the minimum credit requirements of a student's program.

### Written Comprehensive Examinations

Each master's degree and specialist degree student must pass a written comprehensive examination or otherwise show competency in the discipline by successfully completing a specified equivalent that has been approved by the Graduate Council (thesis or project in lieu of comprehensive examinations). Defense of a project or thesis in lieu of comprehensive examinations is equivalent to administering the comprehensive examination.

The major school is responsible for determining the student's eligibility for taking the examination as well as scheduling the time, date, and place of the examination. This examination or its approved equivalent may not be taken until the student has:

- been granted regular admission to the program
- completed school-specified course requirements
- maintained a GPA of at least 3.0 in their program
- received approval from the program advisor.

**Application.** The student will apply in the academic school office for the written comprehensive examination or to defend the thesis before the thesis committee. The comprehensive examination permit is valid only for the semester that it is issued. The program advisor must be consulted for information regarding examination format, procedures, time, date, and place.

Students should not wait until they have been notified of comprehensive examination results before applying for graduation. If the student plans to graduate at the end of the semester in which he/she takes the comprehensive examination or completes the approved equivalent, the student must apply for graduation within the published deadlines.

Once the comprehensive examination session begins, it is considered a take of the examination. If the student leaves the examination session and does not return, the examination will be considered taken and the exam will be evaluated accordingly and reported to the Graduate School.

**Results.** Once the examination has been evaluated or the project/thesis has been defended (project for Specialist Students), the program advisor must return the signed report form to the Graduate School indicating a pass or failure of the examination. If the student plans to graduate, this must be done on or before the published deadline to submit the results of the written comprehensive examination for that semester.

A retake may not be scheduled during the same semester that the original examination was completed. Failure of the retake of the examination or its equivalent will result in the termination of the student's degree program.

Results must be reported to the Graduate School within one semester or be retaken.

**Filing the Thesis (Master's).** All students must follow the program and Graduate School guidelines for writing the master's thesis, found on our website at <http://www.unco.edu/grad/>.

After committee members sign off on the thesis, an electronic copy of the thesis and four (4) original signature pages should be submitted to the Graduate School for an editorial review and dean's approval at least 4 weeks, (28 calendar days) prior to the requested graduation date. The Graduate School shall give the student all changes and corrections that must be made before the student turns in the final thesis. The Graduate School will confer the student's degree once we have received

the final version and the specific forms for binding and billing, mailing and publication (optional). More detail about the final submission procedures can be found on the Graduate School website (<http://www.unco.edu/grad/>)

### Graduation Application

All master's and specialist students must apply for graduation [www.unco.edu/grad/forms/msapplicationforgraduation.pdf](http://www.unco.edu/grad/forms/msapplicationforgraduation.pdf) no later than the end of the semester preceding the semester that a student plans to graduate. A late fee will be assessed for late applications. The student has the responsibility for determining that the application has been filed with the Graduate School. The Graduate School will not process a graduation application that is not signed by the student and program advisor.

If the student does not complete all requirements for the degree and, therefore, does not graduate at the end of the proposed semester, the application will be placed in the deferred file. The student must give written notice to the Graduate School when he/she wishes to appear again on the tentative list of graduates.

All graduating students are encouraged to attend graduation. Those students participating in the graduation ceremony are required to wear appropriate academic regalia. Diplomas are not issued at the graduation ceremony. All Graduate students must complete a *Diploma Request Card* at [www.unco.edu/grad/forms/gradCard.asp](http://www.unco.edu/grad/forms/gradCard.asp). The diploma will be mailed to the address provided by the student on the *Diploma Request Card*. Failure to provide a current mailing address could result in a delay in receipt of the diploma. No diploma will be issued until all requirements for graduation have been met.

### Plan of Study

The program listed in the university Catalog will serve as the plan of study for master's programs.

Written requests for changes or substitutions in the plan of study must be signed by the program advisor and submitted to the Graduate School. Students should take the responsibility to make sure any deviations from the Catalog are documented in their Graduate School file. Schools are also encouraged to identify any deficiency courses a student must complete at the time of screening for admission.

### Research Requirements

**Master's and Specialist research policy.** Student's must complete at least one course in research methodology designated as appropriate to the discipline and approved by the Graduate Council. Courses numbered XXX 622 (Directed Studies) shall not be used as a substitute for the research course.

The Graduate School will not waive this requirement but can approve an appropriate substitute research methodology course. The program advisor must provide a written request to substitute an alternative course, a syllabus for the course, and rationale for the requested substitute to the Graduate Dean in the form of a "Graduate Student Petition for Exception". If the student earned a graduate degree from an accredited institution within the last five years in which an equivalent research course was taken, the program advisor must provide a written request to waive the UNC research requirement based on the previous course work completed.

### Time Limit

The maximum time allowed for the completion of the master's degree is five calendar years beginning with the first semester of enrollment after admission has been granted. However, program time limits are adjusted to reflect approval of transfer credit or unclassified hours. Student must complete the degree within five calendar years beginning with the earliest work counted in the program (which would include transfer credit and unclassified hours).



## SPECIALIST DEGREE REQUIREMENTS

### COURSES AND CREDIT HOURS

A student entering a specialist degree program who possesses a master's degree must earn a minimum of 30 semester hours of graduate credit beyond the master's degree. A student entering a specialist degree program who possesses only a baccalaureate degree must earn a minimum of 60 semester hours of graduate credit beyond the baccalaureate degree. Schools may have requirements that exceed the minimum standards established by the university.

### Comprehensive Examinations

Each specialist student must pass a written comprehensive examination in the area of specialization and pass any other examination(s) the supervising committee may require. The written comprehensive examination may not be taken until the student has:

- been granted regular admission to the program
- filed an approved plan of study
- completed at least 20 semester hours (50 semester hours if baccalaureate only student) of work applicable toward the degree, not including the practicum
- maintained a GPA of at least 3.0 in their program
- received approval from the program advisor
- and see requirements under [Written Comprehensive Examinations—on page 29](#)

### Plan of Study

In conjunction with the supervising committee, each specialist degree student must prepare a plan of study that clearly specifies core requirements and identifies elective, transfer, and double numbered course work.

- The plan must be formalized on a *Plan of Study* form and the completed form, including the signature of the program advisor, must be filed with the Graduate School by the end of the student's first semester of enrollment after admission. Upon receipt of a properly signed *Plan of Study* from the Dean of the Graduate School or his/her designee shall review the plan and approve or disapprove the plan. If approved, the *Plan of Study* form will be filed in the student's folder. If disapproved, the *Plan of Study* form will be returned to the student for correction and re-submission. Because the plan of study will be the basis for the graduation check, any deviation from the plan of study must be approved by the program advisor and the Dean of the Graduate School or his/her designee. Requests for changes to the plan of study must be approved by the advisor and submitted in writing to the Graduate School with copies sent to all committee members.

### Supervising Committee

A two-person specialist supervising committee, recommended by the school, will supervise a student's specialist degree program. The supervising committee will assist the student in preparing a plan of study, oversee comprehensive examinations where appropriate, and direct the student's practicum.

### Time Limit

The maximum time allowed for completion of the Specialist in Education degree is six calendar years beginning with the first semester of enrollment after admission has been granted. However, program time limits are adjusted to reflect approval of transfer credit or unclassified hours. Student must complete the degree within six calendar years beginning with the earliest work counted in the program (which would include transfer credit and unclassified hours).

## DOCTORAL DEGREE REQUIREMENTS

### Doctoral Minor

Doctoral minors consist of a minimum of 15 semester hours of course work in a discipline different from the doctoral program. Any school with at least one approved graduate degree program (master's, specialist, or doctorate) is eligible to offer doctoral minor(s). With school and college approval to offer the doctoral minor the proposal is submitted through the university curriculum approval process. Upon approval, the doctoral minor will be listed in the university catalog.

Graduate students admitted to doctoral programs may, upon approval of their doctoral program advisor, select a minor program of study for inclusion in their doctoral program. Completion of the doctoral minor will be indicated on the student's transcript. Doctoral students who have been approved by the school to pursue a doctoral minor will include the requirements for completion of the minor in their doctoral plan of study.

The credit hours associated with an approved doctoral minor would count toward the total doctoral degree program hours required only when they overlap with electives or research core requirements. No course would be allowed to count for double credit hours. Student would not be allowed to pursue a minor offered under the same program name as the doctoral program to which they are admitted. To complete a minor, the student must first be officially admitted to a doctoral degree program.

### Second Doctorate Guidelines

Double majors are not permitted at the doctoral level. A student may receive a second doctoral degree from UNC provided that the requirements for the first doctoral degree have been completed before initiating the second degree program and provided that no course work from the first degree is counted toward the second degree.

### COURSES AND CREDIT HOURS

#### Credit Hours

A student entering a doctoral program who possesses a master's degree must earn a minimum of 64 semester hours of graduate credit beyond the master's degree. This includes a minimum of 48 semester hours of graduate level discipline content courses and 16 semester hours of research credit.

A student who possesses only a baccalaureate degree must earn a minimum of 94 semester hours of graduate credit beyond the baccalaureate degree. This includes a minimum of 78 semester hours of graduate level discipline content courses and 16 semester hours of research credit.

A student who possesses a master's degree but who is attempting to obtain a second master's degree enroute to a doctoral degree must meet the same credit hour requirements as the baccalaureate only student.

A student who possesses a specialist degree may count a maximum of 21 semester hours of specialist work in the doctoral program with the approval of the Graduate School, the program advisor, and all members of the doctoral committee. Schools may have requirements that exceed the minimums established by the university.

#### Transfer Credit

Doctoral students must complete a minimum of 40 semester hours through UNC of the 64 minimum required for a doctoral degree. If the program requirements exceed the 64 credit minimum, students are allowed to transfer additional credits, as determined by their advisor, from another accredited institution that grants doctoral degrees. Doctoral students without a master's degree must complete 64 of the



94 required credits at UNC for a doctoral degree. The plan of study will indicate transfer credits to be included in a student's program. Students are encouraged to check school policies regarding transfer of credit.

These policies allow programs that exceed the 64 credit minimum for a doctoral degree to establish school transfer limits and guidelines that exceed minimums. As long as the minimum number of credits through UNC are observed, transfer credit allowances to students will be determined by program faculty and can vary on a case by case basis. The Graduate School will not approve students for graduation with fewer than the required UNC credits.

## Doctoral Committee

Each doctoral student must have an Advisor and a doctoral committee appointed before the written comprehensive exam is taken. The appointment of the Doctoral Committee shall occur prior to the scheduled comprehensive examination.

At minimum, a doctoral committee must consist of:

1. a Research Advisor must be from within the program/discipline area; (and must hold Doctoral Research [DR] status);
2. one additional faculty Committee Member from within the program/discipline area;
3. one additional faculty Committee Member from within a related discipline or area of inquiry;
4. a Faculty Representative (needs to be outside the program discipline)

All committee members must have at least Graduate Faculty (GF) status. The Doctoral Committee is subject to the approval of the program advisor and the Graduate School.

The student and all members of the Doctoral Committee will receive confirmation of the approved committee assignments. Unless the student or Research Advisor informs the Graduate School or the Graduate School informs the student of the need for a change, the doctoral committee membership will remain the same from the written comprehensive examination throughout the dissertation research stages of the program.

The Graduate School will confirm that the student's requested committee is appropriate as a doctoral research committee each time the graduate school receives the *Request to Schedule of the Doctoral Examination* to schedule oral comps and dissertation defense and when they turn in their dissertation proposal.

The student should nominate a faculty representative from outside the program discipline to serve on the committee. The final approval of the faculty representative is the responsibility of the Graduate Dean. The faculty representative is a full voting member with all the rights and responsibilities of any other member and must be present at the student's doctoral oral examination and dissertation defense. The faculty member must hold graduate faculty status and should be in a different program/discipline area than that of the student's program/discipline area. The faculty representative is expected to contribute conceptual, theoretical, methodological and/or academic expertise from an alternative disciplinary perspective.

No faculty member will be appointed to a doctoral committee without his/her consent. University faculty who have not been appointed Graduate Faculty or Doctoral Research status by the Graduate Council shall not be appointed as members of doctoral committees. An Honorary member is not required, but is allowed when an off campus faculty member with research expertise related to the study is requested. The Honorary committee member is a full voting member with all the rights and responsibilities of other members of the committee and must be present at the student's doctoral oral examination and dissertation defense. If there is to be a difference in the doctoral committee structure for the oral comprehensive examination and the dissertation research, the student must submit a change of committee membership form to the Graduate School. If a committee member or faculty representative is unable to be present during an oral examination or defense, the program area shall appoint a

replacement committee member who has been previously approved by the Graduate School. The Graduate School must be notified of the replacement before the exam or defense. If a replacement cannot be appointed prior to the examination or defense, the exam must be rescheduled for a future date. The concerns and recommendations of all committee members, including the faculty representative, are crucial to the dissertation approval process.

## Faculty Committee Load Policy

An individual graduate faculty member may serve on ten active doctoral research committees at any one time and may serve as the dissertation director or research advisor for no more than five of these ten committees. Exceptions to the committee maximums may be permitted only if agreed to by the graduate faculty member, school director and college dean as follows:

- The faculty member involved agrees that his or her load (current or projected) allows adequate time to take on an additional student without adversely affecting the responsibility of the school to other students and to programs offered by the school.
- The school director approves the additional student. Approval indicates that the director has reviewed the current load of the faculty member and does not feel the additional load will adversely affect the responsibility of the school to other students and to programs offered by the school.
- The Graduate Dean has approved the exception(s).

An individual school may elect to impose more stringent limitations on its faculty with respect to the number of committees on which they may serve. "Active doctoral student" is defined as one who is currently enrolled.

## Plan of Study

At least three faculty, appointed and approved by the major program/school, shall supervise the planning of a student's doctoral degree program. In conjunction with the appointed faculty, each doctoral student must prepare a long-range plan of study that clearly specifies core requirements, elective, transfer, double-numbered coursework, and if applicable, research tools and doctoral minor.

The plan must be formalized on the completed *Plan of Study* form, including the signatures of the program advisor or appointed faculty (if required by the school). The Plan of Study must be filed with the Graduate School by the end of the student's first semester of enrollment after admission.

Upon receipt of a properly signed Plan of Study form, the Dean of the Graduate School or his/her designee shall review the plan and approve or disapprove the plan. If approved, the Plan of Study form will be filed in the student's folder. If approved, the Plan of Study will be the basis for the graduation check. Any deviation from the plan of student must be approved by the program advisor and the Dean of the Graduate School or his/her designee.

Changes to the Plan of Study must be approved by the advisor and submitted in writing to the Graduate School with copies sent to all appointed faculty.

## Comprehensive Examinations: Written

All examinations and the defense of the dissertation must be scheduled with the approval of all committee members. They may not be performed on weekends or when the University offices are closed for holidays.

Each doctoral student must pass a written comprehensive examination that is designed, administered, and evaluated by the graduate faculty of the major school and by other qualified individuals as specified by the program advisor. This examination may not be taken until the student has:

- been granted regular admission to the degree program;
- filed an approved plan of study;

- completed at least 36 semester hours (60 semester hours if baccalaureate only student) of work applicable toward the degree -- at least 24 semester hours must be UNC credit;
- maintained a grade point average of at least 3.00 in his/her graduate degree program;
- had a doctoral committee appointed by the Graduate School;
- obtained approval from the program advisor to take the exam.

The major school is responsible for scheduling the date, time, and place of the examination(s). Each student must check the school requirements at the beginning of his/her program.

Once the comprehensive examination session begins, it is considered a take of the examination. If the student leaves the examination session and does not return, the examination will be considered taken and the exam will be evaluated accordingly.

Once the examination has been evaluated, the program advisor must submit a signed report form to the Graduate School indicating a pass or failure of the examination.

The results of the comprehensive examinations, proposals and defenses must be reported to the Graduate School no later than the semester following the examination or defense or the Graduate School may require a repeat of the examination.

A retake may not be scheduled during the same semester that the original examination was completed. Failure of the retake of the examination or its equivalent will result in the termination of the student's degree program.

### Comprehensive Examinations: Oral

After passing the written comprehensive examination, every doctoral student must take and pass an oral comprehensive examination. The program advisor, who shall serve as chairperson of the oral comprehensive examination committee, should direct the student to arrange the date, time and place of the oral examination with all committee members. After all arrangements are made, the student or program advisor will notify the Graduate School by forwarding a signed and completed *Request to Schedule a Doctoral Examination* form.

In order for the Graduate School to approve a request for the student to take the examination, the following conditions must be met:

- The committee members and faculty representative must be the same as those approved by the Graduate School.
- The written comprehensive examination results must have been received and recorded by the Graduate School prior to requesting to schedule the oral comprehensive examination.
- The Request to Schedule a Doctoral Examination must be turned in to the Graduate School at least two weeks (14 calendar days) before the requested date of the examination to allow for any problems to be addressed.

The student is responsible for confirming the date and time of the examination with all of their committee members. The Graduate School will approve and publicize the examination date, time and place in the UNC Today or in any other appropriate university publication and forward a *Results of the Oral Comprehensive Exam* to the student's Program Advisor.

Any examination which is not scheduled in advance through the Graduate School will not be recognized as valid and must be rescheduled.

All committee members and the faculty representative must be present at the examination or a substitute assuaged according to the guidelines for Doctoral Committee. The student's performances on the examination will be evaluated as:

- a. pass;
- b. will pass when conditions are met (conditions must be recorded on the *Results of the Oral Comprehensive Examination* form before turning in to the Graduate

School; or,

- c. fail, with option to retake permitted or retake not permitted-program terminating specified on the *Results of the Oral Comprehensive Examination* form before turning in to the Graduate School.

At least three-fourths of the committee members must agree on the final evaluation.

All members of the UNC faculty are invited to attend and may ask questions of the student after the committee members finish their questioning. Other graduate students may also attend with permission from the chairperson of the committee.

The results of the comprehensive examinations, proposals and defenses must be reported to the Graduate School no later than the semester following the examination or defense or the Graduate School may require a repeat of the examination.

### Progress Review

Schools are to evaluate and provide an annual program progress report for each doctoral student until the student passes the oral comprehensive examination.

Doctoral student advisors will be responsible for obtaining and reporting at least the following information for each assigned advisee:

- Student's self evaluations of their academic performance and professional development,
- Student's grades in all graduate courses during the evaluation period,
- Performance ratings from instructors for all graduate courses during the evaluation period,
- Assessment of the student's professional development from appropriate school faculty. Based on the data collected, each doctoral advisor will meet with each student's doctoral committee to develop and provide a summary of the student's strengths and area(s) for improvement. Emphasis should be placed on acknowledging accomplishments and professional growth where appropriate.

Recommendations for improvement should include specific changes expected in the student's performance or behavior, means of assessing the changes, and the time period by which the change is expected to occur. Improvements or lack of change in areas recommended from prior progress reports should be documented. Signatures of the advisor and all committee members are required on the progress report.

The progress report will include a clear recommendation to the chair of the program/school Graduate Program Committee (GPC) of whether the student is to be continued each year without conditions, continued with conditions, or not supported for continuation. If conditions for improvement are stipulated, the student must be informed by the Graduate Program Committee (GPC), in writing, of the conditions and specific changes required to satisfy the conditions. If the school does not have a GPC, the report will be submitted directly to the director of the school.

The following procedures must be followed prior to submitting a recommendation to discontinue a doctoral student's program for causes other than poor academic performance:

- The student must be informed of the pattern of behavior or incident(s) that has given rise to concern among the school faculty members and that led to the recommendation for program discontinuation.
- The student must be given an opportunity to meet with and address the observed behavior or incident with the school Graduate Program Committee (GPC) or with the student's doctoral committee for schools with no graduate program committee. Following the meeting, the GPC or doctoral committee must either reassert the concerns or withdraw the concerns in writing to the school director.

If the complaint arises from an unprofessional behavior or other behavioral concerns, the student will be given a clearly defined probationary period during which clear behavioral objectives are provided to either rectify the concerns or change the behavior. Clear means of assessing improvement will be provided.

If the complaint results from an egregious violation of laws or published university or school policy, rules or professional ethics, clear documented evidence of the incident(s) must be provided with the recommendation.

Copies of the progress report are to be provided by the GPC or student doctoral committee to the school director/division director no later than April 15 of each year and copied to the student. A director/division director may agree or disagree with the GPC's or doctoral committee recommendation. If in agreement with the recommendation, the director/division director will approve and submit the progress report to the Dean of the Graduate School and a copy to the college dean by May 1. The student and GPC or doctoral committee will be informed in writing of the approval. If in disagreement with the GPC's or doctoral committee's recommendation, the school director will invite the student's program advisor and the GPC chair or doctoral committee members to discuss the disagreement. After the meeting, the GPC chair or student's doctoral advisor will approve and submit the original progress report recommendation to the Graduate Dean with a copy to the college dean and student.

*or*

Modify and submit the recommendation to include conditions agreed to by the school director/division director and GPC or doctoral committee (or add conditions) to the Graduate Dean with a copy to the college dean and student.

*or*

Change and submit the recommendation as agreed to by the school director/division director and GPC or doctoral committee with explanation any additional documentation and signed acknowledgement from the school director/division director and GPC chair or doctoral committee members. The advisor and GPC members or doctoral committee members may submit additional comments or documentation to support the GPC chair's decision or to express opposition to the chair's decision. The changed recommendation will then be submitted to the Dean of the Graduate School with a copy to the college dean and student.

## Research Proposal and Dissertation

The student should confirm the composition of the doctoral committee prior to registering for any 797 (proposal) hours. The same doctoral committee will serve as the oral comprehensive examination committee and research committee unless a change is deemed necessary as explained in Doctoral Committee section.

A dissertation proposal and final dissertation should be developed pertaining to a significant topic in the candidate's major and is required of all doctoral students. Minimum credit for the dissertation proposal (797) is 4 semester hours, and for the final dissertation is 12 semester hours. Any program requirement exceeding 12 credits of dissertation hours must first be approved by the Graduate Council and Graduate Dean.

The dissertation proposal should be presented to the student's doctoral committee and the Graduate School for approval prior to engaging in final data collection. Preliminary data collection prior to approval of the proposal is acceptable only as far as it is necessary for developing appropriate skills and methods of research. All 797 (proposal) and 799 (dissertation) hours will result in a grade of "NR" until the final product of each has been approved. Once the proposal and final dissertation have been approved by the doctoral committee and the Graduate School, the Graduate School will authorize the Registrar to change all prior grades to "S".

The dissertation proposal is crucial in the dissertation process and should culminate with a formal and public dissertation proposal hearing with the full committee present. Approval of the dissertation proposal establishes the expectations for the final dissertation and assures agreement among the committee with the student's methods and research strategy prior to

proceeding to the final stages of the dissertation. The proposal hearing also allows the committee to introduce required changes or additions to a student's proposed project while changes are still possible. Scheduling the defense hearing is done with the program office according to the major school policies.

The proposal shall be presented to the student's entire committee in a timely manner as set up in accordance with the research advisor prior to the scheduled formal proposal hearing. Arrangements for a room are made with the research advisor. Students must make sure all committee members are available and aware of the time and place. The faculty representative must be present at both the proposal hearing and the final dissertation defense which will be a public hearing open to the academic community.

After the proposal hearing, the proposal is to be revised according to committee requirements. During the proposal hearing, committee members will direct questions to the student and point out concerns regarding the proposed project. It is a good idea for the student to take careful notes of all comments and concerns made and then review the notes with the committee before the hearing is over to insure that all the requested changes are included. It will be the student's responsibility, in consultation with the research advisor, to address those concerns in a revised proposal. It is recommended that the student summarize the changes that have been incorporated into the revised proposal to assist the committee in identifying and locating the changes that have been made.

The revised proposal should then be circulated with a signature page to the committee for review and signature if they approve of the revisions. A second committee meeting is optional but could be required by the committee due to the extensive nature of the expected changes or to expedite the approval process. All committee members' signatures are required.

**Filing Proposal.** An electronic copy of the approved proposal, signed signature page and signed non-plagiarism affirmation shall be submitted to the Graduate School. The student shall sign the non-plagiarism affirmation when the proposal is filed with the Graduate School Office. All doctoral students must submit a paper copy of the signature page with signatures of all committee members. Students must also assume responsibility for maintaining their own paper copy of the entire proposal in a secure location until the time of their graduation.

**Electronic submission.** Students should submit an electronic copy of the proposal narrative to the Graduate School. Doctoral students should be prepared to submit a paper copy at any time if requested to do so by the Graduate School or by a member of their committee.

**Doctoral Candidacy.** Doctoral students advance to candidacy upon passing the written and oral comprehensive examinations and filing an approved dissertation proposal in the Graduate School. Upon meeting all requirements of the Registrar's Office is authorized to change all prior grades for 797 hours to "S".

The Graduate School will consider the proposal to be accepted unless the Graduate School Dean objects to the proposal. If the Dean objects, the proposal should be sent to the student and research advisor with specific written request for revisions. Students register for prefix 799, Doctoral Dissertation hours with the approval of their research advisor. Approval from the appropriate institutional review board (IRM for human subject research or IACUC for animal research) must be obtained prior to collecting data for the dissertation.

## Graduation Check

Upon admission to doctoral candidacy, the Graduate School will conduct a preliminary graduation check. Any discrepancies between the transcript and the plan of study must be corrected with either a new plan of study or a correction memo initiated by the advisor. Upon receipt of the



preliminary graduation check, the student must thereafter notify the Graduate School by completing an Application for Graduation at [www.unco.edu/grad/forms/docapplicationforgraduation.pdf](http://www.unco.edu/grad/forms/docapplicationforgraduation.pdf).

All graduating students are encouraged to attend graduation. Those students participating in the graduation ceremony are required to wear appropriate academic regalia. Diplomas are not issued at the graduation ceremony. All Graduate students must complete a *Diploma Request Card* at [www.unco.edu/grad/forms/gradCard.asp](http://www.unco.edu/grad/forms/gradCard.asp). The diploma will be mailed to the address provided by the student on the *Diploma Request Card*. Failure to provide a current mailing address could result in a delay in receipt of the diploma. No diploma will be issued until all requirements for graduation have been met.

**Hooding.** The candidate's research advisor shall hood the candidate at the graduation ceremony.

**Dissertation Defense.** The student will complete the research and write the dissertation in close collaboration with the research advisor. All students must follow the program and graduate school guidelines for writing the doctoral dissertation or Audiology Capstone Project. The Graduate School Dissertation Manual can be found at <http://www.unco.edu/grad>. The student should discuss program formatting rules with their doctoral committee advisor.

Upon completion of the dissertation or capstone project, the program advisor should direct the student to arrange the date, time and place of the defense of the dissertation with all committee members. After all arrangements are made, the student or program advisor will notify the Graduate School by forwarding a signed and completed *Request to Schedule a Doctoral Examination* form.

In order for the Graduate School to approve a request for the student to defend the dissertation, the following conditions must be met:

- The committee members and faculty representative must be the same as those approved by the Graduate School.
- The written and oral comprehensive examination results must have been received and recorded by the Graduate School.
- The student must have been admitted into candidacy at least one semester prior to requesting to defend the dissertation.
- The Request to Schedule a Doctoral examination must be turned in to the Graduate School at least two weeks (14 calendar days) before the requested date of the defense to allow for any problems to be addressed.
- The Defense of the Dissertation must be scheduled at least five weeks (35 calendar days) prior to the anticipated graduation date. If it is not, the student may not graduate until the following semester.

The student is responsible for confirming the date and time of the examination with all of the committee members. The Graduate School will approve and publicize the examination date, time and place in the UNC Today or in any other appropriate university publication and forward a *Results of the Doctoral Dissertation* form to the student's Program Advisor as approval of the defense.

Any examination which is not scheduled in advance through the graduate school will not be recognized as valid and must be retaken.

All committee members and the faculty representative must be present at the examination or a substitute assigned according to the guidelines for Doctoral Committee. All members of the graduate faculty may attend the defense and may ask questions of the student after the committee members finish their questioning. Other graduate students may attend with permission from the research advisor. The research advisor should discuss the nature and purpose of the dissertation defense with the student. Generally, the student is instructed to prepare a brief description of the entire study from the purpose to the results and discussion. The committee is free to ask any questions pertaining to the dissertation. The student is expected to understand all aspects of the study including the data analyses and theoretical implications and should avoid being unaware of the

procedure or logic followed in the data analyses. The committee will expect the student to demonstrate himself/herself as an expert on the topic and thesis of the dissertation. It should be recommended that the student bring copies of the signature pages for the dissertation to the defense in the event that the committee evaluates the performance as pass. They can then sign the evaluation form and the signature pages. The dissertation committee will evaluate the student's performance at the defense as well as the written dissertation as a "pass", "will pass with conditions", or "failed" on the *Report of the Defense of Dissertation* form.

- **Pass:** If the student passes the defense, the research advisor shall obtain the signatures of the research committee members on the *Report of Defense of Dissertation* form, obtain the signatures of the committee members on the form, and submit the form to the Graduate School. The student shall proceed to make any corrections required by the research committee and submit the corrected dissertation to the committee members for their signatures. The student must provide all necessary copies of the signature page. Original signatures are required on every signature page.
- **Will Pass:** If the research committee requires the student to meet stated conditions, the research advisor shall list the conditions on the *Report of Defense of Dissertation* form, obtain the signatures of the committee members on the form, and submit the form to the Graduate School. The list of conditions must include a statement regarding the number of additional defense meetings and the amount of additional time allowed by the research committee. The *Report of Defense of Dissertation* form shall be returned to the Graduate School until the conditions are met, or the committee deems student has not met the conditions. If the student subsequently satisfies the stated conditions the research advisor shall obtain the original *Report of Defense of Dissertation* form from the Graduate School. The student shall proceed to make any corrections required by the research committee and submit the corrected dissertation to the committee members for their signatures. If the student does not meet the stated conditions, the research advisor shall obtain the original *Report of Defense of Dissertation* form from the Graduate School, shall obtain signatures of the research committee members on SECTION II of the form indicating that they do not approve, and resubmit the form to the Graduate School. The Graduate School shall then notify the student that the degree program is terminated.
- **Failed:** If a student fails the defense, the research advisor shall obtain the signatures of the research committee members on the *Report of Defense of Dissertation* form and submit the form to the Graduate School. The Graduate School shall then notify the student that the degree program is terminated.

The results of comprehensive examinations, proposal and defenses must be reported to the Graduate School no later than the semester following the examination or defense or the Graduate School may require the examination to repeat the examination.

**Dissertation and Capstone Filing.** After completing any necessary revisions and successful approval of the dissertation by the student's committee, an electronic copy of the final dissertation or capstone is to be submitted to the Graduate School with four (4) original signed signatures pages for an editorial review and final approval from the Dean of the Graduate School.

The student will then be asked to make revisions and/or submit the required copies of the final dissertation for the Dean of the Graduate School to sign. The dissertation is not approved until signed by the Dean of the Graduate School.

If the dissertation is not filed with the Graduate School at least four weeks (28 calendar days) before the student's anticipated graduation date, the student may not graduate until the following semester.



Upon filing the dissertation, the Graduate School will require each doctoral student to complete specific forms relating to the dissertation and will bill the students' UNC account for binding, mailing, microfilming, and publishing the dissertation. Final submission procedures and necessary forms can be found on the Graduate School website (<http://www.unco.edu/grad/>). The dissertation will be microfilmed and the abstract will be published in Dissertation Abstracts.

The four (4) required paper copies shall be dispensed as follows:

- one copy of the dissertation shall be filed in the university archive,
- one at the library circulation,
- one copy for the student's research advisor,
- one copy will be sent to the student.

If a student has co-advisors, a fifth copy must be submitted to the Graduate School.

**Dissertation Objection.** If a dissertation is filed with all but one of the signatures of the research committee members, the Dean of the Graduate School or his/her designee will ask the non-signing member if he/she wishes to enter a formal objection(s). If a formal objection is filed, the Dean of the Graduate School will appoint a review committee to assess the specific objection(s) of the dissenting dissertation committee member. If the review committee rules that the objection(s) does not justify the rejection of the study, the chairperson of the review committee will sign the dissertation in place of the dissenting faculty member. If the review committee rules that the objection(s) is valid, the student must take appropriate steps to modify the dissertation in order to gain the approval of the original dissertation committee.

## Research Requirements

**Research Core.** Doctoral students must complete a school prescribed core of at least 12 semester hours of research courses or methods of inquiry designated as appropriate to the discipline and approved by the Graduate Council. Courses numbered XXX 622 (Directed Studies) shall not be used to substitute for courses in the research core.

The Graduate School will not waive this requirement but can approve appropriate substitute research courses or methods up to the full 12 semester hours. The program advisor must provide a written request to substitute an alternative course, a syllabus for each course, and rationale for the requested substitute(s) to the Graduate Dean.

**Research Tools.** All Ph.D. students must demonstrate competency in two acceptable research tools. A research tool is defined as advanced knowledge and/or set of skills related to a specifiable technique or method that contributes to the student's ability to conduct doctoral level research in the discipline. Schools will determine acceptable research tools such as languages, applied statistics, mathematical statistics, and computer languages/applications.

**Collateral Field.** With the approval of the major school and the Dean of the Graduate School doctoral students may use a collateral field of study as a substitute for one of the research tools. A collateral field of at least 12 credit hours is defined as advanced and specialized or focused knowledge and competence within a specifiable content area or skill area from a related discipline that contributes to the student's ability to conduct doctoral level research in their major discipline (e.g., advanced cognitive theory) applications of distance education technology or multimedia technology to the classroom. The level of competency and the assessment of competency is established by each school and must be approved by the Dean of the Graduate School.

Means of evaluating the student's knowledge or skill must be included on the plan of study to indicate how each research tool requirement is to be satisfied. Acceptable evaluation of research tools might include examinations in academic courses, competency demonstrations evaluated by advisors and committee members, or alternative testing or competency demonstration procedures developed within the school or program.

## Residence Requirement

Each student must complete at least two terms of full-time study in residence after having been admitted to the doctoral degree program. A term in residence is defined as an academic term during which a student completes nine or more credit hours of on-campus course work applicable to the doctoral degree. Non-scheduled courses (e.g., internships, externships, directed studies and doctoral research) will not be counted in the nine or more credit hours unless a student also completes at least six other credit hours of on-campus course work applicable to the doctoral degree.

Schools may request approval of alternative requirements. Proposals for alternative residency requirements must assure extensive immersion in discipline research or practice under close supervision of school graduate faculty or field professionals approved for graduate faculty equivalent status. Further, alternative proposals should address how the requirements promote appropriate values and professional motivation of a doctoral student beyond the training or academic experience that the individual will receive. Approvals will be applicable only to the program(s) specified in the proposal. Proposals should be submitted as a program curriculum request in accordance with the current curriculum review process. Alternative proposals must be approved by Graduate Council and Graduate Dean prior to implementation for any individual student.

The purpose for this residency requirement is to encourage immersion of the doctoral student in the program of study, the school and the discipline. Part-time or sporadic participation in a doctoral program is discouraged. A residency requirement does not guarantee total focus on doctoral studies. It does extend the message that a doctoral program involves more than attending some classes and completing program requirements. It also includes refinement of professional values and developing the intrinsic motivation required to contribute to the discipline.

If a UNC or Aims Community College employee cannot meet the above prescribed residency requirement due to employment restrictions, he/she may satisfy the requirement by completing 20 or more credit hours of on-campus work applicable to the degree during consecutive, academic year terms. Such a student must receive written permission from his/her immediate supervisor and a recommendation from his/her major school to fulfill the residency requirements in this manner. The supervisor's permission and the school's recommendation must be filed with the Graduate School.

## Time Limit

The maximum time allowed for completion of a doctoral degree is eight calendar years beginning with the student's first semester of enrollment after admission has been granted.

However, if a student has approval to count work taken before first enrollment after admission, the student must complete the degree within eight calendar years beginning with the earliest work counted in the program.

If a student has completed a Specialist in Education degree at the time he/she begins a doctoral degree program and if the student is permitted to include 21 semester hours of his/her specialist degree credit in the doctoral program, the student shall have a maximum time limit of five calendar years to earn the doctoral degree.

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## MASTER'S DEGREES

### **APPLIED STATISTICS AND RESEARCH METHODS M.S.**

#### **Degree Requirements — 30 Credits**

See "Applied Statistics and Research Methods M.S." on page 93.

#### **Required Major Credits — 10 hours**

SRM 502 Applied Statistics (4)  
SRM 520 Introduction to Statistical Computing (1)  
SRM 600 Introduction to Graduate Research (3)  
SRM 650 Research and Statistics Colloquium (1)(1 credit/term)

#### **Select One Concentration Area — 20 hours**

1) *Applied Statistics Concentration — 20 hours*  
SRM 551 Mathematical Statistics with Applications I (4)  
SRM 552 Mathematical Statistics with Applications II (4)  
SRM 608 Experimental Design (3)  
SRM 614 Linear Models (3)  
Elective Credits (minimum) (6)

2) *Research Methods Concentration — 20 hours*  
PSY 674 Measurement I: Educational Testing (3)  
SRM 670 Evaluation: Models and Designs (3)  
SRM 680 Introduction to Qualitative Research (3)  
Elective Credits (minimum) (11)

Students enrolled in summers-only or evenings-only programs may substitute SRM 602 and SRM 603 for SRM 502 and SRM 520. They may also substitute two (2) credit hours of SRM 694 for SRM 650. Electives must be approved by advisor prior to enrollment.

### **ART & DESIGN M.A.**

#### **Degree Requirements — 30 Credits**

See "Art & Design M.A." on page 116.

#### **Required Major Credits — 12 hours**

ART 600 Research Methods in Art(3)  
ART 680 Seminar in Art History (3)  
ART 699 Thesis (1-6) Take 6 hours

#### **Art Electives — 18 hours**

Each student will be assigned an academic advisor and graduate committee by the Coordinator of Graduate Studies for the school. The academic advisor will serve as the chair of the graduate committee. The student, with the approval of the academic advisor and committee, will develop a course of study for the degree program. The approved course of study will be submitted to the Coordinator of Graduate Studies. Changes in the course of study must be approved by the student's academic advisor and committee.

Students having less than 12 semester hours of art history in their undergraduate program will include enough hours of art history to make up the deficiency.

- It is recommended that students have a graduate committee review each semester. The student will submit a written report of the graduate review to the academic advisor and the Coordinator of Graduate Studies. The student assumes responsibility for scheduling graduate reviews. Two unsuccessful graduate reviews will be considered grounds for termination of the program. In conjunction with ART 600, the student will prepare and submit a written thesis proposal. The proposal must be approved by all members of the student's graduate committee before beginning the thesis.

A written research thesis is required of all Master of Arts degree candidates in the School of Art & Design.

In conjunction with the required written research thesis, an exhibition of work is an option for graduate students who meet all of the following conditions:

- have a studio concentration and complete a minimum of 9 hours in a specific program area;
- complete work for the exhibition while registered for courses as an on-campus student;
- have works for an exhibition approved by the academic advisor and committee;
- prior to the exhibition, complete the written thesis with the approval of their academic advisor and committee

All decisions concerning a combined art exhibition and written thesis requirement will be made by the student's graduate committee.

**Note(s):** Upon completion of the program, the student will be required to demonstrate competence in the designated area of concentration in accordance with approved school standards. The student's committee must approve the candidate for graduation.





## BIOLOGICAL SCIENCES M.S.

(Select from two emphases)

### Degree Requirements — 30 Credits

See "Biological Sciences M.S." on page 106.

### Research Core — 4 hours

BIO 594 Foundations of Biological Research (2)

BIO 691 Seminar in Biological Sciences (1) Two required hours

### Basic Elective Credits — 7-10 hours

- BIO 525 Molecular Genetics (3)
- BIO 530 Plant Systematics (4)
- BIO 533 General Parasitology (4)
- BIO 534 Mammalogy (4)
- BIO 535 Survey of Fishes, Amphibians and Reptiles (4)
- BIO 537 Morphogenesis of Algae and Fungi (4)
- BIO 540 Anatomy and Morphogenesis of Plants (4)
- BIO 550 Cell Physiology (4)
- BIO 554 General Plant Physiology (4)
- BIO 566 Animal Physiological Ecology (3)
- BIO 567 Animal Physiological Ecology Laboratory (1)
- BIO 576 Pharmacology (3)

**Note(s):** All of the above courses are double numbered.

### Advanced Study Electives — 8 hours

- BIO 512 TA Development Seminar (1)
- BIO 521 Advanced Genetics (3)
- BIO 524 Genomics (3)
- BIO 526 Population Genetics (3)
- BIO 527 Bioinformatics (3)
- BIO 544 Comparative Vertebrate Adaptations (4)
- BIO 545 Pathogenic Microbiology (3)
- BIO 546 Pathogenic Microbiology Laboratory (1)
- BIO 547 Immunology and Disease (4)
- BIO 548 Virology (3)
- BIO 549 Virology Laboratory (1)
- BIO 552 Mammalian Physiology I (3)
- BIO 553 Mammalian Physiology II (3)
- BIO 555 Reproductive and Developmental Biology (3)
- BIO 556 Current Topics in Biomedical Research (2)
- BIO 557 Mammalian Physiology I Laboratory (1)
- BIO 558 Mammalian Physiology II Laboratory (1)
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- BIO 560 Behavioral Ecology (4)
- BIO 561 Plant Ecology (3)
- BIO 563 Animal Communication (4)
- BIO 564 Plant Ecology Lab (1)
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- BIO 569 Conceptual Issues in Evolution (2)
- BIO 570 Coevolution in Ecological Systems (3)
- BIO 572 Species and Speciation (2)
- BIO 580 Mammalian Endocrinology (3)
- BIO 581 Neurobiology (3)
- BIO 591 Biology Roundtable (1)
- BIO 691 Seminar in Biological Sciences (1)

### \*Enrichment and Non-Scheduled Electives — 3 hours

- BIO 501 Current Issues in Biology (1-6)
- BIO 508 Workshop (1-3)\*\*
- BIO 513 Professional Renewal (1-3)\*\*
- BIO 585 Topics in Field Biology (1-10)
- BIO 592 Internship in Biological Sciences (1-3)
- BIO 595 Special Topics in Biology (1-6)
- BIO 622 Directed Studies (1-4)\*\*
- SCED 513 Professional Renewal (1-12)\*\*

### Required Electives — 2-5 hours

Hours can be selected with the approval of the student's advisor from the above list of enrichment and non-scheduled classes or other appropriate classes in the sciences or College of Education and Behavioral Sciences.

**Note(s):** Students must complete a minimum of 50 semester hours in biological science of combined undergraduate and graduate courses.

\*\*See "Variable Topic Courses" on page 24.

## Non-Thesis Emphasis

BIO 697 Graduate Research (1-6) To be taken before last semester

To receive the required BIO 697 credit for the non-thesis Master's degree, students must submit, and have approved by their advisor, a proposal to carry out a capstone experience based on a topic relevant to their professional interest. Students also must pass a written evaluation pertaining to the specific topic upon completion of the project, which will be administered by the advisor.

## Thesis Emphasis

BIO 699 Thesis (1-6) Research Elective, Take 6 hours

**Note(s):** Students are also required to have submitted one research manuscript for publication prior to graduation.



## CHEMISTRY M.S. (Select from two emphases)

### Degree Requirements — 30 Credits

See "Chemistry M.S." on page 107.

### Education Emphasis

#### Research Credits — 5-12 hours

CHEM 600 Seminar in Chemistry (1) Take 2 hours  
and either

CHEM 695 Thesis Proposal (1)  
CHEM 699 Thesis (1-9) Take 6 hours

or

CHEM 693 Chemical Research (3-10)

#### Chemistry Elective Credits — 6-19 hours

CHEM 522 Advanced Analytical Chemistry (3)  
CHEM 523 Chemical Spectroscopy (3)  
CHEM 533 Organic Synthesis and Stereochemistry (3)  
CHEM 534 Theory and Mechanisms of Organic Reactions (3)  
CHEM 543 Organometallic Chemistry (3)  
CHEM 556 Physical Chemistry of Atomic and Microscopic Systems (3)  
CHEM 560 Environmental Chemistry (2)  
CHEM 581 General Biochemistry I (4)  
CHEM 582 General Biochemistry II (4)  
CHEM 587 Toxicology (3)  
CHEM 590 Advanced Topics in Chemistry (3)

#### Pedagogy Credits — 6-19 hours

CHEM 682 Problems in Teaching Chemistry (3)  
PSY 540 Theories and Principles of Learning (3)

#### Electives

EDEL 620 Researched Applications for Instruction in Mathematics, K-9 (3)  
EDSE 501 The Exceptional Learner (3)  
ET 503 Computers in Education (3)  
PSY 674 Measurement I: Educational Testing (3)  
SRM 600 Introduction to Graduate Research (3)

**Note(s):** With the approval of the candidate's graduate advisor, courses may be taken in the natural sciences, mathematics, computer science, education, etc., as necessary to broaden the candidate's background

Student completing a thesis must successfully defend the thesis and all students must successfully complete comprehensive examinations in chemical education and one area of chemistry.

**Qualifier Examinations** — Each student must pass qualifying examinations in three of five areas selected from chemistry content (analytical, biological, inorganic, organic or physical chemistry). Students will have two opportunities to pass each area exam. Qualifier examinations are scheduled during the week preceding the beginning of classes each semester. If an examination is failed, the requirement may be satisfied by completing designated undergraduate coursework in the appropriate subdiscipline with a minimum grade of "B."

### Research Emphasis

#### Research Credits — 12 hours

CHEM 600 Seminar in Chemistry (1) Take 2 hours  
CHEM 695 Thesis Proposal (1)  
CHEM 699 Thesis (1-9) Take 9 hours

**Note(s):** Students must meet a physical chemistry requirement if not previously taken. CHEM 551, CHEM 552, CHEM 453 and CHEM 454 may be taken to meet this requirement.

#### Chemistry Elective Credits — 12 hours minimum

CHEM 522 Advanced Analytical Chemistry (3)  
CHEM 523 Chemical Spectroscopy (3)  
CHEM 533 Organic Synthesis and Stereochemistry (3)  
CHEM 534 Theory and Mechanisms of Organic Reactions (3)

CHEM 543 Organometallic Chemistry (3)  
CHEM 556 Physical Chemistry of Atomic and Microscopic Systems (3)  
CHEM 560 Environmental Chemistry (2)  
CHEM 581 General Biochemistry I (4)  
CHEM 582 General Biochemistry II (4)  
CHEM 587 Toxicology (3)  
CHEM 590 Advanced Topics in Chemistry (3)  
CHEM 622 Directed Studies (1-3)

#### General Electives — 0-6 hours

Electives, with the approval of the major advisor, to complete 30 credit hours are required for this program.

**Note(s):** In addition to course requirements, all students must successfully complete the defense of the thesis and must successfully complete a comprehensive examination in a major area of chemistry (analytical, biological, inorganic, organic or physical chemistry).

**Qualifier Examinations.** Each student must pass qualifying examinations in three of five areas selected from chemistry content (analytical, biological, inorganic, organic or physical chemistry). Students will have two opportunities to pass each area exam. Qualifier examinations are scheduled during the week preceding the beginning of classes each semester. If an examination is failed, the requirement may be satisfied by completing designated undergraduate coursework in the appropriate subdiscipline with a minimum grade of "B."

**CLINICAL COUNSELING M.A.****(Select Clinical Counseling or Couples and Family Therapy emphasis)****Degree Requirements — 60 Credits**

See "Clinical Counseling M.A." on page 91.

This program is accredited by the Council for Accreditation of Counseling and Related Educational Programs.

**Program Objectives**

See "Community and School Counseling (M.A.) Requirements" on page 69.

**Required Major Credits — 60 hours**

APCE 558 Abnormal Psychology (3)  
 APCE 603 Understanding Children, Adolescents, and Their Systems (3)  
 APCE 605 Group Laboratory Experience (1)  
 APCE 607 Theories of Counseling (3)  
 APCE 612 Practicum in Individual Counseling (5)  
 APCE 616 Career Theory, Counseling and Assessment (3)  
 APCE 623 Understanding and Counseling Diverse Populations (3)  
 APCE 624 Assessment and Treatment of Substance Abuse (3)  
 APCE 650 Orientation to Clinical Counseling (3)  
 APCE 654 Child Abuse and Neglect (3)  
 APCE 657 Legal and Ethical Aspects of Counseling and Psychology (3)  
 APCE 660 Psychological Consultation: Theory and Practice (3)  
 APCE 662 Group Dynamics and Facilitation (3)  
 APCE 665 Family Systems (3)  
 APCE 673 Appraisal and Assessment in Counseling (3)  
 APCE 692 Internship in Community Counseling (1-9) (Take 9 hours)  
 PSY 530 Life Span Developmental Psychology (3)  
 SRM 600 Introduction to Graduate Research (3)

**Couples and Family Therapy Emphasis**

If admitted and enrolled in the Clinical Counseling M.A, this emphasis may be an elected addition to the degree program.

**Required Emphasis Credits — 51 hours**

Complete the required credits for the M.A. in Clinical Counseling degree, without APCE 692.

**Required Emphasis Courses — minimum 15 hours**

APCE 668 Sexuality Counseling (3)  
 APCE 669 Advanced Methods: Couples and Family Therapy (3)  
 APCE 691 Internship in Clinical Counseling: Couples and Family Therapy (1-9)  
 APCE 694 Practicum in Couples and Family Therapy (4)  
 APCE 695 Seminar: Contemporary Issues in Couples and Family Therapy (3)

**COMMUNICATION M.A.****(Select from two emphases)****Degree Requirements — 30-33 Credits**

See "Communication M.A." on page 103.

**Required Major Core Credits — 18 hours**

COMM 600 Graduate Study in Communication (3)  
 COMM 601 Qualitative Methods in Communication Research (3)  
 COMM 602 Quantitative Methods in Communication Research (3)  
 COMM 605 Rhetorical Criticism (3)

Select one of the following courses:

COMM 504 Rhetorical Theory (3)  
 COMM 603 Communication Theory (3)

Select one of the following courses:

COMM 514 Interpersonal Communication (3)  
 COMM 515 Group Communication (3)  
 COMM 641 Communication and Technology (3)

**Note(s):**Select any electives with COMM prefixes. One elective course may be from a related discipline with the approval of your advisor. Students must adhere to the Graduate School policy on double-numbered courses.

Graduates are required to have a minimum number of graduate and undergraduate credit hours in the discipline for graduation (45 Non-Thesis and 48 Thesis Option). Possible deficiencies will be determined after review of the undergraduate transcripts.

All graduate students must pass written and oral comprehensive examinations before graduation. Students may apply for comprehensive examinations after completion of 24 semester hours, all undergraduate requirements and all required courses.

A maximum of 12 semester hours, individually or in combination, of courses numbered 561 or 622 may be counted toward the master's degree.

**Human Communication: Non-Thesis Option Emphasis****Required Elective Credits — 15 hours**

500 and/or 600-level coursework

**Human Communication: Thesis Option Emphasis****Required Emphasis Credits — 6 hours**

COMM 699 Thesis (6)

**Required Elective Credits — 6 hours**

500- and/or 600-level coursework

Students must pass an oral examination over his/her thesis.

 **CRIMINAL JUSTICE M.A.**

**Degree Requirements — 34 Credits**

See "Criminal Justice M.A." on page 109.

**Required Major Core Credits — 19 hours (+3 hours for capstone project or 6 hours for thesis option)**

- CRJ 550 Organization and Management of Criminal Justice (3)
- CRJ 560 Seminar in Criminology and Crime Policy (3)
- CRJ 580 Advanced Research Methods for Criminal Justice (3)
- CRJ 582 Statistics for Criminal Justice Research (3)
- CRJ 610 Criminal Justice Planning, Policy and Change (3)
- CRJ 697 Capstone Project (3)
- CRJ 699 Thesis (1-6)
- LIB 550 Library Research in Criminal Justice (1)
- SOC 544 Sociology of Criminal Law (3)

**Elective Credits — 9-12 hours**

Electives to be chosen from CRJ 500+ courses and 500+ courses offered by other programs. All electives must be pre-approved by the student's advisor.

**Note(s):** Completion and presentation of a capstone project or thesis satisfies the completion of the comprehensive exam.

 **EARTH SCIENCES M.A.**

**Degree Requirements — 30 Credits**

See "Earth Sciences M.A." on page 107.

**Thesis Option Required Emphasis Credits — 12-16 hours**

- ESCI 600 Introduction to Earth Science Research (2)
- ESCI 599 Seminar in Earth Sciences — minimum of (2)
- ESCI 695 Special Topics in Earth Sciences (2)
- ESCI 699 Thesis (6-10)

**Thesis Option Elective Credits — 14-18 hours**

Select courses from the Elective Credits listed below. \*\*

**Non-Thesis Option Required Emphasis Credits — 8-12 hours**

- ESCI 599 Seminar in Earth Sciences — minimum of (2)
- ESCI 600 Introduction to Earth Science Research (2)
- ESCI 695 Special Topics in Earth Sciences (2)
- ESCI 697 Graduate Research (2-6)

**Non-Thesis Option Elective Credits — 18-22 hours**

Select courses from the Elective Credits listed below. \*\*

**Thesis or Non-Thesis Elective Credits**

Substitutions must be approved by the graduate committee.

- AST 622 Directed Studies (1-4)\*
- ESCI 575 Earth Systems Science Education (1-6)
- ESCI 584 Earth Sciences Field Experiences (1-15)
- GEOL 510 Groundwater Geology (2)
- GEOL 521 Optical Mineralogy and Petrography (4)
- GEOL 540 Paleontology (4)
- GEOL 550 Sedimentology and Stratigraphy (4)
- GEOL 560 Geomorphology (3)
- GEOL 564 Glacial and Quaternary Geology (3)
- GEOL 567 Volcanic Geology (3)
- GEOL 581 Geologic Field Techniques (2)
- GEOL 590 Rocky Mountain Geology Seminar (2)
- GEOL 622 Directed Studies (1-4)\*
- MET 502 Dynamic Meteorology II (4)
- MET 536 Biometeorology (3)
- MET 551 Climatology (3)
- MET 595 Special Topics in Meteorology (1-4)
- MET 622 Directed Studies (1-3)\*
- OCN 622 Directed Studies (1-4)\*
- SCED 671 Elementary and Middle School Science Curriculum (3)
- SCED 678 Science Education Seminar (1-2)
- SCED 680 Science Curricula in Secondary/College Settings (3)

**Note(s):** ESCI 599, a one semester hour course, must be taken every semester the student is in residence at UNC.

Written and oral comprehensive examinations are required.

A 3.0 GPA in the courses taken as part of this major is required for graduation. A "C" or higher is required for all courses taken as part of the program.

\*See "Variable Topic Courses" on page 24.





## EDUCATION M.A.T.

### Degree Requirements — 30-33 Credit Hours

One full year of full-time classroom teaching experience or equivalent required to graduate

See "Education M.A.T." on page 100.

### Curriculum Studies Emphasis

#### Required Major Credits — 21 credit hours

EDF 610 Teacher Research (3)  
 EDF 619 Pluralism in Education (3)  
 EDF 640 Psychological Foundations of Education (3)  
 EDF 662 Foundations of Curriculum Development & Instructional Practice (3)  
 EDF 664 Current Issues in Instruction and Assessment Practices (3)  
 EDF 685 Philosophical Foundations of Education (3)  
 SRM 600 Introduction to Graduate Research (3)

#### Elective Credits — 9 hours

The elective credits are selected in consultation with the candidate's program advisor to ensure appropriateness to the degree. Elective credits may be taken at either the 500 or 600 levels.

### Elementary Education Emphasis

#### Required Major Credits — 21 hours

EDEL 601 Practicum and Capstone Seminar in Elementary Education (3)\*  
 EDEL 640 Instruction in Language Arts and Literacy in the Elementary School (3)  
 EDEL 645 Assessment of Language Arts and Literacy in the Elementary School (3)  
 EDF 610 Teacher Research (3)  
 EDF 619 Pluralism in Education (3)  
 EDF 662 Foundations of Curriculum Development & Instructional Practice (3)  
 SRM 600 Introduction to Graduate Research (3)

#### Elective Credits — 9 hours

**Note(s):**\*The practicum and capstone seminar is designed as a culminating experience for the degree program. It must be approved by the student's advisor and adhere to the guidelines established by the program area.

### English Education Emphasis

#### Required Major Credits — 30 credits

##### Education core — 12 hours

EDF 619 Pluralism in Education (3)  
 EDF 664 Current Issues in Instruction and Assessment Practices (3)  
 EDF 685 Philosophical Foundations of Education (3)  
 SRM 600 Introduction to Graduate Research (3)

##### English core — 15 hours

ENG 600 Introduction to Graduate Study (3)  
*British Literature (3): Select one*  
 ENG 623 Old English (3)  
 ENG 624 Middle English (3)  
 ENG 625 Studies in the Renaissance (3)  
 ENG 626 Studies in the Restoration and Eighteenth Century (3)  
 ENG 627 British Romantic Literature (3)  
 ENG 628 Studies in the Victorian Period (3)  
 ENG 629 20th Century British Literature (3)  
*American Literature (3): Select one*  
 ENG 630 American Literature to the Civil War (3)  
 ENG 631 Studies in American Literature Civil War to WW1 (3)  
 ENG 632 American Literature WW1 to Present (3)  
*Advance Composition (3): Select one*  
 EED 541 Methods and Materials for Teaching Language and Composition in the Secondary School (3)  
 ENG 640 History and Theory of Rhetoric (3)

ENG 641 Studies in Composition Research and Pedagogy (3)

*Theory or Language (3): Select one*

ENG 633 Studies in Linguistics (3)

ENG 638 Literary Criticism and Theory (3)

ENG 642 Film Theory and Analysis (3)

#### Elective Credits — 3 hours

The elective credits are selected in consultation with the candidate's program advisor to ensure appropriateness to the degree. Elective credits may be taken at either the 500 or 600 levels and have ENG prefix.

### Linguistically Diverse Education Emphasis

#### Required Major Credits — 33 credit hours

EDF 610 Teacher Research (3)  
 EDLD 592 Second Language Acquisition Theory (3)  
 EDLD 593 Language, School and Society (3)  
 EDLD 594 Foundations of Language and Linguistics for ESL/Bilingual Educators (3)  
 EDLD 602 Teaching Linguistically Diverse Learners (3)  
 EDLD 603 Methods and Assessment for ESL and Bilingual Education (3)  
 EDLD 604 Field Experience in TESOL and Bilingual Education (3)  
 EDLD 605 Seminar in Bilingual Education and TESOL I (3)  
 EDLD 606 Linguistically Diverse Students and the U.S. Educational System (3)  
 EDLD 607 Seminar in Bilingual Education and TESOL II (3)  
 SRM 600 Introduction to Graduate Research (3)

**EBS** **EDUCATIONAL LEADERSHIP M.A.**

**Degree Requirements — 30 Credits**

See "Educational Leadership M.A." on page 94.

**Required Courses — 15 hours**

- ELPS 601 Leadership Development Through Inquiry (3)
- ELPS 603 Shaping Organizations: Management and Leadership in Education (3)
- ELPS 604 Understanding People: Professional Development and Educational Leadership (3)
- ELPS 605 External Environments: Social, Political, and Economic Influences in Educational Leadership (3)
- SRM 600 Introduction to Graduate Research (3)

**Choose One Concentration Area Below — 9 hours**

*1) P-12 Education (9 hours)*

- ELPS 654 Instructional Leadership and Supervision (3)
- ELPS 660 Law and the Administrator (3)
- ELPS 670 The Principalsip: Leadership at the School Site Level (3)

*2) Higher Education and Student Affairs Leadership (9 hours)*

Select from the following courses:

- HESA 650 College Student Development: Foundational Theory (3)
- HESA 651 Philosophical, Historical and Cultural Foundations of Student Affairs in Higher Education (3)
- HESA 655 Multiculturalism in Higher Education and Student Affairs Leadership (3)
- HESA 669 College and University Curriculum (3)
- HESA 680 Law and Higher Education (3)
- HESA 683 Finance and Resource Management in Higher Education (3)

*3) Individually Designed Concentration (9 hours)*

ELPS or HESA Prefix Courses (9)

**Electives — 6 hours**

Additional electives appropriate for concentration area to total a minimum of 30 semester hours for program completion.

**Note(s):**Satisfactory performance on a concluding activity approved by division faculty, in accordance with Graduate School policy, must be demonstrated.

**EBS** **EDUCATIONAL PSYCHOLOGY M.A.**

**Degree Requirements — 30 Credits**

Student take the common set of required credits listed below and select additional elective credits in consultation with their advisor.

See "Educational Psychology M.A." on page 97.

**Theoretical Foundations — 9 hours**

- PSY 530 Life Span Developmental Psychology (3)
- PSY 540 Theories and Principles of Learning (3)
- PSY 590 Seminar in History and Systems (3)

**Research Methods — 6 hours**

SRM 600 Introduction to Graduate Research (3)

One of the following:

- SRM 602 Statistical Methods I (3)
- SRM 680 Introduction to Qualitative Research (3)

**Professional Foundations — 9 hours**

- PSY 575 Educational Assessment (3)
- PSY 661 Trends and Issues in Educational Psychology (3)
- PSY 674 Measurement I: Educational Testing (3)

**Elective Credits — 6 hours**

**Note(s):**Students choose electives in consultation with their advisor. Options include, but are not limited to courses in Education, Psychology, Educational Technology, Statistics and Research Methods, Professional or School Psychology, Special Education, or Educational Leadership. Courses numbered 508 or 513 are not acceptable for credit in graduate programs.

PSY 699 is a highly recommended elective for students intending subsequently to enter a doctoral program. Student competencies are examined by comprehensive examination during fall, spring or summer semesters.

**EDUCATIONAL TECHNOLOGY M.A.****Degree Requirements — 33 Credits**

See "Educational Technology M.A." on page 96.

**Required Major Credits — 33 hours**

ET 500 Introduction to Instructional Design and Technology (3)

ET 502 Instructional Design (3)

ET 503 Computers in Education (3)

ET 504 Instructional Materials Design (3)

ET 524 Design of Computer Assisted Instruction (3)

or

ET 613 Design of Distributed Learning Environments (3)

ET 601 Managing People, Projects, and Technology Systems (3)

ET 602 Performance Technology for Instructional Environments (3)

ET 604 Computer Graphics and Visual Literacy (3)

ET 692 Internship (3)

PSY 540 Theories and Principles of Learning (3)

SRM 600 Introduction to Graduate Research (3)

**Note(s):** Students need to have completed the preparatory coursework prior to taking the comprehensive examination. In addition, the student's advisor signature is required on the **Permission form to take Written Comprehensive Examination**, which verifies that the student is cleared to take the comprehensive examination. Successful completion of the written comprehension exam is required to complete the Master of Arts program.

Students may transfer up to 6 semester hours or 9 quarter hours of approved graduate level credit to the program from other accredited institutions. All coursework to be transferred or applied to meet graduate course requirements that was completed before a student's acceptance into a graduate degree program must be approved by the UNC Graduate School.

**ENGLISH, M.A.****Degree Requirements — 30 Credits**

See "English M.A." on page 103.

**Required Major Credits — 15 hours**

ENG 600 Introduction to Graduate Study (3)

One course in Theory (3)

Two courses in British Literature, one before and one after 1800 (6)

One course in American Literature (3)

**Required Elective Credits — 15 hours**

A minimum of two courses must be selected from ENG 600-level offerings (6)

*Additionally, all students must choose one of the following options:*

1) a Master's Project (ENG 697)

2) a Creative Project (ENG 697)

The master's or creative project may be written under ENG 697 for 3 semester hours. The Master's Project consists of a research paper of 30-50 pp., appropriate for journal submission. The Creative Project is a creative work of similar length and can consist of a collection of poems, short stories, or chapters of a novel. Students must make a public presentation of the project before an audience of students and faculty.

**Note(s):** To increase the flexibility of this program for teachers and to provide further work to help them improve their instructional skills, a block of pedagogical coursework (6 semester hours) may be taken as part of the required elective hours. The student and graduate advisor will plan according to individual needs.

Completion of a Master of Arts degree in English does not meet all the College of Education and Behavioral Sciences PTEP requirements for licensure in English. Students must consult their advisors and/or the College of Education and Behavioral Sciences PTEP office if they are interested in elementary or secondary licensure.

All master's candidates must take a written comprehensive examination or approved equivalent.



## FOREIGN LANGUAGES M.A. Spanish Teaching Emphasis

### Degree Requirements — 30 Credits

See "Foreign Languages M.A." on page 104.

By following the prescribed sequence of courses, students may complete the M.A. in three continuous summers on the Greeley campus. The three year cycle includes curriculum rotation featuring Spain, Latin America, and Mexico/Hispanic United States. Students may complete their M.A. in two years by combining academic year courses with two summer sessions at the Greeley campus. All candidates for the M.A. must attend at least one summer session.

### Required Major Credits — 30 hours

FL 531 Teaching of Foreign Languages (2) Take minimum of 4 credit hours

SPAN 600 Introduction to Graduate Study and Research Methods (3)

*Civilization — at least 6 hours:*

SPAN 560 Spanish Civilization and Culture (2)

SPAN 561 Latin American Civilization and Culture (2)

SPAN 562 Mexico and United States Hispanic Civilization and Culture (2)

SPAN 563 Hispanic Cultural Topics (1-6)

*Literature — at least 9 hours:*

SPAN 555 Literature for Children and Adolescents (3)

SPAN 570 Readings in United States Hispanic Literature (1-6)

SPAN 571 Readings in Spanish Literature (1-3)

SPAN 572 Readings in Latin American Literature (1-3)

SPAN 575 Masterpieces of 20th and 21st Century Latin America (2)

SPAN 576 Mexican Literature (1-3)

*Language— at least 6 hours:*

SPAN 505 Spanish Phonetics and Dialects (3)

SPAN 506 Translation (2-3)

SPAN 510 Advanced Placement Program-Spanish (1-3)

SPAN 560 Spanish Civilization and Culture (2)

SPAN 580 Grammar Topics (1-6)

SPAN 581 Advanced Spanish Grammar (2)

SPAN 582 Spanish for Oral Proficiency (2)

SPAN 583 Oral and Written Discourse (2)

**Note(s):**Note: All master's candidates must successfully complete written and oral comprehensive examinations. No thesis is required.

For students opting for summer study at the University of Salamanca, Spain, 9 hours of transfer credit may be accepted.

A maximum of 9 hours of Academic Year courses (SPAN 502, 521, 531, 550, 551) may be accepted with permission of the graduate faculty in lieu of 9 hours of required SPAN courses in the above list.

The student must possess a B.A. in Spanish or the equivalent and must have completed one year of teaching experience in foreign language at the secondary level.

Students are required to complete 27 hours of coursework within the Hispanic Studies program in Spanish and pedagogy. SPAN 600 Introduction to Graduate Study and Research Methods (3) is also required.

See "Variable Topic Courses" on page 24.



## GERONTOLOGY M.A.

### Degree Requirements — 33 Credits

See "Gerontology M.A." on page 109.

### Required Major Credits — 24 hours

GERO 555 Grant Development and Administration (3)

GERO 560 Community Resources for the Elderly (3)

GERO 565 Management Concepts for Aging Services (3)

GERO 625 Psychosocial Aspects of Aging (3)

GERO 635 Social Policies of Aging (3)

GERO 640 Health Aspects of Gerontology (3)

GERO 655 Program Planning and Evaluation in Gerontology (3)

SRM 600 Introduction to Graduate Research (3)

### Program Electives — 9 hours

GERO 692 Graduate Internship in Gerontology (1-12) Take 9 credit hours

or

GERO 699 Thesis (1-6)(with supervisor approval) Take 9 credit hours

or 9 credits from the following:

GERO 630 Intervention Strategies with the Elderly (3)

GERO 694 Practicum in Gerontology (1-4)

HRS 630 Human Services Counseling Theories and Techniques (3)

HRS 694 Supervised Counseling in Human Services (6)

Other advisor-approved electives (3-9)

**Note(s):** Completion and defense of a detailed portfolio that addresses all areas of the master's program matrix of competencies satisfies the completion of the comprehensive exam and is required to complete the M.A. Program




**GRADUATE INTERDISCIPLINARY  
DEGREE PROGRAM M.A.**
**Middle Level Mathematics Teaching Emphasis**

See "Middle Level Mathematics Teaching Emphasis" on page 114.

**Degree Requirements — 30 Credits**
**Required Courses — 9 hours**

MED 600 Introduction to Research in Mathematics Education (3)

MFT 520 Survey of Mathematics (3)

MFT 530 Conceptions of Analytic Geometry and Calculus (3)

**Note(s):** MED 600 satisfies the Graduate School requirements for Introduction to Graduate Studies.

**Required Elective Credits — 9 hours**

Choose 3 of the following:

MFT 514 Geometry in Middle School Mathematics Teaching (3)

MFT 515 Number and Operations in Middle Level Mathematics Teaching (3)

MFT 516 Algebra in Middle Level Mathematics Teaching (3)

MFT 517 Data Analysis & Probability in Middle Level Mathematics Teaching (3)

**Elective Major Credits — 12 hours**

Six credits in electives may be chosen from above courses and the following or approved substitutes:

MED 522 Topics in Mathematics Teaching at the Middle Level (1-3) Repeatable for a maximum of 6 credits

MED 588 Implementation of Mathematics Standards in Instruction (1-3) Repeatable for a maximum of 3 credits

MED 599 Action Research Project (1) Repeatable 3 times

MED 673 Teaching and Learning Mathematics on the Elementary Level (3)

MED 674 Teaching and Learning Mathematics on the Secondary Level (3)

MFT 522 Topics in Middle Level Mathematics Teaching (3) Repeatable under different subtitles

Two additional approved elective courses for up to 6 hours

Additional electives may be chosen from courses offered by the school or other schools with the approval of the student's advisor. Students are encouraged to choose relevant courses from the above or those offered by other schools (e.g. EDMS 665, EDMS 667, EDMS 670).

**Comprehensive Examination**

A student may select either one of the following options to satisfy the school comprehensive examination

requirement. Normally, at least three faculty members will be involved in judging whether or not the selected option

has been completed satisfactorily.

- *Option 1.* Completion of the Action Research Project. The Action Research Project centers around a curricular unit created by the student to be used in their professional instruction. It includes a review of relevant literature, curricular/instructional plan, data analysis and discussion. A copy of this project must be filed with the school; in addition, the student must make a two hour presentation of the project. Students who choose this option are encouraged to take MED 599 to support their work on the project.
- *Option 2.* A written comprehensive examination over MED 600, MFT 520 and two other courses chosen by the student from MFT 514, MFT 515, MFT 516 and MFT 517.

*This program does not prepare teachers to teach mathematics at the upper secondary level (9-12), does not lead to secondary licensure, and will not prepare students for advanced work in mathematics. It is designed solely for professional teachers with minimal mathematics backgrounds who wish to be prepared to teach mathematics at the middle level.*

**Note(s):** For more information about the **Interdisciplinary Studies: Graduate Interdisciplinary Degree**, see page 88.


**GRADUATE INTERDISCIPLINARY  
DEGREE PROGRAM M.A.**
**Natural Sciences K-12 Teaching Emphasis**
**Degree Requirements — 30-33 Credits**

See "Graduate Interdisciplinary Degree Program M.A." on page 114.

**Required Courses — 12 hours**

EDF 619 Pluralism in Education (3) (or any approved course on diversity and equity)

PSY 681 Cognition and Instruction I (3)

SCED 530 Laboratory, Field, and Studio Safety (1)

SCED 578 K-12 Science Inquiry (3)

SCED 600 Science Education Research for K-12 Teachers (2)

**Required Research Courses — 3-6 hours**

SCED 697 Action Research in Science Education (1-3) non-thesis option

or

SCED 699, Thesis (1-6) - thesis option

**Required Science Content Courses — 15 hours**

Courses are selected from 500+ level with the following prefixes: AST, BIO, CHEM, ENST, ESCL, GEOL, MET, OCN, SCED, and SCI; courses must be from at least two prefixes (by advisement).

**Note(s):** The goal of this program is to enhance the science and pedagogical knowledge of professional science teachers in the K-12 environment.

The non thesis option requires an Action Research Project centered around a science educational topic. The Project will be developed with the help of the student's advisor. The student must give a formal presentation on this Project. Students completing the non-thesis option are required to complete either an oral or written comprehensive examination.

The thesis option requires a committee of a minimum of three faculty members. The student conducts research on a science educational topic that is designed/developed, implemented, and evaluated by the student with the help of the student's advisor. The student writes a thesis and defends it in front of his or her committee.



## HISTORY M.A.

### Degree Requirements — 30 Credits

See "History M.A." on page 103.

### Required Courses — 3-6 hours

**HIST 580 Seminar in History (3)** (Required for all students writing a thesis.)

**HIST 600 Introduction to Graduate Historical Study (3)**

### Elective Courses — 24-27 hours

Elective courses may be taken from any HIST 500-HIST 600 level course.

**Note(s):** Candidates for the M.A. in history should consult with the director of the School of History, Philosophy & Political Science or school graduate coordinator as soon as possible during the first semester of graduate work so that a major field advisor may be assigned. A plan of study will be approved by the advisor and the graduate coordinator. Candidates, in consultation with the major field advisor, will select two other program members who together will constitute the candidate's examining committee. Candidates are urged to consult frequently with the faculty who compose their committee.

### Thesis Option

A minimum/maximum of six hours may be earned in HIST 699 by writing a thesis on a subject that falls within the student's concentration. Additionally, each thesis candidate must take HIST 580. At least 15 hours of coursework, in addition to the six thesis hours, must be concentrated in one of the following areas: United States; European; Africa/Asia/ and Latin American history. The remaining three hours in history that round out the candidate's program should be taken from outside the concentration area. Research and writing of a thesis precludes comprehensive examinations. An oral examination will be held after the student's major professor has accepted the thesis for presentation to the candidate's committee. Students will be responsible on the oral for a mastery of their field, including the reading list they received during their first week in the program.

### Non-Thesis Option

Candidates must concentrate fifteen hours of coursework in one of the following areas: American History, European History, African/Asian/Latin American History. The area chosen will become the student's major field. Twelve additional hours of history courses at the 500/600 level must be completed outside the student's concentration area.

Students who elect this option are required to pass written and oral examinations in their concentration area. The written examination will be three hours in length and may be taken no earlier than the second semester of graduate study. Within two weeks of the written examination, candidates receiving a passing grade from each member of their examining committee on the comprehensive will be examined orally, usually for two hours, over the concentration. Students will be responsible on the oral for a mastery of their field of study, including the reading list they have received during their first week in the program.

### Comprehensive and Thesis Fields In History:

European	United States	Africa/Asia/Latin American
Ancient Medieval Early Modern Modern	Colonial Period to the Present	Comprehensive or thesis to be developed with candidate's graduate advisor and committee.

**Note(s):** Candidates must obtain a permit from the School of History, Philosophy & Political Science allowing them to take their comprehensive or thesis/oral examination. The student must return the permit to the school office no later than the end of the sixth week of the semester in which the

examination will be taken. At this time a specific date will be set by the school director with the advice of the candidate's major professor and committee.

The maximum credit that may be earned in HIST 622, Directed Studies, is six hours. Candidates must obtain prior approval and the signatures of their advisor and the school director before enrolling.

The minimum/maximum credit that may be earned in HIST 699, "Thesis," is six hours.

"Please see "Variable Topic Courses" (on page 24)

All students will be examined orally by a committee during their second semester in residence. A "pass" or "conditional pass" recommendation by the committee will permit a student's continuance in the program. A "fail" recommendation will eliminate the student from the History M.A. program. All students without exception must satisfy the thirty hours master's degree requirement.



## MATHEMATICS M.A. (Select from two emphases)

### Degree Requirements — 30 Credits

See "Mathematics M.A." on page 111.

Students must submit an essay of approximately 500 words addressing their interest in the Master of Arts in Mathematics degree program and their educational goals.

### Liberal Arts Emphasis

Applications are not being accepted into the Liberal Arts Emphasis at this time.

#### Required Emphasis Credits — 17 hours

MATH 510 Seminar in Mathematics (1)\*(take twice)

MATH 523 Modern Algebra (3)

MATH 525 Linear Algebra I (3)

MATH 540 Introduction to Topology (3)

MATH 545 Introductory Analysis (3)

MATH 560 Introductory Complex Variables (3)

#### Required Elective Credits — 13 hours

Electives must have the approval of the advisor. Electives must be selected from 500-600 level MATH or STAT courses not including those designed for the Master of Arts: Teaching Emphasis (Exception: One of MATH 528 or MATH 529 may be selected as an elective).

**Note(s):**The comprehensive examination will consist of two two-hour written examinations over the required sequences MATH 523 - MATH 525 and MATH 540 - MATH 545. An oral examination over the program up to two hours in length will be given upon successful completion of the written comprehensive.

### Teaching Emphasis

#### Required Emphasis Credits — 9 hours

MATH 534 Continuous Mathematics (3)

MATH 543 Modern Geometry (3)

MED 600 Introduction to Research in Mathematics Education (3)

**Note(s):** MED 600 satisfies the Graduate School requirements for Introduction to Graduate Studies

#### Elective Credits — 21 hours

At least twelve semester hours must be selected from group A and at least six semester hours must be selected from group B.

##### Group A (12 hours)

MATH 520 Functions and Equations (3)

MATH 528 Discrete Mathematics (3)

MATH 529 Mathematical Problem Solving (3)

MATH 537 Mathematical Modeling (3)

MATH 550 Applied Probability and Statistics (3)

MATH 591 Abstract Algebra and Number Theory (3)

##### Group B (6 hours)

MED 528 Teaching of Discrete Mathematics (2)

MED 534 Teaching Algebra and Trigonometry (2)

MED 543 Teaching Geometry (2)

MED 550 Teaching Applied Probability and Statistics (2)

MED 595 Teaching Advanced Topics in Secondary School Mathematics (2)

MED 599 Action Research Project (1) (repeatable, 3 times)

MED 673 Teaching and Learning Mathematics on the Elementary Level (3)

MED 674 Teaching and Learning Mathematics on the Secondary Level (3)

Additional electives may be chosen from courses offered by the school or other schools with the approval of the student's advisor.

#### Comprehensive Examinations

A student may select either one of the following options to satisfy the comprehensive examination requirement. Normally, at least three faculty members will be involved in judging whether or not the selected option has been completed satisfactorily.

- *Option 1.* A written examination over the three required courses and over one other course from Group B above (student's choice). Up to two hours of oral examination will be given upon successful completion of the written examination.
- *Option 2.* Completion of the Action Research Project involving the selection of a problem, review of relevant literature, plan, data analysis and discussion. A copy of this project must be filed with the School; in addition, the student must make a two hour presentation of the project. Students who choose this option are encouraged to take MED 599 to support their work on the project.



## MUSIC M.M. (Select from eight emphases)

### Degree Requirements — 30-33 Credits

See "Music M.M." on page 117.

### Collaborative Piano Emphasis

In addition to the Music, M.M. requirements above, proficiency in diction and translation of two standard foreign languages (selected from French, German and Italian) will be examined upon entry. Candidates with deficiencies will meet with their major advisor and other appropriate faculty to determine the best way to remedy those deficiencies.

#### Required Emphasis Credits — 24-26 hours

*Studies in Major Area*

MUS 540 Techniques of Vocal Coaching (2)  
 MUS 541 Chamber Music Literature for Keyboard (2)  
 MUS 600 Introduction to Musical Scholarship (2)  
 MUS 693 Practicum in Music (1-4) Take 2 hours\*  
 MUS 665 Individual Performance in Collaborative Piano (2-4)  
 Take 8 hours

Major Performing Organization (2)

*Other studies in Music*

Music History, Music Theory (6)

Courses will be selected by advisement based upon candidates' needs identified through advisory examination.

#### Elective Emphasis Credits — 6-7 hours

Electives will be selected by advisement based upon candidate's need identified through examination.

MUS 507 History of Instruments and Instrumental Practices (3)  
 MUS 510 Vocal Pedagogy (2)  
 MUS 536 German Art Song (3)  
 MUS 538 French/Italian Art Song (2)  
 MUS 539 British/American Art Song (2)  
 MUS 559 Opera History and Literature (2)  
 MUS 630 Small Ensembles and Chamber Music (1)  
 MUS 671 Individual Performance in Piano (2-4)

Note(s): \*Recital and correlative paper.

### Conducting Emphasis

#### Required Emphasis Credits — 26 hours

MUS 511 Wind Band Literature and Techniques (2)  
 MUS 512 Symphonic Literature and Techniques (2)  
 MUS 550 Score Reading and Analysis (1)  
 MUS 551 Individual Performance in Conducting (2) Take 4 hours

MUS 558 Choral Literature and Techniques (2)  
 MUS 600 Introduction to Musical Scholarship (2)  
 MUS 693 Practicum in Music (1-4)  
 Individual Performance in Major Instrument or Voice (4)  
 Major Performing Organization (2)

*Music History and Theory — 6 hours*

Courses will be selected by advisement based upon candidates' needs identified through advisory examination.

#### Elective Emphasis Credits — 4-5 hours

MUS 564 Problems in Teaching Voice (2)  
 MUS 580 String Techniques for the Conductor (2)  
 MUS 650 Seminar: Choral Music (2)  
 MUS 653 Vocal Literature and Styles (3)  
 MUS 657 Instrumental Literature and Styles (3)  
 MUS 658 Brass Pedagogy (3)  
 MUS 661 Percussion Pedagogy (2)  
 MUS 662 Woodwind Pedagogy (2)  
 MUS 685 Performance in Opera Theatre (1-12)

A recorded public recital and correlative paper are required. The performance will be conducted by the candidate and evaluated by the major advisor and relevant faculty. It is the student's responsibility to file a printed program and audio recording of the performance with the School of Music Office and the Music Library.

### Instrumental Performance Emphasis

#### Required Emphasis Credits — 22-23 hours

*Studies in the Major Area (14 hours)*

MUS 600 Introduction to Musical Scholarship (2)  
 MUS 693 Practicum in Music (2) (Recital and Correlative Paper)

Individual Performance (8)

Major Performing Organization (2)

String performers will participate in a major ensemble each semester in residence.

*Other Studies in Music (8-9 hours)*

Music History, Music Theory (6)

Pedagogy (2-3)

Note(s): Other Studies in Music will be selected by advisement based upon candidate's needs identified through advisory examination.

In addition to the Music, M.M. requirements above, brass, woodwind, string, and percussion majors will take a written examination on instrumental techniques in their instrument area.

#### Elective Credits — 8 hours

Electives will be selected by advisement based upon candidate's needs identified through examination.

Note(s): Master of Music candidates in performance must present a public recital. It is the student's responsibility to file a printed program and tape recording of the performance with the School of Music Office and the Music Library.

A correlative paper may be required in conjunction with the recital at the discretion of the individual school.

Performance emphases are available in flute, oboe, clarinet, bassoon, saxophone, horn, trumpet, tenor trombone, bass trombone, euphonium, tuba, percussion, violin, viola, violoncello, string bass, harp, keyboard, voice, and guitar.

### Jazz Studies Emphasis

#### Required Emphasis Credits — 29 hours

MUS 542 Jazz Pedagogy (2)  
 MUS 544 Seminar in Jazz History (3)  
 MUS 547 Advanced Arranging (2)  
 MUS 585 Advanced Jazz Improvisation (2)  
 MUS 600 Introduction to Musical Scholarship (2)  
 MUS 625 Jazz Ensembles (1) Take 2 hours  
 MUS 636 Individual Performance in Jazz (2-4) Take 8 hours  
 MUS 693 Practicum in Music (1-4) Take 2 hours\*

*Other Studies in Music*

Music History, Music Theory (6)

*Other Studies in Music* will be selected by advisement based upon candidates needs identified through advisory examination.

#### Elective Emphasis Credits — 3 hours

Electives will be selected by advisement based upon candidate's needs identified through examination.

Note(s): Master of Music candidates in jazz studies must present a public recital. This recital should be recorded and a printed program and CD recording should be filed with the School of Music Office and the Music Library. A correlative paper will be required in conjunction with the recital.

All graduate students enrolling in the School of Music as majors are expected to attend major recitals, concerts, productions and convocations on a regular basis as part of the course program.

Residency, when stated in the music section of this catalog, is interpreted to mean 9 credit hours or more per semester.

Jazz Studies specializations are available in saxophone, trumpet, trombone, guitar, piano, bass, and drums.

Master of Music candidates will take a written comprehensive examination at a time approved by the major advisor.

This is a highly selective degree program. Admission is by audition for the applied jazz faculty and is dependent on studio availability.



## Music Education Emphasis

### Required Emphasis Credits— 12 hours

*Studies in the Major Area (9 hours)*

- MUS 519 Foundations of Music Education (3)
- MUS 533 Curriculum Trends in Music Education (3)
- MUS 610 Research in Music Education (3)

*Studies in Professional Education (3 hours)*

Selected from the following content areas such as: Multicultural Education, Educational Psychology, Educational Foundations or Special Education (3).

### Credits in Music Studies — 10 hours

To be selected in consultation with program advisor (10).

### Elective Credits in Music and other areas — 8 hours

Courses should be based upon the candidate's specialized teaching area and professional goals.

**Note(s):**Candidates will be asked to take an advisory examination on topics related to music education.

The School of Music will consider examinations, scholarly papers and musical performance in all areas of study to assess student progress throughout the program.

## Music History and Literature Emphasis

### Required Emphasis Credits — 27 hours

- MUS 600 Introduction to Musical Scholarship (2)
- MUS 649 Music History Pedagogy (3)
- MUS 699 Thesis (1-6)

Music History (9)

Music Theory Courses (3)

Major Performing Organization and/or Individual Performance (4)

### Elective Credits — 3 hours

Electives will be selected by advisement, based upon candidate's needs identified through examination.

**Note(s):**Music Theory and Music History courses are selected by advisement based on the candidate's area of focus and upon the candidate's needs identified through the advisory examination.

Students who are able to demonstrate competency in any required course may substitute an elective chosen in consultation with the advisor.

## Music Theory and Composition Emphasis

### Required Emphasis Credits — 33 hours

- MUS 509 Electronic Music (3)
- MUS 600 Introduction to Musical Scholarship (2)
- MUS 603 Analytical Studies in Music (3)
- MUS 648 Seminar: Music Since 1900 (3)
- MUS 677 Individual Instruction in Composition (8)
- MUS 699 Thesis (6) (or original composition)

Music Performing Organization and/or Individual Performance (2)

Music History (6)

Studies in Music History will be selected by advisement based upon candidate's needs identified through advisory examination.

**Note(s):**MUS 502 and MUS 503 may be required if advisory examinations indicate that these courses will significantly increase the strength of Master of Music candidates in Theory and Composition.

Students who are able to prove their competency in any of the required courses listed above may substitute electives chosen in consultation with the advisor.

Master of Music candidates will present a recital of their compositions written as part of their degree program.

In addition to the Music, M.M. requirements above, Theory and Composition candidates must submit examples of works composed, supported if possible by recordings.

This emphasis requires that the student has completed a Bachelor's degree in music.

## Vocal Performance Emphasis

In addition to the Music, M.M. requirements above, Voice students must pass a diction proficiency examination in German, French and Italian. An entrance audition is required; voice students will be expected to perform one or more art songs in French, German, Italian and English, including one opera aria or oratorio aria and a contemporary art song. The entrance audition may be performed during the first semester of degree work.

### Required Emphasis Credits — 29-33 hours

- MUS 559 Opera History and Literature (2)
- MUS 600 Introduction to Musical Scholarship (2)
- MUS 693 Practicum in Music (1-4) (Recital and Correlative Paper)

Individual Performance (8)

Major Performing Organization (2)

*Studies in the Major Area (8-9 hours)*

Select one of the following courses:

MUS 510 Vocal Pedagogy (2)

MUS 564 Problems in Teaching Voice (2)

Select two of the following courses (4-5 hours)

MUS 536 German Art Song (3)

MUS 538 French/Italian Art Song (2)

MUS 539 British/American Art Song (2)

Select one of the following courses: (2 hours)

MUS 534 Acting for Singers (2)

MUS 685 Performance in Opera Theatre (1-12) Take 2 hours

MUS 686 Scene Studies in Opera (1-3) Take 2 hours

*Other Studies in Music (6 hours)*

Music History or Music Theory (6)

Other Studies in Music will be selected by advisement based upon candidate's needs identified through advisory examination.

### Elective Credits — 3 hours

**Note(s):**Students in the area of Vocal Performance should have skills in translation of vocal literature in one foreign language (French, German, or Italian) as well as diction mastery of all three. A candidate may challenge any portion of the language requirement.

Master of Music candidates in voice must present a public recital. It is the student's responsibility to file a printed program and tape recording of the performance with the School of Music Office and the Music Library.

A correlative paper may be required in conjunction with the recital at the discretion of the individual school.



## NURSING M.S. (Select from three emphases)

### Degree Requirements — 39-48 Credits

See "Nursing M.S." on page 112.

### Required Major Core Credits — 9 hours

NURS 507 Leadership and Nursing Issues (3)  
NURS 600 Nursing Theory (3)  
NURS 605 Nursing Research (3)

Successful completion of a comprehensive exam is required to complete the Master of Science program

## Clinical Nurse Specialist in Chronic Illness (CNS) Emphasis

**Prerequisites:** Baccalaureate Degree in Nursing

### Required Emphasis Credits — 35-38 hours

*CNS Emphasis (32 hours)*

NURS 602 Management of Chronically Ill Populations I (4)  
NURS 604 Management of Chronically Ill Populations II (4)  
NURS 610 Health Assessment (3)  
NURS 612 Advanced Pharmacology (4)  
NURS 614 Advanced Pathophysiology (3)  
NURS 630 Teaching Strategies in Nursing (3)  
NURS 665 Seminar Topics in Chronic Illness (3)  
NURS 680 Advanced Practice Role Practicum (1-9)  
NURS 690 Advanced Professional Role (2)

*Research Requirement (3-6 hours)*

NURS 699 Thesis (1-6)

or

NURS 691 Applied Nursing Research (3)

## Education Emphasis

**Prerequisites:** Undergraduate Research.

### Required Emphasis Credits — 30 hours

*Clinical (11 hours)*

NURS 602 Management of Chronically Ill Populations I (4)  
NURS 604 Management of Chronically Ill Populations II (4)  
NURS 614 Advanced Pathophysiology (3)

*Education (13 hours)*

NURS 630 Teaching Strategies in Nursing (3)  
NURS 660 Nursing Education Seminar (4)  
NURS 695 Advanced Academic Nursing Roles (3)  
PSY 540 Theories and Principles of Learning (3)

*Required Research (6 hours)*

NURS 699 Thesis (1-6) Take 6 hours

or

NURS 691 Applied Nursing Research (3) *and*  
NURS 520 Clinical Instruction in Nursing (3)

or

Education Elective (3 hours)

## Family Nurse Practitioner (FNP) Emphasis

### Required Emphasis Credits — 36-39 hours

*FNP Emphasis (33 hours)*

NURS 610 Health Assessment (3)  
NURS 612 Advanced Pharmacology (4)  
NURS 614 Advanced Pathophysiology (3)  
NURS 640 Health Care of Families I (4)  
NURS 645 Health Care of Families II (4)  
NURS 650 Health Care of Families III (4)  
NURS 680 Advanced Practice Role Practicum (1-9) Take 9 hours

NURS 690 Advanced Professional Role (2)

*Research Requirement (3-6 hours)*

NURS 699 Thesis (1-6) Take 6 hours

or

NURS 691 Applied Nursing Research (3)

**Prerequisites:** Undergraduate Research, Undergraduate Physical Assessment Course



## PHYSICAL EDUCATION M.A.T.

### Degree Requirements — 30 hours

SES 589 Bridging Theory and Practice in Sports Coaching (3)  
SES 603 Professional Development Seminar (3)  
SES 604 Teacher Action Research (3)  
SES 612 Assessment in Sport Pedagogy (3)  
SES 614 Analysis of Teaching in Physical Education (3)  
SES 628 Adventure Education (3)  
SES 640 Curriculum in Physical Education (3)  
SES 641 Instructional Strategies for Elementary School Physical Education (3)  
SES 642 Instructional Strategies for Secondary School Physical Education (3)  
SES 680 Perspectives in Sport Pedagogy (3)

**Note(s):** EDFE 555 – Student Teaching – 8 – 12 hours is required (for those using the program for an additional teaching endorsement).

**Note(s):** *Portfolio.* In lieu of a comprehensive exam or thesis, all students must develop and present a portfolio that displays successful incorporation of the theoretical and foundational aspects of effective teaching. Public exhibition of the portfolio before an audience of faculty and students is required.



## PUBLIC HEALTH M.P.H. Community Health Education Emphasis

### Degree Requirements — 45 Credits

See "Public Health M.P.H." on page 109.

### Required Major Credits — 36 hours

SRM 617 Biostatistics and Health Data Analysis (3)

Select one of the following two courses:

HRS 610 Interpretation and Evaluation of Behavioral Research (3)

SRM 600 Introduction to Graduate Research (3)

CH 509 Seminar in Health Behavior (3)

CH 520 Foundations in Public Health (2)

CH 530 Seminar in Health Promotion Strategies (3)

CH 540 Principles of Health Program Management (3)

CH 550 Environmental Health (3)

CH 560 Scientific Foundations of Health Promotion/Disease Prevention (3)

CH 610 Program Planning and Evaluation (3)

CH 620 Epidemiology (3)

CH 625 Public Health Administration and Policy (3)

CH 686 MPH Masters Project (2)

CH 693 MPH Practicum (2)

### Required Elective Credits — 9 hours

**Note(s):** Elective units are selected with consent of advisor.

Students must complete 120 practicum field hours and successfully complete a capstone experience (formal report and public presentation) which incorporates core competencies with the practicum experience. Students may also pursue a thesis option in lieu of 6 elective hours upon consultation and approval by their faculty advisor. Completion and presentation of a capstone project or thesis satisfies the completion of the comprehensive exam.



## READING M.A.

### Degree Requirements — 33 Credits

See "Reading M.A." on page 101.

#### Required Major Credits – 33 hours

- EDRD 611 Language, Literacy and Cognitive Development (3)
- EDRD 612 Reading in the Elementary Schools (3)
- EDRD 614 Literature for Children, Adolescents and Young Adults (3)
- EDRD 617 Evaluation and Improvements of Literacy Teaching and Learning (4)
- EDRD 620 Reading in the Middle and Secondary Schools (3)
- EDRD 642 Teaching the Writing Process in Schools (3)
- EDRD 645 Reading Research (3)
- EDRD 670 Directing a School-Wide Reading/Literacy Program (3)
- EDRD 692 Clinical Practicum in Literacy Coaching (4)
- EDRD 693 Capstone Reading Seminar (1)
- SRM 600 Introduction to Graduate Research (3)



## REHABILITATION COUNSELING M.A.

### Degree Requirements — 60 Credits

See "Rehabilitation Counseling M.A." on page 110.

#### Required Major Credits — 48 hours

- HRS 580 Rehabilitation Principles and Case Management (3)
- HRS 581 Vocational Evaluation and Assessment of People with Disabilities (3)
- HRS 585 Occupational Information and Job Placement (3)
- HRS 604 Family, Cultural and Psychological Aspects of Disability (3)
- HRS 605 Medical Aspects of Disability (3)
- HRS 610 Interpretation and Evaluation of Behavioral Research (3)
- HRS 630 Human Services Counseling Theories and Techniques (3)
- HRS 631 Group Processes in Rehabilitation (3)
- HRS 692 Clinical Internship in Rehabilitation (15) **Must be completed in an approved rehabilitation counseling setting.**
- HRS 694 Supervised Counseling in Human Services (6)
- PSY 530 Life Span Developmental Psychology (3)

#### Elective Credits — 12 hours

- APCE 624 Assessment and Treatment of Substance Abuse (3)
- APCE 654 Child Abuse and Neglect (3)
- EDSE 541 Introduction to Visual Impairment and Deaf-Blindness (3)
- EDSE 546 Principles of Orientation and Mobility (3)
- EDSE 548 Medical and Educational Implications of Visual Impairments (3)
- GERO 555 Grant Development and Administration (3)
- HRS 650 Human Resources System (3)

**Note(s):** To complete requirements for rehabilitation counseling, 12 semester hours of electives, approved by the faculty advisor, must be taken.

The curriculum is presented in both an online and weekend workshop format.

Successful completion of a written comprehensive examination is required to complete the Master of Arts program.

The master's program is fully accredited by the Council on Rehabilitation Education (CORE) and qualifies students to obtain the Certified Rehabilitation Counselor (CRC) designation.

**EBS SCHOOL COUNSELING M.A.**

**Degree Requirements — 60 Credits**

This program is accredited by the Council for Accreditation of Counseling and Related Educational Programs.

See "School Counseling M.A." on page 91.

**Required Major Credits — 60 hours**

- APCE 558 Abnormal Psychology (3)
- APCE 602 Foundations of School Counseling (3)
- APCE 603 Understanding Children, Adolescents, and Their Systems (3)
- APCE 605 Group Laboratory Experience (1)
- APCE 606 Theories and Practices in Group Guidance (3)
- APCE 607 Theories of Counseling (3)
- APCE 608 Organization, Administration and Evaluation of School Counseling Programs (3)
- APCE 612 Practicum in Individual Counseling (5)
- APCE 614 Internship in School Counseling and Guidance (1-9) Take 6 hours.
- APCE 616 Career Theory, Counseling and Assessment (3)
- APCE 623 Understanding and Counseling Diverse Populations (3)
- APCE 624 Assessment and Treatment of Substance Abuse (3)
- APCE 654 Child Abuse and Neglect (3)
- APCE 657 Legal and Ethical Aspects of Counseling and Psychology (3)
- APCE 660 Psychological Consultation: Theory and Practice (3)
- APCE 665 Family Systems (3)
- APCE 673 Appraisal and Assessment in Counseling (3)
- PSY 530 Life Span Developmental Psychology (3)
- SRM 600 Introduction to Graduate Research (3)

**Note(s):** Students wishing to obtain Colorado licensure in this area are required to pass proficiency examination(s). Students should contact the Teaching/Special Services Licensing Office for information.

**EBS SCHOOL LIBRARY EDUCATION M.A.**

**Degree Requirements — 32 Credits**

See "School Library Education M.A." on page 96.

**Required Major Credits — 32 hours**

- EDRD 614 Literature for Children, Adolescents and Young Adults (3)
- EDRD 620 Reading in the Middle and Secondary Schools (3)
- ET 502 Instructional Design (3)
- ET 503 Computers in Education (3)
- ET 504 Instructional Materials Design (3)
- ET 533 Information Literacy & Reference (3)
- ET 535 School Library Administration and Leadership (3)
- ET 538 Selection, Evaluation, & Utilization of Library Materials & Cataloging (3)
- ET 604 Computer Graphics and Visual Literacy (3)
- ET 694 Elementary School Library Internship (1)
- ET 696 Secondary School Library Internship (1)
- SRM 600 Introduction to Graduate Research (3)

**Note(s):** For licensure purposes, the Colorado Department of Education requires students to complete two field experience in an elementary and/or either middle or secondary school library.

Students need to have completed the preparatory coursework prior to taking the comprehensive examination. In addition, the student's advisor signature is required on the **Permission form to take Written Comprehensive Examination**, which verified that the student is cleared to take the comprehensive examination. Successful completion of the written comprehensive exam is required to complete the Master of Arts program.

Students wishing to obtain Colorado licensure in this area are required to pass the required state proficiency examination. Endorsements are granted by the Colorado Department of Education upon the recommendation of the UNC Licensure Officer. Students should contact the School of Teacher Education in McKee 216 for licensure information. All coursework completed will be accessed by the UNC Licensure Officer prior to licensure acceptance.

**Note(s):** For licensure purposes, the Colorado Department of Education requires students to complete two field experiences in an elementary and/or either a middle or secondary school library.

For M.A. Degree and program requirements, See "School Library Education M.A." on page 54.





## **SOCIOLOGY M.A.**

### **Sociological Practice Emphasis**

#### **Degree Requirements — 33 Credits**

See "Sociology M.A." on page 104.

#### **Required Sociology Credits — 27 hours**

GERO 555 Grant Development and Administration (3)  
 SOC 530 Organizational Analysis (3)  
 SOC 532 Social Psychology and Group Dynamics (3)  
 SOC 539 Seminar in Sociological Practice (3)  
 SOC 552 Applied Social Theory (3)  
 SOC 580 Social Policy Analysis (3)  
 SOC 660 Applied Social Research (3)  
 SOC 691 Research Internship (6)

#### **Elective Credits — 6 hours**

Elective credits may be any advisor approved 500 or 600 level courses.

#### **Professional Research Report Option:**

Courses required for this option are listed above. The professional research report is completed in conjunction with **SOC 691 Research Internship (1-9)**. Candidates should consult with the graduate coordinator as soon as possible during the first semester of work so that they can be assigned an advisor. In consultation with their advisor the committee chair, they should choose another program member to be on their committee. These faculty members plus the internship site supervisor serve as the student's committee which directs the research project, the professional research report and the oral examination over the research. Candidates are urged to consult frequently with the members of their committee.

#### **Thesis Option:**

The thesis option requires 6 thesis credits, SOS 699. Thesis credit may be substituted for elective credits and/or for three research internship credits. The thesis option also includes an oral defense of the thesis. Students who are interested in this option should consult with the graduate coordinator as soon as possible.



## SPECIAL EDUCATION M.A. (Select from six emphases)

### Degree Requirements — 36-74 Credits

See "Special Education M.A." on page 98.

**Note(s):** If a student enters the master of arts program in special education without a current teacher licensure, she or he is required to complete additional (separate) admission requirements and course requirements listed under Professional Teacher Education.

### Required Major Core Credits — 3 hours

SRM 600 Introduction to Graduate Research (3)

## Deaf and Hard of Hearing Emphasis

### Required Prerequisites — 7 hours

ASLS 266 Normal Speech and Language Development (3)

ASLS 370 Basic Audiology (4)

Ability to communicate, with advanced proficiency in American Sign Language and/or a sign system.

### Required Emphasis Credits — 39 hours

EDSE 510 Foundations of Special Education (3)

EDSE 511 Learning Environments and Cultural Considerations (3)

EDSE 512 Assessment, IEP Development, and Instructional Planning (3)

EDSE 550 Foundations of Deaf Education (3)

EDSE 551 Collaboration: Deaf/Hard of Hearing (3)

EDSE 652 Auditory Skill Development: Deaf/Hard of Hearing(3)

EDSE 653 Speech: Deaf/Hard of Hearing (3)

EDSE 654 Language: Deaf/Hard of Hearing (3)

EDSE 655 Literacy: Deaf/Hard of Hearing (3)

EDSE 656 Curriculum and Instruction: Deaf/Hard of Hearing (3)

EDSE 657 Practicum: Deaf/Hard of Hearing (6-12)

**Note(s):**Students are required to complete a sign language proficiency test which will be administered before each student's practicum placement.

## Early Childhood Special Education Emphasis

### Required Emphasis Credits — 29-42 hours

EDSE 510 Foundations of Special Education (3)

EDSE 511 Learning Environments and Cultural Considerations (3)

EDSE 512 Assessment, IEP Development, and Instructional Planning (3)

EDSE 530 Parent/Professional Partnerships (3)

EDSE 531 Assessment and Planning in Early Childhood Special Education (3)

EDSE 532 Typical and Atypical Early Child Development: Application to Early Childhood Special Education (3)

EDSE 533 Curriculum and Instruction in Early Childhood Special Education (3)

EDSE 534 EDSE 534 Research, Policy, and Advocacy in Early Childhood Special Education (3)

EDSE 535 Practicum in Early Childhood Special Education (2-15)

EDSE 616 Scientifically Based Literacy Interventions (3)

## Generalist Emphasis

### Required Emphasis Credits — 36 hours

EDSE 510 Foundations of Special Education (3)

EDSE 511 Learning Environments and Cultural Considerations (3)

EDSE 512 Assessment, IEP Development, and Instructional Planning (3)

EDSE 613 Applied Assessment (3)

EDSE 614 Behavioral Interventions (3)

EDSE 616 Scientifically Based Literacy Interventions (3)

EDSE 617 Mathematics and Content Area Learning for Students with Disabilities (3)

EDSE 618 Educating Students with Significant Support Needs (3)

EDSE 619 Secondary Services (3)

EDSE 693 Practicum in Special Education (3-12) Take 6 hours

## Gifted and Talented Education Emphasis

### Emphasis Requirements — 33 hours

EDSE 682 Foundations in Gifted Education (3)

EDSE 683 The Gifted Learner: Nature and Needs (3)

EDSE 684 Assessment and Identification in Gifted Education (3)

EDSE 685 Curriculum & Instructional Practice in Gifted Education (3)

EDSE 686 Emotional and Social Development of the Gifted and Talented (3)

EDSE 687 Program Strategies and Services For the Gifted and Talented (3)

EDSE 688 Communication and Leadership in Gifted Education (3)

EDSE 689 Creativity in Gifted Education (3)

EDSE 690 Highest Levels of Learning for the Gifted and Talented (3)

EDSE 691 Practicum in Teaching the Gifted and Talented (1-12) Take 6 hours

The student must possess a current teaching license, must have at least two years teaching experience and must have a grade point average from the baccalaureate degree of at least 3.0 on a 4.0 scale.

## Intervention Specialist Emphasis

### Required Emphasis Credits — 30 hours

EDSE 670 Legal and Policy Foundations of Special Education (3)

EDSE 671 Fostering School and Community Relationships (3)

EDSE 672 Leadership in the School Community (3)

EDSE 673 Research and Reflective Practice (3)

EDSE 674 Interventions in Literacy and Numeracy (3)

EDSE 675 Issues in Special Education Assessment (3)

EDSE 676 Assessment and Interventions for Students with Challenging Behaviors (3)

EDSE 677 Transition to Adulthood for Youth with Exceptionalities (3)

EDSE 678 Leadership Strategies in Significant Support Needs/ Autism (3)

EDSE 679 Interventions for Students with Cultural and Linguistic Differences (3)

## Visual Impairment Emphasis

### Required Emphasis Credits — 42 hours

EDSE 510 Foundations of Special Education (3)

EDSE 511 Learning Environments and Cultural Considerations (3)

EDSE 512 Assessment, IEP Development, and Instructional Planning (3)

EDSE 541 Introduction to Visual Impairment and Deaf-Blindness (3)

EDSE 543 Braille Codes and Formats (3)

EDSE 546 Principles of Orientation and Mobility (3)

EDSE 548 Medical and Educational Implications of Visual Impairments (3)

EDSE 549 Assessment of Students with Visual Impairments (3)

EDSE 640 Methods of Teaching Students with Visual Impairment (3)

EDSE 642 Advanced Seminar in Education of Students with Visual Disabilities (3)

EDSE 644 Practicum in Education of Students with Visual Impairments, K-12 (6-12)

EDSE 645 Advanced Braille Codes and Formats (3)

**Note(s):** See "Orientation and Mobility (O&M) Endorsement" on page 85.



## SPEECH-LANGUAGE PATHOLOGY M.A.

### Degree Requirements — 69 Credits

See "Audiology and Speech-Language Sciences" on page 108.

Select one of the following research courses:

- HRS 610 Interpretation and Evaluation of Behavioral Research (3)
- SRM 600 Introduction to Graduate Research (3)

Complete the following courses:

- ASLS 516 Professional Issues in SLP (1)
- ASLS 555 Neuroanatomy and Neurophysiology of Communication (3)
- ASLS 563 Voice and Resonance Disorders (3)
- ASLS 571 Speech and Hearing Science (4)
- ASLS 655 Acquired Disorders of Language and Cognition (3)
- ASLS 656 Feeding and Swallowing Disorders: Lifespan (2)
- ASLS 657 Motor Speech Disorders: Lifespan (2)
- ASLS 661 Articulation and Phonological Disorders in Children (3)
- ASLS 664 Fluency Disorders (3)

Select one of the following courses:

- ASLS 658 Assistive Technology for Communication Disorders (3)
- EDSE 308 Workshop in Special Education (1-3)

Select one of the following courses:

- ASLS 682 Language Disorders in Early Childhood and Preschool (3)
- ASLS 684 Disorders of Language & Literacy: School-Age and Adolescent (3)

Research Courses (4 hours)

- ASLS 515 Foundations of Research and Writing (1)
- ASLS 615 Research in Audiology and Speech-Language Pathology (1-4) (Take 1 hour)
- ASLS 686 Capstone in Speech-Language Pathology (2)

### Clinical Practicum — 14 hours

- ASLS 569 Advanced Diagnostic Procedures (1-2) Take 6 hours
- ASLS 583 Clinical Practicum: Introduction (1-2) Take 2 hours
- ASLS 585 Clinical Practicum in Speech-Language Pathology: Intermediate (1-2) Take 2 hours
- ASLS 586 Clinical Practicum in Speech-Language Pathology: Intermediate/Advanced (2)
- ASLS 588 Clinical Practicum in Speech-Language Pathology: Advanced (2)

### Internships — 18 hours

(Student chooses Primary internship for 12 hours and Secondary internship for 6 hours)

- ASLS 592 Internship in Public Schools (2-15)
- ASLS 692 Internship in Medical Settings (2-16)

**Note(s):**Students who do not pursue a thesis must complete both internships: ASLS 592, Internship in Public Schools and ASLS 692, Internship in Medical Settings, for 6-12 semester hours each. Students who elect to complete a thesis may be exempted from one of these externships, with the consent of their academic advisor and they must complete ASLS 699, Thesis: Audiology and Speech-Language Sciences, for six semester hours and SRM 602, Statistical Methods I, for three semester hours, in addition to the requirements shown above.

Students who complete this program are eligible for the Certificate of Clinical Competence in Speech-Language Pathology from the American Speech-Language-Hearing Association and for licensure from the Colorado Department of Education. This program is accredited by the Council on Academic Accreditation (CAA) of the ASHA and by the Colorado Department of Education.

**Note(s):**Satisfactory performance on culminating activity/ activities approved by program faculty, in accordance with Graduate School policy, satisfies the completion of the comprehensive exam and is required to complete the M.A. Program.



## SPORT AND EXERCISE SCIENCE M.S. (Select from three emphases)

### Degree Requirements — 30-33 Credits

See "Sport and Exercise Science M.S." on page 113.

### Exercise Science Emphasis

#### 1) Biomechanics Concentration — 33 hours

*Required Credits (9 hours)*

SES 602 Introduction to Research in Sport and Exercise Science (3)

SES 625 Laboratory Techniques in Kinesiological Research (3)  
SRM 602 Statistical Methods I (3)

*Concentration area requirements (15 hours)*

SES 550 Neural Aspects of Kinesiology (3)

SES 619 Advanced Biomechanics (3)

SES 620 Neuromuscular Structure and Function (3)

SES 629 Concepts in Kinesiology (3) (Biomechanics of Locomotion)

*Select two of the following courses:*

SES 624 Advanced Developmental Kinesiology (3)

SES 626 Advanced Physiological Kinesiology I (3)

SES 627 Advanced Physiological Kinesiology II (3)

SES 665 Advanced Sociological Kinesiology (3)

*Elective Credits (3-6 hours)*

Elective credits in a concentration area must have the approval of the program advisor and must satisfy the Thesis option or the Professional Research Project Option.

*The following course is recommended to be used as an elective:*

SES 692 Graduate Internship in Sport and Exercise Science (1-6)

#### 2) Exercise Physiology Concentration — 33 hours

*Required Credits (9 hours)*

SES 602 Introduction to Research in Sport and Exercise Science (3)

SES 625 Laboratory Techniques in Kinesiological Research (3)  
SRM 602 Statistical Methods I (3)

*Concentration area requirements (15 hours)*

SES 620 Neuromuscular Structure and Function (3)

SES 626 Advanced Physiological Kinesiology I (3)

SES 627 Advanced Physiological Kinesiology II (3)

SES 629 Concepts in Kinesiology (3) (Cardiopulmonary Physiology)

*Select one of the following courses:*

SES 550 Neural Aspects of Kinesiology (3)

SES 619 Advanced Biomechanics (3)

SES 624 Advanced Developmental Kinesiology (3)

SES 665 Advanced Sociological Kinesiology (3)

*Elective Credits (3-9 hours)*

Elective credits in a concentration area must have the approval of the program advisor and must satisfy the Thesis option or the Professional Research Project option. The following courses are recommended electives:

*Research or Pre Med*

BIO 550 Cell Physiology (4)

CHEM 581 General Biochemistry I (4)

CHEM 582 General Biochemistry II (4)

BIO 552 Mammalian Physiology I (3)

BIO 553 Mammalian Physiology II (3)

*Preventative and Rehabilitative Exercise*

SES 510 Cardiac Rehabilitation (3)

SES 692 Graduate Internship in Sport and Exercise Science (6)

*Nutrition in Sport and Exercise*

CHEM 581 General Biochemistry I (4)

CHEM 582 General Biochemistry II (4)

FND 555 Nutrition for Fitness and Athletic Performance (3)

#### 3) Social Psychology of Sport and Physical Activity Concentration — 33 hours

*Required Credits (9 hours)*

SES 602 Introduction to Research in Sport and Exercise Science (3)

SES 625 Laboratory Techniques in Kinesiological Research (3)  
SRM 602 Statistical Methods I (3)

*Concentration area requirements (15 hours)*

SES 624 Advanced Developmental Kinesiology (3)

SES 629 Concepts in Kinesiology (3) (Motivation)

SES 635 Exercise and Sports Psychology (3)

SES 665 Advanced Sociological Kinesiology (3)

*Select one of the following courses:*

SES 619 Advanced Biomechanics (3)

SES 620 Neuromuscular Structure and Function (3)

SES 626 Advanced Physiological Kinesiology I (3)

*Elective Credits (3-9 hours)*

Elective credits in a concentration area must have the approval of the program advisor and must satisfy the Thesis option or the Professional Research Project option.

*The following courses are recommended electives:*

CH 530 Seminar in Health Promotion Strategies (3)

GERO 625 Psychosocial Aspects of Aging (3).

PSY 550 Cognitive Development (3)

PSY 627 Psychometrics (3)

PSY 664 Advanced Social Psychology (3)

SES 680 Perspectives in Sport Pedagogy (3)

SOC 532 Social Psychology and Group Dynamics (3)

SOC 563 Qualitative Methods (3)

SRM 680 Introduction to Qualitative Research (3)

#### Professional Research Project

The writing and presentation of a research project satisfies the completion of the comprehensive exam.

Students must see an advisor to develop a program matrix and research paper topic.

#### Thesis Options (Elective Credit Hours — 6)

The thesis option hours may be included as elective hours within a student's program. The Thesis option requires the completion of an experimental research project (problem development, data collection and analysis, write-up, and defense).



## Sport Administration Emphasis

### Required Emphasis Credits — 21 hours

- SES 560 Issues and Ethics in Sport Management (3)
- SES 570 Program Management (3)
- SES 576 Sport Promotion and Marketing (3)
- SES 602 Introduction to Research in Sport and Exercise Science (3)
- SES 675 Management of Sports Facilities and Equipment (3)
- SES 676 Sport Public Relations and Information Systems (3)
- SES 688 Legal Aspects of Sport (3)

### Elective Credits — 3-9 hours

Students are allowed 9 hours of electives in the master's program. After consulting with their advisor, students should select courses which contribute to their academic and career goals. The following courses are offered as a guide for elective course selection. Students should also review the *Catalog* for course options in their cognate areas.

- ET 501 Introduction to Applications of Educational Technology (3)
- ET 504 Instructional Materials Design (3)
- SES 650 Financial Management for Sport Organizations (3)
- SES 670 Sport and Higher Education (3)
- SES 678 Event Development and Management (3)
- SES 692 Graduate Internship in Sport and Exercise Science (1-6)

### Professional Research Project

The writing of a research project satisfies the completion of the comprehensive exam.

Students must see an advisor to develop research paper topics.

### Thesis Option (Elective Credit Hours — 6)

The thesis option is in lieu of the professional research project listed above.

Thesis hours may be included as elective hours within a student's program. The Thesis option requires the completion of thesis (problem development, data collection and analysis, write-up, and defense).

**Note(s):** SES 692 may be used for up to 6 hours of elective credit and is designed to assist students in gaining experience in the sport industry and/or to bridge the gap between theory and practice. To be eligible to register for SES 692, a student must have 1) a GPA of 3.0, 2) completed (or currently enrolled) five required courses, and 3) completed 20 graduate credits.

## Sport Pedagogy Emphasis

### Required Emphasis Credits — 12 hours

- SES 602 Introduction to Research in Sport and Exercise Science (3)
- SES 603 Professional Development Seminar (3)
- SES 680 Perspectives in Sport Pedagogy (3)
- SES 688 Legal Aspects of Sport (3)

### Select One Concentration Area — 9 hours

- 1) *Physical Education concentration requirements (9 hours)*
    - SES 612 Assessment in Sport Pedagogy (3)
    - SES 614 Analysis of Teaching in Physical Education (3)
    - SES 640 Curriculum in Physical Education (3)
  - 2) *Outdoor Education concentration requirements (9 hours)*
    - SES 612 Assessment in Sport Pedagogy (3)
    - SES 628 Adventure Education (3)
    - SES 631 Outdoor Education (3)
  - 3) *Youth Development concentration requirements (9 hours)*
    - SES 605 Youth Development and Physical Activity (3)
    - SES 606 Scholarship in Youth Development (3)
- Select one of the following courses with advisor approval:
- SES 614 Analysis of Teaching in Physical Education (3)
  - SES 628 Adventure Education (3)

### Elective Credits — 12 hours

Select one course from a different concentration area (3)

Select one of the following options (6 hours)

### Professional Research Project

The writing and presentation of a research project satisfies the completion of the comprehensive exam.

### Thesis Option (Elective Credit Hours — 6)

The Thesis option is in lieu of the professional research project option listed above.

Thesis hours may be included as elective hours within a student's program. The Thesis option requires the completion of an experimental research project (problem development, data collection and analysis, write-up, and defense).

Additional elective credits must have the approval of a program advisor (3)

**Endorsement:** By completing the Sport Pedagogy Emphasis: Physical Education Concentration, students fulfill the requirements for institutional recommendation for an added endorsement as a K-12 Physical Education teacher. Before such recommendation is made, however, students seeking endorsement must provide evidence of two or more years of teaching experience in elementary, middle or secondary school while holding a Type "A" teaching license or equivalent and complete student teaching in physical education. (Contact the Colorado Department of Education for a complete list of requirements for endorsement.)



## TEACHING AMERICAN SIGN LANGUAGE M.A.

See "Teaching American Sign Language M.A." on page 100.

### Degree Requirements — 30 credits

- SRM 600 Introduction to Graduate Research (3)
- TASL 501 First and Second Language Acquisition in ASL (3)
- TASL 502 ASL Teaching Methods (3)
- TASL 503 ASL Assessment and Testing (3)
- TASL 504 ASL Curriculum Development and Design (3)
- TASL 505 Teaching Deaf Community, Culture, and ASL Literature (3)
- TASL 506 Contemporary Professional Issues in Teaching ASL (3)
- TASL 507 ASL Research Methods (3)
- TASL 593 Practicum for ASL Teaching I (3)
- TASL 594 Practicum for ASL Teaching II (3)

**Note(s):** If a candidate is seeking a Colorado Department of Education teaching license and enters the Master of Arts program in Teaching American Sign Language without a current teacher licensure, she or he is required to complete additional (separate) admissions and course requirements listed under Professional Teacher Education.

If a candidate is seeking a Colorado teaching license and enters the Master of Arts program in Teaching American Sign Language without a current teacher licensure, she or he must complete the PTEP requirements prior to TASL 593 and TESL 594.

This program will be offered pending CDE and State Board approval.

### Professional Teacher Education — 9 hours

- EDF 500 Conceptions of Schooling (3)
- EDFE 125 Admission to PTEP Application, Post baccalaureate (0)
- EDRD 523 Reading and Writing in the Content Areas (3)
- PSY 500 Educational Psychology for Teachers (3)



## THEATRE EDUCATION M.A. Theatre Educator Intensive

### Degree Requirements — 36 Credits

This focused program consists of two three-week summer institutes for eighteen (18) credits - 9 each year - one three 3) credit 500 level or above approved UNC or transferable theatre course; three (3) three-credit on-line courses spread out over two academic years (graduate transfer credits may also apply), and six (6) credits of thesis advisement for a total of thirty-six (36) credits spread out over the course of two academic years and two summer sessions.

### Required Courses — 33 credits

- THED 530 Theatrical Production: Costuming, Make-Up, Props (3)
- THED 531 Theatrical Production: Lighting, Sound, and Scenic Design (3)
- THED 540 Directing/Acting: Realism and Musical Theatre (3)
- THED 541 Directing/Acting: Non-Realism/Period Styles (3)
- THED 560 Innovative Strategies in Drama Education (3)
- THED 561 Voice and Movement (3)
- THED 600 Dramaturgy/Research Methodology (3)
- THED 670 Advocacy, History and Philosophy of Theatre Education (3)
- THED 680 Theatre Education Curriculum Development (3)
- THED 690 Thesis I (3)
- THED 699 Thesis II (3)

### Theatre Electives — 3 credits

- Approved 500 or 600 Level Theatre Course (3)

The Coordinator of the M.A. in Theatre Education: Theatre Educator Intensive program will assign each student an academic advisor and a graduate committee. The academic advisor will serve as the chair of the graduate committee.

It is recommended that students have a graduate committee review each semester. The student will submit a written report of the graduate review to the academic advisor and the Coordinator of the M.A. in Theatre Education: Theatre Educator Intensive program. The student assume responsibility for scheduling graduate reviews. Two unsuccessful graduate reviews will be considered grounds for termination of the program. In conjunction with THED 690 and 691, the student will prepare and submit a written thesis proposal. Prior to beginning work on the thesis, the thesis proposal must be approved by all members of the student's graduate committee.

A written research thesis is required of all Master of Arts degree candidates in the School of Theatre Arts and Dance. In conjunction with the required written research thesis, graduate students are required to direct a thesis production.

**Note(s):** Upon completion of the program, the student will be required to demonstrate competence in the designated area of concentration in accordance with approved school standards. The student's committee must approve the candidate for graduation.

## EDUCATIONAL SPECIALIST DEGREES

EBS

### EDUCATIONAL LEADERSHIP ED.S.

#### Degree Requirements — 30 Credits

See “Educational Leadership Ed.S.” on page 94.

#### Research — 3 hours

Select one of the following courses:

- PSY 674 Measurement I: Educational Testing (3)
- SRM 602 Statistical Methods I (3)
- SRM 670 Evaluation: Models and Designs (3)
- SRM 680 Introduction to Qualitative Research (3)

#### Educational Leadership Courses — 15 hours

ELPS or HESA Prefix Courses (15 hours)

#### Field-Based Learning — 3 hours

Select from among the following courses:

- ELPS 606 Internship (3)
- ELPS 695 Practicum in Educational Leadership (1-3)
- HESA 670 Internship in Higher Education and Student Affairs Leadership (6)
- HESA 675 Field Experience in Higher Education and Student Affairs Leadership (1-3)

#### Electives — 9 hours

Courses Fulfilling Professional Needs and Interests (9)

**Note(s):**Satisfactory performance on a concluding activity approved by division faculty, in accordance with Graduate School policy, must be demonstrated.

EBS

### SCHOOL PSYCHOLOGY ED.S.

#### Degree Requirements — 71 Credits

See “School Psychology Ed.S.” on page 93.

The Ed.S program is fully accredited by the National Association of School Psychologists.

See “School Psychology Admission Requirements” on page 70.

#### Required Major Credits — 71 hours

*Psychological and Educational Foundations (40hours)*

- APCE 607 Theories of Counseling (3)
  - APCE 638 Human Behavior Analysis (3)
  - APCE 655 Social and Community Psychology (3)
  - APCE 660 Psychological Consultation: Theory and Practice (3)
  - APCE 667 Crisis Intervention in the Schools (2)
  - APCE 672 Neuropsychologically-Based Interventions for Educational Difficulties (3)
  - APCE 737 Single-Case Research Methods (2)
  - APCE 747 Psychological Aspects of Academic Programming and Intervention (4)
  - APCE 757 Intervention for Severe and Low Incidence Disabilities (3)
  - APCE 758 Advanced Psychopathology (3)
  - APCE 763 Legal and Professional Foundations of School Psychology (4)
  - APCE 781 Evaluation of Psychological Services (3)
  - PSY 530 Life Span Developmental Psychology (3)
- Applied Practice in School Psychology (22 hours)*
- APCE 618 Practicum in Child, Adolescent, and Family Interventions (5)
  - APCE 674 Assessment for Intervention: Cognitive and Academic (5)
  - APCE 675 Social and Behavioral Assessment in the Schools (3)
  - APCE 676 Assessment for Intervention: Infant and Toddler (3)
  - APCE 779 Practicum in School Psychology (3)

Select one of the following courses:

- APCE 681 Practicum in Consultation (3)
- APCE 738 Practicum in Evidenced-Based Interventions (3)

*Multicultural Understanding (3 hours)*

Select one of the following courses:

- APCE 623 Understanding and Counseling Diverse Populations (3)

*Supervised Field Work (6 hours)*

- APCE 789 Internship in School Psychology (1-8) (A minimum of 6 credits must be taken, 2 credits across three semesters.)

**Note(s):**A written comprehensive examination is a program requirement, and it is satisfied by successfully completing the National School Psychology Exam.

## DOCTORAL DEGREES

### **EBS** APPLIED STATISTICS AND RESEARCH METHODS PH.D.

#### **Degree Requirements — 64 Credits**

See “Applied Statistics and Research Methods Ph.D.” on page 93.

The Doctor of Philosophy degree program focus is on the application of statistical concepts, research design, and general research methodology to the solution of practical problems in a variety of disciplines including: education, mental health, business, and public health.

#### **Master’s en route to the Ph.D.**

A student may apply for admission to the Ph.D. program in Applied Statistics and Research Methods and obtain the M.S. in Applied Statistics and Research Methods on the way to completion of the doctoral degree. The application process and admission criteria are the same as for the Ph.D. program. The student must complete all program requirements for the M.S. degree in addition to the minimum 64 hours required for the Ph.D. The student must be conferred with the M.S. degree prior to admission to doctoral candidacy.

#### **Required Major Credits — 6 hours**

SRM 689 Internship in Applied Statistics (1-10) Take 3

or

SRM 694 Practicum (1-9) Take 3  
SRM 763 Apprenticeship (1-3) Take 3

#### **Complete one of the following Concentration Areas:**

##### **Applied Statistics Concentration — 26 hours**

SRM 606 Multiple Linear Regression Analysis (3)  
SRM 607 Non-Parametric Statistics (3)  
SRM 609 Sampling Methods (3)  
SRM 635 Categorical Data Analysis (3)  
SRM 645 Statistical Process Control (3)  
SRM 731 Multivariate Analysis (3)  
Elective Credits (8)

##### **Research Methods Concentration — 26 hours**

SRM 521 Statistical Computing with SPSS (1)  
SRM 625 Applied Multiple Regression Analysis (3)  
SRM 627 Survey Research Methods (3)  
SRM 670 Evaluation: Models and Designs (3)  
SRM 680 Introduction to Qualitative Research (3)  
SRM 705 Advanced Issues in Research Methods (3)  
Elective Credits (10)

#### **Cognate Option**

A student in the research methods concentration may elect to complete 15 semester hours within a cognate area in lieu of the elective credits requirement. These hours must be at the graduate level and approved by the student’s advisor. The intent of the cognate is to equip the student in a substantive discipline within which the dissertation may be written.

Approved electives may be substituted for required courses completed during a Master’s program.

#### **Research Core — 16 hours**

SRM 610 Statistical Methods III (3)  
SRM 611 Advanced Statistical Data Analysis (3)  
SRM 620 Advanced Statistical Programming (3)  
SRM 650 Research and Statistics Colloquium (1) Take 4 hours (1 credit/term)  
SRM 700 Advanced Research Methods (3)

#### **Research Proposal/Dissertation — 16 hours**

SRM 797 Doctoral Proposal Research (1-4) Take 4 hours  
SRM 799 Doctoral Dissertation (1-12) Take 12 hours

#### **Research Tools**

All Ph.D. students must demonstrate competency in two acceptable research tools.

#### **Deficiencies**

Students who enter the doctoral program without a working knowledge of SAS programming must take SRM 520 early in their doctoral program.

### **NHS** AUDIOLOGY AU.D.

#### **Degree Requirements — 127 Credits**

See “Audiology Au.D.” on page 108.

#### **Core Requirements — 52 hours**

ASLS 555 Neuroanatomy and Neurophysiology of Communication (3)  
ASLS 570 Rehabilitative Audiology (2)  
ASLS 571 Speech and Hearing Science (4)  
ASLS 572 Hearing Loss Prevention (3)  
ASLS 573 Auditory Physiology (3)  
ASLS 582 Educational Audiology (3)  
ASLS 668 Cochlear Implants (3)  
ASLS 671 Psychoacoustics (2)  
ASLS 674 Audiology Practice Management (2)  
ASLS 675 Differential Diagnosis of Auditory Problems (3)  
ASLS 677 Medical Aspects of Audiology (3)  
ASLS 678 Amplification I (3)  
ASLS 685 Advanced Differential Diagnosis of Auditory Problems (3)  
ASLS 688 Amplification II (3)  
ASLS 690 Otopharmacology (2)  
ASLS 771 Speech Perception and Advanced Signal Processing (2)  
ASLS 774 Professional Issues in Audiology (2)  
ASLS 775 Advanced Electro-diagnosis (3)  
ASLS 782 Pediatric Audiology (3)

#### **Teaching Requirements (2 hours)**

ASLS 720 Supervised Teaching in Communication Disorders (2)

#### **Clinical Practicum (12 hours)**

ASLS 574 Clinical Practicum in Audiology (1)  
ASLS 580 Practicum in Rehabilitative Audiology (1-2) 2 credits required  
ASLS 594 Practicum and Advanced Topics in Audiology (1-6) 6 credits required  
ASLS 483/583/584 (1-3) (if speech hours are needed)

#### **Internships (16 hours)**

ASLS 592 Internship in Public Schools (2-15)\*  
ASLS 692 Internship in Medical Settings (2-16)  
\*Eight semester hours of Internship in Public Schools (ASLS 592) are required to obtain licensure from the Colorado Department of Education for employment as an audiologist in the public schools.

#### **Externship (27 hours)**

ASLS 792 Externship in Audiology (3-12)  
Students are expected to complete ASLS 792, Clinical Residency, in three semesters of nine credits each.

#### **Elective Courses (3 hours)**

Students will choose at least 3 credits from courses approved by the program advisor. Electives will be chosen to supplement specialized career needs. For example, some students may elect to become more proficient in American Sign Language; others who desire a medical emphasis may elect to take additional courses in genetics or pharmacology.

#### **Research Courses (15 hours)**

ASLS 515 Foundations of Research and Writing (1)  
ASLS 615 Research in Audiology and Speech-Language Pathology (1-4) 4 credits required  
ASLS 715 Applied Research in Audiology (1-4) 4 credits required  
SRM 602 Statistical Methods I (3)  
SRM 603 Statistical Methods II (3)





## BIOLOGICAL EDUCATION PH.D.

### Degree Requirements — 64 Credits

See "Biological Education Ph.D." on page 106.

### Master's en route to the Ph.D.

Students admitted to the Ph.D. program in Biological Education may complete a thesis master's degree in Biology en route to completion of the doctoral degree. A request for a simultaneous master's degree in a discipline other than Biology will not be accepted. The student, in collaboration with the student's advisor, will develop a dual plan of study that includes clearly distinct master's and doctoral requirements. The student will be required to meet all of the requirements of both the master's and the doctoral degrees. The student must graduate from the master's degree program a minimum of one semester prior to conferring of the doctoral degree. The maximum time allowed for completion of the doctorate is eight calendar years beginning with the students' first semester of enrollment after admission has been granted.

### Pedagogical Elective Credits — 6-7 hours

- ET 502 Instructional Design (3)
- PSY 540 Theories and Principles of Learning (3)
- PSY 575 Educational Assessment (3)
- PSY 654 Seminar in College Teaching (3)
- PSY 674 Measurement I: Educational Testing (3)
- PSY 675 Measurement II: Advanced Techniques (3)
- PSY 681 Cognition and Instruction I (3)
- SCED 555 Science Education for Adults and Communities (3)
- SCED 678 Science Education Seminar (1-2)
- SCED 680 Science Curricula in Secondary/College Settings (3)

### Content Elective Credits — 18-19 hours

#### Basic Electives — 8 hrs-maximum

- BIO 525 Molecular Genetics (3)
- BIO 530 Plant Systematics (4)
- BIO 533 General Parasitology (4)
- BIO 534 Mammalogy (4)
- BIO 535 Survey of Fishes, Amphibians and Reptiles (4)
- BIO 537 Morphogenesis of Algae and Fungi (4)
- BIO 540 Anatomy and Morphogenesis of Plants (4)
- BIO 550 Cell Physiology (4)
- BIO 554 General Plant Physiology (4)
- BIO 566 Animal Physiological Ecology (3)
- BIO 567 Animal Physiological Ecology Laboratory (1)
- BIO 576 Pharmacology (3)

**Note(s):** All of the above courses are double-numbered.

#### Advanced Electives (10-11 hours — minimum)

- BIO 512 TA Development Seminar (1)
- BIO 521 Advanced Genetics (3)
- BIO 524 Genomics (3)
- BIO 526 Population Genetics (3)
- BIO 527 Bioinformatics (3)
- BIO 544 Comparative Vertebrate Adaptations (4)
- BIO 545 Pathogenic Microbiology (3)
- BIO 546 Pathogenic Microbiology Laboratory (1)
- BIO 547 Immunology and Disease (4)
- BIO 548 Virology (3)
- BIO 549 Virology Laboratory (1)
- BIO 552 Mammalian Physiology I (3)
- BIO 553 Mammalian Physiology II (3)
- BIO 555 Reproductive and Developmental Biology (3)
- BIO 556 Current Topics in Biomedical Research (2)
- BIO 557 Mammalian Physiology I Laboratory (1)
- BIO 558 Mammalian Physiology II Laboratory (1)
- BIO 560 Behavioral Ecology (4)
- BIO 561 Plant Ecology (3)
- BIO 563 Animal Communication (4)
- BIO 564 Plant Ecology Lab (1)
- BIO 568 Disturbance Ecology (3)
- BIO 569 Conceptual Issues in Evolution (2)
- BIO 570 Coevolution in Ecological Systems (3)
- BIO 572 Species and Speciation (2)
- BIO 580 Mammalian Endocrinology (3)
- BIO 581 Neurobiology (3)
- BIO 591 Biology Roundtable (1)
- BIO 691 Seminar in Biological Sciences (1)

### Research Core — 23-24 hours

- BIO 622 Directed Studies (1-4) Take 6 hours
- BIO 691 Seminar in Biological Sciences (1) Take 4 hours
- BIO 792 Doctoral Supervised Teaching (4)
- SRM 502 Applied Statistics (4)
- SRM 700 Advanced Research Methods (3)

Select one of the following two courses:

- BIO 594 Foundations of Biological Research (2)
- SCED 694 Science Education Research (3)

### Research Proposal/Dissertation — 16 hours

- BIO 797 Doctoral Research Proposal (4)
- BIO 799 Doctoral Dissertation (12)

### Research Tools

All Ph.D. students must demonstrate competency in two acceptable research tools.

**Note(s):** Students must complete a minimum of 50 semester hours in biological science of combined undergraduate and graduate courses.

SRM 502 and SRM 700 may be waived depending on course background of the student.

Students are required to submit two manuscripts for publication prior to graduation. The student must be the first author on one of the submitted manuscripts.



## CHEMICAL EDUCATION PH.D.

### Degree Requirements — 64 Credits

See "Chemical Education Ph.D." on page 107.

Students must meet a physical chemistry requirement if not previously taken. CHEM 551, CHEM 552, CHEM 453 and CHEM 454 may be taken to meet this requirement.

### Chemistry Component — minimum 12 hours

- CHEM 522 Advanced Analytical Chemistry (3)
- CHEM 523 Chemical Spectroscopy (3)
- CHEM 533 Organic Synthesis and Stereochemistry (3)
- CHEM 534 Theory and Mechanisms of Organic Reactions (3)
- CHEM 543 Organometallic Chemistry (3)
- CHEM 556 Physical Chemistry of Atomic and Microscopic Systems (3)
- CHEM 560 Environmental Chemistry (2)
- CHEM 581 General Biochemistry I (4)
- CHEM 582 General Biochemistry II (4)
- CHEM 587 Toxicology (3)
- CHEM 590 Advanced Topics in Chemistry (3)
- CHEM 622 Directed Studies (1-3)

### Pedagogy Component Required — minimum 7 hours

- CHEM 682 Problems in Teaching Chemistry (3)
- CHEM 755 Supervised Practicum in College Teaching (1-6)

#### Electives

- ET 502 Instructional Design (3)
- ET 503 Computers in Education (3)
- ET 602 Performance Technology for Instructional Environments (3)
- ET 627 Design of Games and Simulations (3)
- ET 702 Instructional Design Theory and Research (3)
- PSY 540 Theories and Principles of Learning (3)
- PSY 674 Measurement I: Educational Testing (3)
- PSY 675 Measurement II: Advanced Techniques (3)
- PSY 682 Cognition and Instruction II (3)
- SCED 678 Science Education Seminar (1-2)
- SCED 680 Science Curricula in Secondary/College Settings (3)
- SRM 670 Evaluation: Models and Designs (3)
- SRM 770 Evaluation: Advanced Methods (3)

### Research Core — 13 hours (minimum)

- CHEM 600 Seminar in Chemistry (1)
- CHEM 693 Chemical Research (1-10)
- CHEM 793 Doctoral Research Practicum-Chemistry (1-4)
- SCED 694 Science Education Research (3)
- SRM 610 Statistical Methods III (3)

Select one of the following courses:

- SRM 502 Applied Statistics (4)
- SRM 603 Statistical Methods II (3)

Additional electives as stipulated in Plan of Study:

- CHEM 793 Doctoral Research Practicum-Chemistry (1-4)
- SRM 670 Evaluation: Models and Designs (3)
- SRM 680 Introduction to Qualitative Research (3)
- SRM 700 Advanced Research Methods (3)
- SRM 731 Multivariate Analysis (3)
- SRM 770 Evaluation: Advanced Methods (3)

Advanced research methods - select one of the following courses:

- SCED 694 Science Education Research (3)
- SRM 700 Advanced Research Methods (3)

### Research Proposal/Dissertation — 16 hours

- CHEM 797 Doctoral Research Proposal-Chemistry (4)
- CHEM 799 Doctoral Dissertation - Chemistry (12)

### Research Tools

Students must demonstrate research skills in areas pertinent to the dissertation research topic. The student's competence in these skills will be assessed by the student's dissertation committee members.

The skills may include statistical analysis, analytical instrument operation, background and experience in both field-based and quantitative studies in chemical education research, current technology in education and collateral fields of study such as mathematics, computer science, biology and physics. Courses which are recommended to assist in the development of these skills include SCED 694,

SRM 610 and either SRM 502 or SRM 603, Chemistry and Biochemistry-approved courses in one or more of the following areas: educational technology, statistics and chemistry/chemical education research (CHEM 693, CHEM 693, or CHEM 793), and collateral fields of study (computer science, mathematics, biology and physics).

**Note(s):** Students without a bachelor's degree in chemistry must complete original research projects in chemistry and chemical education. One project must be equivalent to a master's project and written in thesis format and the other will be written and defended as the candidates's doctoral dissertation.

All students must complete courses in a minimum of three areas of chemistry (analytical, biological, inorganic, organic or physical). One course in biochemistry is required if not previously taken.

Students without a master's degree in chemistry must complete 24 hours in the Chemistry component, 16 hours in the pedagogy component, and a minimum of 38 hours in the Research Component (all required hours and electives).

Students will select sufficient electives to complete the degree program. Additional electives in the Research, Pedagogy or Chemistry Components may be selected; electives in supporting sciences, mathematics, computer science, and education are also recommended. All electives will be selected in consultation with the student's graduate committee.

All students must pass written and oral comprehensive examinations in chemical education and in two of the five chemistry content areas (analytical, biological, inorganic, organic, or physical).

All students will demonstrate competence in the research aspects of both basic chemistry and chemical education by completing original research projects in chemistry and chemical education. One project must be equivalent to a master's project and written in thesis format and the other will be written and defended as the candidate's doctoral dissertation.

For students who have written and defended a thesis as part of a master's degree, the thesis, if approved by the candidate's graduate committee, will substitute for the appropriate research requirement.

All students will write a scholarly paper and submit it for publication in a refereed journal as a requirement for this degree.

**Qualifier Examinations.** Each student must pass qualifying examinations in three of five areas selected from chemistry content (analytical, biological, inorganic, organic or physical chemistry). Students will have two opportunities to pass each area exam. Qualifier examinations are scheduled during the week preceding the beginning of classes each semester. If an examination is failed, the requirement may be satisfied by completing designated undergraduate coursework in the appropriate subdiscipline with a minimum grade of "B."



## COUNSELING PSYCHOLOGY PH.D.

### Degree Requirements — 116-119 Credits\*

Accredited by the American Psychological Association. For more information regarding program accreditation, contact the APA's Office of Program Consultation and Accreditation, 750 1st Street NE, Washington, DC 20002-4242 or at (202)336-5979 or at [www.apa.org/ed/accreditation/](http://www.apa.org/ed/accreditation/).

#### Required Major Credits

##### Introductory Core Required — 17 hours

APCE 558 Abnormal Psychology (3)  
 APCE 612 Practicum in Individual Counseling (5)  
 APCE 665 Family Systems (3)  
 APCE 669 Advanced Methods: Couples and Family Therapy (3)  
 SRM 600 Introduction to Graduate Research (3)

##### Counseling Psychology Core — 8 hours

APCE 616 Career Theory, Counseling and Assessment (3)  
 APCE 701 Professional Development Seminar in Counseling Psychology (1) Take two times  
 PSY 530 Life Span Developmental Psychology (3)

##### Research Core — 14-17 hours

APCE 733 Research Apprenticeship (1)  
 SRM 602 Statistical Methods I (3)  
 SRM 603 Statistical Methods II (3)  
 SRM 680 Introduction to Qualitative Research (3)  
 SRM 700 Advanced Research Methods (3)

##### Students Completing Quantitative Dissertations:

SRM 607 Non-Parametric Statistics (3)

or

SRM 609 Sampling Methods (3)

or

SRM 610 Statistical Methods III (3)

or

SRM 625 Applied Multiple Regression Analysis (3)

or

SRM 627 Survey Research Methods (3)

##### Students Completing Qualitative Dissertations:

SRM 641 Special Topics (1-4)

or

SRM 685 Educational Ethnography (3)

or

SRM 686 Qualitative Case Study Research (3)

or

SRM 687 Narrative Inquiry (3)

or

SRM 688 Writing as Analysis of Qualitative Research (3)

##### Practica Required — 24 hours

APCE 694 Practicum in Couples and Family Therapy (4)  
 APCE 702 Practicum in Counseling (4)  
 APCE 712 Advanced Practicum in Individual Counseling (4)  
 APCE 714 Practicum in Supervision of Counseling (3-6)  
 APCE 715 Seminar in Counselor Supervision and Theory (2)  
 APCE 762 Practicum in Group Facilitation (4)  
 APCE 793 Psychological Services Clinic I (1)  
 APCE 794 Psychological Services Clinic II (2)

##### *Suggested Practica Electives:*

APCE 617 Play Therapy: Theory and Practicum (3)  
 APCE 713 Practicum in Supervision of Play Therapy (3)  
 APCE 773 Practicum in Supervision of Group Facilitation (3)  
 APCE 774 Practicum in Supervision of Family Therapy (3)

##### Assessment Core Required — 10 hours

APCE 674 Assessment for Intervention: Cognitive and Academic (5)  
 APCE 678 Assessment for Intervention: Personality and Behavior (5)

##### *Suggested Assessment Elective:*

APCE 782 Introduction to Rorschach Administration and Scoring (3)

##### Licensing Core — 24 hours

APCE 623 Understanding and Counseling Diverse Populations (3)  
 APCE 655 Social and Community Psychology (3)  
 or  
 PSY 664 Advanced Social Psychology (3)

APCE 657 Legal and Ethical Aspects of Counseling and Psychology (3)  
 APCE 707 Seminar in Personality and Counseling Theories (3)  
 APCE 758 Advanced Psychopathology (3)  
 PSY 580 Psychopharmacology (3)

or

PSY 625 Principles of Neuropsychology (3)

or

APCE 777 Applied Neuropsychology (3)  
 PSY 540 Theories and Principles of Learning (3)  
 PSY 590 Seminar in History and Systems (3)

##### Internship - 3 hours

APCE 791 Internship in Counseling Psychology (1-5) (1 Year, 2000 Hours)

##### Research Proposal/Dissertation — 16 hours

APCE 797 Doctoral Proposal Research (1-4) Take 4  
 APCE 799 Doctoral Dissertation (1-12) Take 12

**Note(s):\*** A student entering with previously completed graduate coursework equivalent to coursework required for the Ph.D. degree may have course(s) waived with advisor consent and may significantly reduce the total number of hours required to complete the program. A plan of study for the degree must contain a minimum of 72 hours of coursework in addition to doctoral research (16) and internship hours (3-18).

In addition to formal course requirements, students are required to successfully complete a doctoral comprehensive examination, a dissertation and a one-year, 2000-hour internship.



## COUNSELOR EDUCATION AND SUPERVISION PH.D.

### Degree Requirements — 89-101\* Credits

See “Counselor Education and Supervision Ph.D.” on page 91.

### Required Major Credits — 40-46 hours

*Counseling Core (12 hours)*

- APCE 702 Practicum in Counseling (4)
- APCE 712 Advanced Practicum in Individual Counseling (4)
- APCE 762 Practicum in Group Facilitation (4)

*Supervision Core (8 hours)*

- APCE 714 Practicum in Supervision of Counseling (6)
- APCE 715 Seminar in Counselor Supervision and Theory (2)

*Theory and Instruction Core (17-23 hours)*

- APCE 660 Psychological Consultation: Theory and Practice (3)
- APCE 703 Professional Development Seminar in Counselor Education (1) Must be taken twice.
- APCE 710 Seminar in Instruction, Pedagogy, and Evaluation in Counseling and Psychology (3)
- APCE 746 Seminar: Advanced Career Counseling, Theory and Assessment (3)
- APCE 792 Internship in Counselor Education and Supervision (1-6) Take 6-12 hours

*Special Populations (3 hours)*

- APCE 623 Understanding and Counseling Diverse Populations (3)

### Interest Areas (Select One) — 15-21 hours minimum

*Marriage and Family (19 hours)*

- APCE 603 Understanding Children, Adolescents, and Their Systems (3)
- APCE 668 Sexuality Counseling (3)
- APCE 669 Advanced Methods: Couples and Family Therapy (3)
- APCE 694 Practicum in Couples and Family Therapy (4)
- APCE 695 Seminar: Contemporary Issues in Couples and Family Therapy (3)
- APCE 774 Practicum in Supervision of Family Therapy (3)

*Children and Adolescents (18 hours)*

- APCE 603 Understanding Children, Adolescents, and Their Systems (3)
- APCE 617 Play Therapy: Theory and Practicum (3)
- APCE 654 Child Abuse and Neglect (3)
- APCE 713 Practicum in Supervision of Play Therapy (3)
- PSY 630 Advanced Child and Adolescent Psychology (3)

*School Counseling (21 hours)*

- APCE 602 Foundations of School Counseling (3)
- APCE 603 Understanding Children, Adolescents, and Their Systems (3)
- APCE 608 Organization, Administration and Evaluation of School Counseling Programs (3)
- APCE 614 Internship in School Counseling and Guidance (1-9) Take 6 hours
- APCE 654 Child Abuse and Neglect (3)
- APCE 748 Instruction, Supervision and Leadership in School Counseling (3)

*Gerontological Counseling (15 hours)*

- APCE 668 Sexuality Counseling (3)
- GERO 560 Community Resources for the Elderly (3)
- GERO 625 Psychosocial Aspects of Aging (3)
- GERO 635 Social Policies of Aging (3)
- GERO 640 Health Aspects of Gerontology (3)

### Research Core — 3 hours

- SRM 700 Advanced Research Methods (3)
- (Additional six hours under Research Tool 2.)

### Research Proposal/Dissertation — 16 hours

- APCE 797 Doctoral Proposal Research (4)
- APCE 799 Doctoral Dissertation (12)

### Research Tools — 15 hours

*Research Tool 1: Applied Statistics*

- SRM 602 Statistical Methods I (3)
- SRM 603 Statistical Methods II (3)
- SRM 610 Statistical Methods III (3)

*Research Tool 2: Applied Research*

- APCE 716 Research Seminar in Counselor Education (3)
- SRM 680 Introduction to Qualitative Research (3)

**Note(s):**Students will submit a proposal to present at least one time at a juried state, regional, national or international conference. This presentation can be done alone, with faculty, or with peers. Students must submit a copy of the presentation proposal for their files. Accepted presentations: students must submit a copy of the letter of proposal acceptance and copies of presentation handouts. It is highly recommended that students have manuscripts published, in press, and/or in submission prior to graduation, and that students have been involved in grant writing as a part of their education.

Students who write a qualitative dissertation will be asked to complete one additional course in qualitative methodology.

\*A student entering with previously completed graduate coursework equivalent to coursework required for the Ph.D. degree may have course(s) waived with advisor consent. A plan of study for the degree must contain a minimum of 67 hours of coursework in addition to proposal, dissertation and internship hours (minimum of 89 hours). All students are required to complete all of the courses listed below; most students have already completed some of these hours in their M.A. program.

This program is accredited by the Council for Accreditation of Counseling and Related Educational Programs.





## EDUCATIONAL LEADERSHIP ED.D.

### Degree Requirements — 64 Credits

See “Educational Leadership Ed.D.” on page 95.

### Educational Leadership Core — 21 hours

ELPS 608 Issues in Educational Leadership: Implications for Practice (3)

ELPS 666 Planning and Change in Education (3)

ELPS 667 Leadership at the District Level (3)

ELPS 751 Doctoral Core I (6)

ELPS 752 Doctoral Core II (6)

### Specialization Area — 9 hours

Coursework that relates directly to goals as educational leaders (e.g. building level leadership, central office leadership, special education, educational technology).

### Field Based Learning — 6 hours

Select one or both of the following courses:

ELPS 606 Internship in Educational Leadership (3-6)

ELPS 695 Practicum in Educational Leadership (3-6)

### Research Core — 12 hours minimum

ELPS 754 Research in Educational Leadership (3)

SRM 602 Statistical Methods I (3)

Select research electives from the following courses (or equivalents approved by the doctoral committee) (6 hours):

PSY 674 Measurement I: Educational Testing (3)

SRM 603 Statistical Methods II (3)

SRM 670 Evaluation: Models and Designs (3)

SRM 680 Introduction to Qualitative Research (3)

SRM 700 Advanced Research Methods (3)

### Research Proposal/Dissertation — 16 hours

ELPS 797 Doctoral Proposal Research (4)

ELPS 799 Doctoral Dissertation (12)

### Deficiencies or Additional Elective Courses

ELPS 650 School Finance and Budgeting (3)

ELPS 651 School Business Management (3)

ELPS 654 Instructional Leadership and Supervision (3)

ELPS 660 Law and the Administrator (3)

ELPS 662 Design and Delivery of Professional Development (3)

ELPS 665 Policy Analysis and Development (3)

ELPS 670 The Principalsip: Leadership at the School Site Level (3)



## EDUCATIONAL MATHEMATICS PH.D.

### Degree Requirements — 71 Credits

See “Educational Mathematics Ph.D.” on page 111.

### Master’s Degree en route to the Ph.D.

Students may apply for admission to the Ph.D. in Educational Mathematics and complete their M.A. in Mathematics with either a Liberal Arts Emphasis or Teaching Emphasis on the way to completion of the doctoral program. Once admitted, the student will work closely with their academic advisor to develop a Plan of Study that meets both M.A. and Ph.D. program requirements. Students must complete all program requirements for the M.A. in addition to the hours required for the Ph.D. Students must be conferred with the M.A. degree prior to admission to doctoral candidacy.

### Ph.D. Requirements

#### Mathematics Content Core — 27 semester hours

##### A. Required Courses - 12 hours

MATH 609 Abstract Algebra I (3)  
MATH 623 Abstract Algebra II (3)  
MATH 632 Complex Variables (3)  
MATH 635 Real Analysis (3)

##### B. Minimum of 15 hours chosen from the following courses:

MATH 622 Directed Studies (1-4)  
MATH 633 Geometric Analysis (3)  
MATH 644 Differential Geometry (3)  
MATH 664 Difference Equations and Chaos (3)  
MATH 678 Mathematical Logic (3)  
MATH 691 Number Theory (3)  
MATH 695 Special Topics (3)  
MATH 700 Advanced Seminar (2)  
MATH 727 Representation Theory (3)  
MATH 728 Topics in Discrete Mathematics (3)  
MATH 736 Real Analysis II (3)

At most, two courses may be included from the following: (The two courses may both come from Category I but at most one course can be from Category II.)

##### Category I

MATH 525 Linear Algebra I (3)  
MATH 532 Basic Analysis II (4)  
MATH 540 Introduction to Topology (3)

##### Category II

MATH 528 Discrete Mathematics (3)  
MATH 529 Mathematical Problem Solving (3)  
MATH 531 Basic Analysis I (4)  
MATH 543 Modern Geometry (3)  
MATH 560 Introductory Complex Variables (3)

#### Research Core — 12 hours

MED 610 Survey of Research in Mathematics Education (3)  
MED 700 Cognitive Processes in Mathematics (3)  
MED 701 Educational Mathematics Research (3)  
MED 702 Qualitative Research in Mathematics Education (3)

#### Educational Core — 10 hours (minimum)

##### A. Required Courses (4 hours)

MED 703 Teaching and Learning K-12 Mathematics (3)  
MED 710 Seminar in Post-Secondary Mathematics Teaching (1)

##### B. Elective Courses (6 hours) (Advisor must approve courses)

MED 622 Directed Studies (1-3)  
MED 630 Technology in Mathematics Education (2)  
MED 673 Teaching and Learning Mathematics on the Elementary Level (3)  
MED 674 Teaching and Learning Mathematics on the Secondary Level (3)  
MED 675 Teaching and Learning Mathematics on the Post-Secondary Level (3)  
MED 678 Special Topics (2-3)  
MED 750 History and Philosophy of Mathematics Education (3)

#### Research Proposal/Dissertation — 16 hours

MATH 797 Doctoral Proposal Research (1-4) (Take 4 hours)  
MATH 799 Doctoral Dissertation (1-12) (Take 12 hours)

#### Additional Electives — 6 hours

Electives in this category can include any approved 600 or 700 level courses or any two approved additional 500 level courses. Courses taken for the two research tools may be counted for these electives. A student must complete research tool "option A" and may select any one of the remaining four options.

#### Research Tools

##### A. Applied Statistics and Research Methods

SRM 502 Applied Statistics (4) (or approved equivalent)  
MED 701 Educational Mathematics Research (3)  
SRM 608 Experimental Design (3) (or approved equivalent)  
or  
SRM 610 Statistical Methods III (3)

##### Select One Additional Tool (0-3 hours)

B. Qualitative Research Methods. Student's doctoral committee will approve a combination of coursework (including at least SRM 680 and MED 702) and experience (evaluated by the committee) to appropriately support the student's proposed dissertation research.

C. Collateral Field. Contact the graduate coordinator for a detailed list of approved courses in cognition, instruction, measurement and evaluation, psychology and human development and curricula.

D. Computer Science. Student's doctoral committee will approve and evaluate a combination of advanced computer experience, proficiency and/or coursework only if relevant to the proposed dissertation research.

E. Foreign Language. Student's doctoral committee will approve and evaluate a combination of foreign language experience, proficiency and/or coursework only if relevant to the proposed dissertation research.

**Note(s):** Electives must have the approval of the student's advisor and doctoral committee.

MED 701 may be used as a substitute for the Graduate School's SRM 700 requirement. MED 710 is normally taken in the first year of the program.

The comprehensive examination consists of two parts: mathematics and mathematics education. The mathematics portion of the comprehensive examination will consist of a four-hour examination over either: a) the Math 635, Math 632 sequence or b) the MATH 609, MATH 623 sequence. The mathematics education portion will consist of a four-hour examination over the material in the research core (MED 610, MED 700, MED 701 and MED 702) and a list of required readings. The oral examination will be given upon successful completion of the written examination and will cover the entire program of the candidate.

Students must receive a grade of “B” or better in both courses of the required mathematics sequence over which they do NOT take the comprehensive examination. A student who does not receive at least a “B” may, in lieu of repeating the course, elect to take an examination over that sequence.

A student in this program is required to write a scholarly dissertation. Dissertation topics may range from mathematics with pedagogical applications to topics in educational mathematics such as cognitive processes, educational reform and instructional issues.

## EBS EDUCATIONAL PSYCHOLOGY PH.D.

### Degree Requirements — 67 Credits

See “Educational Psychology Ph.D.” on page 97.

All students complete course work in the areas of Human Development, Learning and Cognition, and Measurement and Assessment. Students declare an emphasis in any one of these three areas, and the comprehensive examination and dissertation are in that area. Students may further specialize in their emphasis area through additional electives such as Apprenticeships, Practica, Directed Studies, as well as research and teaching assistantships.

### Learning and Cognition — 9 credits (take 3 of the following):

Available Emphasis Area

- PSY 635 Individual Differences in Cognition (3)
- PSY 681 Cognition and Instruction I (3)
- PSY 682 Cognition and Instruction II (3)
- PSY 685 Advanced Seminar in Learning and Cognition (3)

### Human Development — 9 credits

Available Emphasis Area

- PSY 630 Advanced Child and Adolescent Psychology (3)
- PSY 683 Research Issues in Cognition and Development (3)
- PSY 684 Advanced Seminar in Human Development (3)

### Measurement and Assessment — 9 credits; (Research Tool I)

Available Emphasis Area

- PSY 575 Educational Assessment (3)
- PSY 675 Measurement II: Advanced Techniques (3)
- PSY 686 Advanced Seminar in Measurement and Assessment (3)

### Professional Applications — 6 credits

- PSY 654 Seminar in College Teaching (3)
- PSY 661 Trends and Issues in Educational Psychology (3)

### Research Core — 18 credits; (Research Tool II)\*

- SRM 603 Statistical Methods II (3)\*
- SRM 610 Statistical Methods III (3)\*
- SRM 700 Advanced Research Methods (3)
- SRM 680 Introduction to Qualitative Research (3)

Two electives, to be chosen in consultation with the advisor, including but not limited to, courses in qualitative methods (such as ethnography or case study methods), quantitative methods (such as regression analysis or multivariate analysis), or program evaluation.

**Note(s):** \*Substitutions for Research Tool II courses may be made with the consent of the advisor.

### Research Proposal/Dissertation — 16 credits

- PSY 797 Doctoral Proposal Research (1-4)
- PSY 799 Doctoral Dissertation (1-12)

### Comprehensive Exams

Doctoral students take comprehensive examinations when they have fulfilled the requirements of the graduate school and are considered prepared by their advisor. Specific procedures for written comprehensives and oral defense of the comprehensives are available from the program office.

### Research Tools

Ph.D. students in Educational Psychology must demonstrate competency in two research tools, as required by the UNC Graduate School. Those tools, as indicated above, are measurement and assessment and research methods.

### Deficiencies

Upon entrance to the Ph.D. program, a candidate must be able to satisfy the core course requirements (or the equivalent) for the M.A. degree in education psychology, or must take additional courses to meet those requirements. Doctoral program courses may have prerequisites that necessitate a student's program credits to be above the 67-credit minimum.

### Master's Degree en route to the Ph.D.

Students may apply for admission to the Ph.D. in Education Psychology and complete their M.A. in Education Psychology on the way to the doctoral degree. The application process and the admission criteria are the same as for the Ph.D. program. Once admitted, students will complete the 30-credit MA program described on page 97. Students must complete all program requirements (including Comprehensive Examination) for the M.A. in addition to the minimum 67 credit hours required for the Ph.D. Students must be conferred with the M.A. degree prior to admission to doctoral candidacy.

## EBS EDUCATIONAL STUDIES ED.D.

Administered by the School of Teacher Education, page 100. The degree prepares candidates to understand the relationship among research, policy, and practice in education in order to contribute to reforming educational systems. Candidates are expected to assume roles as university faculty members, educational leaders in school districts and state and federal agencies, district level curriculum specialists, and to assume leadership roles in nonprofit and private sectors. Programs of study for degree candidates will be individualized to meet candidate's career goals. The extent of an individual's program will be dependent upon previous college work and professional experience, but the minimum is 64 credits.

Make an appointment with program coordinator before applying. Graduate applicants for this degree must complete a free School of Teacher Education on-line graduate application [www.unco.edu/teach/grad.html](http://www.unco.edu/teach/grad.html) in addition to the UNC Graduate School application.

### Degree Requirements — 64 Credits

#### Educational Studies Core — 12 hours

- EDF 670 Introduction of Research Literature (3)
- EDF 685 Philosophical Foundations of Education (3)
- EDF 700 Implementation & Evaluation of Curriculum (3)

OR

- EDF 790 Supervised Practicum in Professional Teacher Preparation (3)

- EDF 701 Doctoral Seminar (1) Take at least three times

#### Research Core — 12 hours

(Coursework completed previously may be substituted for related research courses, within limits allowed by Graduate School)

- SRM 602 Statistical Methods I (3)
- SRM 680 Introduction to Qualitative Research (3)

Take two from among the following:

- EDF 601 Discourse Analysis in Language and Literacy Research (3)
- SRM 603 Statistical Methods II (3)
- SRM 641 Special Topics (1-4) (with advisor consent)
- SRM 685 Educational Ethnography (3)
- SRM 700 Advanced Research Methods (3)

#### Multidisciplinary cognate — 24 hours

Candidates will design the cognate with the assistance of their program advisor.

Sample cognates:

- Curriculum Studies in Secondary Education Settings
- Curriculum Studies in Elementary Education Settings
- Reading
- Social Foundations of Education
- Bilingual, Multicultural, and ESL Education
- Educational Reform

#### Dissertation — 16 hours

- EDF 797 Doctoral Proposal Research (1-4) Take 4 hours
- EDF 799 Doctoral Dissertation (1-12) Take 12 hours

#### Scholarly paper requirement

Students are required to submit for publication one paper to a professional journal prior to dissertation proposal hearing. Other research endeavors prior to the dissertation are encouraged.



## EDUCATIONAL TECHNOLOGY PH.D.

### Degree Requirements — 67-76 Credits

See “Educational Technology Ph.D.” on page 96

### Required Major Credits — 30 hours

- ET 615 Distance Education: Theories and Practice (3)
- ET 617 Development of Online Applications (3)
- ET 627 Design of Games and Simulations (3)
- ET 628 Design of Multimedia Learning Environments (3)
- ET 650 Case Studies in Performance and Instructional Technology (3)
- ET 702 Instructional Design Theory and Research (3)
- ET 782 Doctoral Seminar in Educational Technology I (3)
- ET 784 Doctoral Seminar in Educational Technology II (3)
- ET 692 Internship (3)

or

- ET 693 Practicum (1-3) Take 3 hours
- PSY 682 Cognition and Instruction II (3)

### Elective Courses — 9 hours

General Electives (9)

### Research Core — 12 hours

- SRM 602 Statistical Methods I (3)
- SRM 603 Statistical Methods II (3)
- SRM 680 Introduction to Qualitative Research (3)
- SRM 700 Advanced Research Methods (3)

### Research Proposal/Dissertation — 16 hours

- ET 797 Doctoral Proposal Seminar (1-4) Take 4 hours
- ET 797 Doctoral Proposal Seminar (1-4) Take 12 hours

### Research Tools — 0- 9 hours

Doctoral students in educational technology must demonstrate competency in two out of the four research tools listed below:

1. Research Design/Applied Statistics/Quantitative/Qualitative Methods: Students must complete the 12 semester hours (excluding ET 797) in research methodology courses with an overall GPA of 3.0 or better.
2. Computer Applications — Students must complete a minimum of 9 semester hours in graduate courses relating to computer use with grades of “A” or “B.” (3.0 GPA or higher).

or

A student can develop and demonstrate a computer program written to meet a specific application in education. This program will be judged as “acceptable” or “unacceptable” by the student's doctoral committee.

3. Evaluation — Students must complete a minimum of 9 semester hours in evaluation courses with grades of “A” or “B” (3.0 GPA or higher).
4. Foreign Language — Students must pass the Educational Testing Service or other faculty approved examination in any major modern foreign language with a score at the 50th percentile or higher.

### Deficiencies

Since the program of study builds upon the requirements for the M.A. degree in educational technology, students must have taken comparable coursework to satisfy the educational technology core requirements of the UNC M.A. degree in educational technology or must take these courses as electives in the doctoral program. All doctoral students must complete the common educational technology core, the research methodology core, and specialize in at least one of the four concentration areas.

### Master's Degree en Route to the Ph.D.

Students may apply for admission to the Ph.D. in Educational Technology and complete their M.A. in Educational Technology or School Library Education on the way to completion of the doctoral degree. The application process and the admission criteria are the same as for the Ph.D. program. Once admitted, the student will work closely with their academic advisor to develop a Plan of Study that meets both M.A. and Ph.D. program requirements. Students must complete all program requirements (including comprehensive examination) for the M.A. in addition to the

minimum 67 hours required for the Ph.D. Students must be conferred with the M.A. degree prior to admission to doctoral candidacy.

### Program and Graduation Requirements

Once admitted to a program, students must maintain a satisfactory grade point average of 3.2. The student must complete a minimum of two consecutive semesters as a full-time student (9 semester hours) and be registered for resident credit offered on-campus and applicable to the doctoral degree. A minimum of 67 semester hours beyond the master's degree is required for the doctorate in educational technology.

Students will receive an annual letter of progress providing feedback regarding their individual progress toward completion of their doctoral program. Each doctoral student must pass a written and oral comprehensive examination and portfolio review for the degree. This examination cannot be taken until the student has completed the residency requirement and at least 36 semester hours beyond the master's degree with a grade point average of 3.2 or higher.

The oral examination may include questions from any part of the student's program and is designed to test the student's understanding of the field of educational technology. The dissertation research advisor and the research committee for the dissertation are appointed after the student has passed both written and oral comprehensive examinations. The dissertation proposal and dissertation are completed under the supervision of the research advisor and research committee.





## HIGHER EDUCATION AND STUDENT AFFAIRS LEADERSHIP PH.D.

### Degree Requirements — 64 Credits

See “Higher Education and Student Affairs Leadership Ph.D.” on page 95.

### Required Major Credits — 18 hours

HESA 760 Theoretical and Philosophical Foundations of Higher Education and Student Affairs Leadership (3)  
 HESA 780 Worldviews & Research Methods for Scholar Leaders (3)

Select 12 credits from the following, in consultation with advisor and committee:

- HESA 611 Groups, Teams, and Organizations in Higher Education and Student Affairs (3)
- HESA 650 College Student Development: Foundational Theory (3)
- HESA 655 Multiculturalism in Higher Education and Student Affairs Leadership (3)
- HESA 671 Introduction to Leadership in Higher Education and Student Affairs Leadership (3)
- HESA 711 Organizations and Change in Higher Education and Student Affairs Leadership (3)
- HESA 751 Advanced College Student Development: Social Identity (3)
- HESA 765 Systems Thinking in Higher Education and Student Affairs (3)
- HESA 771 Advanced Leadership in Higher Education and Student Affairs Leadership (3)

### Elective Credits — 6

Complete an additional 6 credits from any HESA-prefixed courses

### Research Core — 15

SRM 602 Statistical Methods I (3)  
 SRM 603 Statistical Methods II (3)  
 SRM 680 Introduction to Qualitative Research (3)

And either

- 6 additional credits of quantitative research methods
- or
- 6 additional credits of qualitative research methods

### Second Research Tool — 9

HESA 761 Scholarly Writing for Scholar/Leaders (3)  
 HESA 781 Collaborative Inquiry for Scholar/Leaders (3)  
 HESA 782 Research Capstone in Higher Education and Student Affairs Leadership (3)

### Dissertation Proposal and Research — 16

HESA 797 Doctoral Proposal Research (1-4) Take 4 hours  
 HESA 799 Doctoral Dissertation (1-12) Take 12 hours

Additional enrollment in HESA 999 Graduate School Continuous Registration (1) may be required to comply with Graduate School policies on continuous registration.

**Note(s):** SRM 600 Introduction to Graduate Research (3) is a prerequisite to coursework in the Research Core. Any student who has not completed that course, or an equivalent course, prior to entry to the HESAL Ph.D. program must complete SRM 600; that course will not be applied to the above requirements for the Ph.D. All coursework for the program must be completed with a grade of “B” or better. Written and oral comprehensive examinations may be taken after completion of specified coursework and two satisfactory progress reports. A document describing eligibility criteria and examination procedures may be obtained from the program office or the program website. Comprehensive examinations are offered in the fall and spring semesters.



## HUMAN REHABILITATION PH.D.

### Degree Requirements — 64 Credits

See “Human Rehabilitation Ph.D.” on page 110.

### Required Major Courses — 21 hours

HRS 659 Seminar in Rehabilitation Counseling Supervision (3)  
 HRS 758 Seminar in Collaborative Research in Human Sciences (3)

PSY 654 Seminar in College Teaching (3)

Practicum — Take any combination of the following for a minimum of 12 hours\*

HRS 755 Supervised Practicum in College Teaching (3)  
 HRS 757 Advanced Seminar in Rehabilitation Administration (3)

HRS 759 Advanced Practicum in Rehabilitation Counseling Supervision (3)

\*(The above courses are repeatable up to 9 credits each.)

### Research and Statistics Core — 15 hours

All doctoral students are required to take the following 15 graduate level hours in statistics and research in order to satisfy one of the two university required research tools.

SRM 602 Statistical Methods I (3)  
 SRM 603 Statistical Methods II (3)  
 SRM 610 Statistical Methods III (3)  
 SRM 680 Introduction to Qualitative Research (3)  
 SRM 700 Advanced Research Methods (3)

### Research Proposal/Dissertation — 16 hours

HRS 797 Doctoral Proposal Research (4)  
 HRS 799 Doctoral Dissertation (12)

### Additional Tool — 12 hours

Select One Additional Tool:

**1) Foreign Language:** Pass the E.T.S. examination in any major foreign language (i.e., other than English) with a score not less than the 30th percentile. Students whose native language is other than English may be determined to have satisfied this requirement by unanimous vote of the student's doctoral program committee.

or

**2) Collateral Field:** Students will identify a concentration area (a body of knowledge represented by a minimum of 12 hours of course work) of study that relates directly to their goals as scholars in the field of rehabilitation. The concentration area and specific courses must be approved by their doctoral committee and the Graduate School. Examples of a collateral field could include, but are not limited to the following: educational technology, leadership, gerontology, community health, nursing, sociology and special education.

**Note(s):** Completion of a detailed portfolio that addresses all areas of the doctoral matrix of competencies is submitted and must receive a passing evaluation prior to scheduling of the oral comprehensive examination.



## MUSIC D.A.

(Select from seven emphases)

### Degree Requirements — 66-71 Credits

See "Music D.A." on page 117.

Doctor of Arts in Music candidates will take written and oral comprehensive examinations at a time approved by the major advisor.

For additional information, see "Doctor of Arts Sequence and Check List" published by the School of Music.

See "Graduate Admission Requirements" on page 116.

### Collaborative Piano Emphasis

### Conducting Emphasis

### Jazz Studies Emphasis

### Music History and Literature Emphasis

### Music Performance Emphasis

### Music Composition Emphasis

#### Required Emphasis Credits — 5-9 hours

MUS 623 Individual Studies in Effective Teaching (3)

MUS 794 Supervised Practicum in College Teaching (2-6)

#### Primary Emphasis — 18 hours

The primary emphasis area develops a major scholarly and/or performing function for the college and university level in Conducting, Music History and Literature, Composition, Music Performance, or Music Performance (with an optional concentration in Pedagogy). Courses are selected by advisement based upon candidate's area of focus and upon the candidate's needs identified through the advisory examinations.

#### Secondary Emphasis — 10 hours

This area develops a secondary scholarly and/or performing emphasis in one of the degree emphasis areas (Music History and Literature, Composition, Music Performance, Conducting, Performance and Pedagogy), or in Jazz Pedagogy, Music Education, Opera Theatre, or related areas outside Music. It is expected that a creative project of some type will be undertaken as part of the concentration. The concentration area and its courses are selected by the candidate with the approval of the program advisor and the advisor for the Secondary Area of Concentration.

#### Elective Credits — 5 hours

#### Research Core — 13 hours

MUS 700 Introduction to Doctoral Research (3)

Select one Course (3 hours) (\*music history exam)

MUS 643-MUS 648 Period Seminars in Music History (3)

Select one Course (3 hours) (\*music theory exam)

MUS 501-503, 603 Graduate Music Theory and Analysis (3)

Select one Course (4 hours) (\*\*individual performance area)

MUS 551, 636, 665, 670-679 Individual Performance Studies (4)

Dependent upon results of \*advisory exams/\*\*performance area.

#### Research Proposal/Dissertation — 16 hours

MUS 797 Doctoral Proposal Research (4)

MUS 799 Doctoral Dissertation (12)

**Note(s):**The hours allotted to the doctoral dissertation may be divided between performance and dissertation requirements according to the plan of study as outlined and approved by the candidate's committee.

Performance, Conducting, Jazz Studies, and Collaborative Piano majors will perform two recitals for 8 semester hours and complete a four semester hour dissertation. Performance (with an optional concentration in Pedagogy) majors will perform one recital for four semester hours and complete an eight-hour dissertation. Students seeking the D.A. in Music Education, Music History and Literature or Composition will complete a 12-hour dissertation.

Composition majors will present a recital of their compositions written as part of their degree program.

A reading knowledge of one foreign language (typically French, German or Italian) is required by the following areas: brass, history and literature (a second language may be required through advisement), piano, strings, theory and composition, voice, woodwinds and instrumental conducting. Students in the areas of choral conducting and vocal performance should have skills in translation of vocal literature in one foreign language (French, German or Italian) as well as diction mastery of all three. In the woodwind and jazz studies areas a substitute research tool may be permitted after consultation and approval by the candidate's committee. For the collaborative piano emphasis, language proficiency will be examined upon entry. Candidates must demonstrate pronunciation proficiency in French, German, Italian and the International Phonetic Alphabet as well as reading proficiency in French, German, and Italian. Candidates with deficiencies will meet with their major advisor and other appropriate faculty to determine the best way to remedy those deficiencies. Students should contact the Graduate Coordinator or appropriate area to clarify language requirements.

The candidate must complete two consecutive semesters (minimum of 9 semester credit hours per semester) of graduate work on the University of Northern Colorado campus in order to satisfy the Doctor of Arts residency requirement.

The Program Advisor or Graduate Coordinator will provide information concerning how the student's oral and research committees are formed, the student's responsibility in the committee process and the means of scheduling comprehensive examinations and the doctoral defense.

The Music Performance Emphasis has an optional concentration in pedagogy.

## Music Education Emphasis

### Required Emphasis Credits — 25 hours

Primary Emphasis (15 hours)

EDF 640 Psychological Foundations of Education (3)

EDF 685 Philosophical Foundations of Education (3)

MUS 519 Foundations of Music Education (3)

MUS 533 Curriculum Trends in Music Education (3)

MUS 612 Psychology of Music Teaching and Learning (3)

Secondary Emphasis (10 hours)

### Elective Credits — 13 hours

Electives will be selected by advisement based on candidate's needs identified through advisory examination and special interests. Electives may be selected from courses offered by the School of Music, or from areas outside of music, such as Educational Administration, Special Education or Psychology.

### Research Core — 12 hours

MUS 610 Research in Music Education (3)

MUS 700 Introduction to Doctoral Research (3)

SRM 602 Statistical Methods I (3)

SRM 603 Statistical Methods II (3)

### Research Proposal/Dissertation — 16 Hours

MUS 797 Doctoral Proposal Research (4)

MUS 799 Doctoral Dissertation (12)

**Note(s):**The dissertation should include goals such as extension of the student's knowledge and improvement of his teaching ability in the field, development of new knowledge that will contribute to music education and implementation of music education theory to the practical aspects of ongoing school music programs.

Secondary Emphasis courses may be selected from courses offered by the School of Music, or from areas outside of music, such as educational leadership, special education or psychology. A project integrating one or more subject areas with music education will be part of the secondary emphasis expectation. The project is given on a directed study basis and may be extended into the framework of the dissertation.



## NURSING EDUCATION PH.D.

### Degree Requirements — 65-95 credits

See "Nursing Education Ph.D." on page 112.

(Select the BS to Ph.D. or the Master's to Ph.D. entry options)

#### Research Core — 14 hours

SRM 602 Statistical Methods I (3) \*

SRM 603 Statistical Methods II (3) \*

HHS 758 Seminar in Collaborative Research in Human Sciences (3)

or

SRM 700 Advanced Research Methods (3)

NURS 790 Research Colloquium (2)

Advanced Qualitative or Quantitative Methods 3

#### Research and Dissertation — 16 hours

NURS 797 Doctoral Proposal Research (1-4)

NURS 799 Doctoral Dissertation (1-12)

#### Research Tools

\*The first research tool is quantitative statistical methods met by successful completion of SRM 602 and SRM 603.

\*\*The second research tool will be determined based on the student's personal interests/preferences (i.e. computer application to coursework design, qualitative design methodology, transcultural nursing project or fieldwork, etc.) and documented in an approved plan of coursework. A collateral field of study may be used as a substitute for one of the research tools (12 hours in a focused content area, i.e., educational psychology, educational leadership, gerontology, community health, etc.).

### BS to Ph.D. Requirements — 95 hours

The BS to Ph.D. students will receive the master's degree en-route to the Ph.D.

#### Nursing Science BS to Ph.D. Core — 29 hours

NURS 600 Nursing Theory (3)

NURS 602 Management of Chronically Ill Populations I (4)

NURS 604 Management of Chronically Ill Populations II (4)

NURS 605 Nursing Research (3)

NURS 614 Advanced Pathophysiology (3)

NURS 691 Applied Nursing Research (3)

NURS 700 Advanced Nursing Theory (3)

NURS 702 Advanced Concepts of Vulnerable Underserved Populations (3)

NURS 707 Leadership in Health Policy (3)

#### Nursing Education — 30 hours

ET 604 Computer Graphics and Visual Literacy (3)

NURS 630 Teaching Strategies in Nursing (3)

NURS 660 Nursing Education Seminar (4)

NURS 695 Advanced Academic Nursing Roles (3)

NURS 710 Evaluation in Nursing Education (3)

or

SRM 670 Evaluation: Models and Designs (3)

NURS 730 The Scholarship of Teaching and Practice in Nursing Education (2)

NURS 740 Intensive Teaching Practicum (3)

NURS 760 Advanced Nursing Curriculum Design (3)

NURS 780 The Professorial Role in Nursing Education (3)

PSY 681 Cognition and Instruction I (3)

#### Electives — 6 hours (with advisor approval)

Examples include transcultural nursing courses or coursework in education, educational leadership, educational psychology, educational technology, statistics, gerontology, etc.

### Master's to Ph.D. Requirements — 65 hours

Students may also enter with a master's and complete the doctoral degree with 65 hours. The general plan of study for students who enter the doctoral program with a baccalaureate degree in nursing and a conferred master's degree is listed below.

### Nursing Science Master's to Ph.D. Core — 9 hours

NURS 700 Advanced Nursing Theory (3)

NURS 702 Advanced Concepts of Vulnerable Underserved Populations (3)

NURS 707 Leadership in Health Policy (3)

### Nursing Education — 20 hours

ET 604 Computer Graphics and Visual Literacy (3)

NURS 710 Evaluation in Nursing Education (3)

or

SRM 670 Evaluation: Models and Designs (3)

NURS 730 The Scholarship of Teaching and Practice in Nursing Education (2)

NURS 740 Intensive Teaching Practicum (3)

NURS 760 Advanced Nursing Curriculum Design (3)

NURS 780 The Professorial Role in Nursing Education (3)

PSY 681 Cognition and Instruction I (3)

### Electives — 6 hours (with advisor's approval)

Examples include transcultural nursing courses or coursework in education, educational leadership, educational psychology, educational technology, statistics, gerontology, etc.

### Deficiencies

\*Equivalencies or portfolio experience will determine student's need to take these additional hours (may be used as elective courses):

NURS 630 Teaching Strategies in Nursing (3)

NURS 660 Nursing Education Seminar (4)



## SCHOOL PSYCHOLOGY PH.D.

The Ph.D. program is fully accredited by the American Psychological Association and approved by the National Association of School Psychologists.

For more information regarding program accreditation, contact the APA's Office of Program Consultation and Accreditation, 750 1st Street NE, Washington DC 20002-4242 or at (202) 336-5979 or at <http://www.apa.org/ed/accreditation/accfaq.html>.

Doctoral students in School Psychology are required to engage in research with a school psychology faculty member for five hours per week (equivalent, one semester hour), for a minimum of two semesters.

### Degree Requirements — 120-121 Credits

#### School Psychology Core — 15 semester hours

- APCE 660 Psychological Consultation: Theory and Practice (3)
- APCE 667 Crisis Intervention in the Schools (2)
- APCE 672 Neuropsychologically-Based Interventions for Educational Difficulties (3)
- APCE 747 Psychological Aspects of Academic Programming and Intervention (4)
- APCE 757 Intervention for Severe and Low Incidence Disabilities (3)

#### Licensing Core — 28 semester hours

##### *Biological Bases of Behavior*

- APCE 777 Applied Neuropsychology (3)

##### *Cognitive-Affective Bases of Behavior*

- APCE 638 Human Behavior Analysis (3) *and*  
PSY 530 Life Span Developmental Psychology (3)

##### *Social Bases of Behavior*

- APCE 655 Social and Community Psychology (3)

or

- PSY 664 Advanced Social Psychology (3)

##### *Individual Behavior*

- APCE 607 Theories of Counseling (3)

or

- APCE 707 Seminar in Personality and Counseling Theories (3) *and*  
APCE 758 Advanced Psychopathology (3)

##### *Professional Ethics*

- APCE 763 Legal and Professional Foundations of School Psychology (4)

##### *History and Systems*

- PSY 590 Seminar in History and Systems (3)

##### *Cultural and Individual Differences*

- APCE 623 Understanding and Counseling Diverse Populations (3)

#### Research Core — 22 semester hours

##### *Research Methodology*

- SRM 700 Advanced Research Methods (3)

##### *Applied Statistics*

- SRM 602 Statistical Methods I (3)
- SRM 603 Statistical Methods II (3)
- SRM 610 Statistical Methods III (3)

##### *Applied Research Methods*

- APCE 663 Research Apprenticeship: School Psychology (1-2)(Must complete 2 credits)
- APCE 737 Single-Case Research Methods (2)
- APCE 781 Evaluation of Psychological Services (3)
- PSY 675 Measurement II: Advanced Techniques (3)

or

- SRM 680 Introduction to Qualitative Research (3)

#### Assessment Core — 13 semester hours

- APCE 674 Assessment for Intervention: Cognitive and Academic (5)
- APCE 676 Assessment for Intervention: Infant and Toddler (3)
- APCE 678 Assessment for Intervention: Personality and Behavior (5)

#### Practicum Core — 14-15 semester hours

- APCE 618 Practicum in Child, Adolescent, and Family Interventions (5)
- APCE 779 Practicum in School Psychology (3)

Select two of the following courses:

- APCE 617 Play Therapy: Theory and Practicum (3)
- APCE 681 Practicum in Consultation (3)
- APCE 694 Practicum in Couples and Family Therapy (4)
- APCE 738 Practicum in Evidenced-Based Interventions (3)
- APCE 778 Clinical Neuropsychology Practicum (3)
- PSY 626 Introduction to Neuropsychological Assessment (3)

#### Supervision Core — 4 semester hours

- APCE 770 Seminar in Supervision of School Psychology Services (1)
- APCE 775 Advanced Practicum in Assessment and Testing Supervision (3)

#### Internship Core — 8 semester hours

(Take 8 hours over three semesters)

#### Dissertation Core — 16 semester hours

- APCE 797 Doctoral Proposal Research (1-4)
- APCE 799 Doctoral Dissertation (1-12)

**Note(s):**Written and oral comprehensive examinations and a dissertation are requirements of this program. Students must successfully complete the National School Psychology Certification Examination (NCSP) to pass the written comprehensive examinations.





## SPECIAL EDUCATION PH.D.

### Degree Requirements — 64-70 Credits

See "Special Education Ph.D." on page 99.

The Ph.D. in Special Education is a flexible doctoral program with provisions for individual planning to prepare special education professionals for positions of leadership in public and private schools and for colleges, universities, agencies, businesses and government entities. Major emphases are internally flexible and may be established to fit a variety of interests in the field of special education. Graduates develop leadership knowledge and skills in special education related to six major themes: theory, pedagogy, research methodology, evidence-based practice, public policy/advocacy, and collaboration. The program is designed to prepare students for creative leadership in a rapidly changing world that is experiencing increasing cultural diversity, curriculum and structural reforms in schools and pedagogical innovations across the educational spectrum.

### Required Major Credits — 23 hours

Note that students will be required to demonstrate literacy and competency in computer applications as part of the program.

*Doctoral Core Courses (23 hours)*

- EDSE 701 Introduction to Doctoral Study in Exceptionalities (1)
- EDSE 702 Law of Exceptionalities (1)
- EDSE 721 Theoretical Foundations of Special Education I (3)
- EDSE 727 Issues and Trends in Exceptionalities (3)
- EDSE 728 Professional Writing (3)
- EDSE 733 Preparing Teachers of Students with Exceptionalities (3)
- EDSE 741 Colloquium in Literacy (1)
- EDSE 742 Colloquium on Talent Development (1)
- EDSE 743 Supervision in Exceptionalities (1)
- EDSE 744 Grant Writing Seminar (3)

*Externships (3 hours - minimum)*

- EDSE 730 Externship in Special Education (3)

Externships are taken in one to twelve hour blocks and involve an off-campus experience. Variable titles related to inquiry, university teaching and administration are selected based on the nature of the externship.

### Elective Credits — 9 hours (minimum)

Students are to select 9 semester hours of courses in a cognate closely related to the student's program goals. Electives are chosen in consultation with the major advisor and are an integral part of the program plan.

### Areas of Special Interest

The student may select an area of interest (one or more), in conference with his or her advisor, from the following areas: transition of children and youth with exceptionalities; education of preschool children with exceptionalities; one of the categorical areas of special education (autism, learning disabilities, deaf or hard of hearing, blind or visually impaired, emotionally disturbed, gifted, mental retardation, etc.); curriculum development, special education administration; university teaching/research; or other areas as designed by the student and his or her advisor.

### Research Core — 12 hours

- SRM 602 Statistical Methods I (3)
- SRM 603 Statistical Methods II (3)
- SRM 680 Introduction to Qualitative Research (3)
- SRM 700 Advanced Research Methods (3)

### Research Proposal/Dissertation — 16 hours

- EDSE 797 Doctoral Proposal Research (1-4)
- EDSE 799 Doctoral Dissertation (12)

### Research Tools — 9-18 hours

1. Research Design/Applied Statistics (9 hours from the following courses)
  - SRM 606 Multiple Linear Regression Analysis (3)
  - SRM 607 Non-Parametric Statistics (3)
  - SRM 608 Experimental Design (3)
  - SRM 609 Sampling Methods (3)
  - SRM 610 Statistical Methods III (3)
  - SRM 611 Advanced Statistical Data Analysis (3)

- SRM 625 Applied Multiple Regression Analysis (3)
- SRM 627 Survey Research Methods (3)
- SRM 635 Categorical Data Analysis (3)
- SRM 685 Educational Ethnography (3)
- SRM 686 Qualitative Case Study Research (3)
- SRM 687 Narrative Inquiry (3)
- SRM 688 Writing as Analysis of Qualitative Research (3)

2. Foreign Language. Students pass a faculty-approved examination in any major language or in American Sign Language with a score at the 50th percentile or better.

3. Evaluation (9 hours from the following courses)
  - ELPS 654 Instructional Leadership and Supervision (3)
  - ELPS 665 Policy Analysis and Development (3)
  - SRM 670 Evaluation: Models and Designs (3)
  - SRM 770 Evaluation: Advanced Methods (3)

4. Instructional Technology (9 hours from the following courses)

- ET 502 Instructional Design (3)
- ET 602 Performance Technology for Instructional Environments (3)
- ET 617 Development of Online Applications (3)
- ET 628 Design of Multimedia Learning Environments (3)
- ET 702 Instructional Design Theory and Research (3)

### Comprehensive Performance Assessment

The comprehensive examination consists of a written response to a question(s) plus a matrix of performance options. Competency in theory, pedagogy, research methodology, evidence-based practice, public policy/advocacy, and collaboration is demonstrated through generation, conversation, and transformation as stewards of the discipline.



**SPORT AND EXERCISE SCIENCE PH.D.**  
(Select from three emphases)

**Degree Requirements — 64-68 Credits**

See “Sport and Exercise Science Ph.D.” on page 114.

**Prerequisites (6 hours)**

*Exercise Science and Sport Pedagogy:*

SES 602 Introduction to Research in Sport and Exercise Science (3)

May be required if not taken during a student’s Master’s program.

*Sport Administration:*

SES 703 Research Seminar in Sport and Exercise Science (3)

or

a graduate research course from Educational Psychology (EPSY), Psychology (PSY) or Applied Statistics and Research Methods (SRM). Advisor approval is required for this choice. Students in this emphasis are required to successfully complete, with a grade of “B” or better in each course, the doctoral minor in Applied Statistics and Research Methods.

**Research Core — 12 hours**

SRM 602 Statistical Methods I (3)

SRM 603 Statistical Methods II (3)

SES 703 Research Seminar in Sport and Exercise Science (3)

SRM 610 Statistical Methods III (3)

or

SRM 680 Introduction to Qualitative Research (3)

**Research Proposal/Dissertation — 16 hours**

SES 797 Doctoral Proposal Research (1-4)

SES 799 Doctoral Dissertation (1-12)

**Research Tools**

Doctoral students in this degree must demonstrate competency in two research tools. Five possibilities are listed below:

1. **Research Design.** Applied Statistics/Quantitative Methods. Complete 9-12 hours (excluding SRM 600 and SRM 700).
2. **Research Design.** Applied Statistics/Qualitative Methods. Complete 9-12 hours (excluding SRM 600 and SRM 700).
3. **Discipline-Specific Laboratory Techniques.** Exhibit competency in laboratory-based research work, which is specific to a student’s concentration area. Coursework supporting this requirement is acceptable, but not required.
4. **Computer Applications.** Complete a minimum of 9 hours in graduate courses related to computer use with grades of “B” or better OR students can develop and demonstrate computer proficiency to satisfy a specific need in sport and exercise science. The students’ doctoral committee judges this program or proficiency acceptable or unacceptable.
5. A collateral field of study may be used as a substitute for a research tool. See Graduate School policies for details.

**Note(s):**In order to advance to candidacy, students must demonstrate proficiency in theoretical and research foundations, teaching and communication, scholarship and professional service. Criteria for proficiency are identified in the School of Sport and Exercise Science Doctoral Evaluation Matrix.

**Exercise Science Emphasis**

Students pursuing the Exercise Science emphasis select one concentration area: 1) biomechanics, 2) exercise physiology, and 3) social psychology of sport and physical activity.

**1) Biomechanics**

**Concentration Area Credits — 21 hours**

SES 550 Neural Aspects of Kinesiology (3)

SES 619 Advanced Biomechanics (3)

SES 620 Neuromuscular Structure and Function (3)

SES 622 Directed Studies (1-4) Take 6 hours

SES 626 Advanced Physiological Kinesiology I (3)

SES 627 Advanced Physiological Kinesiology II (3)

**Elective Credits (with advisor approval) — 15 hours**

SES 550 Neural Aspects of Kinesiology (3)

SES 624 Advanced Developmental Kinesiology (3)

SES 629 Concepts in Kinesiology (3) (Biomechanics of Locomotion)

SES 635 Exercise and Sports Psychology (3)

SES 665 Advanced Sociological Kinesiology (3)

SES 692 Graduate Internship in Sport and Exercise Science (1-6)

SES 694 Special Topics in Sport and Exercise Science (1-3)

Take 3 hours

SES 755 Supervised Practicum in College Teaching (1-6)

Take 3 hours

**2) Exercise Physiology**

**Required Concentration Area Credits — 15 hours**

SES 625 Laboratory Techniques in Kinesiological Research (3)

SES 626 Advanced Physiological Kinesiology I (3)

SES 627 Advanced Physiological Kinesiology II (3)

SES 629 Concepts in Kinesiology (3) (Cardiopulmonary)

SES 755 Supervised Practicum in College Teaching (1-6) Take 3 hours

**Elective Credits (with advisor approval) — 21 hours**

BIO 550 Cell Physiology (4)

BIO 552 Mammalian Physiology I (3)

BIO 553 Mammalian Physiology II (3)

CHEM 581 General Biochemistry I (4)

CHEM 582 General Biochemistry II (4)

GERO 555 Grant Development and Administration (3)

SES 550 Neural Aspects of Kinesiology (3)

SES 619 Advanced Biomechanics (3)

SES 620 Neuromuscular Structure and Function (3)

SES 622 Directed Studies (1-4)

SES 624 Advanced Developmental Kinesiology (3)

SES 635 Exercise and Sports Psychology (3)

SES 665 Advanced Sociological Kinesiology (3)

SES 692 Graduate Internship in Sport and Exercise Science (1-6)

SES 694 Special Topics in Sport and Exercise Science (1-3)

SES 755 Supervised Practicum in College Teaching (1-6) Take 3 hours

**3) Social Psychology of Sport and Physical Activity**

**Required Concentration Area Credits — 12 hours**

SES 624 Advanced Developmental Kinesiology (3)

SES 629 Concepts in Kinesiology (3) (Motivation)

SES 635 Exercise and Sports Psychology (3)

SES 665 Advanced Sociological Kinesiology (3)

**Elective Credits (with advisor approval) — 24 hours**

GERO 625 Psychosocial Aspects of Aging (3)

PSY 664 Advanced Social Psychology (3)

SES 619 Advanced Biomechanics (3)

SES 620 Neuromuscular Structure and Function (3)

SES 622 Directed Studies (1-4)

SES 626 Advanced Physiological Kinesiology I (3)

SES 627 Advanced Physiological Kinesiology II (3)

SES 670 Sport and Higher Education (3)

SES 680 Perspectives in Sport Pedagogy (3)

SES 692 Graduate Internship in Sport and Exercise Science (1-6)

SES 696 College Teaching (3)

SES 755 Supervised Practicum in College Teaching (1-6)

SOC 532 Social Psychology and Group Dynamics (3)

SOC 552 Applied Social Theory (3)

## Sport Administration Emphasis

### Required Emphasis Credits — 26 hours

SES 576 Sport Promotion and Marketing (3)  
 SES 650 Financial Management for Sport Organizations (3)  
 SES 660 Sport Personnel Management (3)  
 SES 665 Advanced Sociological Kinesiology (3)  
 SES 675 Management of Sports Facilities and Equipment (3)  
 SES 676 Sport Public Relations and Information Systems (3)  
 SES 678 Event Development and Management (3)  
 SES 688 Legal Aspects of Sport (3)  
 SES 705 Seminar in Sport Administration (2)

### Elective Credits — 10 hours

Students are allowed 10 hours of electives in the doctoral program (64 credits beyond the Master's is required for graduation). After consulting with their advisor, students should select courses which contribute to their academic and research goals. The following courses are offered as a guide for elective course selection. Students should also review the *Catalog* for course options in other cognate areas.

ELPS 601 Leadership Development Through Inquiry (3)  
 ELPS 650 School Finance and Budgeting (3)  
 ET 501 Introduction to Applications of Educational Technology (3)  
 ET 504 Instructional Materials Design (3)  
 HESA 680 Law and Higher Education (3)  
 SES 670 Sport and Higher Education (3)  
 SES 692 Graduate Internship in Sport and Exercise Science (1-6)  
 SES 696 College Teaching (3)  
 SES 755 Supervised Practicum in College Teaching (1-6)  
 SRM 610 Statistical Methods III (3)  
 SRM 611 Advanced Statistical Data Analysis (3)  
 SRM 627 Survey Research Methods (3)  
 SRM 680 Introduction to Qualitative Research (3)

**Note(s):**The course SES 692 Graduate Internship in Sport and Exercise Science may be used for up to 6 hours of electives and is designed to assist students in gaining experience in the sport industry and/or to bridge the gap between theory and practice. To be eligible to register for SES 692, a student must have 1) a GPA of 3.0, 2) completed (or currently enrolled) five required courses, and 3) completed 20 graduate credits.

## Sport Pedagogy Emphasis

### Required Emphasis Credits — 22 hours

SES 614 Analysis of Teaching in Physical Education (3)  
 SES 640 Curriculum in Physical Education (3)  
 SES 641 Instructional Strategies for Elementary School Physical Education (3)  
 SES 642 Instructional Strategies for Secondary School Physical Education (3)  
 SES 685 Critical Pedagogy (3)  
 SES 695 Seminar in Physical Education (2) (take twice)  
 SES 696 College Teaching (3)

### Elective Credits — 15 hours

**Note(s):**Electives are to be based upon program and career goals and must be related to the study of pedagogy. Must have approval of advisor and program committee.

### Deficiencies

Students may be required to have graduate coursework as a part of their program of study in the following kinesiology areas as determined by the program advisor and candidate:

SES 619 Advanced Biomechanics (3)  
 SES 620 Neuromuscular Structure and Function (3)  
 SES 624 Advanced Developmental Kinesiology (3)  
 SES 626 Advanced Physiological Kinesiology I (3)

## DOCTORAL MINORS

### APPLIED STATISTICS AND RESEARCH METHODS

#### Doctoral Minor Requirements — 15 Credits

A Doctoral Minor in Applied Statistics and Research Methods is available to students in any UNC doctoral program with the approval of their doctoral program advisor.

#### Required courses — 15 hours

A minimum of five (5) courses completed during the student's UNC doctoral program with grades of "B-" or better from the following courses:

- SRM 602 Statistical Methods I (3)
- SRM 603 Statistical Methods II (3)
- SRM 606 Multiple Linear Regression Analysis (3)
- SRM 607 Non-Parametric Statistics (3)
- SRM 608 Experimental Design (3)
- SRM 609 Sampling Methods (3)
- SRM 610 Statistical Methods III (3)
- SRM 611 Advanced Statistical Data Analysis (3)
- SRM 625 Applied Multiple Regression Analysis (3)
- SRM 627 Survey Research Methods (3)
- SRM 635 Categorical Data Analysis (3)
- SRM 670 Evaluation: Models and Designs (3)
- SRM 680 Introduction to Qualitative Research (3)
- SRM 685 Educational Ethnography (3)
- SRM 686 Qualitative Case Study Research (3)
- SRM 687 Narrative Inquiry (3)
- SRM 688 Writing as Analysis of Qualitative Research (3)
- SRM 705 Advanced Issues in Research Methods (3)

**Note(s):**SRM 502 or SRM 617 may be substituted for SRM 602.

#### Features and Conditions

1. Completion of the minor will be noted in the student's transcript as Minor in Applied Statistics and Research Methods.
2. No other course substitutions are permitted.
3. This minor is not available to students in the Applied Statistics and Research Methods degree program.
4. Some or all of the SRM courses used for the minor may be part of a student's program of required or elective classes.

No application to the Applied Statistics and Research Methods program is required. In consultation with their doctoral program advisors, students may include sufficient SRM courses in their programs of study to meet the requirements for the minor.

### EDUCATIONAL PSYCHOLOGY

#### Doctoral Minor Requirements — 15 Credits

**Admission Requirements.** The minor will be open to all students who are enrolled in good standing in a doctoral degree program at the University of Northern Colorado. Doctoral students must notify the Educational Psychology program director by submitting: 1) a letter stating their intent to obtain a minor in Educational Psychology, and 2) a letter from their doctoral program advisor indicating approval of the minor.

#### Concentration Area — 15 hours (minimum)

Substitutions will be allowed if they are approved by the Graduate Program Coordinator or the School Director.

Select one of three concentration areas:

##### 1) Learning and Cognition Concentration

- PSY 540 Theories and Principles of Learning (3)
- PSY 590 Seminar in History and Systems (3)
- PSY 661 Trends and Issues in Educational Psychology (3)
- PSY 681 Cognition and Instruction I (3)
- PSY 682 Cognition and Instruction II (3)
- PSY 685 Advanced Seminar in Learning and Cognition (3)

##### 2) Human Development Concentration

- PSY 530 Life Span Developmental Psychology (3)
- PSY 590 Seminar in History and Systems (3)
- PSY 630 Advanced Child and Adolescent Psychology (3)
- PSY 661 Trends and Issues in Educational Psychology (3)
- PSY 684 Advanced Seminar in Human Development (3)

##### 3) Research and Measurement Concentration

- PSY 575 Educational Assessment (3)
- PSY 661 Trends and Issues in Educational Psychology (3)
- PSY 674 Measurement I: Educational Testing (3)
- PSY 675 Measurement II: Advanced Techniques (3)
- PSY 686 Advanced Seminar in Measurement and Assessment (3)

### EDUCATIONAL TECHNOLOGY

#### Doctoral Minor Requirements — 15 Credits

A Doctoral Minor in Educational Technology is available to students in any UNC doctoral program with the approval of their doctoral program advisor. In addition, a written notification needs to be sent to the Educational Technology program coordinator by the student's doctoral program advisor.

#### Required courses — 15 hours

A minimum of five (5) courses completed during the student's UNC doctoral program with grades of "B" or better from the following courses:

- ET 500 Introduction to Instructional Design and Technology (3)
- ET 502 Instructional Design (3)
- ET 503 Computers in Education (3)
- ET 504 Instructional Materials Design (3)
- ET 524 Design of Computer Assisted Instruction (3)
- ET 601 Managing People, Projects, and Technology Systems (3)
- ET 602 Performance Technology for Instructional Environments (3)
- ET 604 Computer Graphics and Visual Literacy (3)
- ET 613 Design of Distributed Learning Environments (3)
- ET 615 Distance Education: Theories and Practice (3)
- ET 617 Development of Online Applications (3)
- ET 627 Design of Games and Simulations (3)
- ET 628 Design of Multimedia Learning Environments (3)

#### Features and Conditions

1. Completion of the minor will be noted in the student's transcript as Minor in Educational Technology.
2. No other course substitutions are permitted.
3. This minor is not available to students in the Educational Technology degree program.
4. Some or all of the ET courses used for the minor may be part of a student's program of required or elective classes.

No application to the Educational Technology program is required. In consultation with their doctoral program advisors, students may include sufficient ET courses in their programs of study to meet the requirements for the minor.





## HIGHER EDUCATION AND STUDENT AFFAIRS LEADERSHIP

### Doctoral Minor Requirements — 15 Credits

A doctoral minor in Higher Education and Student Affairs Leadership is available to students in any UNC doctoral program with the approval of their doctoral program advisor. The intent of this minor is to encourage doctoral students who anticipate working in higher education settings to increase and expand their understanding of higher education organizations, policies, and procedures and to understand developmental needs of college students and services offered to assist students. Completion of the minor will be noted in the student's transcript as "Minor in Higher Education and Student Affairs Leadership." No application for admission to the minor is required; students will declare their intent to complete the minor on their doctoral program of studies filed with the Graduate School.

### Required courses — 15 hours

A minimum of five (5) courses completed during the student's UNC doctoral program with grades of "B" or better from the following courses:

- HESA 611 Groups, Teams, and Organizations in Higher Education and Student Affairs (3)
- HESA 650 College Student Development: Foundational Theory (3)
- HESA 651 Philosophical, Historical and Cultural Foundations of Student Affairs in Higher Education (3)
- HESA 652 Enrollment Management Services (3)
- HESA 655 Multiculturalism in Higher Education and Student Affairs Leadership (3)
- HESA 658 Management and Administration in Student Affairs (3)
- HESA 669 College and University Curriculum (3)
- HESA 671 Introduction to Leadership in Higher Education and Student Affairs Leadership (3)
- HESA 680 Law and Higher Education (3)
- HESA 683 Finance and Resource Management in Higher Education (3)
- HESA 685 Human Resources in Higher Education (3)
- HESA 690 Public Policy in Higher Education (3)
- HESA 695 Current Issues in Higher Education and Student Affairs Leadership (3)
- HESA 696 Special Topics in Higher Education and Student Affairs Leadership (1-4)
- HESA 711 Organizations and Change in Higher Education and Student Affairs Leadership (3)
- HESA 750 College Students: Culture, Characteristics, Campus Life (3)
- HESA 751 Advanced College Student Development: Social Identity (3)
- HESA 755 Advanced Research Seminar (1)
- HESA 765 Systems Thinking in Higher Education and Student Affairs (3)
- HESA 771 Advanced Leadership in Higher Education and Student Affairs Leadership (3)

### Features and Conditions

1. Completion of the minor will be noted on the student's transcript as Minor in Higher Education and Student Affairs Leadership.
2. Course substitutions will be allowed only upon verification by the Graduate Program Coordinator of the HESAL program that a transfer course from another university is equivalent to one of the UNC courses listed above, or that it would be accepted in the HESAL Ph.D. program as a higher education elective course. Field experiences and internships may not be substituted for the above courses. All course substitutions must have been taken within the time frame of the student's UNC doctoral program.
3. HESA-prefixed courses used for the minor may be part of a student's program of required or elective courses.
4. No application to the Higher Education and Student Affairs Leadership program is required. In consultation with their doctoral program advisor, students may include sufficient HESA-prefixed courses to meet the requirements for the minor.



## SPECIAL EDUCATION

### Doctoral Minor Requirements — 15 Credits

A Doctoral Minor in Special Education is available to students in any UNC doctoral program with the approval of their doctoral program advisor. The intent of this program is to encourage doctoral students throughout the University to increase and expand their understanding of the field of special education and disability issues. Completion of the minor will be noted in the student's transcripts as Minor in Special Education. No application to the School of Special Education is required. In consultation with their doctoral program advisors, students may include sufficient EDSE courses in their programs of study to meet the requirements for the minor. Some or all of the courses used for this minor may be part of a student's program of required or elective classes. The minor consists of additional courses completed with a "B" or better.

This minor is not available to students in the Special Education doctoral program.

### Required Courses — 6 hours

EDSE 500 Field of Special Education (3)

or

EDSE 615 Special Education Law: Cases and Trends (3) *and*  
EDSE 503 Effective School Environments for Learners with Exceptional Needs (3)

or

EDSE 505 Assessment of Exceptional Individuals (3)

Select two of the following courses (6 hours):

EDSE 524 Seminar in Education of Learners with Profound Needs (3)

EDSE 525 Research and Policy for Learners with Profound Needs (3)

EDSE 601 Supporting Special Students in the Mainstream (3)

EDSE 602 Behavioral Disorders: Characteristics, Identification and Intervention (3)

EDSE 606 Instructional Methods for Students with Special Needs (3)

EDSE 608 Case Studies with Students with Special Needs (3)

EDSE 609 Language Development: Disorders of Individuals with Special Needs (3)

EDSE 610 Interventions for Students with Severe Affective Needs (3)

EDSE 611 Seminar in Severe Affective Needs (3)

EDSE 621 Seminar in Severe Cognitive Needs (3)

EDSE 642 Advanced Seminar in Education of Students with Visual Disabilities (3)

EDSE 652 Auditory Skill Development: Deaf/Hard of Hearing (3)

EDSE 653 Speech: Deaf/Hard of Hearing (3)

EDSE 654 Language: Deaf/Hard of Hearing (3)

EDSE 655 Literacy: Deaf/Hard of Hearing (3)

EDSE 656 Curriculum and Instruction: Deaf/Hard of Hearing (3)

Select one of the following courses (3 hours)

EDSE 721 Theoretical Foundations of Special Education I (3)

EDSE 723 Seminar in Facilitating Personal and Professional Development in Special Education (3)

EDSE 727 Issues and Trends in Exceptionalities (3)

EDSE 728 Professional Writing (3)

EDSE 731 Topical Seminar in Special Education (3)

## GRADUATE CERTIFICATE PROGRAMS

### CHILD AND ADOLESCENT GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

#### Certificate Requirements — 15 credits

This sequence of courses provides foundational preparation for mental health professionals who work with children and youth. The certificate program is designed for pre-service and inservice mental health professionals who desire endorsement for specialization, or completion of academic requirements for registration through the Association for Play Therapy.

**Prerequisites:** Master's degree in appropriate mental health profession or current enrollment in appropriate graduate program.

#### Required Credits — 9 hours

APCE 603 Understanding Children, Adolescents, and Their Systems (3)  
 APCE 609 Foundations of Play Therapy (3)  
 APCE 654 Child Abuse and Neglect (3)

#### Elective Credits — 6 hours

APCE 638 Human Behavior Analysis (3)  
 PSY 530 Life Span Developmental Psychology (3)  
 APCE 558 Abnormal Psychology (3)

#### Special Topics Courses

*(offered with a rotating sequence as APCE 508 or APCE 513)*  
 Advanced Theories of Play Therapy (1)  
 Parent Child Interactive Therapy (1)  
 Play Therapy with Traumatized Children (1)  
 Filial Therapy (1)  
 Play Therapy in School Settings (1)  
 Play Therapy with Special Populations (1)  
 Therapeutic Parenting (1)

Candidates who wish to be endorsed for registration through the Association for Play Therapy will also be required to successfully complete the following:

APCE 617 Play Therapy: Theory and Practicum (3)

### EARLY CHILDHOOD SCHOOL PSYCHOLOGY GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

#### Certificate Requirements — 18 credits

This program provides preparation for provision of school psychological services to children ages birth to five and their families. This Graduate Certificate Program is designed for current school psychology students who desire a specialization in birth to 5 populations. Positions in this program are limited and may be dependent upon external funding.

**Prerequisite:** Enrollment in the Ed.S. program in school psychology.

#### Required Credits — 18 credits

APCE 617 Play Therapy: Theory and Practicum (3)  
 APCE 622 Directed Studies (1-3) Take 2 hours as Early Childhood Mentorship  
 APCE 622 Directed Studies (1-3) Take 1 hour as Early Childhood Practicum  
 APCE 676 Assessment for Intervention: Infant and Toddler (3)  
 EDSE 530 Parent/Professional Partnerships (3)  
 EDSE 532 Typical and Atypical Early Child Development: Application to Early Childhood Special Education (3)  
 EDSE 533 Curriculum and Instruction in Early Childhood Special Education (3)

**Note(s):** This certificate program is designed for current school psychology students who desire a specialization in birth to 5 populations. Positions in this program are limited and may be dependent upon external funding.

### FAMILY NURSE PRACTITIONER (FNP) GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

#### Certificate Requirements — 33 Credits

The certificate in FNP at the graduate level provides the nurse who has a master's in nursing for advanced clinical practice in primary care of families. The graduate is eligible to apply for national certification upon program completion.

The graduate is eligible to be recognized as an Advanced Practice Nurse from the State Board of Nursing with all the rights and privileges associated with this title. Health policies, OSHA requirements, CPR and ACLS certifications are required.

**Prerequisites:** Master's degree in nursing.

#### Required FNP Certificate Credits — 33 hours

NURS 610 Health Assessment (3)  
 NURS 612 Advanced Pharmacology (4)  
 NURS 614 Advanced Pathophysiology (3)  
 NURS 640 Health Care of Families I (4)  
 NURS 645 Health Care of Families II (4)  
 NURS 650 Health Care of Families III (4)  
 NURS 680 Advanced Practice Role Practicum (1-9)  
 NURS 690 Advanced Professional Role (2)

### GEOGRAPHY EDUCATION GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

#### Certificate Requirements — 12 credits

The certificate provides K-12 in-service teachers with a graduate-level foundation of the geography discipline. The first three courses are offered in a 2-week summer institute, followed by a capstone course offered online. Geography 520 is offered for any of the subfields in geography and is repeatable. Teachers develop publishable instructional units from the concepts presented in the courses and conduct professional development workshops for colleagues. Applications are limited to teachers with current full-time teaching contracts.

#### Required Credits — 12 hours

GEOG 513 Professional Renewal (1-3)  
 GEOG 520 Topics in Systematic Geography (3) Take 2 times under different subtitles  
 GEOG 592 Field Course in Geography (1-6)

### GERONTOLOGY GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

#### Certificate Requirements — 18 Credits

The certificate in gerontology at the graduate level provides the individual with a broad overview of the field of gerontology.

The certificate is designed for those individuals with a master's degree in a different discipline or other professional designation (i.e. R.N., B.S.W.) or a bachelor's degree and several years of experience in the human services area.

#### Required Credits — 12 hours

GERO 560 Community Resources for the Elderly (3)  
 GERO 625 Psychosocial Aspects of Aging (3)  
 GERO 635 Social Policies of Aging (3)  
 GERO 640 Health Aspects of Gerontology (3)

#### Elective Credits — 6 hours

GERO 555 Grant Development and Administration (3)  
 GERO 565 Management Concepts for Aging Services (3)  
 GERO 630 Intervention Strategies with the Elderly (3)  
 GERO 694 Practicum in Gerontology (1-4)

## LEADERSHIP AND SUPERVISION CERTIFICATE PROGRAM

### Licensure Requirements — 12 Credits

The Leadership and Supervision Certificate Program is a 4-course series of online, specialized coursework designed for individuals working in or aspiring to positions as lead interpreters, mentors, supervisors or leaders within an ASL-English Interpreting system. It is a series designed to provide students with effective strategies and tools for addressing and managing real-world issues and challenges faced in a variety of fast-growing and rapidly changing interpreting systems. Problem solving and decision-making will be enhanced through the critical examination of cutting-edge research, theories and practice.

Prerequisites Evidence of completion of undergraduate studies; and Certified Member in the Registry of Interpreters for the Deaf; OR Educational Interpreting Performance Assessment of 4.0 or higher.

### Required Credits - 12 credits

INTR 505 Supervision of Interpreting Systems (3)

INTR 506 Leadership in Interpreting (3)

INTR 560 Ethics in Leadership (3)

INTR 561 Conducting Diagnostic Assessments for ASL-English Interpreters (3)

A 3.0 GPA must be achieved to earn the Professional Development Certificate.

## NURSING EDUCATION GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

### Certificate Requirements — 12 Credits

The certificate in nursing education is intended to provide nurses with master's or doctoral preparation with advanced knowledge in nursing education and the academic role as an option for required doctoral electives/area of concentration.

Master's prepared nurses and matriculated master's in nursing or doctoral students from other academic institutions may apply for admission. Candidates must possess the baccalaureate degree in nursing and be currently licensed as a registered nurse. Students must complete the required coursework with a grade of "B" or better. Application materials include a cover page with a statement of intent relative to nursing education and are available on the UNC School of Nursing home page at <http://www.unco.edu/nursing>. Completed applications are submitted electronically prior to enrollment in the online nursing education course work. Applications will be considered on an open schedule.

### Required Credit — 13 hours

NURS 630 Teaching Strategies in Nursing (3)

NURS 660 Nursing Education Seminar (4)

NURS 695 Advanced Academic Nursing Roles (3)

Nursing elective (3)

## TRANSCULTURAL NURSING GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

### Certificate Requirements — 10-11 Credits

Using Leininger's theory, the certificate in transcultural nursing prepares the nurse to provide culturally congruent and competent nursing care based upon qualitative analysis and other research methodology. Field experiences are a required component of the program offered in a summers only format. The certificate option is designed for master's in nursing students, post-baccalaureate or post-master's students and senior level undergraduate nursing students.

### Required Courses — 7-8 hours

*Transcultural Nursing Courses (7-8 hours)*

NURS 510 Concepts in Transcultural Nursing (3)

NURS 511 Advanced Transcultural Nursing and Research (3)

NURS 512 Transcultural Nursing Field Experience (3)

### Graduate Elective — 3 hours

SRM 680 Introduction to Qualitative Research (3)

or

One additional elective with instructor approval.



# GRADUATE LICENSURE AND ENDORSEMENT PROGRAMS

## INITIAL TEACHER LICENSURE PROGRAMS

Initial licensure programs are either attached to an undergraduate major (See Undergraduate Initiate Licensure Programs, in the University of Northern Colorado Undergraduate catalog), or are stand-alone post-baccalaureate graduate programs described below. They are approved by the Colorado Department of Education and the Colorado Department of Higher Education. These programs include one initial endorsement. Individuals who already have an initial license but are wishing to add another endorsement should refer to the [Graduate Added Endorsement Licensure Programs on page 86](#)

A teacher license is a right to teach in Colorado public schools, and an endorsement is the right to teach in a specific area (for example, in Elementary classroom, or History in secondary classroom). The initial licensure programs are called PTEP. Professional Teacher Education Programs. Most of teacher licensure programs are administered by the School of Teacher Education, [www.unco.edu/teach](http://www.unco.edu/teach), unless otherwise noted. UNC Licensure officer Vicky Stromberger is located at McKee 216, (970) 351-1624 or; [vicky.stromberger@unco.edu](mailto:vicky.stromberger@unco.edu).

## EBS ELEMENTARY EDUCATION, POST-BACCALAUREATE (K-GRADE 6)

48 Credits

### Admission requirements:

- See <http://uncpostbac.com> for more information.
- A completed baccalaureate degree in liberal arts, humanities, sciences, mathematics, social studies, health or equivalent to those listed in this catalog. Students will have their transcripts evaluated for liberal arts content.
- 3.0 GPA in the last 60 hours. If GPA is below 3.0, the applicant is required to take the Graduate Record Examination receiving a combined score of 900 on verbal and quantitative with a minimum of 400 on each test.
- Applicants wishing to count licensure hours toward a Master of Arts degree in Elementary Education must apply to the Graduate School for Admission into the Master of Arts in Teaching degree program at the same time he or she applied to this program. A maximum of 15 semester credit hours in 500-level numbered elementary education course requirements or electives may be applied as elective credit toward **MAT: Elementary Education Emphasis on page 43**

### Required Credits — 48 hours

CH 303 Health Education in the Elementary School (1)  
 EDEL 520 Effective Instruction in Elementary School Mathematics (3)  
 EDEL 525 Integrated Methods: Visual Arts, Music and Physical Education (1-3) Take 3 hours  
 EDEL 540 Effective Instruction in Elementary School English/Language Arts (3)  
 EDEL 544 Elementary Student Teaching and Capstone Seminar (1-12) Take 12 hours  
 EDEL 550 Effective Instruction in Elementary School Social Studies (3)  
 EDEL 602 Elementary School Practicum (1-3) Take 3 hours  
 EDF 500 Conceptions of Schooling (3)  
 EDRD 510 Achieving Effective Instruction in Developmental Reading (3)  
 EDRD 511 Elementary Reading Diagnosis and Individualization (3)  
 EDSE 430 Exceptional Student in the Elementary Classroom (2)  
 ET 501 Introduction to Applications of Educational Technology (3)  
 PSY 347 Educational Psychology for Elementary Teachers (3)  
 SCED 570 Teaching Science in the Elementary School (3)

### Note(s):

- Students may petition for course equivalence consideration for a maximum of two classes. EDEL 520, EDEL 540, EDEL 550 and EDRDS 510 must be taken at UNC.
- EDEL 544 (Student Teaching) must be completed in grade K-6 in an elementary school setting.
- Oral proficiency is required before placement for student teacher. "C" or better in COMM 100 or COMM 103 or equivalent course; OR Oral proficiency exam is offered by the School of Communication Studies.

## EBS K-12 EDUCATION, POST-BACCALAUREATE LICENSURE (K-GRADE 12)

See <http://uncpostbac.com>

### Admission requirements

- A completed baccalaureate degree in one of the following licensure areas: Sport and Exercise Science, Music or Visual Arts. Students will have their transcripts evaluated for major content; additional content classes may be required. Persons with a non-related degree may declare a Second Bachelors Degree.
- Applicants desiring to count licensure hours toward a Master of Arts or Master of Science degree in any area must apply concurrently to the Graduate School (for admission into the MA or MS degree program) and to the Post-Baccalaureate Licensure program in K12. EDFE 555 cannot be used as hours toward a Master's Degree.
- An interview with an appropriate content advisor is required.
- Applicants must have an overall 3.0 GPA for admission. If the grade point average is below 3.0, the applicant is required to provide evidence of qualifications sufficient to pursue graduate education.

### Required Common PTEP — 21 credit hours

EDF 500 Conceptions of Schooling (3)  
 EDFE 125 Admission to PTEP Application, Post baccalaureate (0)  
 EDFE 130 Student Teaching Application (0)  
 EDFE 555 Supervised Student Teaching (9)  
 EDRD 523 Reading and Writing in the Content Areas (3)  
 EDSE 509 Strategies for Students with Exceptionalities (3)  
 PSY 500 Educational Psychology for Teachers (3)  
 Select one of the three Content Area Program of Studies:

### Physical Education (Sport and Exercise Science) — 49 credit hours

#### Content Courses

##### Outdoor Activity (select one)

SES 125 Hiking (1)  
 SES 127 Cross-Country Skiing (1)  
 SES 128 Cycling (1)  
 SES 130 Kayaking (1)  
 SES 131 Orienteering (1)  
 SES 135 Rock Climbing (1)  
 SES 234 Mountain Biking (2)  
 SES 235 Backcountry Skiing (2)  
 SES 236 Technical Rock Climbing (2)  
 SES 237 Paddle Sports (2)  
 SES 238 Winter Wilderness Living (2)

##### Target Sport (select one)

SES 111 Bowling (1)  
 SES 113 Fly Fishing/Trap Shooting (1)  
 SES 114 Golf (1)

##### Swimming (select one)

SES 116 Water Safety Instructor (2)  
 SES 118 Swimming (1)  
 SES 120 Lifeguard Training (2)  
 SES 133 Scuba Diving (1)  
 SES 152 Swimming Conditioning (1)

The following 10 hours:



SES 134 Self Defense (1)  
 SES 200 Weight Training and Conditioning (1)  
 SES 201 Track and Field (1)  
 SES 209 Dance Activities (1)  
 SES 240 Secondary Physical Education Content I (3)  
 SES 243 Outdoor and Adventure Programming (3)

#### **PTEP Courses**

SES 170 Introduction to Field Based Experience (1)  
 SES 266 Introduction to Physical Education as a Profession (3)  
 SES 323 Motor Learning and Development (3)  
 SES 338 Teaching Diverse Populations (3)  
 SES 342 Teaching Health-Related Fitness (3)  
 SES 440 Developing Pedagogical Skills in Elementary Physical Education (4)  
 SES 442 Developing Pedagogical Skills in Secondary Physical Education (4)  
 SES 612 Assessment in Sport Pedagogy (3)  
 SES 614 Analysis of Teaching in Physical Education (3)  
 SES 641 Instructional Strategies for Elementary School Physical Education (3)  
 SES 642 Instructional Strategies for Secondary School Physical Education (3)  
 SES 688 Legal Aspects of Sport (3)

#### **Music**

##### *Instrumental Track*

##### **Foundational Courses**

MUS 100 Recitals, Concerts and Productions (0), each semester  
 MUS 113 Music Theory I (2)  
 MUS 114 Aural Skills and Sight Singing I (2)  
 MUS 115 Music Theory II (2)  
 MUS 116 Aural Skills and Sight Singing II (2)  
 MUS 143 Musical Styles and Context (3)  
 MUS 213 Music Theory III (2)  
 MUS 214 Aural Skills and Sight Singing III (1)  
 MUS 215 Music Theory IV (2)  
 MUS 216 Aural Skills and Sight Singing IV (1)  
 MUS 243 History of Music I (3)  
 MUS 244 History of Music II (3)

##### *Vocal/General/Piano Track*

##### **Foundational Courses**

MUS 100 Recitals, Concerts and Productions (0), each semester  
 MUS 113 Music Theory I (2)  
 MUS 114 Aural Skills and Sight Singing I (2)  
 MUS 115 Music Theory II (2)  
 MUS 116 Aural Skills and Sight Singing II (2)  
 MUS 143 Musical Styles and Context (3)  
 MUS 213 Music Theory III (2)  
 MUS 214 Aural Skills and Sight Singing III (1)  
 MUS 215 Music Theory IV (2)  
 MUS 216 Aural Skills and Sight Singing IV (1)  
 MUS 243 History of Music I (3)  
 MUS 244 History of Music II (3)

##### **PTEP Preparation Courses**

##### *Instrumental Track*

MUS 292 Marching Band (1)  
 MUS 319 Instrumental Techniques and Conducting (1)  
 MUS 320 Wind Literature, Pedagogy and Conducting (2)  
 MUS 330 String Techniques (1)  
 MUS 360 Voice Class (1)  
 MUS 361 Single Reed and Flute Class (1)  
 MUS 362 Double Reed Class (1)  
 MUS 364 Brass and Percussion Class (2)  
 MUS 492 Marching Band (1)  
 Individual Performance (14)  
 Major Ensemble (7)  
 Piano Proficiency Examination (0)

##### **PTEP Preparation Courses**

##### *Vocal/General/Piano Track*

MUS 314 Guitar in the Classroom (1)  
 MUS 323 Choral Techniques and Conducting (2)  
 MUS 330 String Techniques (1)  
 MUS 361 Single Reed and Flute Class (1)  
 MUS 367 Materials and Techniques for Brass and Percussion (1)  
 MUS 410 Vocal Pedagogy (2)  
 Individual Performance (14)  
 Major Ensemble (7)  
 Private Piano is recommended

Piano Proficiency Examination (0)

#### **Music PTEP Methods Courses**

##### *Instrumental Track*

MUS 210 Introduction to Music Education (1)  
 MUS 310 Teaching General Music in Elementary Schools (2)  
 MUS 312 Teaching Instrumental Music in Elementary Schools (2)  
 MUS 317 Teaching Instrumental Music in Secondary Schools (2)  
 MUS 325 Choral Methods and Literature for Elementary and Secondary Schools (1)  
 MUS 331 String Pedagogy and Literature for the Instrumental Music Teacher (2)  
 MUS 356 Marching Band Techniques (1)  
 MUS 414 Contemporary Issues in Music Education (2)  
 MUS 450 Seminar in Student Teaching for Music Educators (1)

#### **Music PTEP Methods Courses**

##### *Vocal/General/Piano Track*

MUS 210 Introduction to Music Education (1)  
 MUS 310 Teaching General Music in Elementary Schools (2)  
 MUS 311 Teaching General Music in Secondary Schools (2)  
 MUS 312 Teaching Instrumental Music in Elementary Schools (2)  
 MUS 324 Choral Conducting and Pedagogy for Elementary and Secondary Schools (2)  
 MUS 325 Choral Methods and Literature for Elementary and Secondary Schools (1)  
 MUS 414 Contemporary Issues in Music Education (2)  
 MUS 450 Seminar in Student Teaching for Music Educators (1)

#### **Art & Design — 66 credit hours**

##### **Foundations**

ART 181 History of Art I (3)  
 ART 182 History of Art II (3)  
 ART 183 Art I (3)  
 ART 184 Art II (3)  
 ART 234 Drawing I (3)

##### **Required Major Credits**

ART 231 Painting I (3)  
 ART 261 Sculpture I (3)  
 ART 265 Jewelry (3)  
 ART 271 Basic Photography (3)  
*Select one from the following*  
 ART 253 Intaglio Printmaking (3)  
 ART 254 Relief Printmaking I (3)  
 ART 308 Workshop in Art (1-4)  
 ART 356 Monotypes (3)

##### **Elective Credits**

Advanced Art History (4)  
*Select one from the following*  
 ART 211 Ceramic Design (3)  
 ART 212 Wheel Throwing (3)  
*Select one from the following*  
 ART 221 Fiber Design I (3)  
 ART 223 Weaving (3)

##### **Area of Concentration — Total 6 credits**

A minimum of six credits (300 level or above) must be completed in one of the following areas of concentration: art history, ceramics, computer graphics, drawing, graphic design, painting, photographic imaging, photographic communications, printmaking, or sculpture.

##### **Professional Teacher Education Program (PTEP)**

ART 248 Art for the Exceptional Child (2)  
 ART 340 Clinical Experience: K-12 Art (2) (recommend repeating for a total of 4 credits)  
 ART 440 Foundations of Art Education (3)  
 ART 441 Cultural Studies in the K-12 Curriculum (2)  
 ART 442 Curriculum and Instruction in Art: Studio Strategies (3)  
 ART 466 Visual Arts Student Teaching Seminar (1)

##### **General Requirements**

Eng — with B or better  
 Comm — with C or better



## SECONDARY EDUCATION, POST BACCALAUREATE (GRADES 7-12)

The program includes a combination of on-campus and extended studies courses. See <http://uncpostbac.com>.

### Admission requirements

- A completed baccalaureate degree in one of the following majors: Biology, Chemistry, Communications (Speech), Earth Science, English, French, Geography, German, History, Mathematics, Physics, Social Science, Spanish, Theatre Arts. Students will have their transcripts evaluated for major content; additional content classes may be required.
- 3.0 GPA for admission in the last 60 credit hours of course work. Different areas may have various content courses GPA requirements.
- All applicants wishing to count licensure hours toward a Master of Arts degree in any area must apply to the Graduate School for admission into the MA or MAT degree program at the same time he or she applies to the Post-Baccalaureate Licensure program in Secondary Education.
- An interview with an appropriate content advisor is required.

### Required PTEP Core Credits — 27 hours

- EDF 500 Conceptions of Schooling (3)  
 EDFE 125 Admission to PTEP Application, Post baccalaureate (0)  
 EDFE 130 Student Teaching Application (0)  
 EDFE 554 Secondary Practicum  
 EDFE 555 Supervised Student Teaching (9)  
 EDRD 523 Reading and Writing in the Content Areas (3)  
 EDSE 509 Strategies for Students with Exceptionalities (3)  
 ET 501 Introduction to Applications of Educational Technology (3)  
 PSY 500 Educational Psychology for Teachers (3)  
 One of the following Content methods courses or sequences:  
 EED 341 Methods and Materials for Teaching Language and Composition in the Secondary School (3)  
*or*  
 EED 541 Methods and Materials for Teaching Language and Composition in the Secondary School (3)  
*and*  
 EED 402 Methods for Teaching Literature in Secondary Schools (3)  
*or*  
 EED 502 Methods for Teaching Literature in Secondary Schools (3)  
*or*  
 FL 341 Methods of Teaching in the Secondary School (3)  
*or*  
 SOSC 341 Teaching Secondary Social Studies (3)  
*and one of the following:*  
 GEOG 410 Teaching Geography in Secondary Curriculum (1)  
 HIST 400 Teaching History in the Secondary Curriculum (1)  
*or*  
 MED 441 Methods of Teaching Mathematics (3)  
*or*  
 SCED 441 Methods of Teaching Secondary School Science (3)  
*or*  
 THEA 385 Methods of Teaching Drama (3)

## INITIAL ADMINISTRATOR AND SPECIAL LICENSURE PROGRAMS



### ADMINISTRATORS' LICENSURE: DISTRICT LEVEL LEADERSHIP

#### Licensure Requirements — 21 Credits

The Administrator Licensure Program in the Program of Educational Leadership and Policy Studies provides opportunities for candidates to acquire the knowledge and skills needed for the day-to-day demands of the administrative positions that provide leadership for family-school-community efforts to improve education. The program not only provides opportunities for students to develop an in-depth understanding of district office roles and responsibilities, but also develops a breadth of understanding of leadership, policy development, local school governance, and contemporary educational issues.

Entering students who already possess a master's degree in Educational Leadership or a Principal License (or equivalent) need a minimum of 18 semester hours of graduate coursework and an internship (3 hours). The Administrator License requires completion of the leadership core (Please See "Leadership Core — 12 hours" on page 85.) as a prerequisite for endorsement for the Administrator License. These core learning experiences may be satisfied by equivalent prior learning experiences.

This total 21 credit hour requirement is a minimum expectation for program completion. Required courses, however, may be waived by the division if a student has taken an equivalent graduate course within the previous eight (8) years or can demonstrate the knowledge and skills for a Colorado Administrator License (see Standards for School Administrators in Colorado).

See "Administrators' Licensure (Non-Degree) Requirements" on page 63.

#### Required Credits — 21 hours (minimum)

- ELPS 606 Internship in Educational Leadership (3) (minimum 2 hours at central office and 1 hour with other agencies).  
 ELPS 654 Instructional Leadership and Supervision (3)  
 ELPS 660 Law and the Administrator (3)  
 ELPS 665 Policy Analysis and Development (3)  
 ELPS 667 Leadership at the District Level (3)  
*Select one of the following two courses:*  
 ELPS 650 School Finance and Budgeting (3)  
 ELPS 651 School Business Management (3)  
*Select one of the following two courses:*  
 PSY 674 Measurement I: Educational Testing (3)  
 SRM 670 Evaluation: Models and Designs (3)

EBS

## ORIENTATION AND MOBILITY (O&M) ENDORSEMENT

The orientation and mobility endorsement is designed to provide additional competencies for students completing their graduate licensure program in Special Education: Visual Impairment. Students must obtain faculty consent before enrolling in any mobility coursework. Students earning licensure in O&M through the Association for Education and Rehabilitation of Blind and Visually Impaired (ACVREP) must complete the following coursework in addition to the Visual Impairment program requirements.

### Endorsement Requirements — 15 Credits

EDSE 547 Individual Instruction in Orientation and Mobility (3)

EDSE 647 Assessment and Methods in Orientation and Mobility (3)

EDSE 648 Practicum in Orientation and Mobility (9)

EBS

## PRINCIPALS' LICENSURE

### Requirements — 27 Credits

The principals' licensure program provides opportunities to acquire knowledge about leadership in P-12 educational settings. The program is designed according to the Standards for Principals through the Colorado Department of Education and State Board of Education. Program requirements include 27 semester hours of coursework including a field experience.

See "Principals' Licensure (Non-Degree)" on page 94.

### Leadership Core — 12 hours

ELPS 601 Leadership Development Through Inquiry (3)

ELPS 603 Shaping Organizations: Management and Leadership in Education (3)

ELPS 604 Understanding People: Professional Development and Educational Leadership (3)

ELPS 605 External Environments: Social, Political, and Economic Influences in Educational Leadership (3)

### Additional Requirements — 15 hours minimum

ELPS 606 Internship in Educational Leadership (1-9)

ELPS 654 Instructional Leadership and Supervision (3)

ELPS 660 Law and the Administrator (3)

ELPS 670 The Principalship: Leadership at the School Site Level (3)

EBS

## SPECIAL EDUCATION ADMINISTRATION LICENSURE

### Licensure Requirements — 28-39 Credits

The Special Education Administration endorsement program is designed to prepare students to become special education administrators. The endorsement is a post-master's licensure and all students must have completed a master's degree at an accredited institution. Students are admitted to the program if they meet the admission requirements of the Graduate School, are teacher licensed and have completed three years of successful teaching experience or its equivalent. In addition to the admission requirements, a student must hold or be eligible for Colorado licensure as Special Education Generalist Teacher or the equivalent.

The course of study is a highly individualized program based on the background of the student and is designed to provide broad knowledge base for all areas of special education. Depending upon the licensure of the student, a program is designed to provide an in-depth knowledge of the field of special education, emphasizing the wide variety of needs of special children with regard to delivery systems, evaluation, programming, identification, finance, law and due process.

### Required Major Credits — 28-39 hours

EDSE 510 Foundations of Special Education (3)

EDSE 511 Learning Environments and Cultural Considerations (3)

EDSE 512 Assessment, IEP Development, and Instructional Planning (3)

*Special Education Administration (22-33 hours)*

EDSE 680 Administration and Supervision of Special Education (3)

EDSE 681 Administrative Planning and Program Evaluation in Special Education (3)

EDSE 718 Advanced Seminar in Education of Students with Hearing and/or Visual Handicaps (3)

EDSE 730 Externship in Exceptionalities (3)

ELPS 650 School Finance and Budgeting (3)

ELPS 654 Instructional Leadership and Supervision (3)

ELPS 660 Law and the Administrator (3)

**Note(s):** Students wishing to obtain Colorado licensure in this area are required to pass proficiency examination(s). Students should contact the School of Teacher Education or the Department of Educational Foundations and Curriculum Studies in McKee for information.

### Gifted and Talented Specialist Endorsement

The graduate level endorsement program for the Gifted and Talented Specialist prepares teachers at the elementary and secondary level to work with gifted and talented students in order to help them develop their full potential. The program leads to recommendation for Colorado Department of Education's Gifted and Talented Specialist endorsement. The Gifted and Talented Specialist is required to pass the approved PLACE exam prior to licensing. The program consists of the required courses and practicum requirements agreed upon by the student and advisor. If a student enters the endorsement program for Gifted and Talented Specialist without a current teacher licensure, s/he is required to complete additional admission requirements and course requirements listed under Professional Teacher Education.

### Endorsement Requirement — 24-27 hours

EDSE 682 Foundations in Gifted Education (3)

EDSE 683 The Gifted Learner: Nature and Needs (3)

EDSE 684 Assessment and Identification in Gifted Education (3)

EDSE 685 Curriculum & Instructional Practice in Gifted Education (3)

EDSE 686 Emotional and Social Development of the Gifted and Talented (3)

EDSE 687 Program Strategies and Services For the Gifted and Talented (3)

EDSE 688 Communication and Leadership in Gifted Education (3)

EDSE 691 Practicum in Teaching the Gifted and Talented (1-12) Take 3-6 hours\*

\*Number of hours determined by advisor based on candidates; prior background and experiences in Gifted and Talented education.



## ADDED ENDORSEMENT LICENSURE PROGRAMS

Added endorsement graduate programs are intended for individuals who already have completed an initial licensure program and a bachelor's degree.

Completion of one of these state-approved programs allows individuals to apply for an added endorsement with the Colorado Department of Education. While some of these programs' credits may apply to certain graduate programs, they are essentially stand-alone non-degree licensure programs.

### **EBS** BILINGUAL BICULTURAL EDUCATION (ENGLISH/SPANISH, K-GRADE 12)

#### Requirements — 18 Credits

The graduate Bilingual Education Endorsement Program was created with the primary goal to help educators support and enhance the biliteracy skills of students in their classrooms, and to address the critical shortage of Linguistically Diverse: Bilingual Specialists throughout the state of Colorado. This program is offered to educators who already hold a teaching licensure and the Colorado Linguistically Diverse Education Endorsement (ESL) or equivalent. The program requires the completion of 18 semester hours. After the completion of the program, students must pass the Bilingual Education PLACE Exam to be eligible for the Bilingual Education Specialist state endorsement. Requirements for program admission include: Admission to the Graduate School; a teaching licensure; the Colorado Linguistically Diverse (ESL) endorsement; and evidence of Spanish fluency.

#### Required Credits — 18 hours

EDLD 600 Literacy and Content Instruction in Spanish Bilingual Classrooms (3)  
EDLD 604 Field Experience in TESOL and Bilingual Education (3)  
EDLD 605 Seminar in Bilingual Education and TESOL I (3)  
EDLD 606 Linguistically Diverse Students and the U.S. Educational System (3)  
SPAN 555 Literature for Children and Adolescents (3)  
3 Graduate Credits of Spanish Language with approval of advisor

### **EBS** LINGUISTICALLY DIVERSE EDUCATION (K-GRADE 12),

#### Requirements — 21 Credits

The graduate Linguistically Diverse Education Endorsement program was created to help teachers serve the growing number of English language learners in their classrooms, and to address the critical shortage of teachers who are eligible to apply for the Colorado Linguistically Diverse Education endorsement so that they can effectively educate students who are learning English as a new language. This program is offered for educators who already hold a teaching licensure or are enrolled in a teacher preparation program. The Linguistically Diverse Education program requires the completion of 21 semester hours. After the completion of the program, students must pass the ESL PLACE Exam to be eligible for the LDE state endorsement. Requirements for program admission include: Admission to the Graduate School; teaching licensure or enrollment in a teacher preparation program; at least 3 credits of previous literacy instruction, and evidence of familiarity with a second language.

#### Required Major Credits — 21 hours

EDLD 592 Second Language Acquisition Theory (3)  
EDLD 593 Language, School and Society (3)  
EDLD 594 Foundations of Language and Linguistics for ESL/Bilingual Educators (3)  
EDLD 602 Teaching Linguistically Diverse Learners (3)  
EDLD 603 Methods and Assessment for ESL and Bilingual Education (3)  
EDLD 604 Field Experience in TESOL and Bilingual Education (3)  
EDRD 620 Reading in the Middle and Secondary Schools (3)  
or  
EDRD 612 Reading in the Elementary Schools (3)

### **EBS** READING SPECIALIST (K-GRADE 12)

#### Endorsement Requirements — 56 hours

The K-12 Reading Specialist endorsement is designed to prepare students to: 1) provide professional guidance and expertise to school and/or district literacy curriculum, instruction, and assessment programs; 2) develop and conduct inservice programs related to literacy teaching and learning; 3) team teach with classroom teachers; 4) serve as an in-class consultant, collaborator, and/or coach with classroom teachers; and 5) to provide professional guidance and expertise regarding the instructional needs of children with reading/literacy difficulties. As required by the State of Colorado, the K-12 Reading Specialist endorsement program is designed to be a sixth year graduate program of studies. Equivalent graduate courses may be waived by the student's assigned advisor. Most students entering the program will have a Master of Arts degree in Reading and/or a Reading Endorsement at the Elementary or Secondary level. Students in the K-12 Reading Specialist program are required to obtain the alternate endorsement in Reading.

#### K-12 Specialist:

To successfully complete the K-12 Reading Specialist academic program an applicant must:

- Have successfully completed graduate studies in the teaching of reading to qualify for Reading Teacher endorsement at both the elementary and secondary levels. An elementary or secondary Reading Teacher shall have completed preparation in reading at the level alternate to the initial Reading Teacher endorsement.
- Have completed all course requirements with a letter grade of "B" or better.
- Pass the Colorado PLACE Test for Reading Teacher endorsement.

#### Required Literacy Courses — 32 hours

EDRD 612 Reading in the Elementary Schools (3)  
EDRD 614 Literature for Children, Adolescents and Young Adults (3)  
EDRD 617 Evaluation and Improvements of Literacy Teaching and Learning (4)  
EDRD 620 Reading in the Middle and Secondary Schools (3)  
EDRD 642 Teaching the Writing Process in Schools (3)  
EDRD 645 Reading Research (3)  
EDRD 670 Directing a School-Wide Reading/Literacy Program (3)  
EDRD 692 Clinical Practicum in Literacy Coaching (4)  
*Select one of the following courses*  
EDRD 694 Reading Center Internship: Adult Reading, Literacy and/or Supervision (3)  
EDRD 701 Advanced Practicum in Literacy (3)  
*Select one of the following courses:*  
EDRD 622 Directed Studies (1-3) (Content to be determined with Advisor)

#### Required Support Courses — 24 hours

EDEL 620 Researched Applications for Instruction in Mathematics, K-9 (3)  
SRM 600 Introduction to Graduate Research (3)  
SRM 670 Evaluation: Models and Designs (3)  
EDLD 602 Teaching Linguistically Diverse Learners (3)  
EDLD 603 Methods and Assessment for ESL and Bilingual Education (3)  
ELPS 662 Design and Delivery of Professional Development (3)  
*Select one of the following courses:*  
EDEC 670 Curriculum and Instruction in Early Childhood and Primary Education (3)  
EDEL 612 Elementary School Curriculum (3)  
EDSE 500 Field of Special Education (3)  
EDSE 501 The Exceptional Learner (3)  
EED 541 Methods and Materials for Teaching Language and Composition in the Secondary School (3)



EBS

**READING TEACHER (K-GRADE 12)****Endorsement Requirements — 29 hours**

The Reading Teacher endorsement is designed to prepare students to: 1) provide professional guidance and expertise to school literacy curriculum, instruction and assessment programs; 2) serve as a literacy coach to classroom teachers; 3) to work with students experiencing literacy difficulties; and 4) to provide professional guidance and expertise regarding the instructional needs of children with reading and literacy difficulties. As required by the State of Colorado, the Reading Teacher endorsement program is designed to be a fifth year graduate program of studies. Equivalent graduate courses may be waived by the student's assigned advisor.

**Reading Licensure:**

To successfully complete the Reading Teacher endorsement program, an applicant must complete all courses with a letter grade of "B" or better. To receive the Reading Teacher endorsement from the State of Colorado, the applicant must also:

- Have successfully completed two or more years of teaching experience in an accredited and/or established elementary or secondary school (at the level of application) while holding a Type A or equivalent certificate.
- Pass the Colorado PLACE Test for Reading Teacher endorsement.

**Elementary and Secondary Reading Endorsement Requirements — 29 hours****Required Reading Credits – 29 hours**

EDRD 611 Language, Literacy and Cognitive Development (3)  
 EDRD 612 Reading in the Elementary Schools (3)  
 EDRD 614 Literature for Children, Adolescents and Young Adults (3)  
 EDRD 617 Evaluation and Improvements of Literacy Teaching and Learning (4)  
 EDRD 620 Reading in the Middle and Secondary Schools (3)  
 EDRD 642 Teaching the Writing Process in Schools (3)  
 EDRD 645 Reading Research (3)  
 EDRD 670 Directing a School-Wide Reading/Literacy Program (3)  
 EDRD 692 Clinical Practicum in Literacy Coaching (4)

EBS

**SCHOOL LIBRARIAN (K-GRADE 12)****Endorsement Requirements — 26 Credits**

The graduate non-degree program in School Library Education presently includes the School Library Endorsement K-12 added endorsement. This endorsement is required of those who intend to obtain professional level employment in Colorado K-12 school libraries, learning resource centers or media centers.

Applicants seeking a K-12 added endorsement for School Librarian by the State of Colorado Department of Education must meet the following requirements:

- Hold a Type A teaching license (or equivalent) teaching license;
- May or may not have classroom teaching experience and/or school media experience, while holding a valid Type A or professional teaching license or equivalent certificate;
- Have completed an approved graduate degree or (non-degree) program in School Library Education in an accepted institution of higher education including field experiences in an elementary and secondary school library.
- Successfully pass the required state proficiency examination.

The UNC School Library Endorsement program has been designed to meet or exceed competency requirements set by the Colorado Department of Education. Students who do not already hold an M.A. degree who are interested in obtaining a Teacher Librarian Endorsement should investigate the M.A. program in School Library Education. The major difference between the M.A. and the added K-12 Endorsement is 6 additional hours.

Students wishing to obtain Colorado licensure in this area are required to pass the required state proficiency examination. Endorsements are granted by the Colorado Department of Education upon the recommendation of the UNC Licensure Officer. Students should contact the School of Teacher Education in McKee 216 for licensure information. All coursework completed will be assessed by the UNC Licensure Officer prior to licensure acceptance. Students should be prepared to present evidence of course appropriateness (e.g., a copy of the course description and transcripts).

Courses taken at other accredited institutions within the preceding 5 years may be accepted in lieu of courses taken at UNC. However, these courses will be assessed by the UNC Graduate Evaluator before acceptance. Students should be prepared to present evidence of course appropriateness (e.g., a copy of the course description).

EDRD 614 Literature for Children, Adolescents and Young Adults (3)  
 EDRD 620 Reading in the Middle and Secondary Schools (3)  
 ET 502 Instructional Design (3)  
 ET 503 Computers in Education (3)  
 ET 533 Information Literacy & Reference (3)  
 ET 535 School Library Administration and Leadership (3)  
 ET 538 Selection, Evaluation, & Utilization of Library Materials & Cataloging (3)  
 ET 694 Elementary School Library Internship (1)  
 ET 696 Secondary School Library Internship (1)  
 SRM 600 Introduction to Graduate Research (3)

**Note(s):** For licensure purposes, the Colorado Department of Education requires students to complete two field experiences in an elementary and/or either a middle or secondary school library.

## OTHER GRADUATE DEGREE PROGRAMS

### INTERDISCIPLINARY STUDIES: GRADUATE INTERDISCIPLINARY DEGREE

The Graduate Interdisciplinary Degree Program is designed to be a rigorous, quality program providing the opportunity to qualified students to meet career goals by combining two or more disciplines into a single degree program. To ensure the quality of the program, the student will require close supervision, participation, and coordination from all assigned committee members of each discipline concerned. It is imperative that the program be truly interdisciplinary and represent an integration of the subject matter of the component disciplines. Programs that parallel other degree programs are not acceptable as interdisciplinary degree programs. Applicants for the Graduate Interdisciplinary Degree Program are encouraged to consult with the Graduate School prior to submitting their applications. Applicants must follow the student administered application procedure. The complete application packet should include the following:

#### Interdisciplinary Admission Application

1. The degree application returned with the appropriate non-refundable application fee.
2. One official copy of the applicant's transcripts from all colleges or universities attended (except UNC).
3. If applying for a doctoral program, one official copy of the applicant's GRE General Test scores (not more than five years - 1,825 calendar days old) sent from Educational Testing Service to the Graduate School. A student copy of the GRE results will be accepted in the packet for processing to the program area for screening. NO admission will be granted until the official GRE report is received from Educational Testing Service.
4. Three letters of recommendation from appropriate professional sources attesting to the applicant's ability to pursue the intended graduate interdisciplinary program.
5. A detailed written statement of career goals and objectives and a rationale for pursuing the proposed interdisciplinary program. This must be a compelling statement clarifying why no single existing degree program could satisfy these goals.
6. Identification of two primary disciplines which will be combined in the proposed program. At least one of the primary disciplines listed must offer a program leading to the desired degree, (i.e. MA, MAT, MM, MPH, MS, DA or Ed.D.). Secondary disciplines may also be included.
7. A current resume that summarized academic and professional experiences, activities, publications, and other pertinent information.

**Preliminary Review.** The Graduate Interdisciplinary Degree Coordinating (GIDP) Committee, comprised of interdisciplinary coordinators from each college, conducts a mid-semester preliminary review of all complete applications from individuals who satisfy the minimum admission requirements of the Graduate School. Applicants who do not meet the minimum admission requirements of the Graduate School will be denied admission (see this Catalog for admission standards for each degree level).

If the GIDP Committee finds the application to have merit, the Graduate School forwards the application materials to the appropriate GIDP College Coordinator who contacts the disciplines for their evaluation and recommendation. If the GIDP Committee finds the application to lack merit or compelling rationale for interdisciplinary studies, the Graduate School notifies the applicant of the committee's concerns. Those applicants who receive such notification may resubmit their application materials after addressing the concerns of the GIDP Committee.

Upon receipt of the application materials from the Graduate School, the GIDP College Coordinator and the faculty in the appropriate disciplines evaluate the application and recommend to the Graduate School that the applicant be

granted or denied provisional admission status. Each discipline recommending provisional admission must designate an advisor.

All disciplines included in the proposal must recommend provisional admission and must designate graduate faculty advisors before the Graduate School confers provisional admission status.

**Program Criteria.** The Plan of Study must meet the following criteria:

1. If the graduate faculty advisors determine a student has any deficiencies in his/her background, the proposal must list the course work necessary to alleviate those deficiencies. (Deficiency courses must be completed at the earliest possible date).
2. SRM 600 or one of the research oriented substitute courses approved by the Graduate Council (master's) or a 12 hours research core (doctoral) must be proposed. The proposal must also contain at least one additional research methods, statistics, or applied research courses (i.e. computer science, tests/measurements, etc.).
3. Secondary disciplines (divisions/schools) are defined as those disciplines in which nine (9) to eleven (11) semester hours of course work are proposed at the master's levels or those disciplines in which nine (9) to fourteen (14) semester hours of course work are proposed at the doctoral level. If identified in the program proposal, these disciplines must assign an advisor and approve the selected course work.
4. Proposed courses must be offered with sufficient frequency to allow completion of the degree requirements within a reasonable amount of time, e.g. two years for a thirty (30) semester hour program or three to four years for a sixty-four (64) semester hour program. Furthermore, research and library resources must be available to facilitate the completion of the thesis, if applicable, or dissertation.
5. No more than one-third of the proposed courses may be double-numbered courses offered simultaneously toward undergraduate and graduate students.
6. No more than nine (9) semester hours, individually or in combination, of courses numbers 508, 513, or 622 may be proposed or counted in the degree program.
7. Program proposals must conform to all other Graduate School policies and procedures, e.g. transfer of credit. Prior to submission to the Graduate School, the *Graduate Interdisciplinary Degrees Plan of Study* form must be signed by the student, all graduate faculty advisors, and all primary and secondary school directors. Until an approved plan of study is filed with the Graduate School, a hold is placed on an interdisciplinary student's ability to register for classes.
8. **Master's Degree:** Proposed course work must equal at least thirty (3) semester hours of graduate level courses plus any deficiency credits.  
At least twelve (12) semester hours of graduate level course work must be proposed in each of at least two primary disciplines. Courses numbered 622 and 699 may not be used to meet this requirement.  
If a thesis is proposed, the thesis must be a minimum/maximum of six (6) semester hours.  
One of the designated advisors must be named as the Program Advisor.
9. **Doctoral Degree:** Proposed course work must equal at least sixty-four (64) semester hours beyond a master's degree excluding any deficiency credits. If an applicant does not hold a master's degree, the proposed course work must equal at least ninety-four (94) semester hours.  
At least fifteen (15) semester hours of graduate-level course work must be proposed in each of at least two primary disciplines. If an applicant does not hold a master's degree, the proposed course work in each of at

least two primary disciplines must equal a minimum of eighteen (18) semester hours. Courses numbered 622, 797 and 799 may not be used meet this requirement.

The Plan of Study must include four (4) semester hours of proposal (797) and twelve (12) semester hours of doctoral dissertation (799)

When there are only two primary disciplines proposed, one of the two designed graduate faculty advisors must be named as the program advisor. In addition, the two designated advisors and the study must recommend at least one additional graduate faculty advisor, subject to approval by his/her school director and the Dean of the Graduate School.

**Regular Admission.** Upon receipt of the completed *Graduate Interdisciplinary Degrees Plan of Study* form, the Graduate School will forward the form and the original application materials to the GDP Committee for final review. The student, the graduate faculty advisors, and the primary and secondary schools will be notified by letter regarding program approval or disapproval. If approved, the student will be granted regular admission. NOTE: Until such a letter is received, the student remains on provisional admission status. The decisions of the GDP Coordinating Committee and the Dean of the Graduate School shall be final.

**Advising.** Together, the graduate faculty advisors are known as the program advisory committee. It is the responsibility of the program advisory committee to assist the student in planning and coordinating the degree program. Any deviation from the approved proposal must be approved in advance by the program advisory committee and the Graduate School.

**Committees.** At the doctoral level, the Program Advisory Committee plus a graduate faculty representative appointed by the Dean of the Graduate School shall serve as the doctoral committee. The doctoral dissertation proposal and dissertation shall be under the supervision of a research advisor who is a member of the graduate faculty and holds doctoral research endorsement.

**Comprehensive Examinations.** Each interdisciplinary degree program student must pass a written comprehensive examination which is designed, administered, and evaluated by the Program Advisory Committee and by other qualified individuals as identified by the program advisor. All doctoral students must also pass an oral comprehensive examination (see the "Comprehensive Examination Sections" of this Catalog for further details).

All Graduate School policies apply to interdisciplinary students.

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## OFFICE OF THE DEAN

**Dean:** Eugene P. Sheehan, Ph.D.

**Assistant Dean:** Carolyn W. Edwards, Ed.D.

**Location:** McKee 125

**Telephone:** 970.351.2817

The mission of the College of Education and Behavioral Sciences is to contribute to the betterment of society through research, professional service, and the preparation of individuals who are skilled lifelong learners capable of working effectively with diverse populations in an evolving global community.

The College offers programs at the graduate and undergraduate levels. Graduate programs in Psychological Sciences and Educational Research, Leadership, and Technology prepare students for employment in a range of fields including education and the business and technology sectors. The undergraduate program in psychology provides students with a liberal arts degree and transferable skills in several areas including research design and analysis and the ability to understand human behavior.

Several schools in the College provide professional training by offering specialized undergraduate licensure and graduate degree programs in education and psychology. The undergraduate licensure programs (Teacher Education Endorsement: Professional Teacher Education Programs (PTEP) prepare elementary, middle, secondary, K-12, and special education teachers. The Center for Urban Education in Denver trains elementary teachers for work in urban schools. Elementary, middle, and secondary teacher candidates must major in a content degree program offered in one of the other colleges.

Graduate programs are also offered to prepare school administrators, school psychologists, educational technology personnel, counselors and counseling psychologists for mental health agencies and private practice. These programs also prepare college and university faculty and administrators.

The professional education faculty members of the College are committed to the serious study of education and the promotion of professional standards to ensure quality and foster innovation in professional preparation. The College Conceptual Framework holds the view that education is a transformational enterprise and that professional educators use evidence in decision making; respect diversity; collaborate with others; are standards and performance-based; and can use technology to improve teaching and learning.

Programs in the College are accredited by the National Council for the Accreditation of Teacher Education. All educator preparation programs are approved for licensure by



the Colorado State Board of Education and authorized by the Colorado Commission on Higher Education. The American Psychological Association and the Council for Accreditation of Counseling and Related Educational Programs accredit programs in the School of Applied Psychology and Counselor Education.

Other major units in the College are the National Center on Low-Incidence Disabilities, Tointon Institute for Educational Change, Bresnahan-Halstead Center on Mental Retardation and Developmental Disabilities, and the Kephart Memorial Child Study Center. A common focus of these diverse units is to provide teachers and administrators with advanced professional development.

## SCHOOL OF APPLIED PSYCHOLOGY AND COUNSELOR EDUCATION

**Director:** Fred J. Hanna, Ph.D.

**Location:** McKee 248      **Telephone:** 970.351.2731

**School Psychology Faculty:** Michelle S. Athanasiou, Ph.D.; Achilles N. Bardos, Ph.D.; Robyn S. Hess, Ph.D.; Kathrine Koehler Hak, Ph.D.

**Professional Counseling Faculty:** Linda L. Black, Ed.D.; Vilma (Betty) Cardona, Ph.D.; Elysia Versen Clemens, Ph.D.; David M. Gonzalez, Ph.D.; Heather Helm, Ph.D.; Brian D. Johnson, Ph.D.; Jennifer L. Murdock, Ph.D.; M. Sean O'Halloran, Ph.D.; Basilia (Lia) C. Softas-Nall, Ph.D.; Stephen L. Wright, Ph.D.

**Counselor Education Faculty:** Linda L. Black, Ed.D.; Vilma (Betty) Cardona, Ph.D.; Elysia Versen Clemens, Ph.D.; Heather Helm, Ph.D.; Jennifer L. Murdock, Ph.D.

**Counseling Psychology Faculty:** David M. Gonzalez, Ph.D.; Brian D. Johnson, Ph.D.; M. Sean O'Halloran, Ph.D.; Basilia (Lia) C. Softas-Nall, Ph.D.; Stephen L. Wright, Ph.D.

The School of Applied Psychology and Counselor Education offers graduate programs in counselor education, professional counseling, counseling psychology and school psychology, which prepare students for careers in schools, community agencies, industry, higher education and private practice. Service courses are offered for other programs at both graduate and undergraduate levels.

In addition, the School of Applied Psychology and Counselor Education offers services to the University and the local community through its clinic, a research and training facility. The master's programs in School Counseling and Community Counseling, the emphasis area in Couples and Family Therapy and the doctoral program in Counselor Education and Supervision are accredited by the Council for Accreditation of Counseling and Related Educational Programs.

The doctoral program in School Psychology is accredited by the American Psychological Association and approved by the National Association of School Psychologists. The educational specialist degree program in School Psychology is also approved by the National Association of School Psychologists. The doctoral program in Counseling Psychology is accredited by the American Psychological Association.

### Professional Counseling

The Counseling faculty views potential candidates as unique, with strengths and assets to be identified, encouraged and developed during their graduate education. The knowledge and human relations skills necessary to help individuals recognize their own and other persons' unique promise and discover opportunities for its expression form the core of professional preparation for students in professional counseling. Such knowledge and skills are learned in part from research and study in the behavioral and social sciences, various skill development activities and supervised practica. Opportunities for a broad understanding of human behavior and human relationships are included in the education of the student in Counseling.

The Counseling faculty is committed to the development of

broadly based competent professional counselors skilled in helping people with personal, interpersonal and career concerns in community agencies. The requirements of the program are conceptualized within the framework and standards set forth by accreditation standards, the counseling profession, Colorado state law, Graduate School and job requirements.

**Admission.** The prospective student must apply for admission to and be accepted by the program area faculty. Admission to the program requires a GPA of 3.0 on the last 60 hours of course work. If the applicant's GPA is below 3.0, the Graduate Record Exam (General Test) score must be submitted. It is recommended that the applicant have a total score that meets or exceeds 1000 on the Verbal and Quantitative subtests, with no score below 400. The Analytical Writing subtest should have a minimum score of 3.5. Two years of post bachelor's degree work experience is recommended for applicants under 25 years of age. Attendance at a pre-admission workshop is required for this admission process to be completed. When attendance at the preadmission workshop is an extreme hardship for the applicant, special arrangements are made.

Acceptance is based on consideration of the following criteria:

- Clarity of career goals.
- Intellectual qualities.
- Professional judgment of appropriate personality characteristics as evidenced by a structured interview, interpersonal communication style and personal references.

### Clinical Counseling M.A.

The Clinical Counseling program at the master's level prepares professional counselors to work in various agency settings such as mental health centers, probation and parole departments, substance abuse centers and residential treatment centers.

### Couples and Family Therapy Emphasis

The requirements of the emphasis are directed toward the development of competent professionals in the practice of marital and family therapy. The emphasis area deals primarily with relationships, interpersonal interaction and systems theory.

*For degree and program requirements, see:*

**Clinical Counseling M.A. on page 41**  
**Couples and Family Therapy Emphasis**

### School Counseling M.A.

The School Counseling program is designed at the master's level to develop a professional who counsels with children and adults in elementary, middle and high schools.

*For degree and program requirements, see:*

**School Counseling M.A. on page 54**

### Counselor Education and Supervision Ph.D.

This program prepares an individual for employment as a counselor educator and supervisor for colleges and universities offering training in school counseling, community counseling, marriage and family counseling/therapy, counseling with children and adolescents, and gerontology. Graduates are also qualified for licensure as professional counselors, and may be employed in such sites as community agencies, schools, counseling centers, employee assistance programs, and private practice.

**Admission:** Application must be complete and on file in the Applied Psychology and Counselor Education Office by January 1, with decisions announced by the first week of April.

- Total score of 1000 for the Verbal and Quantitative subtests of the GRE, and a minimum score of 3.5 on the Analytical Writing subtest is recommended.

- A master's degree in counseling or a related area is required.
- Three letters of recommendation are required from individuals who are familiar with the student's academic and clinical skills.
- GPA of 3.25 in the last completed degree is desired.
- Written statement must be completed regarding the relationship of the doctoral program to the future career goals of the applicant.

Attendance at a pre-admission workshop is required for the admission process to be completed. Admission decisions are based on the professional judgment of the Counselor Education faculty, considering the above data, including personal characteristics and interpersonal communications style as assessed in the pre-admission workshop. Applications are evaluated on a competitive basis for a limited number of positions.

### **Prerequisites: Required of All Counselor Education and Supervision Ph.D. Students**

Entering doctoral students should have completed graduate courses in the following areas:

- Abnormal Psychology
- Career Counseling and Theory
- Counseling Theories
- Developmental Psychology
- Family Systems
- Group Counseling/Guidance
- Learning Theory
- Legal and Ethical Issues in Counseling
- Personality Theories
- Substance Abuse
- Testing: Analysis and Interpretation
- Tests and Measurement

Students who have not completed coursework in these areas must complete these courses as deficiency coursework not to be counted toward the hours required for the degree.

For degree and program requirements, see:

**Counselor Education and Supervision Ph.D. on page 66**

### **Counseling Psychology Ph.D.**

This program is designed to develop counseling psychologists who can independently apply psychological principles to improve the well being of individuals across the lifespan. The program focuses on developing competencies in the application of three treatment modalities: individual, group, and couples and family therapy. In addition, attention is directed toward the development of competencies in assessment, clinical supervision, advocacy, and program evaluation/research. This program subscribes to the scientist-practitioner model, with an emphasis on training practitioners to work with diverse populations. Graduates obtain employment in private practice, community agency, health care, business and academic settings. The program meets APA accreditation standards, which leads to eligibility for licensure as a psychologist.

**Admission:** Application materials must be completed and on file in the Graduate School by December 15. The Graduate School Application includes: a completed application form, one official copy of academic transcripts, one official copy of GRE scores (and TOEFL scores if an International applicant), three letters of recommendation from individuals familiar with an applicant's academic and clinical skills (letter writers should also complete the Graduate School's Letter of Recommendation form), and an application fee.

1. All entering doctoral students will hold a bachelor's or master's degree in psychology/counseling or a related field; should have a GPA of at least 3.0 on a 4.0 scale, have GRE Verbal and Quantitative scores of at least 400 each, and a minimum of 3.5 on the Analytical Writing subtest. International students must have a TOEFL score of at least 213 on the computer based test and 550 on the paper

based tests. An official copy of GRE scores (and TOEFL if an international applicant) needs to be submitted.

2. The Counseling Psychology program has a supplemental application form that should also be sent to the Graduate School by December 15. The supplemental materials include: completion of the Supplementary Data Sheet (included in the APCE Application Packet or on the Counseling Psychology program's website), applicant's current vita, and a written statement responding to questions related to an applicant's mental health experiences, professional background/interests and aspirations.
3. A further review process is conducted by the faculty. Finalists are invited to attend an admission screening workshop.

Admission decisions are based on the professional judgment of the Counseling Psychology faculty, considering the above data, including personal characteristics and interpersonal communication style as assessed in the pre-admission workshop. Applications are evaluated on a competitive basis; positions are limited.

For degree and program requirements, see:

**Counseling Psychology Ph.D. on page 65**

### **School Psychology**

The Programs in School Psychology are housed within the School of Applied Psychology & Counselor Education and offer graduate training at two levels:

- Specialist (Ed.S.)
- Doctoral (Ph.D.)

The aim of these programs is to develop professionals who are able to apply psychological and educational principles to improve the psychosocial environments of children (ages birth-21) and their families. Attention is directed toward the development of skills in the assessment of the intellectual, emotional, and social development of children; planning and implementing direct academic and social/emotional interventions with a focus on evidence-based and culturally sensitive practice; and providing individual and systems consultation within schools and the larger community. Students who successfully complete either the Ed.S. or Ph.D. are eligible for state licensure and national certification.

**Admission Requirements.** The Graduate School application must be submitted by December 15. In addition to meeting the admission requirements of the Graduate School, the student must submit the following data to the Applied Psychology and Counselor Education Office by December 15. The master's degree is not required for admission. *Educational Specialist - admission decisions are announced by March 30. Doctoral - admission decisions are announced by March 15.*

- Supplementary Data Sheet (included in APCE Application Packet).
- Three letters of recommendation from individuals familiar with the applicant's academic skills and relevant experience.
- Current vita.
- A written statement regarding the relationship of the program to the personal and professional goals of the applicant. This statement should be forwarded to the School Psychology Admissions coordinator.
- An official report of scores on the Graduate Record Examination. A minimum of 1000 combined score on the Verbal and Quantitative subtests is recommended, with no score below 450, and a minimum of 3.5 on the analytical writing subtest.
- Official transcripts from all undergraduate and graduate institutions attended (minimum 3.25 GPA recommended).

*Applications are evaluated competitively for a limited number of positions. The application must demonstrate clear potential for success in a School Psychology program.*

### School Psychology Ed.S.

The Specialist program is designed for those students who wish to become school psychologist practitioners. Training is primarily oriented toward the acquisition of those skills necessary for effective functioning in the educational environment as a school psychologist. The program is based on the student's entering with a bachelor's degree. A student with a master's degree in psychology or professional psychology should meet with his or her advisor to develop a specific plan of study. Courses in abnormal psychology and psychological testing and measurement are prerequisite to the program and must be completed by any student who has not had them. In consultation with the advisor, a student should select the number of hours and specific courses to meet licensure requirements, complete the program, and prepare the student to be a professional school psychologist.

*For degree and program requirements, see:*

**School Psychology Ed.S. on page 61**

### School Psychology Ph.D.

The principal goal of the doctoral program is the training of a scientist-practitioner who possesses general practitioner skills and has developed proficiency in the areas of advanced intervention, assessment, consultation, research, and evaluation. Doctoral graduates, in addition to being eligible for licensure as psychologists and school psychologists, may also be qualified to assume positions as university professors, educational evaluators, private consultants, and therapists.

The program is based on the student entering with a bachelor's degree. A student with a master's or specialist's degree in psychology or professional psychology should meet with his or her advisor to develop a specific plan of study. Courses in abnormal psychology and psychological testing and measurement are prerequisite to the program and must be completed by any student who has not had them. In consultation with the advisor a student should select the number of hours and specific courses to meet licensure requirements, complete the program and prepare to be a professional school psychologist.

*For degree and program requirements, see:*

**School Psychology Ph.D. on page 74**

### School Psychologist Licensure

Institutional recommendation for endorsement in School Psychology is based on the completion of the Ed.S. or the Ph.D. program in School Psychology. No prior teaching experience is necessary.

Students wishing to obtain Colorado licensure in this area are required to successfully complete the National School Psychology exam through the Education Testing Service (ETS/PRAxis).

Students desiring licensure in states other than Colorado should note that requirements for licensure are set by each state's Department of Education and should become familiar with the requirements for any other state from which they seek licensure.

Near the end of the semester that the licensure program is to be completed, the candidate should complete application forms in the Teaching/Special Services Licensing Office in McKee 216. Applications are processed as soon as official transcripts, ordered by the applicant, are received from the Registrar showing completion of requirements. School recommendations are required before institutional endorsement is granted.

# SCHOOL OF EDUCATIONAL RESEARCH, LEADERSHIP & TECHNOLOGY

**Director: Susan R. Hutchinson, Ph.D.**

## APPLIED STATISTICS AND RESEARCH METHODS

**Location:** McKee 518      **Telephone:** 970.351.2807

**Faculty:** Susan R. Hutchinson, Ph.D.; Maria K. E. Lahman, Ph.D.; Daniel J. Mundfrom, Ph.D.; Lisa A. Rue, Ph.D.; Jay R. Schaffer, Ph.D.; Khalil Shafie, Ph.D.

This program provides students with a broad understanding of appropriate applications of statistical and research methodology and with experience in using computers effectively for statistical analysis.

The master's and doctoral programs in Applied Statistics and Research Methods are designed to prepare graduates in statistics and education who make important contributions to educational practice. Through the programs, great emphasis is placed on how research design and statistics can be applied to educational issues and problems. Service courses are offered by the school in support of other university programs at the graduate level.

**Admission:** Applications must be complete and on file in the ASRM office by March 1 for Fall admission and by October 1 for Spring admission.

### Applied Statistics and Research Methods M.S.

Students planning on concentrating on applied statistics need a working knowledge of calculus and linear algebra. Students must also provide a written statement regarding the relationship of the Master's program to the student's professional goals.

Completion of this degree will enable the graduate to seek employment in a career field requiring the application of statistical or research methodology, for example: data analysis or experimental design; to teach in a community or junior college; to work as an evaluation/assessment specialist in a public school setting; or to enter a Ph.D. program in statistics, educational research, or a related area.

*For degree and program requirements, see:*

**Applied Statistics and Research Methods M.S. on page 38**

### Applied Statistics and Research Methods Ph.D.

The student must provide the ASRM program coordinator with a written statement regarding the relationship of the doctoral program to the student's professional goals. It is expected that the student possesses the knowledge, skills and competencies equivalent to those of a graduate from our M.S. degree program. Should it be necessary, a student may use elective credits to make up deficiencies.

This program prepares students to teach courses at the university level in applied statistics and research methodology, to provide leadership in the conduct of research studies, and to serve as consultants in research methodology and data analysis in education, industry, or government.

*For degree and program requirements, see:*

**Applied Statistics and Research Methods Ph.D. on page 62**

**Applied Statistics and Research Methods Doctoral Minor on page 78**



## EDUCATIONAL LEADERSHIP AND POLICY STUDIES

**Location:** McKee 418

**Telephone:** 970.351.2861

**Faculty:** Cliff Brookhart, Ed.D.; Martha Cray, Ph.D.; Linda R. Vogel, Ph.D.; Spencer Weiler, Ph.D.; Kathryn S. Whitaker, Ph.D.

The mission of the program is to develop educators who have the vision and the ability to lead educational organizations by providing needed services to learners in educational settings, creating effective learning environments, effecting policies that govern educational organizations, and modeling continuous learning with and for the citizens of the community. To achieve this mission, ELPS faculty incorporate innovative teaching practices; engage in inquiry about leaders and leadership; and demonstrate leadership at the local, regional, national and international levels.

The underlying philosophy of the ELPS program is that educational leaders possess knowledge of self, others, organizations, learning and society necessary to perform creatively and effectively in diverse environments. They engage people in identifying and working toward the accomplishment of a shared vision for the organization. Leaders incorporate the ideas, values and experiences reflective of a pluralistic society and promote continual learning.

The ELPS programs are exemplified by the following beliefs:

- Human growth and development are lifelong pursuits.
- Leadership encompasses a learned set of knowledge, skills, attitudes and practices.
- Organizations are artifacts of a larger society.
- Learning, teaching, and collegiality are fundamental activities of organizations.
- Validated knowledge and active inquiry form the basis of practice.
- Moral and ethical imperatives drive leadership behavior.
- Effective leadership in organizations depends on individual and team efforts.
- Leaders' behaviors and actions model their beliefs and values.
- Leaders effect positive change in individuals and organizations.
- Effective leaders develop positive interpersonal relationships.
- Diversity strengthens organizations.
- Organizations and leaders are accountable.

The ELPS programs and the scholarship of its faculty and students emphasize:

- Formal and informal roles and strategies of educational leaders in P-12 schools and post-secondary settings
- Fiscal, legal and personnel aspects of schools and higher education
- Innovative practices in leadership preparation
- Understanding, facilitating and evaluating the change process
- Innovation and restructuring of schools
- Collaboration in teaching, learning and scholarship
- Adult learning and development and staff development
- Policy development, analysis and implementation
- Service to schools, higher education and policy makers
- Identification of multicultural and gender-based needs

### Administrators' Licensure (Non-Degree)

An application packet available through the program Office (McKee 418) describes materials for admission review by the faculty: current resume, goals statement, and Professional Assessment Forms. Admission decisions are made throughout the year.

*For licensure requirements, see:*

**Elementary Education, Post-Baccalaureate (K-Grade 6) on page 82**

### Principals' Licensure (Non-Degree)

Students may work concurrently on the principal's license and a Master of Arts degree (M.A.) or an Educational Specialist degree (Ed.S.) in Educational Leadership. To obtain a professional license, students must have a master's degree, complete a principal license program, and satisfactorily pass the PLACE exam. Students must also complete an induction program. Students desiring a principal's license must submit an application to the Graduate School. In addition, an application packet, available through the program office (McKee 418), describes materials for admission review by the faculty: current resume, goals statement, and Professional Assessment Forms. Admission decisions are made throughout the year.

*For licensure requirements, see:*

**Principals' Licensure on page 85**

### Educational Leadership M.A.

The Master of Arts degree in Educational Leadership provides opportunities for candidates to acquire knowledge about leadership in P-12, community college, higher education, or other educational settings. The program provides opportunities for students to develop in-depth understanding about leadership roles and responsibilities, working with external environments, professional development, organizational behavior, and contemporary educational issues.

An application packet, available through the program office (McKee 418), describes materials for admission review by the faculty: current resume, goals statement, and Professional Assessment Forms. Admission decisions are made throughout the year.

One set of materials may be submitted for review for admission to the M.A. and either the Colorado Principal or Administrator Licensure program. This intent should be clearly described in the statement of goals and noted on the application form.

The master's degree requires a minimum of 30 semester hours of graduate study, of which 12 hours are core learning experiences. Depending on career goals, students may choose from four concentration areas in the master's program: P-12 education, higher education and student affairs leadership, adult and continuing education, or an individualized program. Students may obtain the master's degree while also working concurrently on a principal or administrator license.

*For degree and program requirements, see:*

**Educational Leadership M.A. on page 44**

### Educational Leadership Ed.S.

An application packet, available through the program office (McKee 418), describes materials for admission review by the faculty: current resume, goals statement, and Professional Assessment Forms.

One set of materials may be submitted for review for admission to the Ed.S. and either the Colorado Principal or Administrator Licensure program; this intent should be



clearly described in the student's statement of goals and noted on the application form. Admission decisions are made throughout the year.

For degree and program requirements, see:

**Educational Leadership Ed.S. on page 61**

### **Educational Leadership Ed.D.**

The University of Northern Colorado has a long history of preparing individuals to assume leadership roles in education. Over the years, superintendents, principals, deans, program directors, professors, presidents and other persons in leadership positions in Colorado and across the nation have received academic degrees from the University. The current focus of the Ed.D. is preparing P-12 leaders for public and private schools and other educational organizations.

The purpose of the Ed.D. program is to engage educators in P-12 and other education-related settings in the advanced study of educational leadership so they can critique and improve their own practice. The program focuses on problems of practice - studying practice, engaging in constructive critique of practice, and improving one's practice. Coursework in the program is designed to be highly relevant to the participants' jobs and careers.

Features that make this program attractive to current and aspiring educational leaders:

- Collaborative and collegial learning community;
- Challenging, provocative, research-based knowledge;
- Cohort approach to learning for 3 semesters of enrollment;
- Instructional techniques emphasizing practices of adult learning;
- Emphasis on problems of practice;
- Professional networking with area P-12 educational leaders;
- National and internationally recognized university faculty and affiliates;
- Faculty and cohort commitment that all participants successfully complete the program.

**Admission.** An application packet, available through the program office (McKee 418), describes materials required for admissions by the Educational Leadership Program: a resume, a written statement of goals, an essay on a current problem of practice, and Professional Assessment Forms. Applicants complete an interview with the Educational Leadership program faculty.

For students who live out-of-state, the interview may be conducted by a conference call. Although admissions decisions are made throughout the year, students who complete the application process by February 15, including the interview, are given priority screening for Fall admissions of that year and have increased opportunities for financial assistance. The application process, including interview, is typically completed by May 1.

The doctoral program expands upon the foundation gained in study for the master's, specialist, and/or licensure programs. It provides opportunities for candidates to develop breadth in understanding leadership, policy, and research methodologies, and also depth in one or more areas of specialization. The focus of this program is the refinement of students' understandings of leadership and policy development and analysis, ultimately culminating in the dissertation. The dissertation is meant to address a problem of practice in educational leadership.

Entering doctoral students who already possess a Master's Degree in Educational Leadership or a related field complete a minimum of 64 semester hours of graduate credit beyond the master's degree. Students with an Educational Specialist's degree enroll in a minimum of 42 semester hours beyond the specialist's degree. These semester hour requirements are minimum expectations for students' performance. Credit requirements are a function of the types of learning experiences needed by students to achieve their goals.

**Residency.** Students may complete the UNC residency requirement without leaving their employment.

**Program of Study.** The nature of doctoral studies implies a blend of required learning experiences and individualized program development to reflect the personal, professional, and academic goals of each student. Each doctoral student admitted to the program works with an advisor and a program planning committee to develop a plan of study.

For degree and program requirements, see:

**Educational Leadership Ed.D. on page 67**

## **HIGHER EDUCATION AND STUDENT AFFAIRS LEADERSHIP**

**Location:** McKee 418      **Telephone:** 970.351.2861

**Faculty:** Matthew Birnbaum, Ph.D.; Florence Guido-DiBrito, Ph.D.; Katrina Rodriguez, Ph.D.

The Higher Education and Student Affairs Leadership program offers a Ph.D. program for individuals preparing for careers in leadership positions in colleges and universities, faculty positions in higher education, and leadership positions in agencies focusing on higher education leadership, research, and policy analysis and development. The program also offers coursework in higher education and student affairs for students in other graduate programs, both master's and doctoral, including a doctoral minor in Higher Education and Student Affairs Leadership. The program offers coursework for the higher education and student affairs leadership concentration in the M.A. program in Educational Leadership. The program also offers an array of undergraduate coursework in support of a number of campus student services programs.

### **Higher Education and Student Affairs Leadership Ph.D.**

The HESAL program integrates a focus on social justice and empirical research throughout the curriculum. The inquiry-based program offers students the opportunity to focus studies on leadership, college student development, higher education culture and diversity, and organizations and policy in both student affairs and broader higher education contexts. Students may focus on studies related to community colleges, four-year colleges, universities, and higher education agencies. Opportunities are provided for practical experiences under the mentorship of experienced higher education leaders. The Ph.D. program is based upon a community of scholars model, in which students are viewed as colleagues with progressively higher levels of responsibility and expertise. Students are admitted as a cohort group, with expectations that students will engage in collaborative research and other scholarly endeavors early in the doctoral program.

**Admission.** Students must hold a masters degree in higher education, college student affairs, or a related field from an accredited institution and have two years of successful work experience in an institution of higher education. SRM 600 or an equivalent introduction to graduate research course, is required for admission. The program may waive that requirement for admission, in which case the student must make up the deficiency. Coursework to make up the deficiency will not count toward the Ph.D. requirements. Additional details regarding admissions criteria and the application process may be seen on the program's web site, at [www.unco.edu/cebs/hesal](http://www.unco.edu/cebs/hesal). Financial assistance and additional professional experiences are available through an extensive network of graduate assistant opportunities, both within the program and in a number of UNC offices.

**Commitment to Diversity.** The Higher Education and Student Affairs Leadership program recognizes the importance of addressing the needs of an increasingly diverse society. To that end, the program strives to increase the educational opportunities of diverse student populations, as well as create an atmosphere where the values and concerns of diverse populations receive attention and respect. The

program strives to enroll a diverse population of doctoral students. Issues of diversity are integrated into core courses and are explored more fully through special topics courses.

**Residency.** While the Ph.D. program has a residency requirement (see Graduate School information), courses are scheduled such that students may complete the UNC residency requirement without leaving their employment. The program enrolls a combination of individuals who are employed full-time and others who are employed in part-time graduate assistantships.

*For degree and program requirements, see:*

**Higher Education and Student Affairs Leadership Ph.D. on page 71**

## EDUCATIONAL TECHNOLOGY

**Location:** McKee 518

**Telephone:** 970.351.2816

**Faculty:** Jeffrey W. Bauer, Ph.D.; James E. Gall, Ph.D.; Linda L. Lohr, Ed.D.; Heng-Yu Ku, Ph.D. Berlinda L. Saenz, Ph.D.

The Educational Technology faculty administer graduate degree programs in Educational Technology and School Library Education, as well as graduate non-degree programs leading to a School Library K-12 endorsement by the State of Colorado Department of Education. In addition, the school offers a Master of Arts Degree in School Library Education.

At the master's level these programs of study are designed to develop knowledge and skills in instructional systems analysis and design, computer applications, media design and information management. Application is focused upon improving human performance in applied learning settings.

At the doctoral level students are provided with advanced opportunities to develop knowledge and skills in the area of instructional system design, analysis and evaluation. Emphasis is placed upon the generation of empirically derived strategies to promote instructional practice based upon learning and instructional theory.

**Western Regional Graduate Program** The Ph.D. program in educational technology is a member of the Western Regional Graduate Program. Under this program any Ph.D. student in educational technology, who is a resident of selected western states pays in-state tuition rather than out-of-state tuition. The selected states include: North Dakota, South Dakota, Montana, Wyoming, Colorado, New Mexico, Idaho, Utah, Nevada, Arizona, Washington, Oregon, Alaska and Hawaii.

### Educational Technology M.A.

The Master of Arts degree in Educational Technology is designed to develop knowledge and skills in instructional system analysis, computer applications and media design. Application of knowledge and skills is focused on improving human performance in applied learning contexts.

Upon meeting the admission criteria for the Graduate School, the candidate's application is forwarded to the program area faculty for review. Reviews by the program area faculty are held each semester (including summer). Decisions regarding admission are communicated to the applicant before the beginning of the next semester. Although students may enroll any semester following admission, they are strongly encouraged to begin their program in either the summer or fall semester in order to enter the proper sequencing of courses.

Applications require a description of educationally-related work experience, statement of career goals, three letters of reference, and transcripts from previous undergraduate work.

Multiple criteria for admission are considered, including:

- GPA of 3.0 in the last 60 semester hours of academic work.
- Three letters of recommendation indicating a high potential for academic success and interpersonal competency.
- Two page statement of career goals

Educationally-related work experience is desirable, but not required.

*For degree and program requirements, see:*

**Educational Technology M.A. on page 45**

### Educational Technology Ph.D.

The Doctor of Philosophy in Educational Technology prepares graduates for a variety of professions in the broad discipline of human performance technology. Graduates work in academic, corporate, and military settings as researchers, consultants, and scholars. Based upon the focus of their research and courses, graduates develop skills in: needs assessment, needs analysis, instructional design, instructional development, evaluation and change.

The doctoral program uses a community of scholars' model of interaction among the students and the faculty members. The students are viewed as developing colleagues with progressively higher levels of responsibility as they move through the program. Cooperative research and other scholarly projects are encouraged among faculty members and students. The doctoral program in educational technology provides the students with a broad base of knowledge in the use of technology in educational and training settings.

The program is designed to be rigorous but practical, encouraging the serious, mature, motivated and competent student to apply for admission. Applications are reviewed by the educational technology faculty during the middle of each semester. Although the students may enroll any semester following admission, they are strongly encouraged to begin their program in either the summer or fall semester in order to enter the proper sequencing of courses.

All applications must include the following items:

- Two page statement of career goals
- Description of previous teaching and other work experience
- In addition, an interview will be arranged with the program faculty.

Minimum criteria for acceptance include:

- Meet graduate school requirements regarding the GRE and TOEFL (if applicable).
- Grade point average of 3.2 on the most recent 60 semester hours of coursework.
- Congruency between the applicant's career goals and the goals of the doctoral program.
- Letters of reference indicating a strong potential for academic success, interpersonal competency and growth of the individual as a designer, producer, implementor, teacher, scholar, evaluator and researcher in educational technology.
- Relevant work experience is desirable.
- Successful interview with the faculty.

*For degree and program requirements, see:*

**Educational Technology Ph.D. on page 70**

**Educational Technology Doctoral Minor on page 78**

### School Library Education M.A.

Students interested in obtaining a School Library endorsement who do not already hold a master's degree may enroll in the master's degree in School Library Education. This program has been designed to meet the requirements for an M.A. degree as well as to meet the graduate program requirements and competency requirements dictated by the State of Colorado for School Library endorsement.

Upon meeting the admission criteria for the Graduate School, the candidate's application is forwarded to the program area faculty for review. Reviews by the program area faculty are held each semester (including summer). Decisions regarding admission are communicated to the applicant before the beginning of the semester. Although students may enroll any

semester following admission, they are strongly encouraged to begin their program in either the summer or fall semester in order to enter the proper sequencing of courses.

Applications require three letters of reference, written statement of career goals, and educationally-related work experience.

Multiple criteria for acceptance are considered, including:

- Three letters of recommendation indicating a high potential for academic success and interpersonal competency.
- Two page written statement of philosophy and goals with respect to pursuit of degree and/or endorsement.
- Educationally-related work experience is required.

Applicants seeking an endorsement for Teacher Librarian by the State of Colorado Department of Education must meet the following requirements:

- Hold a valid Type A teaching license (or equivalent) teaching license;
- Have completed one year 1 (full-time) of successful teaching experience in the classroom and/or school library media experience while holding a valid Type A or professional teaching license or equivalent certificate;
- Have completed an approved graduate degree program in school library education or library science in an accepted institution of higher education including two field experiences in elementary and/or either middle or secondary school library.
- Successfully pass the required state proficient examination.

Students may transfer up to 6 semester hours or 9 quarter hours of approved graduate level credit to the program from other accredited institutions.

All coursework to be transferred or applied to meet graduate course requirements that was completed before a student's acceptance into a graduate degree program must be approved the UNC Graduate School.

Note that applicants must also complete the Notification of Intent to Seek Endorsement (institutional recommendation).

*For degree and program requirements, see:*

**School Library Education M.A. on page 54**

## SCHOOL OF PSYCHOLOGICAL SCIENCES

**Director:** Mark B. Alcorn, Ph.D.

**Location:** McKee 0014

**Telephone:** 970.351.2957

**Faculty:** Mark B. Alcorn, Ph.D.; Michael Todd Allen, Ph.D.; Theodore R. Bashore, Ph.D.; Kathryn F. Cochran, Ph.D.; Cynthia Clark, Ph.D.; Thomas N. Dunn, Ph.D.; David M. Gilliam, Ph.D.; Carl E. Granrud, Ph.D.; Nancy J. Karlin, Ph.D.; Paul Klaczynski, Ph.D.; Teresa M. McDevitt, Ph.D.; Elizabeth Pascoe, Ph.D.; Phillip E. Peterson, Ph.D. Kristina Phillips, Ph.D.; Michael Phillips, Ph.D.; Kevin Pugh, Ph.D.; Steven M. Pulos, Ph.D.; Rosann Ross, M.A.; Eugene P. Sheehan, Ph.D.; Marilyn C. Welsh, Ph.D.; William Douglas Woody, Ph.D.

**Emeritus Faculty:** William A. Barnard, Ph.D.; Susan Plock Bromley, Psy.D.; John B. Cooney, Ph.D.; Grant L. Morris, Ph.D.; Jeanne E. Ormrod, Ph.D.; Charles S.L. Poston, Ph.D.; Paul D. Retzlaff, Ph.D.

## EDUCATIONAL PSYCHOLOGY

The master's and doctoral programs are designed to prepare individuals for educational activities such as instruction, evaluation, test construction, educational research, educational consulting to business and public schools, and university teaching. All students must abide by the codes of ethics of the American Psychological Association (APA) and the American Educational Research Association (AERA).

Educational Psychology offers programs and service courses at both the graduate and undergraduate levels. The program faculty provide courses on psychological principles and theories and research methodologies as applied to the educational process. These applications range from everyday concerns in the public school classroom to basic research on learning and cognition, and the development of children, adolescents, and adults. Faculty and students have access to computers, a complete set of data analysis software packages and laboratory facilities available for both teaching and research purposes. Service courses are offered to support other university programs at both the undergraduate and graduate levels.

### Educational Psychology M.A.

Upon meeting the admission criteria for the Graduate School, the candidate's application is forwarded to the program area faculty for review. Applications are processed as they are received. Decisions regarding admission are communicated to the applicant before the beginning of the next semester. Although students may enroll any semester following admission, they are strongly encouraged to begin their program in either the summer or fall term in order to enter the proper sequencing of courses. Applications require a description of educationally-related work experience, statement of interest and career goals, three letters of reference, and GRE scores should be submitted if available, but are not required.

Applications are evaluated case by case according to the following preferred guidelines:

- GPA of 3.0 in the last 60 semester hours of academic work.
- Three letters of recommendation indicating a high potential for academic success.
- Congruency between the applicant's career goals and the purpose of the M.A. program as indicated by the letter of interest.
- Educationally-related work experience is desirable, but not required.

### Educational Psychology M.A. en route to the Ph.D.

Students may apply for admission to the Ph.D. in Educational Psychology and complete their M.A. in Educational Psychology on the way to the doctoral degree. The application process and the admission criteria are the same as for the Ph.D. program. Once admitted, students will complete the 30 credit M.A. program described on [page 44](#). Students must complete all program requirements (including Comprehensive Examination) for the M.A. in addition to the minimum credit hours required for the Ph.D. Students must be conferred with the M.A. degree prior to admission to doctoral candidacy.

*For degree and program requirements, see:*

**Educational Psychology M.A. on page 44**

### Educational Psychology Ph.D.

The overall goal of the program is to produce university instructors and scholars capable of original basic and applied research in psychological and educational processes.

There is considerable emphasis on research training within the program. Research topics of the faculty pertain to processes in learning cognition, and development, measurement and assessment, social perspectives to research design and to applications of the findings from educational psychology to informal and informal educational settings.

Upon meeting the admission criteria for the Graduate School, the candidate's application is forwarded to the program area faculty for review. Reviews by the program area faculty are typically conducted within four weeks of receipt of the application. Decisions regarding admission are communicated to the applicant before the beginning of the next semester. Although students may enroll any semester following admission, they are strongly encouraged to begin their program in either the summer or fall term in order to enter the proper sequencing of courses.



Applications are evaluated case by case according to the following preferred guidelines:

- GRE combined score of 1,200 on the verbal and quantitative reasoning sections, with a minimum verbal score of 500 and an analytical writing score of at least 4.0.
- GPA of 3.5 (4.0 scale) in the last 60 semester hours of academic work.
- Three letters of recommendation indicating a high potential for success in a doctoral research program.
- A written statement of career goals and a resume.
- Congruency between the applicant's career goals and the purpose of the Ph.D. program.

The doctoral program contains a common core of courses and three areas of emphasis: Learning and Cognitive Processes, Human Development, and Research, and Measurement. All students must take the common core emphasis area and electives in consultation with the advisor. Students must take a minimum of 67 hours to graduate. A doctoral minor is also available.

For degree and program requirements, see:

[Educational Psychology Ph.D. on page 69](#)

[Educational Psychology Doctoral Minor on page 78](#)

## SCHOOL OF SPECIAL EDUCATION

**Director** Harvey Rude, Ed.D.

**Location:** McKee 29

**Telephone:** 970.351.2691

**Faculty:** Rashida Banerjee, Ph.D.; Diane Bassett, Ph.D.; George T. Betts, Ed.D.; Sandra K. Bowen, Ph.D.; Robin D. Brewer, Ed.D.; Paula W. Conroy, Ed.D.; Silvia Correa-Torres, Ed.D.; Kay A. Ferrell, Ph.D.; Lewis B. Jackson, Ed.D.; John L. Luckner, Ed.D.; Tracy Mueller, Ph.D.; Francie R. Murry, Ph.D.; Stuart N. Omdal, Ph.D.; Lori Peterson, Ph.D.; Corey D. Pierce, Ph.D.; Harvey Rude, Ed.D.; Ann Sebald, Ed.D.; Todd H. Sundeen, Ph.D.; Jennifer Urbach, Ph.D..

The School of Special Education offers one of the most comprehensive training programs for special educators (undergraduate, master's, doctoral) in the nation. UNC is the only institution in a six-state region that offers degree programs in special education in all areas of exceptionality. Special programs associated with special education include the Summer Enrichment Program for the Gifted and Talented, the Bresnahan-Halstead Center on Mental Retardation and Developmental Disabilities, and the Kephart Memorial Child Study Center and an annual symposium in Vail, Colorado featuring renowned speakers.

Faculty in Special Education are nationally recognized, have published in their respective areas, presented papers at prestigious conferences and have many of their publications translated into several foreign languages. Numerous program and research grants provide support for professional development and student scholarships at the graduate levels.

### Special Education M.A.

#### Deaf and Hard of Hearing Emphasis

The MA degree in Special Education with a Deaf/Hard of Hearing emphasis prepares professionals as a special education specialist: deaf/hard of hearing to work with children and youth with hearing losses ages birth-21 and their families in order to help them develop their full potential. The Special Education Deaf/Hard of Hearing Specialist is required to pass an approved elementary education content exam prior to entry into the preparation program, and the Deaf Education PLACE exam prior to licensing. The program consists of the required courses and practicum requirements agreed upon by the student and advisor. Students entering the Master of Arts program in Special Education: Deaf/Hard of Hearing without a current teacher licensure are required to complete additional admission requirements and course requirements listed under Professional Teacher Education. Students are encouraged to contact a program advisor to determine

additional requirements. Also, individuals who are not proficient in sign can enroll in the program and concurrently take sign courses. The Special Education Deaf/Hard of Hearing Specialist is required to pass a sign proficiency examination prior to student teaching.

#### Early Childhood Special Education Emphasis

This master's program is designed to prepare teachers who will work with young children from birth to age 8 across the full spectrum of learning needs and abilities. Because it promotes an inclusive approach to early education, the program is appropriate for teachers who will work in Early Childhood Special Education and/or Early Childhood Education settings. Teacher candidates will demonstrate knowledge and skills in parent-professional partnerships, recommended research-based practices, typical and atypical early child development, and approaches to effective assessment and intervention. Students are required to pass the Early Childhood Special Education PLACE exam before enrolling in practicum coursework. For candidates without a current teaching license who wish to obtain licensure, additional courses are required through the Professional Teacher Education Program.

#### Generalist Emphasis

The MA degree in Special Education with Generalist emphasis prepares teachers who will work with students who are identified with a variety of disabilities from moderate to severe intensity. The emphasis of the program content focuses on literacy and mathematics instruction, understanding standards and assessment, differentiated instruction, and technology. Teachers completing this program will demonstrate the skills needed to provide appropriate behavior supports and accommodations for learning of students with disabilities. The Special Education Generalist is required to pass the approved elementary education content exam prior to entry into the preparation program, and the special education generalist PLACE exam prior to licensing. The program consists of the required courses and practicum requirements agreed upon by the student and advisor. If a student enters the Master of Arts program in Special Education: Generalist without a current teacher licensure, s/he is required to complete additional admission requirements and course requirements listed under Professional Teacher Education.

#### Gifted and Talented Education Emphasis

The MA degree in Special Education with Gifted and Talented emphasis prepares teachers at the elementary and secondary level to work with gifted and talented students in order to help them develop their full potential.

The Special Education Gifted and Talented Specialist is required to pass the approved PLACE exam prior to licensing. The program consists of the required courses and practicum requirements agreed upon by the student and advisor. If a student enters the Master of Arts program in Special Education: Gifted and Talented without a current teacher licensure, s/he is required to complete additional admission requirements and course requirements listed under Professional Teacher Education.

#### Intervention Specialist Emphasis

The Intervention Specialist is a comprehensive program that weaves research and practice while providing current educational professionals with the knowledge and skills that are needed to provide services, supervise, and coach other educators to ultimately foster student growth academically, behaviorally, and socially.

#### Visual Impairment Emphasis

The MA degree in Special Education with a Visual Impairment Emphasis is designed to prepare teachers who will work with students who are visually impaired. The program consists of the required courses and practicum requirements agreed upon by the student and advisor. Students entering the Master of Arts program in Special Education: Visual Impairment without a current teacher licensure are required to complete additional course requirements listed under Professional Teacher Education.



Students may complete licensure and degree requirements in a minimum of 42 credits if they desire licensure of education of students with visual impairments only. Students seeking an added endorsement in Orientation and Mobility may complete this 15 credit program in consultation with their program advisor.

**Admission.** The student must possess a grade point average on the last 60 semester hours of at least 3.0 on a 4.0 scale, provide a minimum of two letters of recommendation from previous employers or academic professors, provide a statement of philosophy and goals of application in relation to the needs in the field and, if possible, arrange for a personal interview. Acceptance or rejection of an applicant will be made after an evaluation of all of the above requirements is made.

Please see degree and program requirements for any additional admission information.

**Comprehensive Examination:** In addition to admission to the program and satisfactory completion of all coursework, each student must pass a written comprehensive examination before she or he is allowed to graduate.

**Evaluation.** Evaluation of the student's professional potential will be an ongoing process throughout the program. Continuation/exit requirements will be based on multiple criteria such as faculty interview, professional recommendations, recommendations of the advisor or other program faculty, academic ethics, successful completion of the comprehensive examination and potential for teaching handicapped infants and adults. The multiple criteria approach does not assume that each of these factors carry equal weights; any one factor might well outweigh all others.

**Licensure.** Students who seek Colorado licensure in an area of Special Education or request an institutional recommendation for licensure from UNC must meet Colorado teacher licensure requirements.

Students wishing to obtain Colorado licensure are required to pass proficiency examination(s). Students should contact the School of Special Education in McKee for information.

A master's degree or a school approved licensure program is required before the University of Northern Colorado will recommend the student for endorsement.

Students entering the licensure program must meet the same entrance requirements as the Master's degree students. They must also demonstrate achievement of all program standards through a combination of UNC coursework, prior coursework, or other approved documentation and completion of a licensure examination. However, a minimum of 15 semester hours must be taken at UNC.

*For degree and program requirements, see:*

**Special Education M.A. on page 56**

Deaf and Hard of Hearing Emphasis

Early Childhood Special Education Emphasis

Generalist Emphasis

Gifted and Talented Education Emphasis

Intervention Specialist Emphasis

Visual Impairment Emphasis

**Orientation and Mobility (O&M) Endorsement on page 85**

**Teaching American Sign Language M.A. on page 60**

### **Special Education Ph.D.**

The student must receive a positive recommendation by the School of Special Education. When a prospective student has met general University requirements for admission, his or her application is submitted to the School for evaluation. In addition to an interview with members of the faculty, the School of Special Education requires the submission of:

1. a resume;
2. a written statement of academic and professional goals;

3. a published or professional writing sample.

The Committee reviews each application for admission to determine evidence of:

- potential for scholarship;
- relevant formal training at the undergraduate and/or graduate level;
- evidence of successful teaching or clinical experience with persons who have exceptionalities for a minimum of two years;
- potential for leadership;
- professional commitment;
- clarity and rationality of professional and personal goals;
- potential for effective university teaching; potential for conceptualization of and reporting research.

Each applicant must receive a positive recommendation from representatives of the School of Special Education faculty to be recommended for admission to the Graduate School.

The philosophy of the doctoral program is based on the concept that learning is an active, self-regulated process. Therefore, doctoral programs are individually tailored through interactive planning that involves the student, the advisor, the doctoral committee, other students and professionals from outside the University.

Students are expected to enter the program with a clear sense of personal direction and a set of learning goals. In this context, a personalized program is developed in which the focus is on finding innovative and flexible ways to meet the needs of each student while insuring that the student develops advanced skills and knowledge. The overall goal of six major themes in relation to special and general education, namely: theory pedagogy, research methodology, evidence-based practice, public policy and advocacy, and collaboration.

Upon admission to the doctoral program, each student will be assigned an advisor. In consultation with this advisor, she or he should determine courses for the first semester. A permanent advisor is selected by the student by the end of the first semester.

In joint planning sessions the student and advisor, in consultation with the doctoral committee, other students and colleagues from outside the University, should establish a tentative doctoral program during the first and second semesters on campus.

This program should be based on past experience and training and on students interests and goals. The program must include an emphasis on critical thinking, breadth and depth of theoretical understanding, scholarship, methods of inquiry, direct experiences in schools with diverse populations, and collaboration with faculty and student colleagues. Students are expected to become stewards of the discipline, demonstrating: a) the ability to conduct research and scholarship; b) an understanding of the history and foundational ideas of special and gifted education; and c) the ability to represent and communicate ideas effectively and clearly.

The program plan must include a statement of goals and rationale for proposed coursework and educational experiences. The program and rationale must then be submitted to the School of Special Education Doctoral Program Coordinator to be in the approval process. If faculty are concerned with elements of the plan, they will make recommendations for revisions or additions. Enrollment in third semester courses without an approved program may lead to the inclusion of courses not ultimately approved as part of the doctoral plan.

*For degree and program requirements, see:*

**Special Education Administration Licensure on page 85**

**Special Education Doctoral Minor on page 79**

**Special Education Ph.D. on page 75**

## Teaching American Sign Language M.A.

The Teaching American Sign Language Program is a distance-delivered master's degree program, with summer onsite sessions, that prepares majors to provide competent ASL instruction. Graduates of this program will be work-and/or certification-ready to effectively teach in elementary, secondary, and postsecondary educational settings.

Check the program website for current application deadlines. All applicants will begin in the summer semester and will be part of an established cohort.

### Admission requirements

- A minimum GPA of 3.0 on the last 60 semester hours of coursework.
- If an applicant does not have a 3.0 GPA, he/she will be required to take the GRE and score at least 900 on the exam and a 3.5 on the written section.
- International applicants must pass the TOEFL exam with a minimum score of 550 or 80 for the internet-based exam.
- Applicants must possess a bachelor's degree, but hold a masters degree in another field.

### Application requirements - Step 1

- Complete the online application for the Graduate School [www.unco.edu/applications/graduate/index.aspx](http://www.unco.edu/applications/graduate/index.aspx).
- Send all official transcripts to the Graduate School.
- Submit two letters of recommendation [www.unco.edu/grad/forms/GS1004.pdf](http://www.unco.edu/grad/forms/GS1004.pdf) from supervisors who know the applicant's work.
- Submit a 1-2 page statement of educational goals and philosophy.
- To comply with practicum agency/school requirements, students must submit evidence that a criminal background check has been completed prior to practicum/field-based experiences.

### Application requirements - Step 2

#### Pre-requisite courses:

- ASL Literature
- Survey of American Deaf Community
- Society of American Deaf Culture

#### Demonstration of ASL Proficiency:

- All applicants will be required to demonstrate minimum ASL proficiency before acceptance in the program. Information on the Teaching ASL program demonstration of ASL proficiency will be made available when Step 1 requirements have been satisfied. Students who do not meet the minimum proficiency will not be accepted into the program. Equivalent ASL proficiency demonstration (e.g., American Sign Language Teachers Association Certification) will be considered.

## SCHOOL OF TEACHER EDUCATION

**Director:** Alexander Sidorkin

**Location:** McKee 216

**Telephone:** 970.351.2908

**Faculty:** Frederick J. Bartelheim, Ed.D.; James A. Erikson, Ph.D.; Gary Fertig, Ph.D.; Thomas A. Griggs, Ph.D.; Jennifer K. Geringer, Ph.D.; Jenni L. Harding-DeKam, Ed.D.; JJody K. Lawrence, Ph.D.; Linda Leon, M.A.; Valerie Middleton, Ph.D.; Madeline Milian, Ed.D.; Michael F. Opitz, Ph.D.; Alexander M. Sidorkin, Ph.D.; Fredrick L. Silverman, Ed.D.; Susan A. Thompson, Ed.D.; Dana Walker, Ph.D.; Mia K. Williams, Ph.D.

Cumbres prepares Hispanic/Latino students to teach with an English as a Second Language or bilingual education endorsement.

**Location:** McKee 262

**Telephone:** 970.351.2417

### Educational Studies Ed.D.

The Ed.D. in Educational Studies prepares candidates to understand the relationship among research, policy, and practice in education in order to contribute to reforming educational systems. Candidates complete an educational studies core, a multidisciplinary cognate, a research core, and a dissertation. The program prepares candidates to assume roles as university faculty members, educational leaders in school districts and state and federal agencies, district level curriculum specialists, and to assume leadership roles in nonprofit and private sectors.

Graduate applicants for this degree must have evaluations by the School of Teacher Education, in addition to the Graduate School, in order to determine admissibility.

Programs of study for degree candidates will be individualized to meet candidate's career goals. A minimum of 64 semester hours are required for the completion of this program. The extent of an individual's program will be dependent upon previous college work and professional experience.

*For degree and program requirements, see:*

**Educational Studies Ed.D. on page 69**

### Education M.A.T.

The Master of Arts in Teaching degree provides experienced practitioners with the knowledge, abilities, and dispositions needed to scaffold their own professional development toward a vision of accomplished practice. Candidates in this program analyze philosophical and contemporary practices and theories relating to knowledge acquisition as a means of enhancing student learning and the curriculum development process within school systems. Three abilities are emphasized throughout the program: critical reflection, systematic inquiry, and collaboration. Teacher participants use these abilities to plan and implement a series of learning and assessment projects for the purpose of improving students' learning and achievement. The M.A.T. program provides opportunities to develop in-depth understanding of content-specific pedagogy, the curriculum development process, teacher research, and portfolio approaches to teaching and learning. Teachers are encouraged to become school leaders as they gain confidence working with increasingly diverse groups of children, parents, and colleagues. The program has several emphases: in Elementary Education, Curriculum Studies, Linguistically Diverse Education, and English Education. One year or successful classroom teaching experience is required for graduation.

*For degree and program requirements, see:*

**Education M.A.T. on page 43**

## Reading M.A.

The Reading/Literacy graduate programs prepare students to be inquiring practitioners who seek knowledge and experiences about reading/literacy processes and practices.

These evolving scholars are guided and encouraged to pursue knowledge, commit to inquiry, engage in problem solving related to reading/literacy processes and practices, and participate as leaders in reading/literacy related activities. The inquiring practitioners learn to use reading/literacy knowledge, practices, and processes to serve the changing technological, diversity, and reading/literacy education needs of dynamic local and global environments.

**Admission.** Applicants must have one year of full-time teaching experience, an overall 3.0 GPA on the last 60 semester hours; must complete the Reading program Application and have three letters of recommendation sent to the Coordinator of the Reading Program in McKee Hall. Upon receiving formal notification of admission a student must meet with his/her assigned advisor to plan a program of study.

If applicant's GPA is below 3.0, the applicant may choose to submit a Graduate Record Exam (General Test) score to attain non-probationary admission to the Reading program.

The Reading program faculty recommend that an applicant have a total score that meets or exceeds 1350 on the Verbal, Quantitative, and Analytical subtests; and it is highly recommended that the Verbal score meets or exceeds 500.

There are several steps to the evaluation of the Reading Program as well as to the evaluation of the students enrolled in the Reading M.A. degree program. The evaluation process is ongoing. For admission into the Graduate School and admission into the Reading M.A. degree program a student must complete and submit specific documents (Graduate School application, Reading program application, three letters of reference and a resume) that Reading program faculty members review and evaluate. As a student takes courses, he/she completes a university generated course evaluation form and may be asked to complete an instructor developed evaluation form. When a student reaches the midpoint of taking the eleven reading courses (after five courses), the student and the student's advisor meet to complete a progress interview. The purpose of the interview is for the student to reflect upon his/her performance to date, as well as to make known his/her evaluation of the strengths and needs of the Reading program. At the conclusion of all the Reading M.A. degree coursework, a student completes a synthesis notebook and oral defense or completes a thesis. Following the successful completion of the synthesis notebook and oral defense or thesis defense, the student completes an exit survey evaluating all of the elements of the Reading program that the student has participated in and completed. Two years after graduating from the Reading program with a Master of Arts degree the student will be asked to complete another survey and to reflect on his/her overall program experience.

### Endorsement

By completing the Master of Arts degree in Reading students fulfill the requirements for institutional recommendation for endorsement as a K-12 Reading Teacher. Students seeking endorsement must provide evidence of two or more years of teaching experience in an accredited and/or established elementary, middle, or secondary school while holding a Type A or teaching license equivalent certificate before such recommendation is made. Students wishing to obtain Colorado licensure in reading are required to pass a State of Colorado administered proficiency examination PLACE-Reading. Students should contact the Licensure Officer in McKee for information.

*For degree and program requirements, see:*

**Reading M.A. on page 53**





# COLLEGE OF HUMANITIES AND SOCIAL SCIENCES



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## OFFICE OF THE DEAN

**Location:** Candelaria 0215    **Telephone:** 970.351.2707

**Dean:** David Caldwell, Ph.D.

**Assistant Dean:** Karen M. Jennison, Ph.D.

## INTRODUCTION

The College of Humanities and Social Sciences offers a wide array of academic pursuits organized into five schools. These various disciplines give students a fuller understanding of the past, present, and future roles of both the individual and society in shaping human experience. The humanities and the social sciences are cornerstones of a liberal arts education. In courses and other learning experiences provided by the college, students become familiar with the most significant accomplishments of the human intellect and spirit and gain appreciation for the potential we have as humans and as societies.

The humanities disciplines study many aspects of human existence, such as creative expression, the spoken and written word, and how our creativity reflects our world. Other fields in the humanities consider how systems of thought and knowledge have developed over time and influence our

decisions today. Humanistic inquiry asks how events in the past affect the present and how understanding the past can help us shape the future. Other scholars in the humanities examine how different cultures and people with different experiences approach common needs and how they express commonly held aspirations in diverse ways. Some humanities disciplines demonstrate how language mirrors our identity to others and opens windows to the world, while others study ways in which humans have learned to cooperate in order to articulate their values and accomplish their goals.

With goals closely related to those of the humanities, the social sciences view the world around us as a laboratory for observation, experimentation, and the advancement of new ideas and practices. Social scientists strive to understand the human capacity for adapting to changing environments and circumstances. Some disciplines examine systems of exchange, communication, and organization. Others study the ways in which humans identify and assert themselves as individuals and as groups, and they learn from the experiences and interaction among people in different times, circumstances, and places.

The College of Humanities and Social Sciences is committed to the liberal arts tradition of advancing human knowledge through serious scholarship, superior instruction, and the freedom of academic inquiry. The faculty employs the latest teaching and learning technology while emphasizing accessibility and the benefits of student-teacher interaction. Humanities and Social Sciences majors are broadly educated to think critically and independently, to articulate ideas and appreciate diverse perspectives, and to exercise reason and make informed judgments. These tools prepare graduates for life in a complex world, help them enter a wide variety of professions, and lay the foundations for lifelong learning.

## SCHOOL OF COMMUNICATION

**Director:** Thomas G. Endres, Ph.D.

## COMMUNICATION STUDIES

**Location:** Candelaria 1265    **Telephone:** 970.351.2045

**Faculty:** Linda S. Allen, Ph.D.; Thomas G. Endres, Ph.D.; James A. Keaten, Ph.D.; Sherilyn R. Marrow, Ph.D.; Heidi Muller, Ph.D.; David L. Palmer, Ph.D.; Cheryl Pawlowski, Ph.D.; Charles E. Soukup, Ph.D.

The focus of the communication discipline is on the process of human message exchange. Classes in communication studies (COMM) emphasize the examination of theories and research relevant to the field of communication and personal improvement in communication ability.

A Bachelor of Arts in Communication Studies prepares students with the knowledge and skills to be effective communicators in personal and professional settings. Coursework focuses on theoretical, analytic, and practical aspects of human interaction



To become a major in Communication Studies, the student must complete a "Change of Major/Minor" form, available from the school office. Students may do this any time during the freshman, sophomore, or junior year.

Students may elect to emphasize the study of communication studies in interpersonal, small group, educational, organizational and intercultural contexts. Practical skills may be obtained in professional presentation, persuasion, leadership, and communication in the classroom. Students completing this program may elect to apply for graduate study in the field of communication, to apply to law or other professional schools, or to begin a career in business or education.

A major in communication studies is well-suited for students desiring a career in education. This degree will prepare future educators for effective communication with students, parents, and other school professionals. Students preparing for careers in Secondary Education must select the Emphasis in Secondary Education. All requirements for the Professional Teacher Education Program, as described in the UNC Catalog, must be met.

### Communication M.A.

This program focuses on the study of human symbolic interaction. Students will emphasize coursework relevant to rhetorical and communication theory, interpersonal and group communication, and communication research methods.

Graduates of this program will advance their current professional careers, prepare themselves for careers in business and industry requiring expertise in human communication or prepare themselves to apply for a Ph.D. program in communication. The thesis option is recommended for students considering additional graduate study.

For degree and program requirements, see:

Communication M.A. on page 41

## SCHOOL OF ENGLISH LANGUAGE & LITERATURE

Director: Tracey A. Sedinger, Ph.D.

Location: Ross 1284 Telephone: 970.351.2971

Faculty: Sarah Allen, Ph.D.; Kristin Bovaird -Abbo, Ph.D.; Kenneth Chan, Ph.D.; Joseph Chaves, Ph.D.; Joel F. Daehnke, Ph.D.; Molly Desjardins, Ph.D.; Barbara Dickinson, Ph.D.; Marcus E. Embry, Ph.D.; Lahcen E. Ezzaher, Ph.D.; Emily B. Golson, Ph.D.; Joonok Huh, Ph.D.; Jeraldine Kraver, Ph.D.; John E. Loftis, III, Ph.D.; April Dawn Miller, Ph.D.; Norman L. Percy, Ph.D.; Ann E. Rasmussen, M.A.; Sharron R. Riesberg, M.A.; Tomas N. Santos, Ph.D.; Tracey A. Sedinger, Ph.D.; Leo Ben Varner, Ph.D.; Sharon R. Wilson, Ph.D.; Lloyd D. Worley, Ph.D.; Lisa H. Zimmerman, M.F.A.

The discipline of English deals with literature and language and other related subjects such as creative writing, film, folklore, myth, and cultural studies. Creative artists refuse to be limited in their subjects or approaches.

Literature, as one writer has said, is "an eloquent artistic document, infinitely varied, of mankind's journey; the autobiography of the race's soul." The questions we ask in studying literature are as "infinitely varied" as those asked by poets, playwrights and novelists: What does it mean to be human? How is the individual related to society? By what values should one lead his or her life?

The study of literature and language requires rigorous discipline and sensitivity, a strict adherence to the highest standards of logic, evidence and argumentation, as well as creative response to language and form. One learns to think, research and write critically, while simultaneously developing sensitivity to language and to the complexities of people and situations.

### English M.A.

The master's degree program provides focused, in-depth study of literature, practical experiences in literary criticism and research and opportunities for advanced levels of writing. Judicious selection of courses under the guidance of the student's advisor may provide additional focus to the program through special course clusters in areas such as pedagogy, literary theory, rhetoric/composition, or specific periods of interests.

Graduates of the program will be prepared to enter a wide range of fields and/or to pursue additional advanced levels of study such as the Ph.D. in English. The program enables teachers currently in the field to develop special areas of interest, to pursue these in depth, and to enhance their skills in teaching, research, and writing. In addition, graduates can pursue professional study in law, theology, medicine (with appropriate science and mathematics preparation), library science, communications, media, and business. The M.A. in English is excellent preparation for any profession or occupation that stresses language usage, such as writing.

For degree and program requirements, see:

English, M.A. on page 45

## SCHOOL OF HISTORY, PHILOSOPHY & POLITICAL SCIENCE

Director: Barry Rothaus, Ph.D.

### HISTORY

Location: Ross Hall 3270 Telephone: 970.351.2905

Faculty: Mary Green Borg, M.A.; Joan L. Clinefelter, Ph.D.; Marshall S. Clough, Ph.D.; Matthew T. Downey, Ph.D.; Adam Fong, Ph.D.; Fritz Fischer, Ph.D.; Aaron Haberman, Ph.D.; Erin L. Jordan, Ph.D.; Barry Rothaus, Ph.D.; Steven Seegel, Ph.D.; Nicholas Syrett, Ph.D.; T.J. Tomlin, Ph.D.; Robert G. Weis, Ph.D.; Michael Welsh, Ph.D.

The discipline of history concerns itself with the record of the human past, thereby forming an indispensable background for all other areas of knowledge, whether in the humanities, social sciences or sciences.

It is the role of the History program at UNC to offer a series of courses that address the significant events in the human past for the purpose of liberally educating students from all areas of the University. The program has a second, but no less important, role in training teachers at both the graduate and undergraduate levels.

### Scholarships

Master's degree candidates are encouraged to apply for the Oliver M. Dickerson stipend presently established at \$1,000-\$4,000 per academic year. Application should be made to the Coordinator of Graduate Studies, School of History, Philosophy & Political Science, UNC, Greeley, CO 80639.

For additional resources: See: "Financial Aid" on page 10.

### Center of Excellence.

The University has designated the Department of History as a Center of Excellence. In 2002, the department was given a University award for "Departmental Excellence in Teaching."

### History M.A.

The master's degree in history has been designed with several options in mind. It may be taken as a foundation for further advanced graduate work; as part of an individualized program that prepares students for a secondary teaching career; or as a terminal degree. Whichever option a student selects, faculty will stress the development of research techniques, analysis of historical data and expository writing skills.

Students receiving a master's degree in history will be competent in research methodology, writing skills and content in selected areas of history. Opportunities include advanced work in history, teaching at the secondary level (with licensure) or in junior and community colleges. Additionally, graduates may apply for professional schools, e.g., in law, library science, theology, museum curatorship and archival work.

*For degree and program requirements, see:*

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## SCHOOL OF MODERN LANGUAGES & CULTURAL STUDIES

**Director:** Elizabeth Anne Franklin, Ph.D.

### Foreign Languages M.A.

The master's program is designed for the secondary school teacher of Spanish and concentrates on the development of a high level of functional proficiency in the four language skills-listening, reading speaking, writing - and in four general content areas - civilization, language, literature, pedagogy. The most recent teaching methodologies are studied and researched.

#### Spanish Teaching Emphasis

Students may complete the M.A. degree:

- in summers only on the Greeley campus or
- by combining summer studies with regular academic year program offerings
- by combining one summer of study at the University of Salamanca, Spain with the above programs.

*For degree and program requirements, see:*

**Foreign Languages M.A. on page 46**

**Spanish Teaching Emphasis**

## SCHOOL OF SOCIAL SCIENCES

**Director:** Robert Brunswig, Ph.D.

### SOCIOLOGY

**Location:** Candelaria 2285    **Telephone:** 970.351.2315

**Faculty:** Hedy Red Dexter, Ph.D.; Angela Henderson, Ph.D.; Pamela Hewitt, Ph.D.; Jeffrey A. Houser, Ph.D.; Karen M. Jennison, Ph.D.; James P. Marshall, Ph.D.; Melanie Moore, Ph.D.; David W. Musick, Ph.D.; Mark D. Riddle, Ph.D.; Diane L. Schott, M.A.

**Emeritus Faculty:** John W. Fox; Daniel F. O'Connor; Richard Trahan; John A. Vonk

Sociology is the scientific investigation of human society and the social interactions that emerge among people. The main focus of sociology is the group rather than the individual. In studying groups, sociologists work to understand the social and cultural forces that operate throughout society and the forces that mold individuals, shape their behavior and thus, determine social events.

Sociologists employ various methods of gathering data from the social world. Theories provide explanations which account for social phenomena; together, methods and theory provide the foundation for sociology as the scientific study of society.

### Sociology M.A.

#### Sociological Practice Emphasis

The master's program in Sociological Practice emphasizes the application of sociological knowledge to various problems experienced by communities, agencies, governmental bodies and businesses. The emphasis of the program is on providing students with Sociological knowledge and skills which are applicable to solving problems in the above organizations. The program culminates in an internship and a research project resulting in a professional research report or thesis.

In addition to meeting the requirements of the Graduate School, the applicant must submit a letter of application outlining his or her career and educational goals. Two letters of recommendation must be provided.

*For degree and program requirements, see:*

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# NHS COLLEGE OF NATURAL AND HEALTH SCIENCES



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Sport Administration Emphasis

Sport Pedagogy Emphasis

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### University Programs

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## OFFICE OF THE DEAN

Location: Gunter 1000

Telephone: 970.351.2877

Fax: 970.351.2176

Dean: Denise A. Battles, Ph.D.

Associate Dean: Douglas Marshall, Ph.D.

The College of Natural and Health Sciences at the University of Northern Colorado serves the people of Colorado and the nation through the advancement and dissemination of fundamental knowledge, by providing high-quality undergraduate and graduate instruction, and by applying knowledge to solve problems in areas of natural and health sciences and science-related education. To achieve this mission, the College supports:

1. Foundational undergraduate education, academic degrees and professional preparation in natural, health, human and mathematical sciences to prepare students to understand and use these disciplines in their lives and careers in the 21st Century.
2. Focused graduate programs in Natural and Health Sciences and related areas of science education, preparing teachers, college professors, researchers, and other professionals.
3. Basic and applied research in all areas of the natural and health sciences represented in the college, including externally supported activities and both undergraduate and graduate research experiences.
4. K-12 teacher preparation in disciplines represented in the college.
5. Outreach and service programs supporting K-12 teachers and students, health and service professionals, schools, health care organizations, businesses and government agencies.

Programs in the College of Natural and Health Sciences are designed to prepare students for careers in science and industry, health care organizations, community and human service agencies, and schools. In addition, students can pursue



pre-professional studies in dentistry, medicine, optometry, pharmacy, podiatry, veterinary medicine, chiropractic medicine, engineering, and education.

The College contains seven Schools:

- School of Biological Sciences
- School of Chemistry and Biochemistry
- School of Earth Sciences and Physics
- School of Human Sciences
- School of Mathematical Sciences
- School of Nursing
- School of Sport and Exercise Science

## SCHOOL OF BIOLOGICAL SCIENCES

Director: Catherine S. Gardiner, Ph.D.

### BIOLOGICAL SCIENCES

Location: Ross Hall 2480 Telephone: 970.351.2921

Faculty: Rick Adams, Ph.D.; Chhandak Basu, Ph.D.; Patrick Burns, Ph.D.; Jennifer A. Clarke, Ph.D.; Gregory K. DeKrey, Ph.D.; Scott B. Franklin, Ph.D.; Catherine S. Gardiner, Ph.D.; Teresa M. Higgins, Ph.D.; Richard Robert Jurin, Ph.D.; Susan M. Keenan, Ph.D.; Stephen P. Mackessy, Ph.D.; Mitchell McLaughlin, Ph.D.; Robert Reinsvold, Ph.D.; Tony Schountz, Ph.D.; Frank A. Skufca, M.S.; Mark P. Thomas, Ph.D.; Cindy White, Ph.D.

Emeritus Faculty: Warren R. Buss, Ph.D.; Margaret E. Heimbrook, Ph.D.; Kathleen S. Jones, Ph.D.; Charles E. Olmsted, III, Ph.D.; Gerald W. Saunders, Ph.D.

#### Biological Sciences M.S.

**Admission.** Before admission to the program, students should have completed at least four courses in biology and a combined total of three courses in the supporting areas of chemistry, calculus or physics. Students entering the program with deficiencies in coursework will be required to complete coursework based on recommendations of the graduate committee, the school director and the advisor. The following application materials should be submitted to the Graduate School:

- Application form and fee
- Official transcripts
- A letter of intent including research/teaching interests and goals
- Three letters of recommendation
- General GRE scores
- Subject GRE scores from either the biology or biochemistry, cell and molecular biology subject test are required prior to admittance or within the first semester of attendance

Students are strongly encouraged to review the research areas of the Biology faculty on our website and contact faculty in whose research they are interested.

The student must meet with a graduate advisor and graduate committee during the first semester of the program to determine a course of study.

#### Non-Thesis Emphasis

The non-thesis emphasis is designed to be as flexible as possible. It is intended for those who wish to expand their background in biological sciences content, including biology and science teachers. Non-thesis students must pass an examination to be administered by the advisor in the form of a written paper or equivalent project covering some aspect of their program of study.

#### Thesis Emphasis

This emphasis is designed for students wishing to broaden their background in the biological sciences and to develop research skills in preparation for a doctoral program, or technical or research career. Students will gain background in

biology content and in research to allow them to enter professional fields of biology requiring advanced training or to pursue advanced studies. Results of the thesis research must be presented orally in a seminar to the faculty in the School of Biological Sciences during the last semester prior to graduation.

For degree and program requirements see:

**Biological Sciences M.S. on page 39**

**Non-Thesis Emphasis**

**Thesis Emphasis**

#### Biological Education Ph.D.

This program is designed for graduate students interested in specializing in either biology education or an area of the biological sciences that matches current faculty interests and expertise. Areas of emphasis in this program prepare students to conduct and supervise biological or pedagogical research and to instruct biology courses at the college or university level.

**Admission.** Before admission to the program, students should have completed at least four courses in biology and a combined total of three courses in the supporting areas of chemistry, calculus or physics. Students entering the program with deficiencies in coursework will be required to complete coursework based on recommendations of the graduate committee, the school director and the advisor. The following application materials should be submitted to the Graduate School:

- Application form and fee
- Official transcripts
- A letter of intent including research/teaching interests and goals
- Three letters of recommendation
- General GRE scores
- Subject GRE scores from either the biology or biochemistry, cell and molecular biology subject test are required prior to admittance or within the first semester of attendance.

Students are strongly encouraged to review the research areas of the Biology faculty on our website and contact faculty in whose research they are interested.

The student must meet with a graduate advisor and graduate committee no later than the second semester of the program to determine a course of study.

For degree and program requirements see:

**Biological Education Ph.D. on page 63**

## SCHOOL OF CHEMISTRY AND BIOCHEMISTRY

Interim Director: David L. Pringle, Ph.D.

### CHEMISTRY AND BIOCHEMISTRY

Location: Ross Hall 3480 Telephone: 970.351.2559

Faculty: Jack Barbera, Ph.D.; Aichun Dong, Ph.D.; Richard M. Hyslop, Ph.D.; Peter Karnilaw, M.A.; Robin T. Macaluso, Ph.D.; Kimberly A. Opperman Pacheco, Ph.D.; David L. Pringle, Ph.D.; James O. Schreck, Ph.D.; Richard W. Schwenz, Ph.D.; Youngjin Song, Ph.D.; Jerry P. Suits, Ph.D.

Emeritus Faculty: Clark L. Fields, Ph.D.; Henry W. Heikkinen, Ph.D.; Marlynn R. James, Ph.D.; Loretta L. Jones, Ph.D.; William G. Koch, Ph.D.; Roger A. Kovar, Ph.D.; Marcus K. Meilahn, Ph.D.; Gordon E. Tomasi, Ph.D.; Dale E. Woerner, Ph.D.



## Chemistry M.S.

### Education Emphasis

This Chemistry, M.S. extends and builds upon the knowledge and skills learned at the undergraduate level and, through the science education component, develops skills necessary to become increasingly effective in the chemistry classroom.

Successful completion of this degree will enhance advancement opportunities in the education field and provide a teacher advanced training in content and pedagogy. The degree can also qualify graduates to teach at the junior or community college level.

**Admission.** The students should have completed chemistry courses comparable to those required in the B.S. degree in chemistry including courses in organic, inorganic and analytical chemistry. If these requirements are not met, a candidate may be admitted to the program on a provisional basis.

### Research Emphasis

The Chemistry, M.S. extends and builds upon the knowledge and skills learned at the undergraduate level and, through the research component, develops independence in the chemical laboratory and in dealing with the chemical literature. Candidates have the opportunity to work closely with faculty trained in biochemistry and in analytical, inorganic, physical and organic chemistry.

Successful completion of this degree will enhance chances for professional advancement and expand employment opportunities. Further education in a Ph.D. program in chemistry is also a possibility.

**Admission.** The students should have completed a program equivalent to the Bachelor of Science degree in Chemistry (ACS Certified) including courses in organic, inorganic, analytical (quantitative and instrumental analysis) and physical chemistry plus college mathematics through differential and integral calculus and one year of physics. If these requirements are not met, a candidate may be admitted to the program on a provisional basis.

*For degree and program requirements, see:*

[Chemistry M.S. on page 40](#)

[Education Emphasis](#)

[Research Emphasis](#)

## Chemical Education Ph.D.

This program prepares versatile, well-informed chemistry teachers by providing advanced training for chemistry teachers or chemists who wish to pursue educational opportunities beyond the master's degree. Students completing this program are qualified to work in the chemical education field at a variety of levels; such as, science coordinators or supervisors in the secondary school, chemistry instructors at two- and four-year colleges or chemistry educators at a university. At the professional level, program graduates are qualified to do fundamental research in chemical education and to direct chemistry research at the undergraduate level.

**Admission.** The student should have completed requirements of an ACS-certified baccalaureate degree in chemistry.

**Master's en route to the Ph.D.** Students who have been admitted to the Ph.D. program in Chemical Education may complete a master's degree in Chemistry en route to completion of the doctoral degree. Requests for a simultaneous master's degree in a discipline other than Chemistry will not be accepted. Students in collaboration with the students' advisors, will develop a plan of study that includes clearly distinct master's and doctoral requirements. Students must graduate from the master's degree program in a minimum of one semester prior to conferring of the doctoral degree.

*For degree and program requirements see:*

[Chemical Education Ph.D. on page 64](#)

# SCHOOL OF EARTH SCIENCES AND PHYSICS

**Director:** [Cynthia S. Galovich, Ph.D.](#)

## EARTH SCIENCES

**Location:** Ross Hall 3235      **Telephone:** 970.351.2647  
**FAX:** 970.351.4197

**Faculty:** [Steven Anderson, Ph.D.](#); [Jill Bezyak, Ph.D.](#); [Denise A. Battles, Ph.D.](#); [Joe T. Elkins, Ph.D.](#); [Emmett Evanoff, Ph.D.](#); [William H. Hoyt, Ph.D.](#); [Gary R. Huffines, Ph.D.](#); [Rita Leafgren, M.A.](#); [Paul Nutter, Ph.D.](#); [Lucinda Shellito, Ph.D.](#)

The Earth Sciences program includes the disciplines of geology, meteorology, oceanography and astronomy. Geology is the study of the earth, its structure, composition and history. Meteorology is the study of the atmosphere and the weather phenomena that affect our daily lives. Oceanography is the study of the physical, chemical and biologic characteristics of the world's oceans. Astronomy (administered by Physics) is the study of the planets, stars and galaxies that make up our universe.

The undergraduate program in the earth sciences provides preparation for professional careers in geology, meteorology, secondary-level earth science teaching and the environmental industry. The graduate program is designed to meet the needs and interests of individuals who wish to expand their knowledge of the earth sciences as science teachers or in other careers that require a knowledge of the earth sciences.

## Earth Sciences M.A.

This program is for students who wish to broaden or deepen their backgrounds in the earth science disciplines (astronomy, geology, meteorology and oceanography) and develop their research skills. It serves individuals who are or intend to become secondary school or community college earth science teachers. It is also appropriate for K-12 teachers, students pursuing careers in allied fields that require a multidisciplinary background in the earth sciences and for individuals wishing to explore the earth sciences as a second career.

The multidisciplinary structure of the school affords each student the opportunity to develop a sequence of courses that complements and builds upon his or her previous education and experience, whether in the earth sciences or in other disciplines. The program provides both a thesis and a non-thesis option. Typically, students seeking a focused program emphasizing research skills elect the thesis option, and students seeking a broad, multidisciplinary curriculum emphasizing content will elect the non-thesis option. In consultation with the student's graduate committee, each student will select the appropriate option and design a curriculum for his or her particular educational and career objectives.

*For degree and program requirements, see:*

[Earth Sciences M.A. on page 42](#)

## SCHOOL OF HUMAN SCIENCES

Director: Ellen Meyer Gregg, Ph.D.

### AUDIOLOGY AND SPEECH-LANGUAGE SCIENCES

Location: Gunter 1400

Telephone: 970.351.2734  
Fax: 970.351.2974

**Faculty:** Kathryn E. Bright, Ph.D.; Diane Erdbruegger, Au.D.; Kathleen R. Fahey, Ph.D.; Mark Guiberson, Ph.D.; Ellen Meyer Gregg, Ph.D.; Julie A. Hanks, Ed.D.; Deanna K. Meinke, Ph.D.; Tina Prout, Ph.D.; Jennifer E. Weber, Au.D.

**Emeritus Faculty:** Donna J. Bottenberg, Ph.D.; Linda K. Cleeland, M.Ed.; Francis A. Griffith, Ph.D.; Dale J. Lundeen, Ph.D.

Audiology and Speech-Language Sciences (ASLS) offers an educational program with a clinical orientation. ASLS also houses the Speech-Language Pathology and Audiology Clinic. ASLS offers an undergraduate pre-professional major in Audiology and Speech-Language Sciences, a professional certifying master's degree program in speech-language pathology, and a professional certifying clinical doctorate in audiology. These programs prepare students in the diagnosis, treatment, and prevention of hearing, balance, speech and language disorders.

#### Speech-Language Pathology M.A.

This certifying master's program is fully accredited and provides excellent academic, research, and clinical preparation.

Areas emphasized include:

- The science of communication;
- The nature, prevention, assessment, and management of:
  - developmental articulation disorders
  - language and literacy disorders
  - voice disorders
  - fluency disorders
  - pervasive developmental disorders, including autism
  - dysphagia
  - neurologic disorders including aphasia, apraxia, post head-injury disorders and dementia;
- Augmentative and alternative communication systems;
- Aural rehabilitation.

This program offers extensive supervised clinical experience through the well-equipped UNC Speech-Language Pathology and Audiology Clinic and ancillary clinics in Colorado. This M.A. program is accredited by the Colorado Department of Education (CDE) and by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). Students who complete this program are eligible to apply for the Certificate of Clinical Competence in Speech-Language Pathology from the American Speech-Language-Hearing Association. Graduates can also qualify for licensure from the Colorado Department of Education. Career opportunities include: positions in schools, hospitals, practice in association with a range of physicians including otolaryngology, neurology, neurosurgery, psychiatry and pediatrics; rehabilitation centers, and private practice.

**Admission.** Students will be admitted to this limited-enrollment program on the basis of:

1. academic record,
2. Graduate Record Examination scores,
3. at least three letters of recommendation from persons familiar with their academic/clinical performance,
4. a letter of intent.

Admission to the Graduate School does not guarantee admission to the Speech-Language Pathology graduate program.

**Prerequisites.** This program assumes an undergraduate background in speech-language pathology and/or audiology. Students who do not have such a background must fulfill academic requirements as determined by their major advisor and should be prepared to spend a minimum of two additional semesters to complete undergraduate level courses prior to beginning graduate coursework.

For degree and program requirements, see:

[Speech-Language Pathology M.A. on page 57](#)

#### Audiology Au.D.

This certifying clinical doctoral degree program in audiology (Au.D.) is fully accredited and provides excellent academic, research, and clinical preparation.

Areas emphasized include:

- Basic sciences underlying the hearing and balance mechanisms;
- Diagnosis of hearing disorders in persons ranging in age from infants through older adults;
- Audiological treatment of persons who are deaf or hard of hearing, including counseling and specific treatment procedures for children and adults;
- Diagnosis for and dispensing of hearing aids and other amplification and auditory prosthetic devices;
- Educational audiology for diagnosis and treatment of hearing disorders in early childhood and K-12 educational settings;
- Consultation for and execution of hearing conservation programs for industry, schools and other agencies;
- Instrumentation used in evaluation and treatment of hearing and balance disorders;
- Fundamentals of applied research.

Specific exceptions to Graduate School requirements for doctoral degrees have been approved. These exceptions relate to the dissertation proposal, dissertation, defense of dissertation, advancement to candidacy and doctoral committees. Because of the clinical focus of this degree, rigorous academic standards are maintained through measurement of clinical competencies throughout the program rather than completion of a dissertation. Students will be required to complete a capstone research project.

This program offers extensive supervised clinical experience through the well-equipped UNC Speech-Language Pathology and Audiology Clinic and ancillary clinics in Colorado. The Au.D. program leading to certification is accredited by the Colorado Department of Education (CDE) and by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). Students who complete this program are eligible to apply for the Certificate of Clinical Competence in Audiology from the American Speech-Language-Hearing Association and/or for Board Certification in Audiology awarded by the American Board of Audiology (ABA). Graduates can also qualify for licensure from the Colorado Department of Education and/or the Colorado Department of Regulatory Agencies.

Career opportunities include positions in hospitals; audiology clinics; otolaryngology medical practices; rehabilitation centers; schools; industry; and private practice.

**Admission:** Students will be admitted to this limited-enrollment program on the basis of:

1. academic record,
2. Graduate Record Examination scores,
3. at least three letters of recommendation from persons familiar with their academic/clinical performance,
4. letter of intent.

Admission to the Graduate School does not guarantee admission to the Audiology graduate program.

**Prerequisites:** This program assumes an undergraduate background in audiology and/or speech-language pathology. Students who do not have such a background must fulfill academic requirements as determined by their major advisor

and should be prepared to spend a minimum of two additional semesters to complete undergraduate level courses prior to beginning graduate coursework.

For degree and program requirements, see:

**Audiology Au.D. on page 62**

## COMMUNITY HEALTH

**Location:** Gunter 2280      **Telephone:** 970.351.2755  
**FAX:** 970.351.1489

**Faculty:** Elizabeth A. Gilbert, Ed.D.; Deborah A. Givray, Ed.D.; Douglas Marshall, Ph.D.; Stephen Nkansah-Amankra, Ph.D.; Ashley D. Walker, Ph.D.

**Emeritus Faculty:** Bryan E.M. Cooke, Ph.D.; Larry R. Harrison, M.S.; Jack LaBonde, M.A.; William Parkos, Ph.D.; Kathleen J. Zavela, Ph.D.

### Public Health M.P.H.

#### Community Health Education Emphasis

The Master of Public Health (MPH) is the primary professional degree in the field of public health, training students for a variety of public health areas. The program provides a broad, multidisciplinary focus on the factors that influence population health from behavioral risk to environmental exposures to socioeconomic and health policy. Students acquire knowledge, skills and practical experiences that prepare them for professional activities, including: epidemiological and health services research; community needs assessment; environmental and occupational health; health policy; health promotion; and administration of public health programs. Graduates find work in research settings, health care settings, industry, government health agencies, community-based organizations and foundations, and global health. Physicians, veterinarians, nurses and other health care professionals also comprise a portion of the MPH student body, acquiring graduate training in public health to enhance their understanding of the preventative measures and underlying causes of disease.

The future of public health, a field dedicated to improving the health of populations, depends on the collaboration of educators, researchers, policy makers, communities and citizens. The new Colorado School of Public Health, collaboratively formed by the University of Colorado Denver, Colorado State University and the University of Northern Colorado, is the first and only school of public health in the Rocky Mountain region. Combining transferable courses, faculty and resources, the collaborative school allows students to access specializations, research and service centers located at the three universities.

The MPH with an emphasis in Community Health Education offered at UNC aims to prepare students to work with diverse populations and work within communities to prevent disease and develop positive, healthy lifestyles. Because of the great latitude within the field of community health education, the program allows students to tailor their program to emphasize special interests in public health. The Community Health Education concentration is designed to prepare students to serve as administrators or practitioners in a variety of health education settings. The curriculum is based upon the Council of Education for Public Health's accreditation guidelines. Elective coursework includes international health, reproductive health, stress management, grant writing and administration.

**Admission:** Applications to the MPH program are accepted yearly for summer or fall entry, with a deadline of February 1. Applicants should have a bachelors degree and submit the required application and materials as listed on [www.cudenver.edu/Academics/Colleges/PublicHealth/admissions/reqanddeadlines/Pages/MPH.aspx](http://www.cudenver.edu/Academics/Colleges/PublicHealth/admissions/reqanddeadlines/Pages/MPH.aspx).

Students who seek public health training have varied backgrounds and levels of experience, though many students have a bachelors degree in a biological or sociological science. In addition, a significant number of students are currently

employed while seeking professional training and advancement. Approximately 30-40% of students have a prior graduate or professional degree, including fields such as nursing, medicine, veterinary medicine, law, social work, and various laboratory sciences.

Students in the Community Health Education track are prepared to work in population based programs-helping prevent disease and developing positive health lifestyles.

For degree and program requirements, see:

**Public Health M.P.H. on page 52**

**Community Health Education Emphasis**

## CRIMINAL JUSTICE

**Location:** Gunter 1250      **Telephone:** 970.351.2186  
**FAX:** 970.351.1527

**Faculty:** Colleen Fitzpatrick, Ph.D.; William A. Perrill, M.A.; Philip L. Reichel, Ph.D.; Mary West-Smith, Ph.D.

### Criminal Justice M.A.

The master's program in Criminal Justice is designed to be completed in two years by working professionals. It emphasizes the importance of furthering society's ideals of a fair-minded and unbiased system of justice as embraced by the rule of law. The concept of "best practices" is an overarching theme in all core classes. Students will be informed of current research regarding effective practices in all aspects of criminal justice, will develop the ability to make informed decisions regarding practices for their particular areas within the system, and will acquire the knowledge and skills to be more capable supervisors in criminal justice organizations and agencies by making use of research findings that support effective policy planning and programming.

Students receiving the M.A. in Criminal Justice will be competent in research methodology and writing skills and will possess an increased understanding of the theoretical foundations for crime causation. The M.A. may be the foundation for further advanced graduate work or may serve as a terminal degree.

In addition to meeting the requirements of the Graduate School, the applicant must submit a letter of application outlining his or her career and educational goals. Two letters of recommendation must be provided.

For degree and program requirements, see: **Criminal Justice M.A. on page 42**

## GERONTOLOGY

**Location:** Gunter 1250      **Telephone:** 970.351.2403  
**FAX:** 970.351.1255

**Gerontology Faculty:** Susan M. Collins, Ph.D.; Robbyn R. Wacker, Ph.D.

### Gerontology M.A.

The Master of Arts in Gerontology prepares students for professional responsibility and leadership in the aging network. Students complete required courses that provide a multidisciplinary foundation in gerontology, and select program electives that will prepare them for working with or on behalf of older adults in direct service, management and administration, further scholarship, or similar professional endeavors.

Graduates find employment in health or mental health related positions, long term care residential or community settings, senior centers, recreation programs, agencies and organizations providing care management and/or administrating policy, community college teaching, industrial and business settings, or private consultation.

**Admission.** The student must send directly to the School of Human Sciences:



1. Two letters of recommendation.
2. Miller Analogies Test scores.
3. A statement of interest covering the following topics (maximum 10 pages double-spaced):
  - a. Why have you chosen gerontology? What factors and events motivated your interest in gerontology? Discuss your attitude and philosophy toward aging in general and your personal aging in particular. Also discuss your attitude or philosophy toward research, community change and advocacy.
  - b. What past exposure have you had to gerontology? Include any coursework or work experience (paid or volunteer) you have had related to aging. If you have had none, provide a justification of your current interest in the field of aging.
  - c. What are your career and educational goals? In what role and in what setting would you ultimately like to be employed? If you do not have a specific goal in mind, what are the areas of interest and what would you like to achieve during your graduate studies.
  - d. How would you describe your strengths and weaknesses? This should cover such areas as academic ability, capacity to work with others, leadership and ability to cope with stress.

*For degree and program requirements, see:*

**Gerontology M.A. on page 46**

**Gerontology Graduate Certificate Program (Non-Degree) on page 80**

## REHABILITATION

**Location:** Gunter 1250      **Telephone:** 970.351.2403  
**FAX:** 970.351.1255

**Rehabilitation Faculty:** Jill Bezyak, Ph.D.; Juliet H. Fried, Ed.D.; Joseph N. Ososkie, Ph.D.

**Emeritus Faculty:** James A. Bitter, Ed.D.; Jack A. Bowen, Ph.D.; John H. Cronin, Ed.D.; Garth M. Eldredge, Ph.D.; Dennis A. Gay, Ph.D.; Raymond E. Nelson, Ph.D.; Vincent A. Scalia, Ed.D.; Richard Wolfe, Ph.D.

The School of Human Sciences houses the only rehabilitation degree programs in Colorado. The following graduate degree programs are offered: Master of Arts: Rehabilitation Counseling; and a Doctor of Philosophy: Human Rehabilitation.

Students in these programs are prepared at two professional levels to work with people with physical and/or mental disabilities. Both graduate programs include experiences through practica and internships.

Careers in Human Rehabilitation are available in areas of direct service, administration, teaching and research.

In addition to the academic programs, the school operates the Region VIII Technical and Continuing Education Program.

### Rehabilitation Counseling M.A.

The mission of the Rehabilitation Counseling program at the University of Northern Colorado is to develop well-educated professional rehabilitation counselors and to improve the quality of life for persons with disabilities in the state, region and the nation through counseling. The University provides services that support equal learning opportunities for all students. Learning occurs in an environment characterized by small classes taught by full-time faculty who are all certified rehabilitation counselors, and some of whom are also certified vocational evaluators.

**Admission.** The student must send **directly to the school:**

1. Two letters of recommendation.
2. Miller Analogies Test scores.
3. A statement of interest covering the following topics

(maximum of ten pages doubled-spaced).

- a. What factors and events motivated your interest in rehabilitation? Discuss your attitude and philosophy in general. Describe your attitude or philosophy toward research, community change and advocacy.
- b. What are your career and educational goals? Why have you chosen rehabilitation counseling as your area of study? In what role and in what organizational setting would you ultimately like to be employed?
- c. What past exposure have you had to rehabilitation? Include any coursework or work experience (paid or volunteer) you have had. If you have had none, provide a justification of your current interest in the field.
- d. How would you describe your strengths and weaknesses? This should cover such areas as academic ability, capacity to work with others, leadership and ability to cope with stress.

### Objectives

1. Students will develop an appreciation for cultural diversity and political values.
2. Students will develop life-long habits of scholarship and service.
3. Students will acquire knowledge and skills that prepare them for careers in Rehabilitation Counseling, Vocational Evaluation, and/or advanced scholarly work.
4. Students will master methods of inquiry to acquire deeper understanding of their discipline.
5. The professional service activities of students will be a resource to the community, state, region and nation.
6. The professional activity of faculty, staff and students extends beyond the boundaries of Colorado, to the region, the nation, and the world.
7. All students who graduate will be eligible to earn the Certified Rehabilitation Counselor (CRC) designation.
8. All students who graduate will be prepared to enter the professional Rehabilitation Counseling field in public and/or private rehabilitation programs.

*For degree and program requirements, see:*

**Rehabilitation Counseling M.A. on page 53**

### Human Rehabilitation Ph.D.

The mission of the doctorate in Human Rehabilitation is to educate individuals in research and instruction in order that they may be prepared to assume leadership and university faculty positions upon graduation. Students are provided opportunities to practice knowledge they attain in courses by conducting research, instructing at the graduate and undergraduate levels, and performing counseling supervision for masters rehabilitation counselors-in-training. The intimate size of the program affords students a chance to work closely with faculty individually and in small seminars.

Admission into the doctoral program in Human Rehabilitation is determined by the graduate faculty of the school, with final approval of the graduate dean.

All doctoral applicants must meet the following criteria for preliminary consideration:

1. Hold a master's degree from an accredited college or university, in Rehabilitation Counseling or a closely allied discipline. The appropriateness of a degree in a related discipline will be determined by the graduate faculty of the school. If the student is deficient in rehabilitation counseling content, the equivalents determined by the student's program committee will be included in the plan of study.
2. Have two years of work experience (or equivalent, as determined by the school's graduate faculty) in the field of rehabilitation. This must include the minimum of one year's experience before receipt of the master's degree and completion of a minimum of two years of work experience before receipt of the doctorate.
3. Participate in a personal interview on request. Admission



decisions are based on multiple criteria, without fixed weights for any individual criterion.

4. Please submit a statement of interest (double spaced, no more than 12 pages) addressing the following:
  - a. State why you are interested in pursuing a doctorate in the field of rehabilitation. Did any life experiences motivate you to seek this degree?
  - b. What is your career history and what, if any, role did it play in your decision to pursue doctoral studies?
  - c. What are your short-term and long-range educational and career goals? What do you hope to be doing in five years? In ten years? Beyond?
  - d. Express your personal attitudes towards individuals with disabilities.
  - e. Who do you envision your future consumers to be once you graduate?
  - f. Discuss your interest in conducting scholarly research, providing community service, and/or teaching in the field.
  - g. Explain your exposure to the field of rehabilitation. Please talk about any coursework, volunteer activities, or fieldwork you have experienced.
  - h. Identify your top three strengths or assets as a doctoral student. What are the primary areas in which you need to improve? We are interested, among other things, in academic, interpersonal, communication, problem-solving, planning, organizational, and work ethic skills and abilities. Do you consider yourself to be a people person? Are you creative, visionary, goal-oriented? How do you deal with stress? In short, tell us about your aptitudes as well as strengths you hope to develop.

For degree and program requirements, see:

[Human Rehabilitation Ph.D. on page 71](#)

## SCHOOL OF MATHEMATICAL SCIENCES

Director: [Dean E. Allison, Ph.D.](#)

### MATHEMATICAL SCIENCES

**Location:** Ross Hall 2239      **Telephone:** 970.351.2820

**Faculty:** [Dean E. Allison, Ph.D.](#); [William L. Blubaugh, Ph.D.](#); [Cathleen Craviotto, Ph.D.](#); [Ricardo L. Diaz, Ph.D.](#); [Anton Dzhamay, Ph.D.](#); [Stephanie Fitchett, Ph.D.](#); [Nancy Geisendorfer, M.A.](#); [Richard M. Grassl, Ph.D.](#); [Shandy Hauk, Ph.D.](#); [Robert L. Heiny, Ph.D.](#); [Steven C. Leth, Ph.D.](#); [Nathaniel G. Miller, Ph.D.](#); [Jodie Dawn Novak, Ph.D.](#); [Michael K. Petrie, M.A.](#); [Robert A. Powers, Ed.D.](#); [Terry A. Scott, Ph.D.](#); [Hortensia Soto-Johnson, Ph.D.](#); [Stacy Swinburn, M.S.](#); [Igor N. Szczyrba, Ph.D.](#); [Angela Tisi, M.A.](#)

**Emeritus Faculty:** [William W. Bosch, Ph.D.](#); [Donald D. Elliott, Ph.D.](#); [Jeffrey D. Farmer, Ph.D.](#); [Samuel R. Houston, Ph.D.](#); [Charles R. McNerney, Ph.D.](#); [William D. Popejoy, Ed.D.](#); [John Schmid, Ph.D.](#); [Donald L. Schmidt, Ph.D.](#); [Rex R. Schweers, M.A.](#); [Donald T. Searls, Ph.D.](#); [Robert A. Tolar, Ph.D.](#)

Mathematics and related areas have been important human endeavors since ancient times. Mathematics is a discipline with its own questions, methods and content. It has also been used as a tool to explain the natural world for centuries. Mathematics, statistics and computer science have become essential to almost every other discipline such as the natural sciences, the social sciences, business, and economics.

The School of Mathematical Sciences has faculty in mathematics, mathematics education, statistics and computer science. We offer a variety of undergraduate and graduate programs in these areas. In addition, courses and minors that we offer can be used as important components of a variety of other programs across the university.

### Mathematics M.A.

Students must have:

- an undergraduate major in mathematics
- an essay of approximately 500 words addressing their interest in the Master of Arts in Mathematics degree program and their educational goals.

Generally a B.S. in mathematics or mathematics education with strong mathematics courses is required for admission to this program. Students without the B.S. in mathematics are advised to consult the school for a list of recommended undergraduate courses they should take before entering the program.

#### Liberal Arts Emphasis

Applications are not being accepted into the Liberal Arts Emphasis at this time.

The foci of this program are the core areas of algebra and analysis with specialization or breadth available through electives.

A graduate of this program may continue graduate work in mathematics or some other discipline such as statistics. A graduate may also enter a career making use of the knowledge and skills developed in the selected courses; career potential exists in industrial settings, business and governmental service.

#### Teaching Emphasis

This program is designed to prepare teachers to be experts in their own classroom. Upon finishing this program they should be able to teach the content of mathematics, assume leadership roles in mathematics curriculum within their schools, and read and understand the professional literature relating to the teaching and learning of their discipline. The emphasis is on preparing teachers for the 21st century with a dynamic and individualized program of study.

For degree and program requirements, see:

[Mathematics M.A. on page 49](#)

[Liberal Arts Emphasis](#)

[Teaching Emphasis Requirements](#)

### Educational Mathematics Ph.D.

This program offers an innovative approach to mathematical pedagogy. A basic tenet of the program is that mathematical content is fundamental to methods, research and reform in mathematics education. The program has three major strands: mathematics, mathematics education, and cognition.

Graduates of the program will be prepared to lead the reform of mathematics education. They will be able to teach mathematics at several levels; perform research; and administer and supervise the reform of mathematics education.

**Admission.** Applicants should possess a master's degree in mathematics or mathematics education, or a strong bachelor's degree in mathematics. It is expected that students will have had a senior level or beginning graduate level course in each of abstract algebra, linear algebra, point-set topology, and real or complex analysis. Applicants not having this preparation may be required to take additional courses to prepare them for the coursework in the program. Also required is an essay of approximately 500 words addressing the applicant's interest in the Doctor of Philosophy in the Educational Mathematics program and the applicant's educational goals.

For degree and program requirements, see:

[Educational Mathematics Ph.D. on page 68](#)

## SCHOOL OF NURSING

**Director:** Debra Leners, Ph.D..

**Location:** Gunter 3080      **Telephone:** 970.351.2293  
**Fax:** 970.351.1707

**Faculty:** Audrey J. Bopp, M.S.; Lory Clukey, Ph.D, Psy.D.; Elizabeth Davis, M.S.N.; Jacalyn Dougherty, Ph.D.; Katrina S. Einhellig, M.S.N.; Priscilla A. Faulkner, M.S.; Janice S. Hayes, Ph.D.; Melissa L. Henry, Ph.D.; Karen Hessler, Ph.D.; Faye I. Hummel, Ph.D.; Katherine R. Johnson, M.S.N.; Maria deMontigny Korb, Ph.D.; Kathleen LaSala, Ph.D. ; Debra Leners, Ph.D.; Alison S. Merrill, Ph.D.; Carol Roehrs, Ph.D.; Rhonda Squires, Ph.D.; Mary Jo Stanley, M.S.N.; Sandra Strobel, M.S.N.; Laurie Walker, M.S.; Vicki W. Wilson, Ph.D.; Lynda Woodson, M.S.N.; Yvonne Yousey, Ph.D.

**Emeritus Faculty:** Sandra C. Baird, Ed.D.; Nancy Quinn Beardlee, Ed.D.; Agnes Biegel, M.S.N.; Adah Bossart, M.S.; Phyllis Drennan, Ph.D.; Joan T. Hurlock, M.S.; Jane E. Koeckeritz, Ph.D.; Virginia Kinnick, Ed.D.; Judith A. Malkiewicz, Ph.D.; Janice Hoot Martin, Ph.D.; Rita Payton, M.S.; Diane Peters, Ph.D.; Judith Richter, Ph.D.; Nancy E. White, Ph.D.

The School of Nursing subscribes to the philosophy that nursing is both an art and a science which promotes, supports and restores optimal health in individuals, families and communities. Nursing is a caring profession that is an integral component of the health care delivery system.

Graduate programs are available at the master's and doctoral level. The Ph.D. in Nursing Education offers two levels of entry: BS to MS on campus and MS to Ph.D. online. Graduates are qualified to fill nursing faculty positions in educational institutions and health care agencies.

The Master of Science in Nursing Program has three emphases available: a nursing education with a clinical emphasis in chronic illness, a Clinical Nurse Specialist in Chronic Illness, and the Family Nurse Practitioner emphasis. Full and part-time options are available. Full-time option is available for the nursing education emphasis. Part-time study only for the FNP program.

### Nursing M.S.

#### Clinical Nurse Specialist in Chronic Illness (CNS) Emphasis

The Master of Science degree in Nursing with an emphasis in the CNS prepares students in the roles of clinician, educator, researcher, and consultant. The CNS emphasis prepares the post baccalaureate nursing student to be on the Colorado Advanced Practice Registry in the area of care for the chronically ill adult or child. The program is consistent with the American Association of Colleges of Nursing guidelines. Full time and part-time options are available. Health policies, OSHA requirements, CPR certification and criminal background checks are required for clinical practicum experiences.

The program provides the graduate with the expertise to function in an autonomous nursing role. The graduate is eligible to be recognized as an Advanced Practice Nurse from the Colorado State Board of Nursing with all the rights and privileges associated with this title.

#### Education Emphasis

The Master of Science degree in Nursing prepares post-baccalaureate nursing students as nurse educators for either academic or inservice settings with clinical emphasis in case management of the chronically ill child or adult. The program is consistent with the characteristics of graduate education accepted by the American Association of Colleges of Nursing. Full-time and part-time options are available. Health policies, Background check, OSHA requirements and CPR certification are required.

This program provides expertise valuable for positions in education, community college settings, institutions of higher education, community health settings and institutions that provide inpatient care for the chronically ill child or adult.

### Family Nurse Practitioner (FNP) Emphasis

The Master of Science degree in Nursing with an emphasis in FNP prepares the post-baccalaureate nursing student for advanced clinical practice in primary care of families. The graduate is eligible to apply for national certification from the American Nurses Credentialing Center or American Academy of Nurse Practitioners. Part-time study only. Health policies, OSHA requirements, CPR, ACLS certification, and criminal background check are required.

The program provides the graduate with the expertise to function in an autonomous and collaborative role as a Family Nurse Practitioner (FNP) who provides primary care in a variety of settings. The graduate is eligible to be recognized as an Advanced Practice Nurse from the State Board of Nursing with all the rights and privileges associated with this title.

#### Master's student admission requirements

1. A bachelor's degree from an NLN or CCNE accredited institution with an upper division major in nursing.
2. Eligibility for Colorado licensure as a registered nurse.
3. A minimum grade point average of 3.0 on the baccalaureate level.
4. Two letters of reference.
5. A statement of career goals.
6. One year of clinical experience is preferred.
7. A personal interview may be required.

#### For degree and program requirements, see:

**Family Nurse Practitioner (FNP) Graduate Certificate Program (Non-Degree) on page 80**

**Nursing Education Graduate Certificate Program (Non-Degree) on page 81**

**Nursing M.S. on page 52**

**Clinical Nurse Specialist in Chronic Illness (CNS) Emphasis**

**Education Emphasis**

**Family Nurse Practitioner (FNP) Emphasis**

**Transcultural Nursing Graduate Certificate Program (Non-Degree) on page 81**

### Nursing Education Ph.D.

The Doctorate of Philosophy in Nursing Education prepares nurses who provide professional leadership in nursing education, the scholarship of teaching, practice and research in the discipline. The program has two entry options: Bachelor's in Nursing (BS) to Ph.D. or the traditional Master's to Ph.D.

#### Admission requirements

1. Completion of a bachelors of science in nursing from an accredited school or completion of a bachelors in nursing and a master's degree.
2. Admission to the Graduate Program of UNC:
  - a. GRE scores must have been taken within 5 years of application date, i). Verbal and quantitative scores (800 possible on each) must add up to at least 1000 total, and no less than a 400 on either, ii.) Analytical writing skills (6.0 possible) must be at least 3.5.
  - b. GPA 3.0 minimum (4.0 scale).
  - c. Two copies of all transcripts from any academic work post high school (if previous coursework was from UNC, no copies are required).
3. Current RN licensure.
4. Three letters of recommendation:
  - a. One addressing the applicant's experience with/interest in/potential for nursing education, and professional leadership skills.
  - b. One from a doctorally prepared nursing educator addressing the applicant's academic potential.

- c. One letter from a reference of the student's choice.
5. Personal statement of future goals/interest in nursing education.
6. Interview with nursing faculty (scheduled by telephone or in person).

For degree and program requirements, see:

**Nursing Education Ph.D. on page 73**

## SCHOOL OF SPORT AND EXERCISE SCIENCE

Director: David K. Stotlar, Ed.D.

### SPORT AND EXERCISE SCIENCE

Location: Gunter 2590 Telephone: 970.351.2535  
Fax: 970.351.1762

**Faculty:** Robert J. Brustad, Ph.D.; Shannon M. Courtney, M.A.; Dianna P. Gray, Ph.D.; J. Reid Hayward, Ph.D.; Gary D. Heise, Ph.D.; Jani Malkiewicz, M.A.; Melissa A. Parker, Ph.D.; Tim B. Ramsey, M.A.; Carole M. Schneider, Ph.D.; Linda A. Sharp, B.A., J.D.; Christina Sinclair, Ph.D.; Jeremy D. Smith, Ph.D. Mark A. Smith, Ph.D.; Megan Babkes Stellino, Ed.D.; Jim Stiehl, Ph.D.; David K. Stotlar, Ed.D.; James V. Turk, M.S.

**Emeritus Faculty:** Mary A. Behling, Ph.D.; Thomas R. Benich, M.A.; Robert Blasi, M.A.; Cynthia Carlisle, Ed.D.; Carolyn A. Cody, Ph.D.; Carolyn Ann Dennehy, Ph.D.; Margaret E. Everett, M.A.; Jean A. Hedberg, M.A.; William C. Heiss, Jr., M.A.; Christy A. Howard, M.S.; Virgil Y. Lindahl, M.A.; Theresa M. Malumphy, Ph.D.; Harold L. McKain, Jr., Ph.D.; Robert A. Montgomery, Ed.D.; L. Carol Mosser, M.A.; D. Allen Phillips, Ed.D.; Bobby H. Rollins, M.A.; Anthony M. Rossi, M.A.; George H. Sage, Ed.D.; Doris C. Steffy, M.A.; Nancy Van Anne, Ph.D.; Thurman Wright, D.P.E.

The School of Sport and Exercise Science has a long and distinguished history of preparing individuals to assume leadership roles in sport and physical activity settings, and subscribes to the philosophy that physical activity and sport contribute to the overall quality of life. To this end the School offers a variety of majors related to teaching, fitness and exercise science, biomechanics, sport psychology, and the management of sport. Majors in these diverse fields provide students with the necessary coursework and experience to serve as a foundation for careers in the professions of physical education, athletic training, exercise science, sport psychology, and sport management.

Graduate programs in sport and exercise science provide an opportunity to go into greater depth in the study of human movement, pedagogy, delivery of sport and activity in the outdoors, sport administration, and working with youth. Both theory and professional applications are emphasized. The doctoral program seeks to develop critical thinkers with the conceptual and methodological tools for conducting meaningful research, and prepares individuals to teach courses at the college level and assume leadership positions in their respective disciplines.

Many research opportunities are available in the laboratories used by the School of Sport and Exercise Science. Facilities are available for the study and analysis of teaching physical education. The teaching research laboratory is equipped with state-of-the-art interactive video and computer equipment that is available for student and faculty use. This laboratory is the focal point for the analysis of teaching physical education. The University also operates a large challenge course and indoor climbing facility.

Biomechanical facilities include a motion analysis system for three-dimensional data acquisition using video cameras and computerized data reduction to determine the mechanical parameters of total body motion. There is a computerized system for acquiring electronic data through the use of a force platform.

Research in social psychology is primarily conducted with individuals in natural or "field" settings. The Sport Marketing Research Institute conducts marketing and other industry research for Colorado and western region sport organizations. Housed within the Ben Nighthorse Campbell Health and Human Sciences Center is the Rocky Mountain Cancer Rehabilitation Institute, one of the first programs of its kind in the United States. In addition, laboratory equipment is also available for motor learning and motor control research.

### Sport and Exercise Science M.S.

#### Exercise Science Emphasis

Exercise Science is the integrated study of human movement. Concentrations within this discipline include biomechanics, exercise physiology and social psychology of sport and physical activity.

#### Sport Administration Emphasis

The curriculum follows the guidelines set for the preparation of students in sport management by the National Association for Sport and Physical Education and the North American Society for Sport Management. Students are prepared to assume positions in the management of sport in collegiate athletic programs and professional, Olympic and commercial sport business. The M.S. program requires a minimum of 30 hours.

#### Sport Pedagogy Emphasis

The Master's degree with an emphasis in Sport Pedagogy is designed for individuals who have relevant experience in their chosen concentration and who plan to provide leadership in that concentration. Sport pedagogy involves the complex and idiosyncratic activity of teaching. Students in this program examine different assumptions, conceptions, and paradigms of teaching physical activity and sport. Furthermore, they have opportunities to practice and reflect on the art and science of teaching using various models in assorted settings with diverse populations.

### Physical Education, M.A.T.

The Master of Arts in Teaching degree is an off-campus degree designed for those students wishing to further their teaching expertise through the application of theory to practice. This degree provides in-service teachers with the skills, knowledge, and dispositions to enhance their professional development toward accomplished practice

### Sport and Exercise Science Post Baccalaureate Licensure Program

The Post Baccalaureate licensure program allows students with an undergraduate major in sport and exercise science or related areas to obtain teacher licensure.

**Admission.** Applicants must submit an application form, official transcripts, letter of intent/career goals statement, two letters of recommendation from persons who can attest to the applicant's academic ability, and processing fee directly to the Graduate School. Applicants are encouraged to visit the campus to meet with program area faculty. Admission to the program occurs for the fall or summer semesters only. The Master's in Sport Administration curriculum is a limited enrollment degree program. Students who complete the application process by February 15 are given priority screening for fall or summer admission of that year. The application period normally closes on August 1 for fall admission.

For degree and program requirements, see:

**Sport and Exercise Science M.S. on page 58**

**Exercise Science Emphasis**

**Sport Administration Emphasis**

**Sport Pedagogy Emphasis**

**Physical Education M.A.T. on page 52**



### **Sport and Exercise Science Ph.D.**

The Doctor of Philosophy in Sport and Exercise Science is offered through the School of Sport and Exercise Science.

#### **Exercise Science Emphasis**

Students pursuing the Exercise Science emphasis select one concentration area: 1) biomechanics, 2) exercise physiology, and 3) social psychology of sport and physical activity.

#### **Sport Administration Emphasis**

This curriculum follows the guidelines set for the preparation of students in Sport Management by the National Association for Sport and Physical Education and the North American Society for Sport Management. The program is designed primarily to prepare students for academic positions in higher education. Some students may choose to apply their doctoral course work in careers in the management of sport in collegiate athletic programs, professional, Olympic, or commercial sport business.

#### **Sport Pedagogy Emphasis**

The Sport Pedagogy emphasis prepares students for academic positions in comprehensive universities, particularly as teacher educators. Students are afforded the coursework, research, and practical experiences necessary for providing leadership on teacher education and conducting educational research. Students will have the opportunity to gain practical experience in pedagogy. They will also have opportunities to participate in ongoing research efforts within the School of Sport and Exercise Science (SES). SES has a well-equipped research laboratory for the study of teaching and various forms of graduate experiences are available in this area.

**Admission.** Applicants must submit an application form, official transcripts, three letters of recommendation from persons who can attest to the applicant's academic ability, Graduate Record Examination General Test Scores and processing fee directly to the Graduate School. Materials required for admission to the program are: a resume, a written statement of career goals and research interests. Additionally, sport administration applicants should submit an essay on a current issue in sport business. Applicants are encouraged to visit the campus to meet with program area faculty. Although admission decisions are made throughout the academic year, the faculty prefers that students begin the program in the fall semester. Students who complete the application process by February 15 are given priority screening for fall admission of that year and have increased opportunities for financial assistance. The application period normally closes on August 1 for fall admission.

*For degree and program requirements, see:*

**Sport and Exercise Science Ph.D. on page 76**

**Exercise Science Emphasis**

**Sport Administration Emphasis**

**Sport Pedagogy Emphasis**

## **OTHER PROGRAMS IN THE COLLEGE OF NATURAL AND HEALTH SCIENCES**

### **GRADUATE INTERDISCIPLINARY DEGREE PROGRAM M.A.**

#### **Graduate Interdisciplinary Degree Program M.A.**

#### **Middle Level Mathematics Teaching Emphasis**

This program is designed to prepare professional teachers currently working in K-8 education with mathematical content and pedagogical expertise to teach mathematics at the middle level (Grades 6-8). Upon finishing this program they should be able to teach the mathematical content at this level, assume leadership roles at their sites, perform action research in their own classrooms and read and understand the relevant professional literature. The program focuses on mathematics content, and the mathematics courses are taught in a manner consistent with the process standards of the NCTM. This program emphasizes the mathematical and professional preparation to meet national standards and the need for excellent mathematics education in the 21st century.

The program combines professionalized mathematics courses appropriate for middle school teachers (Mathematics for Teaching (MFT)) with courses in mathematics education, pedagogy and practice (Mathematics Education (MED)). Students may include some appropriate electives in other areas of education.

**Admission** Generally, a B.A. or B.S. in any area with (at least one year of) teaching experience in K-8 education is required; a current professional teaching position is preferred. Students must submit an essay of approximately 500 words addressing their interest in the Master of Arts in Interdisciplinary Studies with Emphasis in Middle Level Mathematics Teaching and their educational goals.

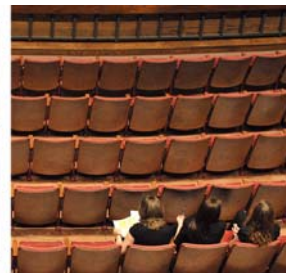
#### **Natural Science K-12 Teaching Emphasis**

The Emphasis in Natural Science K-12 Teaching is a comprehensive program coordinated by the MAST Institute. It provides practicing K-12 teachers with advanced study focusing on the following themes: increased science content knowledge; competency in the sciences; diversity and equity in teaching strategies; and the teacher as researcher. Thesis and Non-thesis options are available for the M.A. degree. Research experiences are molded around the teacher's interests. Courses are offered on campus and online. The program combines science courses directed towards topics applicable to K-12 science teaching with courses in science education, pedagogy and practice.

**Admission:** Generally a bachelor's degree with at least one year of teaching experience in K-12 education is required; a current professional teaching position is preferred. Students must submit an essay of approximately 500 words addressing the interest in this program, their educational goals, and topics of potential research interest.



# **PVA** COLLEGE OF PERFORMING AND VISUAL ARTS



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## OFFICE OF THE DEAN

**Location:** Guggenheim 204      **Telephone:** 970.351.2515

**Dean:** Andrew Jay Svedlow, Ph.D..

**Assistant Dean:** Vergie Amendola, M.M.

The University of Northern Colorado's College of Performing and Visual Arts draws on the extensive resources of the University and the Front Range region of Colorado to provide an outstanding milieu conducive to the development of arts professionals. Our students have transformative and inspiring experiences in a first-class environment that includes advanced technology laboratories in all the arts, contemporary dance studios, traditional and experimental theatre spaces, unparalleled music resources, and studios in the diverse disciplines of the visual arts. The College combines the best of the time-honored academy tradition and the most current and prescient ideas in the arts with the liberal arts education of a major university.

The College of Performing and Visual Arts has an exceptional reputation for offering in-depth study of music, theatre arts, dance, and art and design. The College offers undergraduate and graduate degrees, as well as lifelong learning programs that integrate up-to-date facilities, accessible and highly acclaimed faculty members, practicum experiences with leading arts agencies, and the rich cultural attractions of the region into a well rounded and valuable curriculum.

Whether you are interested in becoming a high school art teacher, an orchestra conductor, a choreographer of modern dance, a stage manager, graphic designer, composer of contemporary jazz, a performance artist, actor, graphic designer, or any one of hundreds of arts professions, you will find the University of Northern Colorado the place to expand and nurture your talent. If you choose to join the College, and its distinguished and accomplished faculty, you will be following in the footsteps of alumni who have been succeeding in and creating the arts of today and the future.

Performance based standards for degree programs in the College of Performing and Visual Arts are available online at <http://arts.unco.edu/pva/assessment/default.html>.

## SCHOOL OF ART & DESIGN

**Director:** Dennis Morimoto, Ed.D.

**Location:** Guggenheim 103      **Telephone:** 970.351.2143

**Faculty:** Connie Bethards, Ph.D.; Michael A. Coronel, M.A.; Lauren Eisen, M.F.A.; Mark Fetkewicz, M.F.A.; Sieger Hartgers, M.A.; Kris Heintz-Nelson, M.A.; Michael Lemke M.F.A.; Dennis Morimoto, Ed.D.; Kenneth Price, M.A.; Thomas Stephens, M.F.A.; Connie Stewart, Ph.D.; Andrew Jay Svedlow, Ph.D.; Anna Ursyn, Ph.D.

The School of Art & Design offers the opportunity to study the artistic aspects of our heritage, our culture, visual communications and personal artistic expression, as well as the arts of other cultures and civilizations. It is the purpose of the school to provide a comprehensive education in the visual arts through studio practice, art history, cultural studies, and critical studies.

Students learn to produce works of art in a variety of media and to understand the processes of various art forms as they relate to personal expression and professional application. Through the programs of the School of Art & Design, students learn to analyze and make reasoned, critical judgments about the significance and quality of works of art. This approach gives students an excellent background for recognizing and understanding art in context, which is necessary preparation for many careers in the visual arts.

In addition, students pursuing Art Education Studies will have demonstrated the ability to teach art effectively in grades K-12.

## Art & Design M.A.

The graduate program in the School of Art & Design leads to the Master of Arts degree. It offers an in-depth and individualized course of study. The program provides opportunities for the K-12 art educator seeking Master's Degree to develop advanced expertise in art education, art history, and studio arts. The M.A. degree can also be used in preparation for further, more advanced, graduate studies. It is the goal of the School of Art & Design to encourage, foster, and provide academic rigor and artistic excellence.

**Admission** to the Master of Arts in Art & Design degree program is approved by the faculty of the School of Art & Design following an evaluation of the applicant's admission materials. At the time of application to the Graduate School, application materials should be sent to: Coordinator or Graduate Studies, School of Art & Design, University of Northern Colorado, Greeley, CO 80639. Application materials include a portfolio of no less than 20 different pieces of current work in the proposed area of study submitted in one of the following formats: 35mm color slides of professional quality, or a CD or DVD containing digitized images of work in a format which will open on either a Mac or PC (Power Point, jpeg, pdf, etc.), a typewritten statement by the applicant elaborating the reasons for pursuing advanced studies in art or art education, statement to be two pages in length and an example of writing ability; three letters of recommendation, preferably from professionals working in the field; and a current resume. For more information, contact the Coordinator or Graduate Studies.

**Prerequisites.** Students who have completed an undergraduate degree in art or art education or the equivalent and whose grade point average is a minimum of 3.0 based on the last 60 semester hours of coursework may apply for the Master of Arts degree program in the School of Art & Design. An applicant who does not have an undergraduate major in art or art education, or its equivalent, will be required to complete specified coursework or areas of study before beginning the program.

For degree and program requirements, see:

[Art & Design M.A. on page 38](#)

# SCHOOL OF MUSIC

**Director:** H. David Caffey, M.M.

**Associate Director:** Lauren Murray, D.M.A.

**Location:** Frasier Hall 108      **Telephone:** 970.351.2993

**Graduate Coordinator:** Robert Ehle, Ph.D.

**Faculty:** Vergie Amendola, M.M.; Erik Applegate, M.M.; H. Gray Barrier, M.M.; Jonathan Bellman, D.M.A.; Diane Bolden-Taylor, M.M.; Jason Byrnes, D.M.; David Chew, M.M.; Andrew Dahlke, D.M.A.; Galen Darrough, D.M.A.; Stefan Eckert, Ph.D.; Robert Ehle, Ph.D.; Paul Elwood, Ph.D.; Richard C. Fuchs, M.M.; Russell Guyver, D.M.A.; Charles A. Hansen, D.M.A.; Robert Al Harding, D.M.E.; Caleb Harris, M.M.; Errol Haun, D.M.A.; Marian K. Hesse, M.M.; Deborah Kauffman, D.M.A.; Dana B. Landry, M.M.; Brian Clay Luedloff, M.F.A.; Melissa Malde, D.M.A.; Lesley Manning, M.M.; Richard G. Mayne, Ph.D.; Charlotte R. Mills, D.A.; Mark Montemayor, Ph.D.; Kathy Bundock Moore, Ph.D.; Robert Murray, D.M.A.; Kenneth Singleton, D.M.A.; Lei Weng, M.M.; James White, M.A.; Juliet T. White-Smith, D.M.A.; Nathaniel G. Wickham, D.M.A.; William Wilson, M.M.

Approximately 450 music majors annually have made UNC's School of Music their choice for many reasons. The School of Music offers nationally recognized faculty with specialists on every instrument. There are more than 50 performing ensembles, a number of which are nationally recognized.

The UNC School of Music, with 37 full-time and 20 part-time faculty, is organized into seven program areas, each with an area head. The program areas are Winds and Percussion, Strings, Keyboard, Vocal, Academic Studies, Music Education, and Jazz Studies.

Students may choose from a full range of degrees, bachelor through doctoral programs, and from emphases in performance, conducting, music education, music theory, jazz studies, and music history. Considerable variety and depth of course offerings are available at UNC.

General objectives of the University of Northern Colorado School of Music are based on service and leadership in the arts at local, state, regional, national and international levels.

An integral unit within the University, the School of Music embraces the role and mission statements of the University of Northern Colorado and has designed its goals and objectives to support and enhance institutional purposes and directions.

The primary goal of the UNC School of Music is to develop skilled and sensitive musicians at the undergraduate, master's and doctoral levels, including performers, conductors, educators, composers, historians, theorists and music administrators. The UNC School of Music maintains a two-fold objective of providing the strongest preparation possible in music education, theory, and history, while encouraging the highest standards of performance.

School of Music graduates are well regarded in the professional world. UNC-prepared educators hold positions at universities, colleges, high schools, junior high and elementary schools throughout the United States and the world. School of Music performance graduates are found in professional symphony orchestras, opera and musical theatre repertory companies, the nation's premier military ensembles, prominent free-lance positions in metropolitan centers, and in professional chamber ensembles and jazz bands.

## Major Musical Organizations

- MUS 267/MUS 467/MUS 667 University Symphony Orchestra
- MUS 268/MUS 468/MUS 668 Chamber Orchestra
- MUS 280/MUS 480/MUS 680 Mixed Concert Choir
- MUS 281/MUS 481/MUS 681 Women's Glee Club
- MUS 284/MUS 484/MUS 684 Men's Glee Club
- MUS 288/MUS 488/MUS 688 Concert Band
- MUS 290/MUS 490/MUS 690 Symphonic Band
- MUS 291/MUS 491/MUS 691 Wind Ensemble

## Graduate Admission Requirements

Prerequisite to admission to any graduate program in Music is completion of an appropriate undergraduate music degree. Admission will be based on an evaluation of the student's competencies and the content of the undergraduate program.

The student must take the appropriate Advisory Examinations in Music Education, Music History, and Music Theory administered by the School of Music faculty upon the student's arrival on campus. Students with an instrumental emphasis may be required to take written examinations on technique in their performance area.

All graduate students enrolling in the School of Music as majors are expected to attend major recitals, concerts, productions, and convocations on a regular basis as part of their course program.

Candidates will take a written comprehensive examination at a time approved by their major advisor.

**Master's Programs.** An audition in the major applied area is required of all entering graduate students, and three letters of recommendation are also required of Music Education majors.

**Doctoral Program.** An audition in the major applied area is required of all entering graduate students. A minimum of two years public school teaching experience is required of D.A. (Music Education) applicants. Three letters of recommendation are required of all applicants.

## Music M.M.

Each new student entering a graduate program in music at the University of Northern Colorado is required to take graduate advisory examinations in Music History and writing skills, and placement examinations in Music Theory and Aural Skills, and the student's major area. For students entering the Music Education degree, the major area will be Music Education. Entering graduate students who do not pass the theory placement exam must enroll in MUS 401. Entering graduate students who do not pass the aural skills placement exam must enroll in MUS 402.

The degree program seeks to assist graduate candidates in developing advanced professional competencies in performance, scholarly abilities, research, and pedagogical techniques for use in the profession or for instruction in higher education.

**Admission.** Residency, when stated in the music section of this Catalog, is interpreted to mean 9 credit hours or more per semester.

The candidates must take the Advisory Examinations in Music History and writing skills, and the Placement Examination in Music Theory and Aural Skills. Candidates with deficiencies will meet with their major advisor and other appropriate faculty to determine the best way to address the deficiencies. An entrance audition is required.

### Collaborative Piano Emphasis

#### Conducting Emphasis

This emphasis is designed to assist the graduate candidate in developing advanced professional competencies in conducting, while pursuing specialized studies in the areas of choral, orchestral, and wind band. In addition to the Music M.M. requirements, an entrance audition is required.

**Admission.** Prospective conducting applicants should have had at least two years of experience in high school teaching or equivalent experience before applying for graduate studies. A personal audition is required.

Conducting applicants should write to the appropriate director for specific information concerning audition and interview procedures.

### Instrumental Performance Emphasis

Performance emphases are available in flute, oboe, clarinet, bassoon, saxophone, horn, trumpet, tenor trombone, bass trombone, euphonium, tuba, percussion, violin, viola, violoncello, string bass, harp, keyboard, voice, and guitar.

### Jazz Studies Emphasis

The Master of Music degree program is designed to assist the graduate student in developing advanced professional competencies in jazz. The degree program seeks to broaden and deepen scholarly abilities and research and pedagogical techniques for use in the profession or for instruction in higher education.

**Admission.** In addition to meeting the admission requirements of the Graduate School, the student must take the Advisory Examinations in Music History and Literature, Jazz History, Jazz Theory, Music Theory and writing skills. Candidates with deficiencies will meet with their major advisor and other appropriate faculty to determine the best way to address the deficiencies. An entrance audition is required.

### Music Education Emphasis

The Master of Music (Music Education Emphasis) degree program is designed to develop and enrich professional understandings, skills, and musical/pedagogical competencies in the field of music education.

Incoming students must meet admission requirements of the Graduate School. Candidates must have completed an undergraduate degree in music or music education. Other candidates may be accepted upon petition to the Music Education Program.

Prospective music education graduate students, in addition to following current Graduate School and School of Music application procedures, should submit the following directly to the School of Music director in order to be considered for admission to the UNC Music Education Graduate Program:

- One 30-45 minute video or DVD that is representative of the applicant's teaching abilities. Applicants should include a 10-15 minute performance segment that is representative of their performing ability on their primary instrument or voice. Applicants should select two pieces of contrasting style for the performance segment.
- Three letters of recommendation addressing teaching abilities, potential for success in graduate studies, musicianship, and collegiality.

### Music History and Literature Emphasis

In addition to the Music M.M. requirements above, students entering this area of emphasis must have the equivalent of an undergraduate music major as outlined in this Catalog.

Students will be expected to demonstrate translational competency in German, French, or Latin as a prerequisite to candidacy.

### Music Theory and Composition Emphasis

#### Vocal Performance Emphasis

*For degree and program requirements, see:*

**Music M.M. on page 50**

Collaborative Piano Emphasis

Conducting Emphasis

Instrumental Performance Emphasis

Jazz Studies Emphasis

Music Education Emphasis

Music History and Literature Emphasis

Music Theory and Composition Emphasis

Vocal Performance Emphasis

## Music D.A.

### Collaborative Piano Emphasis

### Conducting Emphasis

### Jazz Studies Emphasis

### Music History and Literature Emphasis

### Music Performance Emphasis

### Music Composition Emphasis

Each new student entering a graduate program in music at the University of Northern Colorado is required to take graduate advisory examinations in Music History and writing skills, and placement examinations in Music Theory and Aural Skills, and the student's major area. For students entering the Music Education degree, the major area will be Music Education. Entering graduate students who do not pass the theory placement exam must enroll in MUS 401. Entering graduate students who do not pass the aural skills placement exam must enroll in MUS 402.

The Doctor of Arts degree provides options for advanced study in the areas of music history and literature, composition, conducting, and performance (with an optional concentration in pedagogy).

The Doctor of Arts in Music at UNC is part of the Western Regional Graduate Program (WRGP) established by the Western Interstate Commission for Higher Education (WICHE). In most cases, WRGP students pay tuition at resident student rates; prospective D.A. students may direct inquiries concerning the WRGP to the School of Music.



### **Music Education Emphasis**

This program emphasizes philosophy, psychology, contemporary and past history, and research. It also includes scholarship and musicianship through study in the areas of music history and literature, theory, composition, and performance.

This program area places primary emphasis on a comprehensive working knowledge of contemporary music education practices in public schools and college music programs, and/or community cultural life.

Prospective music education graduate students, in addition to following current Graduate School and School of Music application procedures, should submit the following directly to the Music Education Chair in order to be considered for admission to the UNC Music Education Graduate Program:

- One 30-45 minute video or DVD that is representative of the applicant's teaching abilities. Applicants should include a 10-15 minute performance segment that is representative of their performing ability on their primary instrument or voice. Applicants should select two pieces of contrasting style for the performance segment.
- Three letters of recommendation addressing teaching abilities, potential for success in graduate studies, musicianship, and collegiality.

*For degree and program requirements, see:*

**Music D.A. on page 72**

**Collaborative Piano Emphasis**

**Conducting Emphasis**

**Jazz Studies Emphasis**

**Music History and Literature Emphasis**

**Music Composition Emphasis**

**Music Performance Emphasis**

**Music Education Emphasis**

**Admission:** Applicants must have a Bachelor's degree and a strong desire to obtain a Master of Arts degree in Theatre Education. A teaching certificate is recommended yet not required. A minimum of nine and a maximum of twelve students will be admitted each year. The goal is that each class will reflect a mix of diverse backgrounds, experience and interests. Applicants must meet the University of Northern Colorado's graduate admission requirements and apply by April 1. They must also submit an essay stating their goals for the program and discuss why graduate school is an appropriate choice in their careers at this time, a resume, and three letters of recommendation. Selection for the program will be made by the end of April. GRE is not required.

*For degree and program requirements, see:*

**Theatre Education M.A. on page 60**

**Theatre Educator Intensive**

## **SCHOOL OF THEATRE ARTS AND DANCE**

**Director:** David Gene Grapes II, M.F.A.

**Location:** Frasier Hall 105      **Theatre Arts:** 970.351.2991  
**Dance:** 970.351.2991

**Graduate Coordinator:** Mary Schuttler, Ph.D.

**Faculty:** Monte Black, M.F.A.; Marie Davis-Green, M.F.A.; Raymond Vance Fulkerson, M.A.; Karen Sue Genoff-Campbell, D.A.; David Gene Grapes II, M.F.A.; Brian Hapcic, M.F.A.; John R. Leonard, M.F.A.; Gillian McNally, M.F.A.; Thomas P. McNally, M.F.A.; Tracy Salter, M.F.A.; Mary Schuttler, Ph.D.; Anne Toewe, M.F.A.; Ken Womble, M.F.A.

UNC's Theatre Arts program combines on line and classroom instruction with first-hand experiences in theatre education. General objectives of the University of Northern Colorado School of Theatre Arts and Dance are based on service and leadership in the arts at local, state, regional and national levels. An integral unit within the University, the School embraces the role and mission of the University and has designed its goals and objectives to support and enhance institutional purposes and directions.

### **Theatre Education M.A.**

**Schedule:** This focused program consists of two three-week summer institutes for 18 credits (9 each year); three 3 credit on-line courses spread out over two academic years, one 3 credit 500 level or above transferable theatre course, and 6 credits of thesis advisement for a total of 36 credits. While on campus in the summer, students will attend classes, and view or work on productions, Monday through Saturday for a total of 45 hours per week.



# Course Descriptions

## Curriculum Contacts and Course Prefixes



### College of Education and Behavioral Sciences

#### Schools

#### Applied Psychology and Counselor Education

- Contact (970) 351.2731
- <http://www.unco.edu/cebs/ppsy>

#### Education Research, Leadership and Technology

- Contact (970) 351.2807
- <http://www.unco.edu/cebs/ertl>

#### Psychological Sciences

- Contact (970) 351.2957
- <http://www.unco.edu/cebs/psychsci>

#### Special Education

- Contact (970) 351.2691
- <http://www.unco.edu/cebs/sped>

#### Teacher Education

- Contact (970) 351.2908
- <http://www.unco.edu/cebs/teached>

#### Prefixes

APCE (Applied Psychology & Counselor Education)

ELPS (Educational Leadership & Policy Studies)  
 ET (Educational Technology)  
 HESA (Higher Education & Student Affairs Leadership)  
 SRM (Statistics & Research Methods)

PSY (Psychology)

EDI (Educational Interpreting)  
 EDSE (Special Education)  
 INTR (Interpreter)  
 TASL (American Sign Language)

EDEC (Early Childhood Education)  
 EDEL (Elementary Education)  
 EDF (Foundations of Education)  
 EDFE (Educational Field Experience)  
 EDLD (Education of Linguistically Different)  
 EDRD (Reading)  
 TED (Teacher Education)



### College of Humanities and Social Sciences

#### Schools

#### Communication

- Contact (970) 351.2405
- <http://www.unco.edu/communication>

#### English Language and Literature

- Contact (970) 351.2971
- <http://www.unco.edu/english>

#### History Philosophy and Political Science

- Contact (970) 351.2905
- [http://www.unco.edu/jist\\_phil\\_psci](http://www.unco.edu/jist_phil_psci)

#### Modern Languages and Cultural Studies

- Contact (970) 351.2811
- [http://www.unco.edu/mod\\_lang\\_cult\\_stud](http://www.unco.edu/mod_lang_cult_stud)

#### Social Sciences

- Contact (970) 351.2069
- [http://www.unco.edu/social\\_sciences](http://www.unco.edu/social_sciences)

#### Other Programs (Women's Studies Minor)

- Contact (970) 351.2607
- <http://www.unco.edu/WomensStudies>

#### Prefixes

COMM (Communication Studies)

EED (English Education)  
 ENG (English)

HIST (History)

FL (Foreign Languages)  
 MAS (Mexican American Studies)  
 SPAN (Spanish)

ANT (Anthropology)  
 GEOG (Geography)  
 SOC (Sociology)  
 SOSOC (Social Science)

WS (Women's Studies)



## College of Natural and Health Sciences

### *Schools*

#### Biological Sciences

- Contact (970) 351.2921
- <http://www.unco.edu/nhs/biology>

#### Chemistry and Biochemistry

- Contact (970) 351.2559
- <http://www.unco.edu/nhs/chemistry>

#### Earth Sciences and Physics

- Contact (970) 351.2647
- <http://www.unco.edu/nhs/cep>

#### Human Sciences

- Contact (970) 351.2451
- <http://www.unco.edu/nhs/humansci>

#### Mathematical Sciences

- Contact (970) 351.2820
- <http://www.unco.edu/NHS/mathsci/index.htm>

#### Nursing

- Contact (970) 351.2293
- <http://www.unco.edu/nhs/nursing>

#### Sport and Exercise Science

- Contact (970) 351.2535
- <http://www.unco.edu/nhs/ses>

#### Other Programs (Interdisciplinary Degree Program M.A.)

- Contact (970) 351.2877
- <http://www.unco.edu/nhs>

### *Prefixes*

BIO (Biology)

SCED (Science Education)

CHEM (Chemistry)

SCI (Science)

AST (Astronomy)

ENST (Environmental Studies))

ESCI (Earth Science)

GEOG (Geology)

MET (Meteorology)

OCN (Oceanography)

PHYS (Physics)

ASLS (Audiology & Speech-Language Sciences)

CH (Community Health)

CRJ (Criminal Justice)

FND (Food, Nutrition & Dietetics)

GERO (Gerontology)

HRS (Human Rehabilitative Services)

MATH (Mathematics)

MED (Mathematics Education)

MFT (Mathematics for Teaching)

NURS (Nursing)

SES (Sport & Exercise Science)

HHS (Health & Human Sciences)



## College of Performing and Visual Arts

### *Schools*

#### Art & Design

- Contact (970) 351.2143
- <http://www.arts.unco.edu/visarts>

#### Music

- Contact (970) 351.2993
- <http://www.arts.unco.edu/music>

#### Theatre Arts and Dance

- Contact (970) 351.2991
- <http://www.arts.unco.edu/theatredance>

### *Prefixes*

ART (Visual Arts)

MUS (Music)

THEA (Theatre Arts)

THED (Theatre Education)



## University College

### *Prefixes*

ID (Interdisciplinary Arts)

### **Other**

### *Prefixes*

CIE (Center for International Education)

LIB (University Libraries)

# COURSE DESCRIPTIONS

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### Course Designations

Each course is assigned a prefix that identifies the discipline, field or program offering the course. For example, course numbers in Mathematics are preceded by MATH; and courses in Visual Arts are preceded by ART.

Five groups are identified by course numbers, generally to indicate the difficulty of a course and its location on a continuum of study that leads to general mastery of the content and methodology of a discipline:

- Basic skills courses - 001 through 099 range are not counted in cumulative credits, total credits toward graduation or grade-point-average. These courses are designed to teach students academic skills and general competencies necessary to succeed in college.
- Lower division courses - the 100 range for freshmen and the 200 range for sophomores.
- Upper division courses - the 300 range for juniors and the 400 range for seniors.

- Master's level courses - the 500 and 600 ranges. Juniors and seniors with a cumulative grade-point-average of 3.00 or higher may be admitted to 500-level courses but no undergraduates may be admitted to course numbers above the 500 range.
- Doctoral and Specialist level courses - the 700 range.

Courses with variable titles may have additional prerequisites assigned to specific sections scheduled.

Occasionally, courses that do not appear in the Catalog may appear in the Schedule of Classes. These course numbers end in "98" and are considered experimental. For example, an experimental course in geology might be GEOL 398. Courses ending in "98" cannot be used to meet Liberal Arts Core requirements.

**Courses bearing the designation "gtP" are in gtPathways, Colorado's Guaranteed Transfer Program. These courses are guaranteed to transfer to all Colorado institutions of higher education.**



## ANT — ANTHROPOLOGY

### ANT 508 Workshop (1-3)

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

### ANT 525 Fieldwork in Archaeology (4)

Prerequisite: ANT 100 or ANT 120 or equivalent. Required laboratory arranged. Introduction to archaeological field methods through participation in an archaeology field school experience. Students will participate in an on-going archaeological research project for four weeks during the summer. Participation fee.

### ANT 622 Directed Studies (1-4)

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.



## APCE — APPLIED PSYCHOLOGY AND COUNSELOR EDUCATION

### APCE 508 Workshop (1-3)

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

### APCE 513 Professional Renewal (1-3)

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

### APCE 558 Abnormal Psychology (3)

Graduate students only. Study of abnormal behavior, causes, symptoms, characteristics, classifications, prevention and treatment.

### APCE 559 Introduction to Clinical Hypnosis (2)

Prerequisites: APCE 612 or equivalent. Consent of instructor. Graduate students only. Introduction to techniques and applications of hypnosis in academic and mental health settings. Achievement of competence with basic hypnotic techniques and their appropriate utilization in psychotherapeutic processes.

### APCE 566 At Risk Students: Opportunities and Strategies (3)

Gain knowledge and understanding of "high risk students" and expand the teachers' repertoire of skills when educating at risk students. Prevalence, family characteristics and systems, and successful strategies will be studied.

### APCE 568 Psychology of Women (2)

Graduate students only. Theory and psychological issues influencing gender identity such as definitions of abnormality, achievement and interactional influences upon development.

### APCE 601 Practicum (1-3)

Consent of instructor. Majors only. Open by invitation to graduate students. Supervised professional activity in student's major field; approximately 37.5 clock hours of work per credit. S/U graded. Repeatable, maximum of three credits.

### APCE 602 Foundations of School Counseling (3)

Study the conceptual foundation of the counseling and school counseling professions including history, philosophy, principles and trends. Includes functions of counselors, administrators, teachers and parents in meeting students' needs.

### APCE 603 Understanding Children, Adolescents, and Their Systems (3)

Prerequisites: APCE 607. A comprehensive study of therapeutic approaches and techniques for children and adolescents. The course focuses on the therapeutic involvement of families and others, with children, in a variety of settings.

### APCE 605 Group Laboratory Experience (1)

Co-requisite: APCE 606 or APCE 662. Consent of coordinator. Provides an opportunity to participate in a group experience. S/U graded.

### APCE 606 Theories and Practices in Group Guidance (3)

Prerequisites: APCE 602 and APCE 607. Co-requisite: APCE 605. Majors only. Must be taken at site of admission. Study theories and methods of group counseling including applications in school settings for educational planning, career decisions and interpersonal relations, and forming and facilitating guidance groups in educational settings.

### APCE 607 Theories of Counseling (3)

Majors only or consent of instructor. The study and critical analysis of the major counseling theories and elements of effective psychotherapy as they apply to the counseling process.

### APCE 608 Organization, Administration and Evaluation of School Counseling Programs (3)

Prerequisite: APCE 602. Majors only or consent of instructor. The major focus of this applied course is on the design, development, implementation, and evaluation of a comprehensive school counseling program that meets national standards.

### APCE 609 Foundations of Play Therapy (3)

Prerequisites: Master's degree in appropriate mental health profession, or enrollment in a APCE graduate program, or consent of instructor. Course includes an overview of play therapy principles, history, techniques, and modalities. Course features a practicum element during which students conduct one play therapy session, under supervision of the instructor.

### APCE 612 Practicum in Individual Counseling (5)

Prerequisite: APCE 607 and consent of coordinator. Prerequisite or concurrent enrollment in APCE 657. Majors only. Must be taken at site of admission. Requires 15 hours per week minimum. Receive supervised experience in counseling and interview analysis, including use of audio and video tapes, client and supervisor feedback and weekly seminar. S/U graded. Repeatable, maximum of 10 credits.

### APCE 614 Internship in School Counseling and Guidance (1-9)

Prerequisites: APCE 608, APCE 612 and consent of instructor. Refer to program handbook. Must be taken at site of admission. A culminating field experience for counseling students engaged in counseling and guidance activities in elementary, middle, and high school settings under the supervision of one or more licensed school counselors. S/U graded. Repeatable, maximum of 18 credits.

### APCE 615 Supervision in Agencies and Schools (1)

Prerequisite: APCE 612 and consent of instructor. Provides an overview of the supervision process and the theoretical orientation and practical skills necessary to function effectively as a supervisor of counselors.

### APCE 616 Career Theory, Counseling and Assessment (3)

Study theory and methods of career counseling, introduce and become familiar with career assessment instruments, and discuss current issues in the field of career counseling.

### APCE 617 Play Therapy: Theory and Practicum (3)

Prerequisites: APCE 612 and consent of instructor. Study theoretical bases for play therapy and conduct play therapy under faculty supervision.

### APCE 618 Practicum in Child, Adolescent, and Family Interventions (5)

Prerequisite: APCE 607 and consent of instructor. Supervised experience in interventions with children, adolescents, and families; including counseling and interview analysis, the use of audio and video tapes, client and supervisor feedback, and weekly seminars.

### APCE 622 Directed Studies (1-3)

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.



**APCE 623 Understanding and Counseling Diverse Populations (3)**

Majors only. An examination of counselor training issues and counseling skills relevant to working with clients with diverse cultural backgrounds. This course will sensitize students to the concerns of various cultural groups.

**APCE 624 Assessment and Treatment of Substance Abuse (3)**

Examination of major treatment approaches to substance abuse and theories of etiology. Investigation of pharmacological and medical aspects of commonly used substances. Explore addiction and abuse in related compulsive behaviors.

**APCE 627 Counseling Interventions and Techniques for Talented and Gifted Students (2)**

Study counseling interventions and techniques appropriate for talented and gifted students, their parents, siblings, peers, teachers and other school personnel.

**APCE 638 Human Behavior Analysis (3)**

Overview of human behavior analysis, with a focus on school-based behavioral assessment and intervention.

**APCE 650 Orientation to Clinical Counseling (3)**

Provides conceptual foundation for the counseling profession with emphasis on community counseling. Places the profession in a historical context; introduces associations, licensure, certification, accreditation, codes of ethics, and practice settings.

**APCE 654 Child Abuse and Neglect (3)**

Prerequisite: APCE 607 or consent of instructor. Introduction to major issues in the child abuse field, including definitions, causes, effects, assessment, prevention, treatment, and legal issues. Secondary traumatic stress and self-care will be emphasized.

**APCE 655 Social and Community Psychology (3)**

Provides advanced study in the research, theory, and practice of social and community psychology applied to individual, families, groups, and social systems.

**APCE 657 Legal and Ethical Aspects of Counseling and Psychology (3)**

Covers the interrelationship of ethical standards and legal regulation in professional counseling, education and psychology. Ethical standards, litigation and legal regulation are examined in regard to professional practice.

**APCE 660 Psychological Consultation: Theory and Practice (3)**

Prerequisite: APCE 607. Overview of consultation theory and practice. Mental health, expert, collaborative, behavioral and organizational models will be discussed and applied to problems in school and agency settings.

**APCE 662 Group Dynamics and Facilitation (3)**

Prerequisite: APCE 607. Co-requisite: APCE 605. Majors only. Must be taken at site of admission. Course features an examination of theoretical bases of group counseling including group types, group development, leadership styles and skills, and application to various populations. Ethical group leadership is emphasized.

**APCE 663 Research Apprenticeship: School Psychology (1-2)**

Consent of instructor. Serve as research apprentice to faculty member; must complete minimum of 2 semester credits, 75 clock hours each. Repeatable, maximum of two credits.

**APCE 665 Family Systems (3)**

Study general systems theory of family development and interactions. Structural, communication and behavioral approaches to family therapy will be examined as well as ethics, legal issues and current research.

**APCE 667 Crisis Intervention in the Schools (2)**

Examination of crisis intervention theory and strategies in school settings. Emphasis on application to child-centered crises such as abuse, divorce, family violence, loss, school-based violence and suicide.

**APCE 668 Sexuality Counseling (3)**

Recommended for advanced students. Counselors explore the treatment of various sexual issues. Topics covered: male and female sexual systems, sexual myths, variations in sexual behavior and common sexual concerns. Various therapeutic approaches are presented.

**APCE 669 Advanced Methods: Couples and Family Therapy (3)**

Prerequisite: APCE 665. Prerequisite or corequisite: APCE 612. Course expands on family therapy models presented in APCE 665 and includes other significant models. Training activities include diagnosis, assessment, case presentations, enactments, video use and case analysis.

**APCE 670 Psychological Testing and Measurement (2)**

Understanding psychological testing through an overview of measurement principles, the psychological assessment process, test construction and development and the use of test results in individual psychological evaluations.

**APCE 672 Neuropsychologically-Based Interventions for Educational Difficulties (3)**

Strategies for intervening in neuro-psychologically-based educational difficulties. Covers interventions of neuropsychological processes including perceptual, expressive, attentional, and emotional abilities; emphasizes remedial and compensatory strategies for learners with special needs.

**APCE 673 Appraisal and Assessment in Counseling (3)**

Recommended prerequisite: SRM 600. Majors only. This course features an overview of individual and group approaches to assessment used by professional counselors. Course participants evaluate instruments, interpret results, and demonstrate knowledge of psychometric properties.

**APCE 674 Assessment for Intervention: Cognitive and Academic (5)**

Prerequisites: APCE 670 and consent of instructor. Covers the historical and theoretical bases of psychological and educational assessment concentrating primarily in the areas of cognitive abilities and academic achievement and their relation to interventions.

**APCE 675 Social and Behavioral Assessment in the Schools (3)**

Prerequisites: APCE 674, APCE 781. Understand and implement techniques for assessing social and behavioral functioning in children and adolescents for the purpose of designing effective interventions in home and school settings.

**APCE 676 Assessment for Intervention: Infant and Toddler (3)**

Prerequisites: APCE 674 and APCE 678 and consent of instructor. Covers psychological services for infants and toddlers. Includes law, typical and atypical development, multicultural issues, and intervention services. Provides practice in assessment, with an emphasis on nontraditional methods.

**APCE 678 Assessment for Intervention: Personality and Behavior (5)**

Prerequisites: APCE 674 and consent of instructor. Supervised experience in administration and interpretation of ecologically valid psychological data including personality, behavioral, cognitive and academic. Emphasis on designing, implementing and evaluating ecologically-based interventions.

**APCE 680 Special Populations Practicum (1-3)**

Prerequisite: APCE 678. School psychology students explore in depth a special population including those with handicaps that interfere with learning. Instructor arranges research and involvement with a population not included in APCE 678. S/U graded. Repeatable, maximum of three credits.

**APCE 681 Practicum in Consultation (3)**

Prerequisite: APCE 660. Supervised field experience concurrent with professional seminar. Application of case and/or systemic consultation strategies to problems/challenges in the schools or social service agencies.

**APCE 691 Internship in Clinical Counseling: Couples and Family Therapy (1-9)**

Prerequisite: APCE 694 and consent of coordinator. Refer to program handbook. Majors only. Must be taken at site of admission. Minimum of 600 hours on-site required. A culminating field experience for qualified students in the area of community counseling: marriage and family therapy. S/U graded. Repeatable, maximum 18 credits.

**APCE 692 Internship in Community Counseling (1-9)**

Prerequisite: APCE 612 and consent of coordinator. Refer to program handbook. Majors only. Must be taken at site of admission. Minimum of 600 total on-site hours required. A culminating field experience for qualified community counseling students in areas of specialty. S/U graded. Repeatable, maximum of 18 credits.

**APCE 694 Practicum in Couples and Family Therapy (4)**

Prerequisites: APCE 612 or APCE 712, APCE 669. Consent of practicum coordinator. Majors only. Receive supervised experiential training in counseling with families. Develop diagnostic and therapeutic skills in systemic approaches. S/U graded.

**APCE 695 Seminar: Contemporary Issues in Couples and Family Therapy (3)**

Prerequisites: APCE 665. Majors only. Study of interventions utilized within the major approaches to couple and marital therapy. Covers current issues and research in family therapy.

**APCE 701 Professional Development Seminar in Counseling Psychology (1)**

Majors only. An overview of current issues in the discipline of counseling psychology, as well as an introduction to the program and the faculty in the division.

**APCE 702 Practicum in Counseling (4)**

Consent of practicum coordinator. Requires 12 hours per week minimum. Majors only. Supervised individual counseling experiences in a laboratory setting. Supervision will be directed toward improvement of counseling skills and case management. S/U graded.

**APCE 703 Professional Development Seminar in Counselor Education (1)**

Majors only. An overview of current professional issues in Counselor Education with special focus on understanding and developing a professional identity in the field. Research will be strongly emphasized. Repeatable, maximum of three credits.

**APCE 707 Seminar in Personality and Counseling Theories (3)**

Majors only. A comparative and critical in-depth analysis of personality and counseling theories including the interrelationship, philosophical foundations and practical applications.

**APCE 710 Seminar in Instruction, Pedagogy, and Evaluation in Counseling and Psychology (3)**

Prerequisites: APCE 702 and APCE 703. This course provides in-depth study of instructional principles, pedagogy, and evaluation procedures in counseling and counselor education. Instructional methods, techniques, and evaluation models related to counselor education will be discussed.

**APCE 712 Advanced Practicum in Individual Counseling (4)**

Prerequisites: APCE 702, APCE 707 and consent of practicum coordinator. Majors only. For the student with prior counseling experience, this course offers opportunity to develop counseling skills and philosophy in depth with clients in an individual counseling situation. S/U graded.

**APCE 713 Practicum in Supervision of Play Therapy (3)**

Prerequisite: APCE 617. Consent of practicum coordinator. Majors only. Doctoral candidates receive experience in supervising child psychotherapy training through working with a staff member.

**APCE 714 Practicum in Supervision of Counseling (3-6)**

Prerequisites: APCE 702, APCE 712 and consent of practicum coordinator. Majors only. Students gain experience with a faculty member in supervising counseling practice. Repeatable, maximum of six credits.

**APCE 715 Seminar in Counselor Supervision and Theory (2)**

Prerequisites: APCE 702, APCE 707, APCE 712 and consent of practicum coordinator. Co-requisite: APCE 714. Majors only. Study problems involved in training individuals to engage in the therapeutic process.

**APCE 716 Research Seminar in Counselor Education (3)**

Majors only. Review and analysis of reported research in counselor education with special emphasis on research published during the last ten years in the professional journals.

**APCE 733 Research Apprenticeship (1)**

Consent of instructor. Majors only. Requires approximately 3-5 hours per week. Serve as an apprentice to a chosen faculty member and work on professional endeavors such as course planning, writing and research, library searches. S/U graded. Repeatable, maximum of two credits.

**APCE 737 Single-Case Research Methods (2)**

Prerequisite: APCE 638. Provides conceptual and practical knowledge and skills in the design, implementation, and interpretation of single-case research designs. Application to education and to applied behavior analysis stressed.

**APCE 738 Practicum in Evidenced-Based Interventions (3)**

Prerequisites: APCE 607, APCE 638, APCE 737, APCE 747 and consent of practicum coordinator. Practice implementing interventions with children and adolescents with a variety of behavioral and emotional problems, with special emphasis on identifying and implementing evidence-based interventions.

**APCE 746 Seminar: Advanced Career Counseling, Theory and Assessment (3)**

Prerequisite: APCE 616. This advanced seminar course provides in-depth study of career guidance and counseling over the life span. Career theory, resources, assessment, technology, and ethical and legal considerations will be discussed.

**APCE 747 Psychological Aspects of Academic Programming and Intervention (4)**

Addresses applied psychological aspects of curriculum, instruction, and learning environment in relation to the development, implementation and monitoring of academic interventions in the areas of reading, math and written language.

**APCE 748 Instruction, Supervision and Leadership in School Counseling (3)**

Prerequisites: APCE 602, APCE 608. An advanced examination of issues and trends in professional school counseling with an emphasis on preparation and supervision of school counselors and leadership in implementation of school counseling programs.

**APCE 755 Supervised Practicum in College Teaching (1-6)**

Consent of instructor. Majors only. Doctoral students receive experience in observation and supervised practice in college teaching. Repeatable, maximum of six credits.

**APCE 757 Intervention for Severe and Low Incidence Disabilities (3)**

Prerequisites: APCE 638, APCE 660, APCE 747, APCE 758. Addresses severe and low-incidence disabilities including chromosomal, sensory related, low cognitive, motor disabilities, and autism spectrum disorder. Emphasis on functionally focused assessment, functional skills, consultation and family-professional partnerships.

**APCE 758 Advanced Psychopathology (3)**

Prerequisite: PSY 355 or APCE 558. Consent of instructor. Acquire understanding of developmental and behavioral disorders of childhood through adulthood. Thorough knowledge of specific pathologies and conditions through intensive reading, research or practical experience.

**APCE 762 Practicum in Group Facilitation (4)**

Prerequisites: APCE 605 and APCE 662 or equivalent, APCE 702, APCE 712. Consent of instructor. Requires a minimum of 12 hours per week. Majors only. Receive supervised experience in the role of group facilitator, including feedback on group process, leadership and intervention skills and problem areas. S/U graded.

**APCE 763 Legal and Professional Foundations of School Psychology (4)**

Professional issues and problems concerning the school psychologist, including certification and licensure requirements, confidentiality, legal and ethical issues, roles and responsibilities.

**APCE 770 Seminar in Supervision of School Psychology Services (1)**

Prerequisites: APCE 618, APCE 674, APCE 678 and APCE 763. Overview of theories and practice of supervision of school psychology services. Includes practice with and reflection on supervision skills.

**APCE 773 Practicum in Supervision of Group Facilitation (3)**

Prerequisite: APCE 762 and consent of practicum coordinator. Majors only. Doctoral candidates receive experience in supervision of group facilitator training. Work with regular staff member supervising group practicum, observe techniques and processes and receive feedback on progress.

**APCE 774 Practicum in Supervision of Family Therapy (3)**

Prerequisites: APCE 694 and consent of practicum coordinator. Majors only. Doctoral candidates receive experience in supervision of family therapist training. Work with regular staff member in supervising family therapy practicum, observe techniques and processes, receive feedback on progress.

**APCE 775 Advanced Practicum in Assessment and Testing Supervision (3)**

Prerequisites: APCE 674, APCE 770 and consent of instructor. Under faculty supervision, provide psychological assessment services to clients in the Psychological Services Clinic and participate in the instruction and supervision of students in testing courses. Repeatable. Maximum of 9 credits.

**APCE 777 Applied Neuropsychology (3)**

Prerequisites: APCE 612 or APCE 618 or APCE 702; and APCE 672 and APCE 674. Study of brain-behavior relationships emphasizing procedures for diagnosing neurobiological disorders, neuropsychological intervention and treatment planning, and professional practice issues from conception to adulthood.

**APCE 778 Clinical Neuropsychology Practicum (3)**

Prerequisites: APCE 612 or APCE 618, and APCE 678 and APCE 777. Supervised practice in administering and interpreting neuropsychological tests and qualitative procedures for children, adolescents, and adults. Emphasizes intervention development, rehabilitation, neuropsychological report writing, and use of neuropsychological test batteries.

**APCE 779 Practicum in School Psychology (3)**

Prerequisites: APCE 607, APCE 638, APCE 660, APCE 674, APCE 678, APCE 747 and consent of instructor. Supervised practice in providing comprehensive psychological services to children in grades preschool to 12. Experience in public schools or affiliated school-related agencies with supervision by practicing licensed school psychologists. Repeatable, no limitations.

**APCE 781 Evaluation of Psychological Services (3)**

Learn the theory and practice of psychological program evaluation. Use technology and measurement skills to promote systems change by evaluating the effectiveness of consultation, therapy, guidance, academic interventions, and placement.

**APCE 782 Introduction to Rorschach Administration and Scoring (3)**

Prerequisites: APCE 558, APCE 674 and APCE 678. Learn conceptual basis for comparing projective with traditional psychometric procedures and begin skills in administration and scoring of Rorschach test.

**APCE 789 Internship in School Psychology (1-8)**

Prerequisite: Permission from your advisor and the internship coordinator. Supervised experience in the practice of school psychology with children and adolescents in a school or clinic setting. (See Ph.D./Ed.S. Internship Guidelines for complete description.) S/U graded. Repeatable, maximum of 16 credits.

**APCE 791 Internship in Counseling Psychology (1-5)**

Consent of instructor. Majors only. 2,000-hour predoctoral internship at a site meeting APPIC and or APA training standards to be completed in 3-6 consecutive semesters after completion of all Psy.D. course work. Repeatable, maximum of 18 credits.

**APCE 792 Internship in Counselor Education and Supervision (1-6)**

Consent of instructor. Capstone experiences in the areas of teaching, research apprenticeships, consulting, supervision, and counseling in pre-approved settings. An approved internship plan must be in place before students engage in internship activities. Repeatable, maximum of 12 credits.

**APCE 793 Psychological Services Clinic I (1)**

Prerequisites: APCE 702, APCE 712, and either APCE 694 or APCE 617, and consent of practicum coordinator. Majors only. An introduction for students to gain experience as staff clinicians, conducting intake sessions, making recommendations for treatment, participating in clinic administrative duties and providing therapeutic services to clients. S/U graded.

**APCE 794 Psychological Services Clinic II (2)**

Prerequisites: APCE 702, APCE 712, APCE 793 and consent of practicum coordinator. Majors only. This course offers the opportunity to refine assessment and therapeutic skills with children, adolescents and adults, couples or families, and refine administrative skills including outreach to community agencies. S/U graded. Repeatable, maximum of four credits.

**APCE 797 Doctoral Proposal Research (1-4)**

Consent of instructor. Majors only. Required for all doctoral students. Student must earn a maximum of 4 hours of credit in this course in partial fulfillment of requirements for all doctoral degrees, before admission to candidacy. S/U graded. Repeatable, maximum of four credits.

**APCE 799 Doctoral Dissertation (1-12)**

Consent of instructor. Majors only and admission to candidacy. Required of all doctoral candidates. A student must earn a minimum of 12 hours of credit for the dissertation in partial fulfillment of requirements for all doctoral degrees. S/U graded. Repeatable, no limitations.

**APCE 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**ART — VISUAL ARTS****ART 181 History of Art I (3)**

A general survey of Western art from Pre-Historic (35000 B.C.E.) through Medieval (1400 A.C.E.). Emphasis on major movements and civilizations, methods of analysis, historical and cultural context. (LAC, gtP)

**ART 182 History of Art II (3)**

A general survey of Western art from Proto-Renaissance (1200 A.C.E.) through Modern art of the 21st century. Emphasis on major movements/civilizations, methods of analysis, historical and cultural context. (LAC, gtP)

**ART 183 Art I (3)**

Elements and principles of art. Exploration of the elements of line, shape and color in two-dimensional and three-dimensional design and drawing projects. Experiences in conceptualization and visual problem solving.



**ART 184 Art II (3)**

Elements and principles of art. Exploration of the elements of value, space, and texture in two and three-dimensional design and drawing projects. Experiences in conceptualization and visual problem solving.

**ART 211 Ceramic Design (3)**

Prerequisite: ART 183 and ART 184. Design, construct and fire ceramic forms using several different approaches to hand building and firing. Receive general background in the history of ceramic arts, clays, glazes and methods of firing.

**ART 212 Wheel Throwing (3)**

Prerequisite: ART 183 and ART 184. Begin throwing on the potter's wheel. Learn techniques of centering, opening and raising clay into basic pottery forms.

**ART 221 Fiber Design I (3)**

Prerequisite: ART 183 and ART 184. A studio course involving several fiber construction processes and fabric surface treatments in two or three dimensions.

**ART 223 Weaving (3)**

Prerequisite: ART 183 and ART 184. Introduction to the fundamentals of loom weaving as an art form, emphasizing applied design problems.

**ART 231 Painting I (3)**

Prerequisites: ART 183 and ART 184. Fundamentals of painting. Materials and techniques in basic procedures of studio painting using acrylic paint.

**ART 234 Drawing I (3)**

Deal in depth with concepts, techniques and materials. Problem areas include composition, content, technical concerns, use of color and a range of material use from traditional to contemporary alternatives.

**ART 248 Art for the Exceptional Child (2)**

Overview characteristics, needs and instruction adaptations suitable for teaching Visual Arts to the exceptional learner.

**ART 253 Intaglio Printmaking (3)**

Prerequisites: ART 234, ART 183 and ART 184. Introduction to intaglio printmaking techniques, including drypoint, engraving and etching in black and white. Traditional and experimental approaches are explored.

**ART 254 Relief Printmaking I (3)**

Prerequisite: ART 234, ART 183, and ART 184 or consent of instructor. Investigations in relief printmaking media including linoleum cuts, wood cuts, wood engravings, and collographs printed in black and white and in color.

**ART 261 Sculpture I (3)**

Prerequisite: ART 183 and ART 184. Introduction to materials, processes and concepts fundamental to making sculpture.

**ART 265 Jewelry (3)**

Prerequisite: ART 183 and ART 184. Introduction to materials, processes and concepts basic to making jewelry.

**ART 271 Basic Photography (3)**

Consent of Instructor. Learn fundamentals of photography. Study principles of black and white photography, including exposing, processing, printing and finishing techniques.

**ART 308 Workshop in Art (1-4)**

Arts workshops are for the study of specialized areas in art, art education, art history, graphic arts and related fields. Specific workshop content is determined by subtitle. Repeatable, maximum of six credits per subtitle.

**ART 340 Clinical Experience: K-12 Art (2)**

For Art Education majors. Provisional admittance to PTEP required. Consent of instructor. Gain practical experience in the classroom with a variety of materials, subject matter and with varying age groups. Requires classroom observation and participation with weekly seminar. Repeatable, maximum of four credits.

**ART 356 Monotypes (3)**

Prerequisite: ART 183 and ART 184 or instructor consent. Investigations in techniques of creating monotypes and monoprints (one-of-a-kind printed images). Individual imagery and technical development are emphasized. Repeatable, maximum of six credits.

**ART 440 Foundations of Art Education (3)**

Prerequisite: EDFE 110. An in-depth study of the field of art education and pre-professional related areas including: learning theory, aesthetics and psychology.

**ART 441 Cultural Studies in the K-12 Curriculum (2)**

Prerequisites: ART 181 and ART 182, EDFE 110. Teaching art based on cultural and historical context. Integrates cultural study with art history, aesthetics and processes of critical inquiry as a basis for determining meaning in art.

**ART 442 Curriculum and Instruction in Art: Studio Strategies (3)**

Prerequisites: EDFE 110. Study curriculum development and art learning activities appropriate for instruction in elementary and secondary art education.

**ART 466 Visual Arts Student Teaching Seminar (1)**

Co-requisite: EDFE 444. Prerequisite EDFE 120 or 125. This seminar provides persons actively involved in the student teaching program in Visual Arts with a support system and pertinent information to assist them during their field experience.

**ART 508 Workshop (1-4)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, maximum of six credits per subtitle.

**ART 511 Graduate Ceramic Design (3)**

Design and assembly of hand-built ceramic forms at an advanced level. An exploration of stoneware, raku and sodium vapor firing processes. Repeatable, maximum of six credits.

**ART 512 Wheel Throwing (3)**

Prerequisite: ART 312 or equivalent. Develop an individual approach to wheel thrown ceramic forms at an advanced level. Exploration of various methods of ceramic decoration and firing. Repeatable, maximum of six credits.

**ART 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**ART 521 Fiber Design (3)**

Advanced design techniques in fibers. Repeatable, maximum of six credits.

**ART 523 Weaving (3)**

Concentrate in a selected area of weaving on an advanced design concept. Repeatable, maximum of six credits.

**ART 533 Life Drawing (3)**

Prerequisite: ART 333 or equivalent. Advanced life drawing emphasizing development of personal interpretations of the human form. Repeatable, maximum of six credits.

**ART 537 Computer Art (3)**

Further exploration in applying computer graphics to the visual arts and integrating computer-based technologies related to design, desktop publishing and page layout. Some experience in computer graphics is recommended.

**ART 538 History of Computer Graphics (4)**

Prerequisite: Select one of the following courses: ART 171, ART 437, ART 537, ART 471, ART 571. Facts and aspects related to computer applications in art, graphics animation, interactive art, www. Analyze and contrast images, concepts and approaches to artistic quality and technological solutions in electronic art.

**ART 539 Computer Graphics Studio (1-3)**

Consent of instructor. Advanced, individualized or specialized study on specific topics related to computer graphics. Repeatable, maximum of nine credits.

**ART 553 Advanced Intaglio Printmaking (3)**

Prerequisite: ART 353 or consent of instructor. Advanced investigations in intaglio printmaking techniques, including color printing. Individual imagery and technical mastery will be emphasized. Repeatable, maximum of nine credits.



**ART 554 Advanced Relief Printmaking (3)**

Prerequisite: ART 254 or consent of instructor. Advanced investigations in relief printmaking techniques. Individual imagery and technical mastery are emphasized. Repeatable, maximum of nine credits.

**ART 556 Advanced Monotypes (3)**

Prerequisite: ART 356 or consent of instructor. Advanced investigations in monotype and monoprint techniques. Individual imagery and technical mastery are emphasized. Repeatable, maximum of nine credits.

**ART 561 Graduate Sculpture (3)**

Self-directed or assigned work in specific areas of sculpture. Advanced technical skills emphasized. Repeatable, maximum of six credits.

**ART 569 Web Style Design (3)**

Prerequisite: ART 437 or ART 471. Provide working knowledge about principles and practices in Website design in terms of art applications. Design knowledge related aesthetically to content for Web Page Layout.

**ART 571 Computer Graphics (3)**

Prerequisite: ART 471 or consent of instructor. Further exploration of computer graphics concepts, application of recently developed techniques to create integrative, interdisciplinary 2-D and 3-D projects, submitting for competitions and professional magazines. Portfolio and paper presentation required.

**ART 572 Digital Photography (3)**

Prerequisite: Consent of Instructor. Explore and apply techniques in digital photography. Study the evolution of traditional photographic concepts, principles, and processes into digital media. Emphasis placed upon the creation, manipulation, and presentation of digital photographic images.

**ART 575 Color Photography – Transparencies (3)**

Prerequisite: ART 271 or equivalent. Improve and develop individual creative skills in color photography using transparency materials. Learn to plan and produce multi-projector presentations using current materials, tools and processes.

**ART 576 Advanced Black and White Photography (3)**

Prerequisite: ART 271 or equivalent. Refine and improve individual skills in black and white photography. Study film and print manipulation with silver and non-silver materials.

**ART 577 Photographic Illustration and Lighting Techniques (3)**

Prerequisite: ART 271 or equivalent. Learn creative lighting techniques for illustration and portraiture. Study available light and studio lighting for black and white and color photography.

**ART 600 Research Methods in Art(3)**

Learn appropriate art, art historical and art education research methodology and procedures for inquiry. Present research according to approved style guidelines. Review Art program and Graduate School requirements.

**ART 615 Ceramic Studio (1-3)**

Consent of instructor required. Individualized or specialized study on specific topics in ceramics. Repeatable, maximum of nine credits.

**ART 622 Directed Studies in Art (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**ART 631 Painting (3)**

Prerequisite: ART 431 or equivalent. Advanced problems in painting in either acrylic, oils or watercolor. Emphasis is on development of personal imagery and working in a series, thematic development. Repeatable, maximum of six credits.

**ART 634 Drawing (3)**

Advanced work in development on thematic imagery, inventive media, unique and personal solutions to visual problems. Repeatable, maximum of six credits.

**ART 635 Drawing Studio (1-3)**

Consent of instructor required. Individualized or specialized study on specific topics in drawing. Repeatable, maximum of nine credits.

**ART 636 Painting Studio (1-3)**

Consent of instructor required. Individualized or specialized study on specific topic in painting. Repeatable, maximum of nine credits.

**ART 640 Literature of Art Education (3)**

Survey historical and contemporary literature on theory, research and practice in art education and related areas.

**ART 641 Art Curriculum and Instruction: Cultural Studies (3)**

Study methods for teaching art history. Research art analysis, art criticism and art theory for developing procedures for instruction.

**ART 642 Art Curriculum and Instruction: Studio Methods (3)**

Research and develop studio art content, processes and sequencing appropriate for the elementary and secondary art curriculum.

**ART 648 Art and the Exceptional Student (2)**

Study art for the exceptional in depth. Involvement in the review of literature and research field in the development of an art curriculum specific to individual interest area.

**ART 655 Advanced Printmaking Studio (1-3)**

Consent of instructor. This class provides a working environment for large scale printmaking by utilizing all facets of printmaking techniques, serious edition printing and special projects. Repeatable, maximum of nine credits.

**ART 660 Graduate Sculpture Studio (1-3)**

Self-directed studies in selected sculptural modes or processes. Repeatable, maximum of nine credits.

**ART 661 Advanced Graduate Sculpture (3)**

Select problems in the creation of sculpture with emphasis on critical and technical competencies. Repeatable, maximum of six credits.

**ART 672 Photography Studio (1-3)**

Instructor consent required. Advanced individualized or specialized study in photography for graduate students. Repeatable, maximum of nine credits.

**ART 680 Seminar in Art History (1-4)**

Discuss advanced and specialized art historical topics. Take concurrently with 300 level art history course. Subject area determined by subtitle. Repeatable, under different subtitles.

**ART 692 Internship in Art (1-5)**

Graduate art majors only. Supervised professional activity in major field of study. Must spend a minimum of 30 clock hours per credit hour. Maximum of five credits per semester. Repeatable, under different subtitles.

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

Prerequisite: ART 600. A written thesis is required of all master's degree candidates in visual arts. The thesis must be approved by the supervising committee and meet all requirements of the Graduate School. S/U graded. Repeatable, no limitations.



## ASLS — AUDIOLOGY AND SPEECH-LANGUAGE SCIENCES

**ASLS 266 Normal Speech and Language Development (3)**

Normal speech and language development and their relationship to other aspects of child development. Should be taken after the English composition LAC requirement is completed.

**ASLS 370 Basic Audiology (4)**

Pathologies and disorders of the auditory vestibular system, pure-tone testing, methods of speech audiometry, interpretation of audiometric data in terms of physical, social and educational effects. An introduction to aural rehabilitation.

**ASLS 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**ASLS 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**ASLS 515 Foundations of Research and Writing (1)**

Introduction to graduate-level writing and research strategies. Content includes identification of problems/research topics, use of library databases and web sources, organization of content, and use of current APA style.

**ASLS 516 Professional Issues in SLP (1)**

Professional issues in speech-language pathology as they relate to the public schools, medical settings and private practice. Topics include the law, ethics, risk management and third party reimbursement.

**ASLS 555 Neuroanatomy and Neurophysiology of Communication (3)**

Neuroanatomy-physiology related to speech, language and hearing; neuropathologies of the central nervous system and results of neurological insult.

**ASLS 563 Voice and Resonance Disorders (3)**

Etiologies and symptoms of dysphonia and laryngectomies, assessment and intervention strategies. Resonance disorders associated with cleft lip and palate and causes, including assessment and intervention in a team approach.

**ASLS 569 Advanced Diagnostic Procedures (1-2)**

Must be taken for a minimum of six credits. Perform speech-language screenings and diagnostic evaluations. Repeatable, maximum of eight credits.

**ASLS 570 Rehabilitative Audiology (2)**

Prerequisites: ASLS 478 or equivalent. Theory and procedures for rehabilitation of children and adults with hearing handicap.

**ASLS 571 Speech and Hearing Science (4)**

(3 lecture, 1 lab) Laboratory required. Models of speech production and perception, measurement techniques for simple and complex signals. Lab addresses application of models of speech production and perception to experimental and clinical situations.

**ASLS 572 Hearing Loss Prevention (3)**

The study of noise as it pertains to the auditory system. Physical aspects of noise, instrumentation, measurement and reduction principles, hearing conservation management.

**ASLS 573 Auditory Physiology (3)**

Undergraduate anatomy and physiology required. Advanced physiology of the human auditory system, emphasizing electrical potentials; processes of pathophysiology.

**ASLS 574 Clinical Practicum in Audiology (1)**

Prerequisites: 3.0 GPA in major courses or consent of clinical coordinator. Perform basic audiometric testing: audiometric screening, routine hearing evaluation and impedance audiometry. S/U graded.

**ASLS 580 Practicum in Rehabilitative Audiology (1-2)**

Habilitation/rehabilitation of acoustically-handicapped persons. Repeatable, maximum of six credits.

**ASLS 582 Educational Audiology (3)**

Explore services for hearing impaired children in the schools. Educational implications of auditory processing disorders are also covered.

**ASLS 583 Clinical Practicum: Introduction (1-2)**

Introduces students to issues related to treating individuals with speech and/or language disorders. Topics include writing treatment plans, evaluating clinical performance, working with supervisors, measuring outcomes, and risk management. S/U graded.

**ASLS 584 Screening Procedures in Speech-Language Pathology (1)**

Presents theory and procedures related to screening speech and language abilities in children and adults. Provides practice in implementing procedures in a variety of settings. S/U graded.

**ASLS 585 Clinical Practicum in Speech-Language Pathology: Intermediate (1-2)**

Prerequisite: ASLS 583. Students improve their clinical skills and learn about issues related to clinical practice, including ethics, counseling, self-evaluation, treatment notes, efficacy, counseling techniques, sharing information verbally and relating to diverse populations. Repeatable, maximum of eight credits.

**ASLS 586 Clinical Practicum in Speech-Language Pathology: Intermediate/Advanced (2)**

Prerequisites: ASLS 585. Students improve their clinical skills and learn about issues related to clinical practice, including continuing education, conflict resolution, data keeping methods, technology, and clinical research. Repeatable, maximum of four credits.

**ASLS 587 Advanced Audiology (3)**

Theory and practice of advanced techniques of audiometric assessment.

**ASLS 588 Clinical Practicum in Speech-Language Pathology: Advanced (2)**

Prerequisites: ASLS 586. Students improve their clinical skills and learn about issues related to clinical practice in medical settings, including interviewing, legislation, professional liability, marketing, clinical fellowship year, leadership, inservices.

**ASLS 592 Internship in Public Schools (2-15)**

Prerequisites: Minimum of 100 clock hours of previous supervised clinical experience and/or consent of advisor. Supervised full-time experience working with school children. S/U graded. Repeatable, maximum of 15 credits.

**ASLS 594 Practicum and Advanced Topics in Audiology (1-6)**

Prerequisite: ASLS 574. Perform the full range of clinical audiological services, including special testing, hearing aid evaluations and dispensing of hearing aids. Repeatable, maximum of twelve credits.

**ASLS 615 Research in Audiology and Speech-Language Pathology (1-4)**

Engage students in systematic inquiry in communication disorders. Evaluate current research, pose research questions, formulate research designs, and develop formal research proposals. Advanced students conduct research and plan dissemination. Repeatable, maximum of 5 credits.

**ASLS 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**ASLS 655 Acquired Disorders of Language and Cognition (3)**

Prerequisite: ASLS 555. This course describes signs and symptoms, evaluation approaches, differential diagnostic criteria, prevention, and management approaches to speech and language disorders resulting from acquired neurological dysfunction across the lifespan.

**ASLS 656 Feeding and Swallowing Disorders: Lifespan (2)**

Prerequisite: ASLS 555. In-depth study of normal and disordered deglutition in adult and pediatric populations and dysphagia diagnosis and management.

**ASLS 657 Motor Speech Disorders: Lifespan (2)**

Prerequisite: ASLS 555. Etiologies and characteristics of motor speech disorders. Differential diagnosis and treatment of the disorders will be explored with pediatric and adult populations.

**ASLS 658 Assistive Technology for Communication Disorders (3)**

Describes assistive technology (AT) applications for individuals with limited/restricted verbal communication. Emphasis on multidisciplinary assessment Selection and use of low and high assistive technologies for communication and learning.

**ASLS 661 Articulation and Phonological Disorders in Children (3)**

Disorders of speech production in pediatric populations. Biological, cognitive, linguistic, and ethnocultural systems influencing speech production, contributing/causal factors, theories of acquisition, assessment and treatment issues.

**ASLS 664 Fluency Disorders (3)**

Characteristics of fluency and fluency disorders; biological, developmental, and environmental factors contributing to fluency disorders; models of and research in fluency disorders; assessment of fluency; and, treatment of fluency disorders.

**ASLS 668 Cochlear Implants (3)**

Advances in cochlear implant device circuitry, electrode design, speech processing strategies, candidacy, and rehabilitation are explored. The history and technological progression of cochlear implants are also reviewed.

**ASLS 671 Psychoacoustics (2)**

Prerequisite: ASLS 573. Concepts of loudness, adaptation, auditory fatigue, masking and the critical band, pitch perception, localization, temporal order and perceptual organization.

**ASLS 674 Audiology Practice Management (2)**

Introduction to issues and resources to manage an audiology practice. Topics of business planning, fiscal management, coding and third-party reimbursement, personnel management, marketing and professional communication, and working relationships.

**ASLS 675 Differential Diagnosis of Auditory Problems (3)**

Prerequisite: ASLS 573. Theory and process of differential diagnosis of hearing and auditory processing disorders. Focus on behavioral testing, advanced immittance concepts and assessment. Some exposure to other objective measures.

**ASLS 677 Medical Aspects of Audiology (3)**

Study of the medical correlates of hearing impairment including pathogenesis of auditory pathologies, medical/surgical intervention, pharmacology and ototoxicity, radiology and imaging techniques and effects of sedation on electrophysiologic tests.

**ASLS 678 Amplification I (3)**

Advanced study of the theory and use of hearing aids, other amplification devices and assistive listening devices.

**ASLS 681 Advanced Speech Physiology (3)**

Undergraduate anatomy and physiology required. Advanced physiology of the speech production system, emphasizing normal aspects. Select pathophysiological conditions.

**ASLS 682 Language Disorders in Early Childhood and Preschool (3)**

Language disorders from infancy through preschool. Application of contemporary theory and legislative mandates to assessment and treatment for infants and children demonstrating or at-risk for social-communicative-linguistic impairments.

**ASLS 684 Disorders of Language & Literacy: School-Age and Adolescent (3)**

In-depth study of impairments of oral language, reading, and written expression in school-age children and adolescents. Explores typical development, models of impairment, assessment and treatment.

**ASLS 685 Advanced Differential Diagnosis of Auditory Problems (3)**

Prerequisite: ASLS 675. Advanced study of auditory and vestibular physiology, otoacoustic emissions, multi-frequency tympanometry, auditory evoked potentials, and electronystagmography.

**ASLS 686 Capstone in Speech-Language Pathology (2)**

This seminar provides students the opportunity to complete in-depth study of an area of evidence-based practice, design a research study in that area, and present projects to faculty and peers.

**ASLS 688 Amplification II (3)**

Prerequisite: ASLS 678. A continuation of the advanced study of the theory, instrumentation, and use of hearing aids and assistive listening devices with emphasis on applied theory and clinical use.

**ASLS 690 Otopharmacology (2)**

Prerequisites: ASLS 555 and ASLS 677. Pharmacology and ototoxicity as applied to clinical audiology. Basic mechanisms of pharmacodynamics, pharmacokinetics and pharmacotherapeutics and classes of drugs relative to otologic disorders.

**ASLS 692 Internship in Medical Settings (2-16)**

Prerequisites: Minimum of 100 clock hours of previous supervised clinical experience and/or consent of advisor. Supervised full-time clinical experience in diagnosis/treatment of persons with speech, language and/or hearing disorders in medical settings. S/U graded. Repeatable, maximum of 16 credits.

**ASLS 699 Thesis: Communication Disorders (1-6)**

Individual original research under the direction of faculty, aimed at acquisition of research skills, appreciation of the scientific inquiry process, knowledge of scientific writing style and dissemination. S/U graded. Repeatable, no limitations.

**ASLS 715 Applied Research in Audiology (1-4)**

Prerequisite: ASLS 615. Seminar to engage students in a capstone research project. Students will also explore multiple avenues for the presentation of professional quality scholarly projects in audiology. S/U graded. Repeatable, maximum of four credits.

**ASLS 720 Supervised Teaching in Communication Disorders (2)**

Emphasis on teaching techniques and methods for college and university instruction. Repeatable, maximum of six credits. S/U graded.

**ASLS 771 Speech Perception and Advanced Signal Processing (2)**

Prerequisite: ASLS 671. Advanced study of psychoacoustics with special reference to disordered auditory systems. Current theories of speech perception will also be addressed.

**ASLS 774 Professional Issues in Audiology (2)**

Overview of professional responsibilities and intra-professional relationships in the hearing health care delivery system. Medical-legal issues, practice guidelines, licensure, intra-personal skills and ethics are addressed.

**ASLS 775 Advanced Electro-diagnosis (3)**

Prerequisites: ASLS 685. Advanced testing methods of the auditory and vestibular systems.

**ASLS 782 Pediatric Audiology (3)**

Philosophy, diagnosis, and management of hearing loss in children. Includes auditory development, appropriate hearing assessment techniques for infants and children, interpretation of results, administering follow-up, and effective caregiver counseling.

**ASLS 792 Externship in Audiology (3-12)**

Prerequisites: 16 credits of internship in any combination of ASLS 592 or ASLS 692, and consent of clinical coordinator. Full-time, broad-based clinical experience in the diagnosis, treatment, management and prevention of hearing loss in a supervised off-campus site. Enrollment is during the 4th year of the Au.D. program. S/U graded. Repeatable, maximum of 27 credits.

**ASLS 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**AST — ASTRONOMY****AST 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**BIO — BIOLOGY****BIO 501 Current Issues in Biology (1-6)**

Course varies in content, reviewing current issues of biology. S/U graded. Repeatable, under different subtitles, maximum of six credits.

**BIO 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.



**BIO 509 Advanced Placement Biology (2)**

Consent of instructor. Topics in biological sciences and pedagogy related to establishment and maintenance of a biology advanced placement program. S/U graded. Repeatable, no limitations.

**BIO 512 TA Development Seminar (1)**

Explores instructional strategies related to effective teaching of undergraduate laboratory learning environments. Intended to help develop teaching skills of graduate teaching assistants in the Biology program. S/U graded.

**BIO 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**BIO 521 Advanced Genetics (3)**

Prerequisites: BIO 220 and CHEM 331; recommend CHEM 481. Survey experimental advances in gene regulation of growth, maintenance and protection of all organisms including the human species with special emphasis on recent developments in the field.

**BIO 524 Genomics (3)**

(3 lecture) Fundamental concepts of genomics. Introduction to the tools and techniques in the field of genomics, including genetic transformation, DNA sequencing, cDNA library synthesis, microarray, bioinformatics and sequencing of model organisms.

**BIO 525 Molecular Genetics (3)**

(2 lecture, 3 laboratory) Prerequisites: BIO 220 and CHEM 481. Examination of protein synthesis, DNA replication, gene structure, and regulation of gene expression with particular emphasis on molecular techniques.

**BIO 526 Population Genetics (3)**

Prerequisites: BIO 111, BIO 220, MATH 131. Investigation of empirical and theoretical population genetics. Topics will include: mutation, selection, migration, drift, genomics, quantitative genetics, human genetics, gene families, linkage disequilibrium, coalescence, and molecular clocks.

**BIO 527 Bioinformatics (3)**

(3 lecture) Prerequisite: BIO 111, BIO 220. An Introduction to the information technology of genomics and proteomics and their application to biological fields as diverse as evolution and medicine.

**BIO 530 Plant Systematics (4)**

(3 lecture, 3 laboratory) Prerequisite: BIO 111. History of plant taxonomy, phylogenetic systematics, family recognition, and identification of local flora using keys. Native plant collection and field trips required.

**BIO 533 General Parasitology (4)**

(3 lecture, 3 laboratory) Prerequisite: BIO 101 or BIO 111. Study of the symbiotic relationships of parasitism as exemplified by typical parasites of humans, domesticated and wild animals, stressing life cycles, pathogenesis, systematics and host-parasite relationships.

**BIO 534 Mammalogy (4)**

(3 lecture, 3 laboratory) Prerequisite: BIO 111. Study of the functional biology, ecology and behaviors of mammals. Laboratory stresses the identification and ecology of Colorado species. Field work required.

**BIO 535 Survey of Fishes, Amphibians and Reptiles (4)**

(3 lecture, 3 laboratory) Prerequisite: BIO 111. Investigation of the biology of the cold-blooded vertebrates including their evolution, ecology and behavior. Laboratory stresses the identification and biology of Colorado species.

**BIO 537 Morphogenesis of Algae and Fungi (4)**

(3 lecture, 3 laboratory) Prerequisite: BIO 111. Study structure, morphogenesis and Phylogenetic relationships of organisms grouped with algae and fungi. Comparative study to explore multiple kingdom concepts. Ecological, medical and economic aspects of mycology and phycology explored.

**BIO 540 Anatomy and Morphogenesis of Plants (4)**

(3 lecture, 3 laboratory) Prerequisites: BIO 111 and BIO 330. Study of the evolution of vascular plants as revealed by anatomy and morphology.

**BIO 544 Comparative Vertebrate Adaptations (4)**

(3 lecture, 3 laboratory) Prerequisites: BIO 345 or consent of instructor. Study of the diverse adaptations of vertebrates, from morphological to molecular levels of organization; includes significant overview of relevant primary literature.

**BIO 545 Pathogenic Microbiology (3)**

This lecture course addresses medically-relevant microorganisms and disease. Particular emphasis is placed upon mechanisms of pathogenesis, including microbial virulence factors and immunopathology, epidemiology and public health.

**BIO 546 Pathogenic Microbiology Laboratory (1)**

Students will learn techniques for the isolation, propagation and identification of pathogenic microorganisms.

**BIO 547 Immunology and Disease (4)**

(4 lecture) Prerequisites: BIO 210 required. BIO 350 and BIO 351 recommended. Study the disease process and immunological resistance to disease with major emphasis on initiation and regulation of adaptive immunity.

**BIO 548 Virology (3)**

(3 lecture) Prerequisites: BIO 351. Recommend BIO 381. Study of the principles of virology, including biochemistry, structure, taxonomy, transmission, isolation and identification strategies.

**BIO 549 Virology Laboratory (1)**

(3 laboratory) Co-requisite: BIO 548. Study and development of laboratory skills in animal virology, including virus propagation, quantification, and detection assays.

**BIO 550 Cell Physiology (4)**

(3 lecture, 3 laboratory) Prerequisites: BIO 220 and CHEM 331, recommend CHEM 481. The study of the structural and functional relationships among biological macromolecules, cell organelles, and cell processes.

**BIO 552 Mammalian Physiology I (3)**

(3 lecture) Prerequisites: BIO 341 or BIO 345 and CHEM 481. In-depth examination of the physiological function of various organ systems of mammals.

**BIO 553 Mammalian Physiology II (3)**

(3 lecture) Prerequisites: BIO 341 or BIO 345 and CHEM 481. Continuation of BIO 552. In-depth examination of the physiological function of various organ systems of mammals.

**BIO 554 General Plant Physiology (4)**

(3 lecture, 3 laboratory) Prerequisites: BIO 111 and CHEM 331. Study physiological factors influencing the chemical and structural composition of plant absorption and utilization of water and minerals; photosynthesis, translocation, respiration, nitrogen metabolism and growth and development.

**BIO 555 Reproductive and Developmental Biology (3)**

Prerequisites: BIO 110 and CHEM 331, recommend CHEM 481. Examination of the anatomy, physiology and mechanisms of reproduction and development with an emphasis on mammals.

**BIO 556 Current Topics in Biomedical Research (2)**

Prerequisites: BIO 110 and CHEM 331; recommend BIO 450. Examine current biomedical research, molecular, cellular, and physiological studies of human and model systems. Mechanisms regulating normal function, effects of toxicants and drugs, and the role of genetic mutations.

**BIO 557 Mammalian Physiology I Laboratory (1)**

(3 laboratory) Co-requisite: BIO 552. Laboratory experimentation, small group discussion and active learning exercises to complement BIO 552.

**BIO 558 Mammalian Physiology II Laboratory (1)**

(3 laboratory) Co-requisite: BIO 553. Laboratory experimentation, small group discussion and active learning exercises to compliment BIO 553.

**BIO 559 Plant Reproductive Growth and Development (3)**

Prerequisite: BIO 354. Advanced study of the genetic, physiological and environmental factors that influence reproductive development in flowering plants.



**BIO 560 Behavioral Ecology (4)**  
(3 lecture, 3 laboratory) Prerequisite: BIO 362 or equivalent. Comprehensive review of population dynamics, behavioral ecology and zoogeography. Review of current literature an integral part of course.

**BIO 561 Plant Ecology (3)**  
(3 lecture) Prerequisites: BIO 110 and BIO 360. Examination of plant communities, effects of environmental factors on plants, as well as community measurement and evaluation, modeling techniques, energy flow through ecosystems, and community dynamics.

**BIO 563 Animal Communication (4)**  
(3 lecture, 3 laboratory) Prerequisites: BIO 362, an Animal Behavior course from another university, or consent of the instructor. Students should have a background in animal behavior, experimental design and statistics. The course covers animal communication theory, modalities, signal function, physiological and anatomical constraints, and evolutionary aspects regarding animal communication.

**BIO 564 Plant Ecology Lab (1)**  
(3 laboratory) Prerequisites: BIO 110, BIO 360 concurrently. Laboratory to accompany BIO 561 plant ecology. Examines methods of plant ecology including monitoring community structure and function, population dynamics, physiological tolerance, and data analysis. The lab will include both field and laboratory experiments.

**BIO 566 Animal Physiological Ecology (3)**  
(3 lecture) Prerequisites: BIO 110 and BIO 360. Study of animal function and how environmental conditions influence the physiology of animals. Emphasis will be on vertebrate systems but invertebrates will be included.

**BIO 567 Animal Physiological Ecology Laboratory (1)**  
(3 laboratory) Prerequisites: BIO 110 and BIO 360, BIO 566 concurrently. Laboratory to accompany BIO 566 - animal physiological ecology. Includes instruction on the theory behind and use of physiological equipment/instruments and an examination of how environmental conditions affect animal function.

**BIO 568 Disturbance Ecology (3)**  
(3 lecture) Prerequisites: BIO 110 and BIO 360. Study of natural and anthropogenic disturbances (fire, flood, insect outbreaks) effects on populations, communities and ecosystem function.

**BIO 569 Conceptual Issues in Evolution (2)**  
Prerequisite: BIO 465 or consent of instructor. Study of the guiding principles in modern evolutionary biology. Focus on concepts of fitness, selection, adaptation, form and function, concerted evolution and the nature of biological variation.

**BIO 570 Coevolution in Ecological Systems (3)**  
(3 lecture) Prerequisites: BIO 360, BIO 465 or consent of instructor. Survey of contemporary primary literature on coevolution and ecology, including symbiosis, mutualism, competition, pollination, mimicry, parasitism, seed dispersal, etc.

**BIO 572 Species and Speciation (2)**  
(2 lecture) Prerequisite: BIO 465 Examination of the theoretical and pragmatic perspectives of species recognition and critical review of speciation. Includes considerations of species recognition in context of conservation biology.

**BIO 576 Pharmacology (3)**  
Prerequisite: BIO 246, BIO 350, BIO 552 BIO 553, or ASLS 573. A mechanistic study of pharmacokinetics (absorption, distribution, metabolism and excretion of drugs) and pharmacodynamics (drug actions and interactions). Examples of important bioactive chemicals will be discussed.

**BIO 580 Mammalian Endocrinology (3)**  
(3 lecture) Prerequisites: BIO 210 and BIO 350. Survey of endocrinology including neuroendocrine physiology, mechanisms of action, regulation of homeostasis, endocrine dysfunction, quantifying hormones.

**BIO 581 Neurobiology (3)**  
(3 lecture) Prerequisite: BIO 350 or consent of instructor. Examination of the development, anatomy, and physiology of the nervous system, with an emphasis on humans. Topics will include mechanisms mediating behavior and major brain diseases.

**BIO 585 Topics in Field Biology (1-10)**  
After preparatory work, study biology in the field on a state, national or international basis.

**BIO 591 Biology Roundtable (1)**  
An intensive facilitated discussion on current and cutting-edge topics in the Biological Sciences taken from peer-reviewed literature and input from visiting scholars. S/U graded. Repeatable, no limitations.

**BIO 592 Internship in Biological Sciences (1-3)**  
Consent of instructor required. On-the-job experience in professional areas under the supervision of an area specialist. S/U graded.

**BIO 594 Foundations of Biological Research (2)**  
Required for all incoming master's students in biological sciences. Introduction to the scientific method and experimental design, written and oral presentation skills, grantsmanship, ethics and responsible scientific conduct.

**BIO 595 Special Topics in Biology (1-6)**  
Study of any biological topic at an advanced level. Repeatable, maximum of six credits.

**BIO 622 Directed Studies (1-4)**  
Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable under different subtitles, maximum concurrent enrollment is two times.

**BIO 691 Seminar in Biological Sciences (1)**  
(1 lecture) Invited speakers will present research topics in content biology and biology education. Graduate students will also present their research proposals and final defenses of their theses or dissertations. Repeatable, no limitations.

**BIO 697 Graduate Research (1-6)**  
Consent of instructor. Qualified graduate students spend a minimum of 38 clock hours per semester hour on a research problem. Before credit is given, a well-written report must be submitted to the instructor.

**BIO 699 Thesis (1-6)**  
S/U graded. Repeatable, no limitations.

**BIO 792 Doctoral Supervised Teaching (1-6)**  
Experience supervised college level biological sciences teaching. Develop course outlines and effective teaching techniques. Students must have completed oral and written comprehensive exams prior to being eligible for this course.

**BIO 797 Doctoral Proposal Research (1-4)**  
Four credits required of all doctoral students before admission to candidacy. S/U graded.

**BIO 799 Doctoral Dissertation (1-12)**  
Twelve credits required of all doctoral candidates. S/U graded.



## CH — COMMUNITY HEALTH

**CH 303 Health Education in the Elementary School (1)**  
Prerequisite: Provisional admission to PTEP or EDFE 110. Examines the foundations in coordinated school health programs and teaches skills in integrating health into elementary schools.

**CH 500 Stress Management (3)**  
A holistic approach to stress management, with cognitive and theoretical knowledge and stress reduction techniques to prevent or alleviate physical symptoms of stress.

**CH 505 Health Communications and the Media (3)**  
Focuses on the design, production, evaluation and acquisition of appropriate media and materials for health education/promotion programs.

**CH 508 Workshop (1-3)**  
A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**CH 509 Seminar in Health Behavior (3)**

Review theories of behavior and behavior change as they relate to current health issues. Health behavior change models will be examined and applied. Repeatable, no limitations.

**CH 510 International Health: Cross Cultural Comparisons (3)**

This class explores the multi-cultural aspects of health and international comparisons of various health indicators. Students will examine specific health problems, and the nature of health care delivery worldwide.

**CH 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**CH 515 Grant Writing for Health Professionals (3)**

Overview of grant proposal development process. Develop skills in identifying funding needs and sources, methodology, management plans, budgeting and evaluation. Collaboration with local agencies and faculty.

**CH 520 Foundations in Public Health (2)**

Examines historical and conceptual bases of public health, key issues and problems faced by the public health system, and tools available for protection and enhancement of the public's health.

**CH 530 Seminar in Health Promotion Strategies (3)**

Prerequisites: CH 509, CH 560 or consent of instructor. Examines the effectiveness of a wide range of strategies used in health promotion/disease prevention programs. Current literature/programs are presented and reviewed.

**CH 540 Principles of Health Program Management (3)**

Prepares students to assume a supervisory role in the management of health and human services programs. Course covers planning, decision-making, organization, budgeting, marketing, human resource management, leadership.

**CH 550 Environmental Health (3)**

Investigate and discuss the relationships of environmental health problems to human health and welfare. Include sources of these problems, their recognition and control and current research studies.

**CH 560 Scientific Foundations of Health Promotion/Disease Prevention (3)**

Examine epidemiological, physiological and intervention studies from the USA and other countries to develop a scientific basis for health promotion and disease prevention.

**CH 570 Field School (3-6)**

Consent of instructor. Experience in rural health and human services related to working with marginalized populations. S/U graded. Repeatable. Field trip fee required.

**CH 610 Program Planning and Evaluation (3)**

Prerequisite: CH 530 or consent of instructor. Theories and practices of program planning and evaluation including needs assessment, planning approaches, selection of strategies, data collection and analysis, evaluation design, program implementation and utilization of evaluation data.

**CH 620 Epidemiology (3)**

Prerequisite: SRM 617. Epidemiological principles analyzed with an emphasis on selected topical issues, infectious and chronic/degenerative diseases, research design and analysis. Practical applications of statistical and epidemiological methods.

**CH 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**CH 625 Public Health Administration and Policy (3)**

Analyze the organization and administration of public health agencies at national, state and local levels. Major public health problems, including administrative and policy decisions regarding their resolution, will be included.

**CH 686 MPH Masters Project (2)**

Prerequisite: CH 693 (or concurrent) and consent of instructor. Independent project in which student demonstrates public health competencies. Includes public presentation of capstone paper.

**CH 692 Graduate Internship (3-6)**

Prerequisites: CH 610 and consent of advisor. Supervised experience at a health agency that allows the student to put into practice knowledge and skills learned in the classroom. S/U graded. Repeatable, maximum of six credits.

**CH 693 MPH Practicum (2)**

Prerequisites: CH 520, CH 610 (or concurrent) and consent of instructor. MPH students must successfully demonstrate competencies and integrate knowledge. Through this practicum, theory and skills will be applied in a public health setting.

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

Optional for Master of Public Health candidates in Health Education. Repeatable, no limitations.

**CH 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**CHEM 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**CHEM 509 Advanced Placement Institute in Chemistry (2)**

Consent of instructor. Topics in chemistry content and pedagogy appropriate to the establishment, development and maintenance of an advanced placement program in chemistry. S/U graded. Repeatable, no limitations.

**CHEM 510 Green Chemistry for Secondary Educators (3)**

(2 lecture, 3 laboratory) Applications of green chemistry principles to secondary science classrooms, techniques for recycling chemicals, reducing hazardous chemical use and waste. Must have completed 1 year of general chemistry.

**CHEM 522 Advanced Analytical Chemistry (3)**

Prerequisite: CHEM 321. Advanced topics in analytical chemistry, including sampling, statistics, multiple equilibria and current literature.

**CHEM 523 Chemical Spectroscopy (3)**

Prerequisites: CHEM 321 and CHEM 332. Theory and application of IR, NMR, UV-visible and mass spectroscopy.

**CHEM 533 Organic Synthesis and Stereochemistry (3)**

Prerequisite: CHEM 332. An advanced treatment of synthesis and stereochemistry in organic chemistry.

**CHEM 534 Theory and Mechanisms of Organic Reactions (3)**

Prerequisites: CHEM 332, CHEM 452. An advanced treatment of organic reaction mechanisms and molecular orbital chemistry.

**CHEM 543 Organometallic Chemistry (3)**

Prerequisite: CHEM 441. An introduction to organometallic systems will be presented. Included will be a comprehensive study of the preparation, properties and practical utility of both main-group and transition metal organometallic compounds.

**CHEM 551 Physical Chemistry I (4)**

Prerequisites: CHEM 332, MATH 233, PHYS 241. Co-requisites, CHEM 321. Chemical kinetics, quantum theory of atoms and molecules and statistical thermodynamics.

**CHEM 552 Physical Chemistry II (4)**

Prerequisite: CHEM 551. The properties of matter, thermodynamics, thermochemistry and kinetic molecular theory.

**CHEM 556 Physical Chemistry of Atomic and Microscopic Systems (3)**

Prerequisites: CHEM 451 and CHEM 452. This course will examine the details of atomic and molecular structure, energetics, and dynamics.

**CHEM 560 Environmental Chemistry (2)**

(1.5 lecture, .5 laboratory) Prerequisite: CHEM 331. The effect of chemicals on the environment.

**CHEM 581 General Biochemistry I (4)**

Prerequisite: CHEM 332 or equivalent. Chemistry of biologically important compounds (proteins, nucleic acids, carbohydrates and lipids), emphasizing structure and function, methods of isolation, identification and characterization, kinetics and mechanisms of enzyme catalysis.

**CHEM 582 General Biochemistry II (4)**

Prerequisites: CHEM 581. A continuation of CHEM 581. Bioenergetics, electron transport systems, metabolism of carbohydrates, lipids, nucleotides and amino acids.

**CHEM 587 Toxicology (3)**

Prerequisites: CHEM 482 or equivalent. A descriptive examination of the toxic effects of environmental substances on living systems.

**CHEM 590 Advanced Topics in Chemistry (3)**

Discussion of a topic in chemistry at the graduate level; e.g. polymers, drug metabolism, and molecular reaction dynamics. Repeatable, maximum of 12 credits, under different subtitles.

**CHEM 600 Seminar in Chemistry (1)**

Oral report and discussion on an advanced topic in chemistry or chemical education. Repeatable, may be taken three times.

**CHEM 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**CHEM 682 Problems in Teaching Chemistry (3)**

Problems encountered in teaching chemistry and approaches to their resolutions will be considered. The formal nature of concepts, management of laboratories, safety, demonstrations are illustrative of areas of discussion.

**CHEM 693 Chemical Research (1-10)**

Develop, complete, and defend master's level research project in chemistry. S/U graded. Repeatable, maximum of ten credits.

**CHEM 695 Thesis Proposal (1)**

The student will develop a committee approved research proposal based on current literature.

**CHEM 699 Thesis (1-9)**

Required of candidates in M.S. Research emphasis program. Repeatable, maximum of 9 credits.

**CHEM 755 Supervised Practicum in College Teaching (1-6)**

Supervised practice in college teaching for doctoral candidates with observation used as a basis for analysis of learning experiences. Repeatable, maximum of six credits.

**CHEM 793 Doctoral Research Practicum-Chemistry (1-4)**

Consent of advisor. Provides experience in the development and implementation of research techniques, the development of experimental design and the analysis of research data. S/U graded. Repeatable, maximum of 16 credits.

**CHEM 797 Doctoral Research Proposal-Chemistry (1-4)**

Required of all doctoral students. Students may register for this course (1-4 hours) in any semester, but must earn 4 hours of credit in partial fulfillment of requirements before admission to candidacy. S/U graded. Repeatable, maximum of four credits.

**CHEM 799 Doctoral Dissertation-Chemistry (1-12)**

Required of all doctoral candidates. See Ph.D. in Chemical Education - Minimum requirements for the major in the Graduate School section of this Catalog. Repeatable, maximum of 12 credits.



## COMM— COMMUNICATION STUDIES

**COMM 502 Teaching College COMM Courses (1)**

Required of all graduate teaching assistantships in COMM. S/U graded. Repeatable, maximum of three credits.

**COMM 504 Rhetorical Theory (3)**

Systematic review of the major contributions of rhetorical theorists for their probable impact on communication.

**COMM 512 Persuasion (3)**

Investigate the implications of contemporary research and theory in the area of persuasion and attitude change.

**COMM 514 Interpersonal Communication (3)**

An overview of current theoretical perspectives on interpersonal communication and representative supportive research.

**COMM 515 Group Communication (3)**

Examine theories of group process, major group process research findings and how the principles derived from communication literature can be applied to small groups.

**COMM 517 Organizational Communication (3)**

Examine theories of organizing, research findings on organizational communication and how the principles derived from communication impact institutions.

**COMM 531 Communication and Leadership (3)**

Examine theories of leadership, major leadership research findings and various leadership methods. Consider how the principles derived from leadership literature can be applied to small group and organizational settings.

**COMM 541 Courtroom Communication (3)**

Investigate the relationship between communication and the law and legal argumentation and persuasion within courtroom advocacy. Analyze communication within the legal profession.

**COMM 542 Seminar in Political Communication (3)**

Graduate students only. Analysis and criticism of political discourse using theories and methods from the discipline of communication.

**COMM 553 Professional Speaking (3)**

Prerequisites: COMM 100, COMM 103. Theory and practice of advanced speech composition, presentational decisions and techniques in a variety of contexts.

**COMM 561 Seminar in Communication (1-3)**

Investigate issues of current concern, for COMM professionals with subject varied according to faculty expertise. Repeatable, under different subtitles.

**COMM 592 Internship (1-3)**

Receive professional communicative experience. Submit a proposal to the Internship Coordinator six weeks before registration. Hours may not be credited to 30 basic hours in communication graduate program. Repeatable, maximum of six credits.

**COMM 600 Graduate Study in Communication (3)**

Orientation to graduate study with emphasis on learning to conduct literature reviews using the major journals of the communication discipline. Introduction to research using quantitative, qualitative and rhetorical approaches.

**COMM 601 Qualitative Methods in Communication Research (3)**

Orientation to the methods of qualitative research that are most frequently used in the communication discipline. Practical experience in data gathering and analysis procedures.

**COMM 602 Quantitative Methods in Communication Research (3)**

Orientation to the methods of quantitative research that are most frequently used in the communication discipline. Practical experience in data gathering and analysis procedures.

**COMM 603 Communication Theory (3)**

The study of current theories of human communication and the process of theory building.

**COMM 605 Rhetorical Criticism (3)**

Systematic review of the major contributions of rhetorical criticism theorists for their probable impact on communication.

**COMM 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.



**COMM 641 Communication and Technology (3)**

This course is designed to explore issues surrounding the emergence of new technologies and the evolution of the mediated communication process.

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

Optional for Master of Arts candidates on recommendation of major advisor. S/U graded. Repeatable, no limitations. /U graded. Repeatable, no limitations.


**CRJ — CRIMINAL JUSTICE**
**CRJ 523 Problem Oriented Policing and Problem Solving for the 21st Century (3)**

An in-depth examination of the relationship between law enforcement and social problems. Techniques for identifying and analyzing social problems from a law enforcement perspective.

**CRJ 550 Organization and Management of Criminal Justice (3)**

Prerequisites: CRJ 560, SOC 544. Explores the spectrum of criminal justice administration: law enforcement, corrections, and the courts. Topics include financial administration, employee supervision and discipline, civil liabilities, labor relations, professional ethics, and emerging technologies.

**CRJ 560 Seminar in Criminology and Crime Policy (3)**

Corequisite: LIB 550. Advanced study of criminological theories using a broad interdisciplinary perspective. Explain and critique current crime control and crime prevention strategies as they relate to theory, policy, and practice.

**CRJ 580 Advanced Research Methods for Criminal Justice (3)**

Prerequisite: CRJ 550. Scientific method of inquiry applied to the study of crime. Emphasis on questions inherent in the study of contemporary issues in criminal justice programs and policies.

**CRJ 582 Statistics for Criminal Justice Research (3)**

Prerequisite: CRJ 580. Application of statistical methods for identifying and classifying data; determine appropriate statistical techniques for particular data, know why procedures give the results they do, and interpret output of statistical analyses.

**CRJ 610 Criminal Justice Planning, Policy and Change (3)**

Prerequisite: CRJ 582. Focus on strategic planning and policy involving multiple stakeholders in environments of change. Emphasis on the uncertainty and interconnectedness between criminal justice and other public, private, and not-for-profit organizations.

**CRJ 697 Capstone Project (3)**

Prerequisite: CRJ 610. Option to CRJ 699 on recommendation of student's advisor. Students complete an advisor approved research project with practical implications relevant to the student's professional interests.

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

Prerequisite: CRJ 610. Option to CRJ 697 on recommendation of student's advisor. Especially for students applying to doctoral programs. Individual original research aimed at acquisition of research skills and application of theory. S/U graded. Repeatable.

**EDEC — EARLY CHILDHOOD EDUCATION****EDEC 539 Parent Education and Involvement in Early Childhood/Primary (3)**

Deal with relationships between parents, children and teachers stressing parent involvement in education and resources for promoting children's success in school.

**EDEC 562 Classroom Management in Early Childhood (3)**

Juniors or above. Examine those components of effective classroom management procedures with children in groups. Topics include theoretical perspectives, rules and organization, pro-social behavior and effective pedagogical decisions.

**EDEC 601 Practicum (1-3)**

Supervised professional activity in early childhood education, approximately two hours per day. A well-written paper must be filed before credit is given. Repeatable, maximum of six credits.

**EDEC 620 Educational Applications of Child Development in Early Childhood Classrooms (3)**

Study of applications of child development theories and research. Acquisition of knowledge and skills to analyze classroom practice and to apply theory and research to best practice.

**EDEC 660 Critical Issues in Early Childhood (3)**

Investigating trends and issues concerning the young child, stressing curriculum, sound education policies, especially the need for cultural diversity, as well as issues of compelling contemporary significance.

**EDEC 670 Curriculum and Instruction in Early Childhood and Primary Education (3)**

Examine components of effective instruction in early childhood and primary levels, including theoretical bases, environment, organization and management, teacher's role, curriculum content and evaluation. Relevant research is investigated.

**EDEC 675 Play and Psychosocial Development in Early Childhood (3)**

Focus on theories of play in socio-drama, therapy and cognition. Motor, emotional and psychosocial development explored. Play of successive development phases and individual meaning for each child emphasized.

**EDEC 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**EDEL — ELEMENTARY EDUCATION****EDEL 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**EDEL 520 Effective Instruction in Elementary School Mathematics (3)**

3.00 GPA required. A comprehensive examination of issues, trends and practices in elementary school mathematics programs, including instructional strategies, planning, development, materials and evaluation. Emphasis on promoting problem solving in school mathematics curriculum.

**EDEL 525 Integrated Methods: Visual Arts, Music and Physical Education (1-3)**

3.00 GPA required. Integration of visual art, music and physical education. Students learn discipline specific instruction techniques, strategies, activities and content knowledge to effectively integrate these areas across the curriculum.

**EDEL 540 Effective Instruction in Elementary School English/Language Arts (3)**

3.00 GPA Required. Examines acquisition of English as a basis for effective instruction: handwriting, spelling, oral and written composition. Considers methods, materials, selection and placement of content, diagnosis and evaluation for individual differences.

**EDEL 544 Elementary Student Teaching and Capstone Seminar (1-12)**

Prerequisites: Full admittance to PTEP required. Meets student teaching requirement for certification. S/U graded. Repeatable, maximum of 12 credits.

**EDEL 550 Effective Instruction in Elementary School Social Studies (3)**

3.00 GPA Required. In-depth consideration of issues, problems and practices in the elementary social studies classroom, including instructional strategies planning, materials and evaluation. Emphasis on thinking in a pluralistic democratic society.





## EDF — FOUNDATIONS OF EDUCATION

### **EDEL 601 Practicum and Capstone Seminar in Elementary Education (3)**

Provides opportunities for students to collaborate in the completion of a teacher research project, revise the curriculum development project, finalize the professional portfolio, prepare for and take the comprehensive examination.

### **EDEL 602 Elementary School Practicum (1-3)**

Prerequisites: EDFE 125 and 3.00 GPA required. This practicum is designed to immerse students in the elementary school classroom. Opportunities are provided to inquire, analyze and reflect on classroom routines.

### **EDEL 612 Elementary School Curriculum (3)**

A review and analysis of competing conceptualizations of the elementary-school curriculum. Teachers develop, implement, and evaluate curriculum in elementary classrooms. Current topics, trends and issues in curriculum are explored.

### **EDEL 613 Integrated Curriculum (3)**

Theory, design, development, implementation and evaluation of integrated curriculum. Students develop interdisciplinary units of study and learn active learning strategies and techniques consistent with an effective rationale for integrated curriculum.

### **EDEL 619 Pluralism in Education (3)**

Assists student in recognizing need for creating processes that enable children, educators and others to support and design a culturally and socially diverse curriculum.

### **EDEL 620 Researched Applications for Instruction in Mathematics, K-9 (3)**

Consider in detail the problems concerned with selection of what to teach, grade placement of content, methods and materials for teaching and means of evaluating achievement in mathematics.

### **EDEL 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

### **EDEL 640 Instruction in Language Arts and Literacy in the Elementary School (3)**

Teachers develop their abilities as readers, writers and thinkers as they examine current research and practice in language arts and literacy instruction.

### **EDEL 645 Assessment of Language Arts and Literacy in the Elementary School (3)**

Prerequisite: EDEL 640 and teaching experience. A consideration of problems, trends, and issues in the assessment of language arts and literacy. Focus on reading and writing as integrated processes.

### **EDEL 650 Researched Application for Instruction in Social Studies, K-9 (3)**

Designed for experienced teachers, course focuses on strategies for improving social studies curriculum and instructions. Studies trends, issues and research affecting educating children for citizenship in a pluralistic/democratic society.

### **EDEL 725 Seminar in Elementary School Mathematics (2)**

Prerequisite: EDEL 520 or EDEL 620. Cover important problems in the teaching and supervision of mathematics in the elementary school. Content may vary from year to year according to needs of participants. S/U graded.

### **EDEL 745 Seminar in Elementary School English (2)**

Prerequisite: EDEL 540. Advanced study and original research in teaching English/language arts in the elementary and middle school. S/U graded.

### **EDEL 755 Seminar in Elementary Education Social Studies (2)**

Prerequisite: EDEL 550 or EDEL 650. A consideration of the research applicable to crucial issues in elementary social studies including the child's development of key concepts, values, morals and skills; curriculum development and evaluation. S/U graded.

### **EDEL 790 Supervised Practicum in College Teaching (3)**

Experience in observation and supervised practice of college teaching for doctoral candidates planning to teach at college level. Observations and experiences used as basis for analysis of learning experiences. S/U graded. Repeatable, maximum of six credits.

### **EDEL 797 Doctoral Proposal Research (1-4)**

Required of all doctoral students. Students must earn 4 hours of credit for doctoral dissertation research proposal in partial fulfillment of requirements for doctoral degree before admission to candidacy. S/U graded. Repeatable, maximum of four credits.

### **EDEL 799 Doctoral Dissertation (1-12)**

Required of all doctoral candidates. Students must earn 12 hours of credit for the dissertation in partial fulfillment of requirements for the doctoral degree. S/U graded. Repeatable, no limitations.

### **EDEL 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

### **EDF 500 Conceptions of Schooling (3)**

Co-requisite: EDFE 125. Investigation of social contributions of schools. Determination of what the public expects from local schools, assessing how accurately present systems meet public's expectations and individual implications for teaching.

### **EDF 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

### **EDF 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

### **EDF 601 Discourse Analysis in Language and Literacy Research (3)**

Prerequisites: SRM 680. An introduction to the theory and methods of microethnographic discourse analysis approaches to the study of language and literacy events. Students will be encouraged to pursue their individual research interests in work for the course.

### **EDF 610 Teacher Research (3)**

Provides teachers with an analytic framework for understanding different types of teacher research as well as strategies and techniques for conducting research in K-12 schools.

### **EDF 619 Pluralism in Education (3)**

Assists student in recognizing need for creating processes that enable children, educators and others to support and design a culturally and socially diverse curriculum.

### **EDF 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

### **EDF 640 Psychological Foundations of Education (3)**

Exploration and analysis of possible range of assumptions about nature of human activity (thinking, behaving, feeling) and implications of those assumptions relative to educational enterprise.

### **EDF 662 Foundations of Curriculum Development & Instructional Practice (3)**

Examines nature and scope of curriculum planning, instructional design, decision-making, and implementation. Delivery and instruction of a curriculum, the process for changing curriculum are investigated.

**EDF 664 Current Issues in Instruction and Assessment Practices (3)**

Examine current issues in instructional and assessment practices, from social and historical and political perspectives; focus on the research literature on instruction and assessment practices.

**EDF 685 Philosophical Foundations of Education (3)**

Examine leading contemporary and classical philosophical systems and how they culminate in practical educational goals, systems of justification and practices. Includes the study of educational aims and values.

**EDF 670 Introduction of Research Literature (3)**

Examines roots of educational research, its evolution in context of educational reform. Conceptual base in the interpretation, application, and dissemination of current and emerging literature.

**EDF 700 Implementation & Evaluation of Curriculum (3)**

Analysis of major concepts as related to the implementation and evaluation of curriculum. Covers models of curriculum design and strategies for implementing and evaluating curriculum.

**EDF 701 Doctoral Seminar (1)**

Focus of the seminar changes. It helps doctoral students to identify research methods, dissertation topic and design, conceptual framework, hypothesis, research and writing strategies. Repeatable.

**EDF 790 Supervised Practicum in Professional Teacher Preparation (3)**

Prerequisites: Teaching experience at the appropriate school level (elementary or secondary), student must have approval from either the Elementary or Secondary Program Coordinator. Course is designed for the doctoral student who elects to teach in teacher preparation programs.

**EDF 797 Doctoral Proposal Research (1-4)**

Candidate must earn a minimum of 4 credit hours for doctoral proposal research in partial fulfillment of the requirements for the degree.

**EDF 799 Doctoral Dissertation (1-12)**

Candidate must earn a minimum of 12 credit hours for the dissertation in partial fulfillment of the requirements for the degree.

 **EDFE —  
EDUCATIONAL FIELD  
EXPERIENCES**

**EDFE 125 Admission to PTEP**

**Application, Post baccalaureate (0)**  
Prerequisite: Prerequisites: 3.0 GPA, graduate status. Submit Fingerprint card, Oath and Consent Form, current TB test, proof of oral/written proficiency, proof of registration for PLACE or PRAXIS, major advisor approval form. S/U graded.

**EDFE 130 Student Teaching Application (0)**

Prerequisite: EDFE 120 or EDFE 125. Submit to STE office in one package: Current TB test, PLACE or PRAXIS exam results and complete on-line Request for placement. Subject to approval by major content advisor. S/U graded.

**EDFE 501 Practicum (1-4)**

Full admittance to PTEP or certification at undergraduate level required. Arrange with instructor. Undertake educational field studies in school settings, either individual or team oriented and focus on practical and relevant assessment of needs in teacher education. S/U graded. Repeatable, no limitations.

**EDFE 554 Secondary Practicum**

Prerequisites: EDFE 125 required. The course provides teacher candidates with opportunities to observe, participate in, analyze, and reflect on teaching and learning in secondary school and classroom settings.


**EDFE 555 Supervised Student Teaching (9)**

Prerequisites: EDFE 130. Meets student teaching requirement for certification. Graduate students only. S/U graded.

 **EDI — EDUCATIONAL  
INTERPRETING**

**EDI 513 — Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable under different subtitles.

 **EDLD — EDUCATION  
OF LINGUISTICALLY  
DIFFERENT**

**EDLD 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**EDLD 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**EDLD 592 Second Language Acquisition Theory (3)**

Designed for educators who are preparing to teach or who are already teaching, English Language Learners. Introduces students to the existing body of theory related to second Language Acquisition.

**EDLD 593 Language, School and Society (3)**

Designed for educators who are preparing to teach, or are already teaching, English Language Learners. Primary focus is on the interactions between society, language, and institutions of schooling.

**EDLD 594 Foundations of Language and Linguistics for ESL/Bilingual Educators (3)**

Provides teachers of English language learners with an introduction to linguistics and its application in the ESL classroom: linguistic concepts about oral and written language use and development.

**EDLD 600 Literacy and Content Instruction in Spanish Bilingual Classrooms (3)**

Prerequisite: Fluency in Spanish as indicated by the Oral Proficiency Exam. Designed for educators who are preparing to teach, or are already teaching Spanish speaking children. Primary focus is on literacy strategies and content area knowledge used in the bilingual classroom.

**EDLD 602 Teaching Linguistically Diverse Learners (3)**

This course will introduce future teachers to the theoretical, practical, and legal aspects of the education of students who speak English as a second language.

**EDLD 603 Methods and Assessment for ESL and Bilingual Education (3)**

Prerequisite: EDLD 602. This course will introduce students to the use of assessments and procedures and to teaching methods appropriate when working with linguistically diverse students.

**EDLD 604 Field Experience in TESOL and Bilingual Education (3)**

Prerequisites: EDEL 619, EDLD 602 and EDLD 603. Provides teachers with the opportunity to observe and participate in instructional strategies for English Language Learners.

**EDLD 605 Seminar in Bilingual Education and TESOL I (3)**

Prerequisites: SRM 600 or equivalent and at least six completed graduate credits in Bilingual/ESL. Study contemporary issues, research and practice in bilingual education and English as a second language.

**EDLD 606 Linguistically Diverse Students and the U.S. Educational System (3)**

Introduction to the history of education of linguistically diverse groups in the United States. Study of educational practices that affect their success and influences of language on schooling and culture.

**EDLD 607 Seminar in Bilingual Education and TESOL II (3)**

Capstone experience for the MAT: LDE Emphasis. Integrates content, pedagogy, and research methods knowledge with classroom teaching and other work-related experiences. Students complete a culminating experience project.

**EDLD 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**EDLD 746 Sociocultural Theories and Linguistically Diverse Education (3)**

Introduction to sociocultural theories of learning and development and their relevance for understanding and supporting effective teaching and learning among culturally and linguistically diverse students.

**EDLD 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**EDRD — READING****EDRD 510 Achieving Effective Instruction in Developmental Reading (3)**

3.00 GPA Required. Teaching/learning strategies, reading materials, selection, lesson planning and organizing for instruction in reading across the total curriculum constitute the focus of the course.

**EDRD 511 Elementary Reading Diagnosis and Individualization (3)**

3.00 GPA required. Course will emphasize diagnosis leading to instruction through a variety of approaches toward the end of enabling teachers to select appropriate methods/materials.

**EDRD 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**EDRD 523 Reading and Writing in the Content Areas (3)**

Full admittance to PTEP or certification at the undergraduate level required. Develop understanding of cognitive affective needs of middle and secondary students in reading and writing to learn. Develop sensitivity to individual needs. Participate in related field experiences.

**EDRD 611 Language, Literacy and Cognitive Development (3)**

Students examine the developmental nature of language, literacy and cognition birth to adulthood by reading and studying classic and current research. The impact of nature and nurture will be examined.

**EDRD 612 Reading in the Elementary Schools (3)**

Study of the nature of reading instruction, K-6 as reflected by current research, teaching and evaluation methods and techniques, published and teacher prepared materials, and effective classroom management.

**EDRD 614 Literature for Children, Adolescents and Young Adults (3)**

Considers locating and evaluating children's, adolescent, and young adult literature and methods of organizing, teaching, and evaluating a literature program. Examine issues such as censorship, multicultural literature, and style analysis.

**EDRD 615 Topical Seminar in Reading/Literacy (3)**

Advanced study, and inquiry, in Reading/Literacy education. Address landmark research, analysis and synthesis of past and present trends and issues, and scholarly pursuit of scholarly topic. Repeatable, may be taken four times, under different subtitles.

**EDRD 617 Evaluation and Improvements of Literacy Teaching and Learning (4)**

Prerequisites: EDRD 612 and EDRD 620 or equivalent for Reading Education majors. Develop an understanding of the educationally disabled reader and writer in elementary and secondary school. Explore diagnostic and instructional strategies. Required tutoring experiences.

**EDRD 620 Reading in the Middle and Secondary Schools (3)**

Introduction to reading skills and reading requirements in developmental reading and subject-matter classes in the middle and secondary school. Examine instructional strategies and evaluation procedures as reflected by research.

**EDRD 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**EDRD 642 Teaching the Writing Process in Schools (3)**

Assist classroom teachers with children's writing process. Emphasis on: writing process; encouragement of process development; children's growth in writing process; and, recording, assessing, and reporting student progress.

**EDRD 645 Reading Research (3)**

Study research procedures and their application to reading education. Critique reading research and reading programs and practices. Develop and present a research project in the area of reading/literacy.

**EDRD 670 Directing a School-Wide Reading/Literacy Program (3)**

Seminar course intended to prepare reading teachers, specialists, coordinators and administrators for directing textbook adoption, curriculum development and issues, staff development, evaluation and supervision of reading/writing programs.

**EDRD 692 Clinical Practicum in Literacy Coaching (4)**

Prerequisites: EDRD 617. Supervised clinical instruction of elementary/middle/secondary school disabled readers. Continued professional development, in the areas of collegial communications, reflective coaching, and leadership capacity. May be completed at each level. Repeatable for a maximum of 12 hrs.

**EDRD 693 Capstone Reading Seminar (1)**

Prerequisites: Register final semester of coursework for MA in Reading. Explores major trends in reading education; synthesis and assimilation of information gleaned from all courses in the MA in Reading Program. S/U graded.

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

Optional for Master of Arts programs on recommendation of major advisor. Successful completion of a formal thesis paper and oral defense required. S/U graded. Repeatable, no limitations.

**EDRD 745 Topical Seminar in Reading/Literacy (2-4)**

Advanced study and inquiry, in Reading/Literacy education. Address landmark research, analysis and synthesis of past and present trends and issues, and scholarly pursuit of scholarly topic. Repeatable, may be taken four times, under different subtitles.

**EDRD 750 The Contributing Professional in Reading (3)**

Designed for Reading/Literacy professional completing doctorate. Encourages and examines professional contributions encompassed within the reading/literacy field including scholarly activities, organizational memberships, and service roles.

**EDRD 795 Supervised Practicum in College Teaching (3)**

Experiences in observation and supervised practice in college teaching to be used as basis for analysis of learning experiences. S/U graded. Repeatable, maximum of nine credits.

**EDRD 797 Doctoral Proposal Research (1-4)**

Required of all doctoral students. Students must earn 4 hours of credit for doctoral dissertation research proposal in partial fulfillment of requirements for doctoral degree before admission to candidacy. S/U graded. Repeatable, maximum of four credits.

**EDRD 799 Doctoral Dissertation (1-12)**

Required of all doctoral candidates. Students must earn 12 hours of credit for the dissertation in partial fulfillment of requirements for the doctoral degree. S/U graded. Repeatable, no limitations.



**EDRD 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program.  
S/U graded. Repeatable, no limitations.

**EDSE — SPECIAL EDUCATION****EDSE 308 Workshop in Special Education (1-3)**

For beginning teachers and clinicians. Topics will include observation, techniques, programming, community relations, child development as related to exceptional children and evaluation for placement. Repeatable, under different subtitles.

**EDSE 430 Exceptional Student in the Elementary Classroom (2)**

EDFE 110 or EDFE 120 or EDFE 125. Provide elementary level licensure candidates current research/practices related to students with exceptionalities. Identify/adapt instruction for students with a wide range of disabilities. Field experience will be used extensively.

**EDSE 500 Field of Special Education (3)**

Historical development and present status of individuals with disabilities and those who are gifted. Focus on communication, parent involvement, finance, legal issues, ethics/professionalism and trends in special education.

**EDSE 501 The Exceptional Learner (3)**

Basic issues in dynamics of learning and evaluation related to exceptionality. Emphasizes understanding learning and evaluation processes for purposes of individual and group educational planning.

**EDSE 502 Communication, Collaboration and Consultation for Special Educators (3)**

Develop skills in intrapersonal/interpersonal dynamics in serving exceptional learners. Focus on communication, collaboration and consultation in the context of multicultural educational settings along a continuum of special education.

**EDSE 503 Effective School Environments for Learners with Exceptional Needs (3)**

Study of components of effective schools and the relationship to child, family, community and professionals. Roles of special educators and different service delivery models presented and analyzed.

**EDSE 504 Transition Planning and Service Delivery for Students with Special Needs (3)**

Provide theoretical framework in transition process from school to adult life including historical/legal, planning, curricular, interagency, self-determination and parent/family aspects of transition.

**EDSE 505 Assessment of Exceptional Individuals (3)**

Explore issues in assessment related to exceptional children. Emphasis placed on principles, purposes, and processes of assessment related to programming in special education.

**EDSE 506 Teaching Students with Special Needs in Inclusive Settings (3)**

Introductory course designed for regular classroom teachers with information about various disabilities and the gifted/talented. Emphasis on identifying, accommodating and adapting for students in inclusive settings.

**EDSE 507 Field Based Experience (1-2)**

The special education Teacher Candidate will be provided opportunities to observe, analyze and reflect on issues including diversity, professionalism, rights and responsibilities, and instruction in a K-12 classroom. S/U graded

**EDSE 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**EDSE 509 Strategies for Students with Exceptionalities (3)**

Provides effective strategies to educate all students, particularly at secondary level. Overviews special education process and inclusive education models; characteristics, transitional needs, and culturally/linguistically different exceptional learners and their families.

**EDSE 510 Foundations of Special Education (3)**

This course is designed to provide the historical and legal foundations of special education and the educational implications for the teacher and exceptional child.

**EDSE 511 Learning Environments and Cultural Considerations (3)**

This course provides an overview of learning environments, collaboration and consultation among teachers, related services professionals, and families, and emphasizes culturally appropriate communication strategies.

**EDSE 512 Assessment, IEP Development, and Instructional Planning (3)**

Students gain knowledge and skills for selecting, adapting, and using assessments, developing Individualized Education Programs, and planning instruction within a continuum of service delivery models.

**EDSE 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**EDSE 520 Survey of Learners with Severe Disabilities (3)**

Includes an overview of persons with profound needs and their families including their characteristics and needs. Programmatic issues are also emphasized in relation to current research.

**EDSE 521 Educational Assessment of Learners with Severe Disabilities (3)**

Emphasizes the assessment – intervention – evaluation approach for learners with profound needs. The use of developmental/ behavioral/ecological assessment approaches as well as transdisciplinary approaches are emphasized.

**EDSE 522 Methods of Teaching Learners with Severe Disabilities: Early Childhood Transitions and the Elementary School Years (3)**

Prerequisite: Full admittance to PTEP or certification at undergraduate level required. Review methodological approaches to serving individuals with profound needs and their application; emphasizes teaching strategies, consultation techniques and accessing multi-agency resources.

**EDSE 523 Methods of Teaching Learners with Severe Disabilities: Middle School, Secondary Settings, and Transitions to Adulthood (3)**

Prerequisite: Full admittance to PTEP or certification at undergraduate level required. Reviews teaching approaches to serve students with profound needs at the prevocational/vocational levels and application of approaches; emphasis on residential-employment competencies and transition from school to work.

**EDSE 524 Seminar in Education of Learners with Profound Needs (3)**

Designed to synthesize experience and coursework in the area of educating students with profound needs. Emphases are on issues, research, classroom application and consultation.

**EDSE 525 Research and Policy for Learners with Profound Needs (3)**

Consent of instructor. Includes research and policy relative to the learners with profound needs. Ethics of conducting research with these individuals, current research results and relevant public policy are the main foci.

**EDSE 526 Practicum with the Learners Who Have Severe Disabilities (3-12)**

Prerequisite: Full admittance to PTEP or certification at undergraduate level required. Entails supervised clinical experience with young and older individuals with profound handicaps. Daily supervision by a master teacher with overall supervision by UNC faculty is provided. S/U graded. Repeatable, maximum of 12 credits.

**EDSE 528 Linguistically Diverse Students with Low Incidence Disabilities**

Prerequisites: Regular admission into one of the Special Education Severe Needs Programs, or completion of one of the programs. Introduce instructional and assessment issues related to the education of linguistically diverse students with low incidence disabilities.



**EDSE 530 Parent/Professional Partnerships (3)**

The course promotes in-depth reflection on collaboration with families of young children using a case method of instruction. Family systems perspectives and family centered approaches are emphasized.

**EDSE 531 Assessment and Planning in Early Childhood Special Education (3)**

The course explores theory and application of assessment methods in Early Childhood Special Education. Cross-disciplinary approaches, matching assessment procedures to the intended purpose, and linked assessment/planning systems are emphasized.

**EDSE 532 Typical and Atypical Early Child Development: Application to Early Childhood Special Education (3)**

The course will explore typical and atypical patterns of early child development; biological, cultural, and environmental influences; and implications for appropriate practice in Early Childhood Special Education.

**EDSE 533 Curriculum and Instruction in Early Childhood Special Education (3)**

The course explores recommended practices for inclusive education of young children with developmental concerns. Developmentally appropriate, individually responsive, cross-disciplinary, and evidence-based practices are emphasized across developmental domains.

**EDSE 534 EDSE 534 Research, Policy, and Advocacy in Early Childhood Special Education (3)**

The course explores efficacy research, state and federal policies and systems, nationally recommended practices, and advocacy processes that support high quality services in Early Childhood Special Education (ECSE).

**EDSE 535 Practicum in Early Childhood Special Education (2-15)**

Prerequisites: EDFE 130 and passed PLACE/PRAXIS test. In their practicum experience, students build on knowledge and competencies gained throughout their master's program to synthesize their knowledge and apply recommended practices in ECSE settings.

**EDSE 540 Independent Living for Individuals with Visual Disabilities (1-2)**

Required laboratory arranged. Gain ability to understand the use of adapted materials and techniques in teaching independent living to individuals with visual disabilities. Emphasis given to recreational areas. Repeatable, maximum of 2 credits.

**EDSE 541 Introduction to Visual Impairment and Deaf-Blindness (3)**

Historical perspectives and current educational services for the student with visual impairment and deaf-blindness across the lifespan. Emphasis is placed on growth and development and psychosocial effects of visual impairment.

**EDSE 542 Assessment and Methods for Teaching Students with Visual/Multiple Disabilities (3)**

Prerequisite: EDFE 120 or EDFE 125 or certification at undergraduate level required. Discuss causes, characteristics, educational implications and instructional methods for student with visual/multiple disabilities. Learn effective teaming and collaborative planning strategies.

**EDSE 543 Braille Codes and Formats (3)**

Study literary and nemeth codes, basic abacus operations. Techniques of teaching literacy skills to students with visual disabilities are included.

**EDSE 546 Principles of Orientation and Mobility (3)**

Philosophy and history of cane instruction, dog guides and other methods of travel. Techniques in developing orientation skills and pre-cane mobility instruction. Gross motor and concept development are presented.

**EDSE 547 Individual Instruction in Orientation and Mobility (3)**

Prerequisite: EDFE 120 or EDFE 125 and EDSE 546 or certification at undergraduate level required. Consent of instructor. Required laboratory arranged. A study of methods involved in general navigation and environmental awareness relating to severe vision needs. Travel techniques are gained while working under simulated conditions. Repeatable, maximum of four credits.

**EDSE 548 Medical and Educational Implications of Visual Impairments (3)**

Anatomy and physiology of the eye, medical and educational assessment of low vision and functional implications of various eye conditions. Techniques to develop use of functional vision.

**EDSE 549 Assessment of Students with Visual Impairments (3)**

Prerequisites: EDSE 541 and EDSE 548. Assessment procedures related to learners with visual impairments. Determination of learning needs and appropriate learning media. Relationship of assessment, IEP development and placement.

**EDSE 550 Foundations of Deaf Education (3)**

Prerequisites: EDFE 120 or EDFE 125 and EDSE 550. This course is designed to provide the historical, legal, and cultural foundations of deaf education and the educational implications for the teacher and student who is deaf or hard of hearing.

**EDSE 601 Supporting Special Students in the Mainstream (3)**

Prerequisites: Full admittance to PTEP or certification at undergraduate level required. Interventions for students with moderate academic difficulties in inclusive settings including (a) collaborating in providing direct service and (b) providing scaffolds to enable students to perform independently.

**EDSE 602 Behavioral Disorders: Characteristics, Identification and Intervention (3)**

Examine typical characteristics associated with severe behavior problems and procedures for identification. Emphasis on development of appropriate intervention programs.

**EDSE 603 Practicum with Moderate Needs Students (3-12)**

Prerequisites: Full admittance to PTEP or licensure at the undergraduate level required. Consent of Instructor. Supervised practica in programming for and teaching moderate needs students including assigned seminar topics. Additional seminar time required. S/U graded. Repeatable, maximum of 12 credits.

**EDSE 606 Instructional Methods for Students with Special Needs (3)**

Prerequisites: Full admittance to PTEP or certification at undergraduate level required. Teaches about major current techniques, methods, philosophies and trends in teaching communication, affective and cognitive needs students with moderate/severe disabilities.

**EDSE 608 Case Studies with Students with Special Needs (3)**

Consent of instructor. Required laboratory arranged. Applied experience in assessment and teaching of exceptional individuals. Work a minimum of 45 clock hours one-on-one with exceptional individual in school or clinical setting.

**EDSE 609 Language Development: Disorders of Individuals with Special Needs (3)**

Consent of instructor. In-depth study of language and speech disorders, including assessment instruments and teaching strategies related to language and communication. Focuses on the language of students with special needs.

**EDSE 610 Interventions for Students with Severe Affective Needs (3)**

Knowledge and classroom application of group and individual interventions for students with severe affective needs. Includes auxiliary services and parent interventions.

**EDSE 611 Seminar in Severe Affective Needs (3)**

Consent of instructor. This course is designed to synthesize experience and coursework in the area of students with severe affective needs. Emphases are on issues, research and classroom application.

**EDSE 612 Practicum with Students with Severe Affective Needs, Ages 5-21 (3-12)**

Prerequisites: Full admittance to PTEP or licensure at the undergraduate level required. Consent of instructor. Integrative experiences of sufficient scope, intensity, and length to assure demonstration of all Teacher II affective program competencies. Seminar required. S/U graded. Repeatable, maximum of 12 credits.

**EDSE 613 Applied Assessment (3)**

Prerequisites: EDFE 120 or EDFE 125 and EDSE 512 required. Students develop assessment skills related to students with disabilities focusing on principles, purposes, and the practice of assessment tools, including formal and informal measures.

**EDSE 614 Behavioral Interventions (3)**

Prerequisites: EDFE 120 or EDFE 125. This course is designed to provide special educators with researched-based assessment and intervention strategies for working with individuals who have behavioral needs.

**EDSE 615 Special Education Law: Cases and Trends (3)**

Enhances student's skills to read integratively special education laws and ensuing litigation. Readings will include public laws, court transcripts and a selected case synopsis(es) pertaining to a particular exceptionality.

**EDSE 616 Scientifically Based Literacy Interventions (3)**

Prerequisites: EDFE 120 or EDFE 125. Scientifically based literacy interventions for learners with exceptional needs; theoretical models related to interventions addressing the five reading components (i.e., phonemic awareness, phonics, vocabulary, comprehension, and fluency).

**EDSE 617 Mathematics and Content Area Learning for Students with Disabilities (3)**

Prerequisites: EDFE 120 or EDFE 125. Prepare teachers to teach mathematics and content areas to students with disabilities. Scientifically research-based and validated methods will be emphasized for effective instruction, technology use, and collaborative support.

**EDSE 618 Educating Students with Significant Support Needs (3)**

Prerequisites: EDFE 120 or EDFE 125. This course addresses planning, managing, and collaboratively delivering educational plans and interventions for students with severe disabilities. It addresses academic, communication, behavioral, medical, and unique individual needs, K-12.

**EDSE 619 Secondary Services (3)**

Prerequisites: EDFE 120 or EDFE 125. This course includes an overview of transition services, academic strategies, community-based instruction, and contextual learning in a standards-based framework. Student self-determination and interagency coordination is included.

**EDSE 620 Psycho-Social Aspects of Students with Severe Cognitive Needs (3)**

In-depth study of sociological and psychological aspects of students with severe cognitive needs. Focuses on issues relative to life care and treatment of the cognitive needs student.

**EDSE 621 Seminar in Severe Cognitive Needs (3)**

This course is designed to synthesize experience and coursework in the education of students with severe cognitive needs. Emphases are on issues, research and classroom application.

**EDSE 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**EDSE 623 Practicum with Students with Severe Cognitive Needs, Ages 5-21 (3-12)**

Prerequisites: Full admittance to PTEP or licensure at undergraduate level required. Consent of major advisor. Integrative experiences of sufficient scope, intensity, and length to assure demonstration of all Teacher II cognitive program competencies. Seminar required. S/U graded. Repeatable, maximum of 12 credits.

**EDSE 640 Methods of Teaching Students with Visual Impairment (3)**

Prerequisites: EDFE 120 or EDFE 125 and EDSE 541, EDSE 548. Curriculum development, adaptations, and teaching methodology for individuals with visual impairments. Modification of general and functional curricular areas. Emphasis on methods of teaching skills and the core curriculum.

**EDSE 642 Advanced Seminar in Education of Students with Visual Disabilities (3)**

Prerequisites: Enrollment prior to or concurrent with EDSE 644, EDFE 120 or EDFE 125. Role and responsibilities of the teacher of students with visual impairments as an educational team member, professionalism, ethics, consultation and collaborative partnerships, and social skill development. Full PTEP Admittance.

**EDSE 644 Practicum in Education of Students with Visual Impairments, K-12 (6-12)**

Prerequisites: EDFE 120 or EDFE 125 and EDFE 130 and EDSE 541, EDSE 543, EDSE 546, EDSE 548, EDSE 549, EDSE 640, EDSE 645 or certification at undergraduate level required. Consent of instructor. Supervised teaching experience with students with visual disabilities, K-12, planning and implementing lessons, preparing materials, participating in staffings, IEP/IFSP development and parent conferences. Repeatable, maximum of 12 credits.

**EDSE 645 Advanced Braille Codes and Formats (3)**

Prerequisites: EDSE 543 or proof of mastery from an approved examination or other demonstration of basic literary braille skills. Instruction in Nemeth Code (braille math code). Introduction to advanced braille codes, formats and techniques for teaching skills in each code including music, foreign language, chemistry, and computer braille.

**EDSE 647 Assessment and Methods in Orientation and Mobility (3)**

Prerequisites: EDSE 546. Consent of instructor required or certification at undergraduate level required. Weekly seminar explores methods and strategies for teaching independent travel techniques to students with visual and other disabilities. Student provides individualized instruction to visually impaired person with faculty supervision.

**EDSE 648 Practicum in Orientation and Mobility (9)**

Prerequisites: EDFE 120 or EDFE 125 or certification at undergraduate level required. Consent of major advisor required. Supervised teaching experience with both blind and low vision individuals in orientation and mobility. Observation of varied programs; e.g., resource room itinerant plan, residential school and rehabilitation settings.

**EDSE 651 Collaboration: Deaf/Hard of Hearing (3)**

Prerequisite: Prerequisites: EDFE 120 or EDFE 125 and EDSE 550. Integration of theoretical and practical considerations involved in collaborating with families, service providers, and agencies.

**EDSE 652 Auditory Skill Development: Deaf/Hard of Hearing(3)**

Develop the knowledge and skills to assess and to teach auditory skill development to individuals who are deaf or hard of hearing. Field experience required.

**EDSE 653 Speech: Deaf/Hard of Hearing (3)**

Develop knowledge and skills to assess and to teach spoken language to individuals who are deaf or hard of hearing. Field experience required.

**EDSE 654 Language: Deaf/Hard of Hearing (3)**

Develop knowledge and skills to assess and facilitate the development of language skills of individuals who are deaf or hard of hearing. Field experience required.

**EDSE 655 Literacy: Deaf/Hard of Hearing (3)**

Develop knowledge and skills to assess and facilitate the development of literacy in individuals who are deaf or hard of hearing. Field experience required.

**EDSE 656 Curriculum and Instruction: Deaf/Hard of Hearing (3)**

Develop the knowledge and skills to assess and to teach academic content to individuals who are deaf or hard of hearing. Field experience required.

**EDSE 657 Practicum: Deaf/Hard of Hearing (6-12)**

Individual observation and supervised practice in the education of individuals who are deaf or hard of hearing. Repeatable, maximum of 12 credits.

**EDSE 670 Legal and Policy Foundations of Special Education (3)**

This course is designed for school personnel who are impacted by special education law. The course focuses on federal and state special education statutes, regulations, and case law.

**EDSE 671 Fostering School and Community Relationships (3)**

Prerequisite/Co-requisite: EDSE 670.

This course provides specialist knowledge and skills related to consultation, collaboration, supervision, coaching, and support for educators, families, and paraprofessionals. Topics include the implementation of proactive strategies for empowerment.

**EDSE 672 Leadership in the School Community (3)**

Prerequisite/Co-requisite: EDSE 670.

Foundational grounding for prospective teacher leaders to function as highly facilitative special educators who demonstrate leadership necessary to effectively interact with diverse populations including students, teachers, administrators, and parents.

**EDSE 673 Research and Reflective Practice (3)**

Prerequisite: EDSE 670. The role of inquiry in identifying promising practices is examined. Action research is highlighted, culminating in a work sample in which scientifically based interventions are designed, assessed, and described.

**EDSE 674 Interventions in Literacy and Numeracy (3)**

Prerequisite/Co-requisite: EDSE 670.

This course will help individuals effectively select and implement research-based literacy and numeracy interventions as they related to students' strengths and needs at an individual student, classroom and school-wide level.

**EDSE 675 Issues in Special Education Assessment (3)**

Prerequisite/Co-requisite: EDSE 670.

Provides a comprehensive perspective of assessment development, implementation, interpretation, and implications of results to inform educational practices including the practice of monitoring progress and collaborating with individuals, families and professionals.

**EDSE 676 Assessment and Interventions for Students with Challenging Behaviors (3)**

Prerequisite/Co-requisite: EDSE 670.

Designed to provide learners with the knowledge and skills to supervise, coach, assess, and model a continuum of behavior support for teachers, paraprofessionals and other educators in the school, home, and community.

**EDSE 677 Transition to Adulthood for Youth with Exceptionalities (3)**

Prerequisite/Co-requisite: EDSE 670.

This course includes in-depth investigation into the provision of transition services and secondary services. Topics include transition-focused standards-based IEP development, self-determination, interagency coordination, career educational strategies, and content enhancement routines.

**EDSE 678 Leadership Strategies in Significant Support Needs/Autism (3)**

Prerequisite/Co-requisite: EDSE 670.

This course provides mentoring and coaching strategies when planning and collaborating for students with severe disabilities and/or autism. Topics include meeting student academic, communication, and medical needs in K-12 settings.

**EDSE 679 Interventions for Students with Cultural and Linguistic Differences (3)**

Prerequisite/Co-requisite: EDSE 670.

This course critically analyzes issues of equity through a culturally responsive lens as it applies to assessment, interventions, and education of all students including those with diverse backgrounds.

**EDSE 680 Administration and Supervision of Special Education (3)**

Designed to review problems and strategic opportunities in the administration and supervision of special education programs and services. Emphases include leadership and management, organizational planning and change, and strategic thinking.

**EDSE 681 Administrative Planning and Program Evaluation in Special Education (3)**

Prepares individuals to conduct program/service evaluations, organize data for decision-making purposes, understand resource utilization, develop collaborative partnerships, and integrate systems of accountability into other administrative functions.

**EDSE 682 Foundations in Gifted Education (3)**

The purpose of this course is to address the foundational underpinnings of gifted and talented education, including the history of the field; pertinent theories and research in the area of intelligence, creativity, and human development; knowledge of public policy; current brain research; and how these concepts can be applied in educational settings.

**EDSE 683 The Gifted Learner: Nature and Needs (3)**

The knowledge base of definitions, characteristics, traits and needs of diverse groups of learners with gifts and talents will be examined. Emphasis is placed on identification, assessment and appropriate placements.

**EDSE 684 Assessment and Identification in Gifted Education (3)**

Prerequisites: EDSE 682 and EDSE 683.

The content of this course includes procedures in the assessment of students for the purpose of selecting appropriate and relevant educational strategies, and identifying students for services and programs.

**EDSE 685 Curriculum & Instructional Practice in Gifted Education (3)**

This course focuses on development of curriculum and implementation of teaching practices centered on discipline-based knowledge, learning styles, cultural variation, depth and complexity of content, and provisions for independent investigation.

**EDSE 686 Emotional and Social Development of the Gifted and Talented (3)**

This course is designed for learners to develop a knowledge base of the affective, social and cognitive development and needs of the various types of gifted students.

**EDSE 687 Program Strategies and Services For the Gifted and Talented (3)**

Prerequisite: EDSE 683. This course addresses the basic program models, strategies and services necessary for developing appropriate education for the gifted. Real-life scenarios are basic in determining appropriate strategies and services.

**EDSE 688 Communication and Leadership in Gifted Education (3)**

Topics include communication, consultation and collaboration for the implementation of education for the gifted and talented. Teachers are a main source of leadership for school, district and state levels.

**EDSE 689 Creativity in Gifted Education (3)**

The focus of this course is the examination of theories of creativity, research in creativity and the teaching of creative thinking skills in the context of gifted education programming.

**EDSE 690 Highest Levels of Learning for the Gifted and Talented (3)**

Prerequisite: EDSE 682, EDSE 683, EDSE 685. This capstone seminar is designed for learners to synthesize knowledge and skills regarding cognitive needs of students who are gifted and talented. Emphasis is on enrichment/acceleration, inquiry, seminars, in depth studies.

**EDSE 691 Practicum in Teaching the Gifted and Talented (1-12)**

Prerequisites: EDSE 683, EDSE 685, EDSE 687 and EDSE 130. Emphasize actual teaching and facilitation of learners who are gifted, talented, creative in actual supervised teaching experiences. Repeatable, maximum of 12 credits.



**EDSE 693 Practicum in Special Education (3-12)**

Prerequisites: EDFE 120 or EDFE 125 and EDFE 130 and EDSE 510, EDSE 511, EDSE 512, EDSE 614, EDSE 617, EDSE 618, and EDSE 619. EDSE 615 may be taken concurrently. Supervised practicum in assessing, planning, and teaching students with exceptional learning needs in collaboration with families, education professionals, and community members. Unlimited Repeatability.

**EDSE 701 Introduction to Doctoral Study in Exceptionalities (1)**

Develop knowledge, skills, concepts, and attitudes necessary for special and gifted educators to effectively interact with diverse populations. Emphasis on development of individual goals/specific activities within program. S/U graded.

**EDSE 702 Law of Exceptionalities (1)**

Doctoral level course that analyzes and interprets federal, state, and case law relevant to teaching students with exceptionalities in a variety of educational settings.

**EDSE 718 Advanced Seminar in Education of Students with Hearing and/or Visual Handicaps (3)**

Investigation of the issues and trends in education of infants, children and youth with hearing and/or visual disabilities: focus on research, curriculum, instructional strategies and other administrative concerns.

**EDSE 721 Theoretical Foundations of Special Education I (3)**

In-depth study of special education's enrichment by conceptions of the nature of exceptionality, learning and instruction that have and are emerging from biological and sociocultural constructivism, phenomenology and holism.

**EDSE 723 Seminar in Facilitating Personal and Professional Development in Special Education (3)**

Assist learners with development of the skills and knowledge necessary to function as special educators who effectively interact with diverse students, teachers, administrators and parents.

**EDSE 727 Issues and Trends in Exceptionalities (3)**

Investigates current issues and trends in special and gifted education, with specific focus on policy, research, curriculum, and instructional strategies.

**EDSE 728 Professional Writing (3)**

Explore purposes, protocols, and processes for professional writing; critical review of student writing by students and faculty. Focus on research reports, practitioner articles, research.

**EDSE 729 Apprenticeship in Special Education (1-4)**

Consent of instructor. Jointly defined experiences on campus in intensive mentor/apprenticeship project; participating in all aspects of inquiry, administration, or university teaching from planning through dissemination/publication. Repeatable, maximum of 12 credits, under different subtitles.

**EDSE 730 Externship in Exceptionalities (3)**

Prerequisites: Submission of an externship proposal 1 semester prior to enrollment. This course should be taken prior to submission of dissertation proposal. The externship requires 180 hours of supervised activities outside of UNC to expand the learner's knowledge base in a setting related to services for students with exceptionalities. Repeatable under different subtitles.

**EDSE 731 Topical Seminar in Special Education (3)**

Course content differs to ensure flexibility promoting cutting-edge knowledge. Faculty share expertise in depth. Students select from offerings to individualize program and utilize wide variety of methods of inquiry. Repeatable, maximum of 15 credits, under different subtitles.

**EDSE 732 Research in Exceptionalities (3)**

Examines research designs and methods used in special and gifted education. Emphasis on developing skills necessary to understand the relationship between research strategies and problems in special and gifted education.

**EDSE 733 Preparing Teachers of Students with Exceptionalities (3)**

Gain knowledge and skills to prepare teachers of students with exceptionalities. Content includes course syllabi development, application of research-based practices to course development, and mentoring and evaluating personnel.

**EDSE 741 Colloquium in Literacy (1)**

Examines issues and prominent theories of literacy research in special and gifted education. The relationship of this scholarship to current educational practices is explored.

**EDSE 742 Colloquium on Talent Development (1)**

Addresses topics related to the nature of disabilities, giftedness, twice exceptionality, talent development, and the contemporary approaches that foster individual competencies over deficits.

**EDSE 743 Supervision in Exceptionalities (1)**

Examines supervision of student teachers; internships; paraprofessionals; graduate research assistants, and clerical assistants. Exploration of leadership styles, communication methods, and conflict resolution skills.

**EDSE 744 Grant Writing Seminar (3)**

Develops grant writing skills essential for doctoral level personnel in special and gifted education, including identifying federal and state funding sources, panel reviews, and development of proposals, budgets, and evaluation.

**EDSE 797 Doctoral Proposal Research (1-4)**

Explores dissertation research problems, theoretical frameworks, methodology, and data analysis procedures expected to develop an approved dissertation proposal. S/U graded. Repeatable, maximum of four credits.

**EDSE 799 Doctoral Dissertation (1-12)**

Permission of major advisor. Required of all doctoral candidates. A student must earn 12 hours of credit for the dissertation as a partial fulfillment of requirements for any doctoral. S/U graded. Repeatable, no limitations.

**EDSE 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**EED — ENGLISH EDUCATION****EED 341 Methods and Materials for Teaching Language and Composition in the Secondary School (3)**

Prerequisites: EDFE 120 or EDFE 125 and 3.0 GPA. Content covers the writing process, composition theory, language and writing development in grades 7-12 with an emphasis on the teaching of writing.

**EED 402 Methods for Teaching Literature in Secondary Schools (3)**

Prerequisite: EDFE 120 or EDFE 125 and 3.0 GPA. Prerequisite to student teaching. Selection of literature for young adults, use of media, curriculum and classroom organization, standards-based education, assessment and evaluation in a secondary school program.

**EED 502 Methods for Teaching Literature in Secondary Schools (3)**

Prerequisites: Enrollment as post baccalaureate student or a graduate student. Selection of literature, use of media, curriculum and classroom organization, standards-based education, assessment and evaluation in a secondary school program. In addition, students will address the introduction of critical theories of literature in the secondary classroom.

**EED 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.



**EED 541 Methods and Materials for Teaching Language and Composition in the Secondary School (3)**

Prerequisites: EDFE 120 or EDFE 125 and 3.0 GPA. Content covers the writing process, composition theory, language and writing development in grades 7-12, with an emphasis on the teaching of writing.



## ELPS — EDUCATIONAL LEADERSHIP AND POLICY STUDIES

**ELPS 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**ELPS 601 Leadership Development Through Inquiry (3)**

Experiences help students understand the nature of leadership and the importance inquiry plays in creating, using, and acquiring knowledge.

**ELPS 603 Shaping Organizations: Management and Leadership in Education (3)**

Introduces students to qualities of effective leadership and management; organizational skill development; organizational behavior; and change in organizations.

**ELPS 604 Understanding People: Professional Development and Educational Leadership (3)**

The fundamentals of working with people in educational organizations is reviewed. Emphasis is on adult learning, communications and working in teams, and personnel issues.

**ELPS 605 External Environments: Social, Political, and Economic Influences in Educational Leadership (3)**

External influences on policies, curriculum and operations, including demographics, diversity, governance, partnerships, integrated service delivery for children and families, sources of revenue, budgeting and accountability.

**ELPS 606 Internship in Educational Leadership (1-9)**

Involves part- or full-time leadership assignments in educational organizations. S/U graded. Repeatable, no limitations.

**ELPS 608 Issues in Educational Leadership: Implications for Practice (3)**

Consent of instructor. Multiple perspectives will be used to review and analyze critical past issues and current educational dilemmas. Focus on solution strategies and their impact on practice.

**ELPS 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**ELPS 650 School Finance and Budgeting (3)**

Examines economics and politics of education, revenues for school systems, principles of taxation, conflicts between equality and efficient goals and local state and federal policies for education.

**ELPS 651 School Business Management (3)**

Develops understanding of problems and procedures of such management functions as transportation, property control, food services, facility maintenance, purchasing, insurance and investments. Provisions for applications of technology to financial management.

**ELPS 654 Instructional Leadership and Supervision (3)**

Examine the school leader's role supervising the teaching and learning process. Focus on curriculum development, instructional improvement, and developing capacity of others to become curricular and instructional leaders.

**ELPS 660 Law and the Administrator (3)**

Relate statutory provisions, court decisions, common law principles and constitutional requirements to legal problems affecting organization and administration of public and private school systems.

**ELPS 662 Design and Delivery of Professional Development (3)**

Explores the planning, delivery, and evaluation of professional development activities for adults. Emphasizes practical aspects such as needs identification and learning transfer. Course outcomes include creating a professional development program.

**ELPS 665 Policy Analysis and Development (3)**

Study standard techniques for analyzing, evaluating and developing policies for educational systems and organizations, with special attention to contemporary policy issues.

**ELPS 666 Planning and Change in Education (3)**

Consent of instructor. Understand planning and change theories; strategic planning development; particular emphasis on restructuring educational environments.

**ELPS 667 Leadership at the District Level (3)**

Study the leadership responsibilities of school district administrators, with special emphasis on the knowledge, skills, and values needed by effective superintendents.

**ELPS 670 The Principals: Leadership at the School Site Level (3)**

Examine leadership and management issues of building principals, instructional leadership and problems facing principals at the site level.

**ELPS 695 Practicum in Educational Leadership (1-3)**

Consent of instructor. Enables students to engage in a particular task/activity in educational leadership in one or more field sites. S/U graded. Repeatable, no limitations.

**ELPS 751 Doctoral Core I (6)**

Consent of instructor. Team-taught seminar focusing on teambuilding and group processing, inquiry and reflective practice, and moral and ethical dimensions of leadership. Extensive attention given to developing scholarly writing skills.

**ELPS 752 Doctoral Core II (6)**

Prerequisite: ELPS 751 or consent of instructor. Continued doctoral study in educational leadership and policy. Team-taught seminar exploring the nature of organizations, leadership and policy through readings, group discussions, and a collaborative research project.

**ELPS 754 Research in Educational Leadership (3)**

Prerequisites: ELPS 751, ELPS 752, SRM 602 or consent of instructor. Classic and contemporary published quantitative and qualitative studies on organizations, leadership and policy studies are used to analyze research strategies and tactics.

**ELPS 797 Doctoral Proposal Research (1-4)**

Prerequisites: ELPS 751, ELPS 752. To enable advanced doctoral students to learn the essential elements of effective research proposals and to develop analytic skills needed to critique other research. S/U graded. Repeatable, maximum of four credits.

**ELPS 799 Doctoral Dissertation in Educational Leadership and Policy Studies (1-12)**

Prerequisite: ELPS 797. Approval of research advisor required. Complete research of a major problem in educational leadership and policy. Must earn total of 12 hours of credit. S/U graded. Repeatable.

**ELPS 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.



## ENG — ENGLISH

**ENG 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**ENG 510 Advanced Placement Program-English (1-3)**

Consent of Instructor. A course designed to provide content and pedagogical information related to the teaching of writing and literature in the secondary school English advanced placement program. S/U graded. Repeatable, no limitations.

**ENG 513 Professional Renewal (1-4)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**ENG 530 Advanced Studies in World Literature (3)**

An investigation of a theme, form or problem that cuts across periods and nationalities. Repeatable, under different subtitles.

**ENG 593 The Rocky Mountain Writing Project (6)**

Consent of instructor. Teachers teaching teachers about writing to extend their knowledge in theory and practice and to prepare them as writing consultants. Open to K-12 teachers in all disciplines. S/U graded. Repeatable, maximum of 12 credits.

**ENG 594 Practicum in the Teaching of College Composition (3)**

Consent of instructor. Train new teaching assistants in School of English to teach college level composition to UNC students.

**ENG 600 Introduction to Graduate Study (3)**

An orientation to graduate study in general and the nature and methods of research in particular. Should be taken during the first semester of graduate work.

**ENG 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**ENG 623 Old English (3)**

Students will study the language and literature of Anglo-Saxon England, translating important historical and literary documents in prose and poetry, including works by Alfred, AElfirc, and others.

**ENG 624 Middle English (3)**

An introduction to Middle English literature. Authors considered may include Chaucer, Langland, Kempe, and the Pearl poet. Readings may include drama, narrative poetry, lyric poetry, narrative prose and devotional literature.

**ENG 625 Studies in the Renaissance (3)**

A survey of selected Renaissance texts, including works by Spenser, Shakespeare, Donne, and Milton. Emphasis on historical contexts and recent criticism, including new historicist, feminist, psychoanalytic, and queer approaches.

**ENG 626 Studies in the Restoration and Eighteenth Century (3)**

Representative poetry, prose, and/or drama in England from 1660-1789, including such writers as Dryden, Behn, Astel, Finch, Pope, Swift, Defoe, Fielding, Boswell, Johnson, Gray, Equiano, Barbauld, Wycherley, and Congreve.

**ENG 627 British Romantic Literature (3)**

British Literature, 1780-1835, with emphasis on poetry, the novel, and non-fiction prose. Central issues include the Romantic poetic, the French Revolution, and the growth of the English nation.

**ENG 628 Studies in the Victorian Period (3)**

British literature from 1832-1900, with primary focus on prose fiction, non-fiction, and poetry. emphasis on the intellectual currents of the period as reflected in the literature of the age.

**ENG 629 20th Century British Literature (3)**

Studies in British literature of the twentieth century, with primary focus on diction, poetry, and non-fiction prose. Emphasis on cultural and intellectual influences on the literature of the era.

**ENG 630 American Literature to the Civil War (3)**

American literature from 1590-1865, with primary focus on prose fiction, non-fiction, and poetry. Emphasis on New-and Old-World cultures and the contribution of writing in the creation of cultures.

**ENG 631 Studies in American Literature Civil War to WWI (3)**

Seminar in ideas and representative authors during the late 19th and early 20th centuries. An examination of both the intrinsic literary quality of selected texts and their sociopolitical, historical, and cultural contexts.

**ENG 632 American Literature WWI to Present (3)**

Studies in American literature 1914 to the present, with primary focus on fiction, poetry, and non-fiction prose. Emphasis on cultural and intellectual influences on the literature of the era.

**ENG 633 Studies in Linguistics (3)**

Seminars in various topics ranging from the evolution of English from its beginnings to dialectology, semantics, stylistics and psycholinguistics. Repeatable, maximum of nine credits, under different subtitles.

**ENG 634 Studies in World Literature (3)**

Seminars in writers or works in translation to illustrate generic, thematic, national, or cultural approaches to world literature. Repeatable, maximum of nine credits, under different subtitles.

**ENG 638 Literary Criticism and Theory (3)**

Prerequisite: ENG 600. Historical survey of different theoretical approaches to literary and cultural criticism and pedagogy, including classical, renaissance, and eighteenth-century movements. Emphasis on twentieth-century schools.

**ENG 639 Colloquium in Literature (3)**

Seminars in various topics (e.g., the tragic hero, alienation, the experimental novel) related in form and/or idea and drawn from American, British or World literature in translation. Repeatable, maximum of nine credits, under different subtitles.

**ENG 640 History and Theory of Rhetoric (3)**

Readings in selected rhetoricians, including Plato, Aristotle, Augustine, Erasmus, Ramus, Bacon, Montaigne, Campbell, Blair, Bakhtin, Richards, Gates, Cixous, Kristeva.

**ENG 641 Studies in Composition Research and Pedagogy (3)**

Reading in composition theory and pedagogy, including expressivist, cognitive, historical, rhetorical, social epistemic, discourse, and cultural studies.

**ENG 642 Film Theory and Analysis (3)**

This seminar explores major debates and developments in film theory from the 1920s to recent decades. Theories are illustrated with the technical and aesthetic analysis of specific films.

**ENG 697 MA or Creative Project (3)**

Consent of Instructor. Select MA project, a journal-appropriate research paper of 30-50 pages., or creative project (collection of poems, short stories, or novel chapters). Proposal approval by advisor and public presentation (faculty/students) required.


**ENST — ENVIRONMENTAL STUDIES**
**ENST 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**ENST 509 Advanced Placement Environmental Sciences/Studies (2)**

Consent of Instructor. Topics in Environmental Sciences/Studies and pedagogy related to establishment and maintenance of an environmental science advanced placement program. S/U graded. Repeatable, no limitations.

**ENST 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**ENST 515 Sustainable Solutions to Environmental Problems (3)**

Examine the structural and functional relationships of the environment with emphasis on present and long-term problems, and understand the validity of solutions for environmental sustainability.

**ESCI — EARTH SCIENCES****ESCI 575 Earth Systems Science Education (1-6)**

A variable content course covering integrated science content and pedagogy from the following: atmosphere (air), biosphere (life), hydrosphere (water), and/or lithosphere (land/rock). Repeatable, under different subtitles.

**ESCI 584 Earth Sciences Field Experiences (1-15)**

Consent of instructor. Field studies in astronomy, geology, meteorology and/or oceanography, usually preceded by on-campus orientation. Schedule of classes lists specific area and topic to be investigated when course is offered. Repeatable under different subtitles. Field trip required.

**ESCI 599 Seminar in Earth Sciences (1)**

Consent of instructor. Invited speakers, including graduate students, faculty and guests, present current earth science research topics in seminar format. Required of graduate students all semesters they are in residence at UNC. S/U graded. Repeatable, no limitations.

**ESCI 600 Introduction to Earth Science Research (2)**

Consent of instructor. Nature and methods of research in the earth sciences. Development of research proposal that will provide the basis for thesis or graduate research project. Required of all first year Earth Sciences graduate students.

**ESCI 605 Global Change (3)**

Prerequisite: 8 hours graduate level science. An online, problem-based course in which students conduct data analysis on climate variability, modeling, and Earth system impacts and apply results to societal issues.

**ESCI 695 Special Topics in Earth Sciences (2)**

Consent of instructor. Faculty and students select an earth sciences topic for intensive study beyond the scope of existing departmental course offerings. Repeatable, under different subtitles.

**ESCI 697 Graduate Research (1-6)**

Consent of instructor. Qualified graduate students select and research a problem and present professional quality written report. Repeatable, maximum of six credits.

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

Intensive study of selected earth sciences topic under the direction of student's graduate studies committee. S/U graded. Repeatable, no limitations.

**ET — EDUCATIONAL TECHNOLOGY****ET 347 Educational Technology Applications for Elementary Teaching (1)**

Prerequisite: ET 247. Provisional or full admittance to PTEP required. Sophomores or above. Integration of various instructional delivery systems within teaching. Content-specific and elementary applications of computing, video, print, hypermedia and multimedia, telecommunications technologies and issues relevant to the elementary education community.

**ET 500 Introduction to Instructional Design and Technology (3)**

This is a survey course examining the broad field of educational technology, with an emphasis on both K-12 settings and corporate/business environments.

**ET 501 Introduction to Applications of Educational Technology (3)**

Instruction and practice with computer systems, video and other technological tools. Applications include word processing, spreadsheets and presentation software. Visual and information literacy skills and copyright trends are addressed.

**ET 502 Instructional Design (3)**

Covers a systematic process of design for determining instructional content and creating effective, efficient, and appealing self-paced instruction.

**ET 503 Computers in Education (3)**

Prerequisite: ET 501 or permission of instructor. Instruction for intermediate to advanced applications of current computer-based technologies. Introduction to a variety of other technology related topics with an emphasis on educational applications and integration.

**ET 504 Instructional Materials Design (3)**

Procedures for designing and developing instructional materials. Includes scripting and production specifications for graphic, audio, slide/tape and/or video formats.

**ET 524 Design of Computer Assisted Instruction (3)**

Prerequisite: ET 503. A study of the design and development of computer assisted instruction, introducing both authoring system and general purpose programming language paradigms.

**ET 533 Information Literacy & Reference (3)**

Study research-based instructional strategies and process models to teach information literacy and information skills in elementary and secondary school libraries.

**ET 535 School Library Administration and Leadership (3)**

Learn the essentials of organizing and administrating school libraries in elementary and secondary schools.

**ET 538 Selection, Evaluation, & Utilization of Library Materials & Cataloging (3)**

Majors only. Designed to provide an overview of the processes and procedures required to successfully develop, maintain, and evaluate a collection program of print and non-print materials in a school library.

**ET 601 Managing People, Projects, and Technology Systems (3)**

Prerequisites: ET 502, ET 503. For teachers of technology skills in diverse environments (public schools to corporations). Topics include instructional design, theories, strategies, ethics and interpersonal skills for effective and appealing learning environments.

**ET 602 Performance Technology for Instructional Environments (3)**

Prerequisite: ET 502. Application of contemporary methods of assessment, design, development, implementation and evaluation of instructional courses, programs and systems.

**ET 604 Computer Graphics and Visual Literacy (3)**

In this course you will apply principles of human learning, perception, and motivation to the design and production of visual materials to support learning and performance.

**ET 613 Design of Distributed Learning Environments (3)**

Provides students with knowledge and experiences in designing, developing and delivering e-learning courses. Using instructional design principles as a foundation, the course covers the fundamental elements that make web based instruction effective.

**ET 615 Distance Education: Theories and Practice (3)**

Includes an overview of distance education foundations (design and assessment), application and implementation (interactivity and hypermedia design), and management issues (copyright, course management systems, and policy).



**ET 617 Development of Online Applications (3)**

Prerequisites: ET 502, ET 503 and ET 524; ET 613 or ET 615 strongly recommended. Focus on the design, development and implementation of interactive online network applications. Emphasis on instructional environments, application development necessary simulations, database development, evaluation. Secondary emphasis creating an ADA compliant online application.

**ET 622 Directed Study (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**ET 627 Design of Games and Simulations (3)**

Prerequisites: ET 503, ET 524 Design and development of computer-based games and simulations for education. In addition to exploring various tools, this course also will examine research and implementation issues related to various educational settings.

**ET 628 Design of Multimedia Learning Environments (3)**

Prerequisites: ET 503, ET 524. Investigation of the theory, implementation, practice, and research on interactive, computer based instructional systems including videodisk, videotape, digital video, CD-ROM, and image capture technologies.

**ET 650 Case Studies in Performance and Instructional Technology (3)**

Consent of Instructor required. Course uses a case study approach to the analysis, design, and evaluation of performance and educational environments.

**ET 692 Internship (3)**

Advisor's recommendation and permission of program director. Individual field experience in educational technology. Field experience and summative report format must be approved by advisor. S/U graded. Repeatable, no limitations.

**ET 693 Practicum (1-3)**

Supervised professional activity requiring a minimum of 10 hours per week. Develop project, product or technological device unique to the field. An approved end of semester project report is required. S/U graded. Repeatable, no limitations.

**ET 694 Elementary School Library Internship (1)**

Advisor's recommendation and permission. Individual field experience in secondary school libraries. Field experience and summative report format must be approved by advisor. S/U graded. Repeatable, no limitations.

**ET 695 Special Topics in Educational Technology (1-3)**

Consent of instructor. Scheduled on irregular basis. Explore special topics in Educational Technology. An appropriate subtitle will explain each course. Repeatable.

**ET 696 Secondary School Library Internship (1)**

Advisor's recommendation and permission. Individual field experience in secondary school libraries. Field experience and summative report format must be approved by advisor. S/U graded. Repeatable, no limitations.

**ET 702 Instructional Design Theory and Research (3)**

Prerequisite: ET 602. Includes examinations of theories underlying instructional design methods. Review and critique of basic and applied research bases is featured.

**ET 782 Doctoral Seminar in Educational Technology I (3)**

Prerequisite: ET 500. Investigation of the development, theory, and research bases of the field of Educational Technology.

**ET 784 Doctoral Seminar in Educational Technology II (3)**

Prerequisite: ET 782 Investigation of the development, theory, and research bases of the field of Educational Technology.

**ET 797 Doctoral Proposal Seminar (1-4)**

Design research proposals and conduct pilot studies to examine feasibility of proposed hypothesis. Summarize existing research, identify problems, develop hypotheses and justify selection of design components. S/U graded. Repeatable, maximum of four credits.

**ET 799 Doctoral Dissertation (1-12)**

Required of all doctoral candidates. Student must earn 12 hours of credit for the dissertation as partial fulfillment of requirements for all doctoral degrees. Repeatable, no limitations.

**ET 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**FL — FOREIGN LANGUAGES****FL 341 Methods of Teaching in the Secondary School (3)**

Prerequisite: EDFE 120. Prerequisite to student teaching. Emphasize teaching techniques, curriculum and classroom organization, testing and evaluation, procedures and materials, relationship of subject area to entire secondary program.

**FL 531 Teaching of Foreign Languages (2)**

Study problems in teaching at secondary and elementary school levels, content development for course of study, organization of learning materials, teaching procedures, testing and evaluating. Normally conducted in workshop format. Repeatable, under different subtitles.

**FND — FOOD, NUTRITION AND DIETETICS****FND 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**FND 510 Foodservice Management (2)**

Intensive review course for students beginning their dietetic internship. Overview of relevant issues and critical problems concerning all levels of systems management and dietetic food service administration.

**FND 512 Medical Nutrition Therapy Skills (2)**

An overview with case practice of medical nutrition therapy for dietetic interns. Several topics are covered with an emphasis on clinical skills.

**FND 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**FND 520 Maternal and Child Nutrition (3)**

Prerequisite: FND 252. Developmental stages, nutrient requirements, appropriate diet and eating behaviors for children from conception through school age. Nutrition related conditions of children and nutrition for the pregnant and lactating woman.

**FND 555 Nutrition for Fitness and Athletic Performance (3)**

Prerequisite: FND 250 or FND 357. The study of nutrition principles as they apply to the promotion of optimal physical fitness and athletic performance. Current research and evaluation of nutritional recommendations will be stressed.

**GEOG — GEOGRAPHY****GEOG 410 Teaching Geography in Secondary Curriculum (1)**

Prerequisites: GEOG 100 or GEOG 110; and at least one GEOG course at the 200 level or higher OR consent of instructor (need to interview student to determine expertise and academic background). Study fundamental themes in geography, use current materials and create new lessons and materials for teaching geography at the secondary level. S/U graded.



**GEOG 507 Geographic Information Science (3)**

Consent of instructor (interview to determine expertise and academic background). Examines the nature and accuracy of spatially referenced data, as well as methods of data capture, storage, retrieval, modeling and output using GIS software.

**GEOG 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**GEOG 509 Advanced Placement Institute in Human Geography (2)**

Graduates only. Intensive course for teachers planning to teach or currently teaching AP Human Geography. Topics include both content and pedagogy for establishment, development and maintenance of an AP program. S/U graded. Repeatable, no limitations.

**GEOG 510 Topics in Teaching Geography (2)**

Appraise and become familiar with various concepts, theories and skills in geography and with the techniques and methodologies appropriate for teaching them. Repeatable, maximum of six credits.

**GEOG 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**GEOG 520 Topics in Systematic Geography (3)**

Graduates only or consent of instructor. Examine a selected area of systematic geography; consider appropriate pedagogical approaches in teaching about that geographic topic. Repeatable, under different subtitles.

**GEOG 525 Topics in Regional Geography (2)**

Graduates only or consent of instructor. Examine a selected geographic region; consider appropriate pedagogical approaches in teaching the geography of the region. Repeatable, under different subtitles.

**GEOG 540 Biogeography (3)**

Identify meaningful patterns in the distributions of plants and animals and explain how/why those patterns developed. Includes an examination of the role humans have played in shaping those patterns.

**GEOG 592 Field Course in Geography (1-6)**

Study and apply techniques used, solve geographic problems in the field and effectively present results of such studies. Unlimited repeatability.

**GEOG 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**GEOL — GEOLOGY****GEOL 510 Groundwater Geology (2)**

Groundwater in the geologic setting. Hydrology of groundwater basins. Well hydraulics. Principles of flow in saturated and unsaturated materials. Modeling of hydrogeologic systems. Applications to groundwater contamination and management problems.

**GEOL 521 Optical Mineralogy and Petrography (4)**

(2 lecture, 4 laboratory) Prerequisite: GEOL 320. Use of the petrographic microscope to study minerals in immersion media and in rock thin sections and the hand sample and microscopic description of rocks.

**GEOL 540 Paleontology (4)**

(2 lecture; 6 laboratory) Prerequisite: GEOL 202. Fossil animals and plants - fossilization processes, collecting procedures, specimen preparation, description, classification, functional morphology, paleoecology, biostratigraphy, evolutionary trends. Field trip required.

**GEOL 545 Vertebrate Paleontology (3)**

GEOL 202 or permission of instructor. A survey of the evolution of vertebrates through geologic time, emphasizing major events in the history of vertebrates. Includes field trips and methods of fossil collection, preparation, and curation.

**GEOL 550 Sedimentology and Stratigraphy (4)**

(3 lecture, 3 laboratory) Prerequisite: GEOL 202. Sedimentary processes; depositional environments; classification and structures of sedimentary rocks; field and laboratory methods of analyzing and interpreting outcrops and samples. Regional stratigraphy of northeastern Colorado investigated. Field trips required.

**GEOL 560 Geomorphology (3)**

(2 lecture, 3 laboratory) Prerequisite: GEOL 100 or GEOL 201. Origin and evolution of landforms emphasizing fluvial processes, hydraulic characteristics of streams, morphology of drainage basins, landscape evolution by stream sculpture and deposition and lithologic, climatic and structural controls.

**GEOL 564 Glacial and Quaternary Geology (3)**

Prerequisite: GEOL 100 or GEOL 201. A survey of geologic phenomena that characterized the Quaternary Period, with emphasis on the behavior of glaciers, glacial landforms and sediment and climatic implications. Two Saturday field trips required.

**GEOL 567 Volcanic Geology (3)**

(2 lecture, 3 laboratory) Prerequisite: GEOL 202 or consent of instructor. A study of volcanoes and volcanic processes and products. Emphasis on the origin, classification and interpretation of volcanic rocks and ejecta and volcanic structures and landforms.

**GEOL 570 Structural Geology (4)**

(3 lecture, 3 laboratory) Prerequisites: GEOL 201, PHYS 220, MATH 125. Mechanics of rock deformation and geologic structures of the earth's crust - their description and classification, theories and facts regarding their origins and methods of investigating them. Field trips required.

**GEOL 581 Geologic Field Techniques (2)**

(4 laboratory) Prerequisites: GEOL 202 and GEOL 470. Techniques of obtaining and recording geological data in the field and constructing geological maps. Includes use of Brunton compass, plane table and aerial photographs and the preparation of geological reports.

**GEOL 590 Rocky Mountain Geology Seminar (2)**

Consent of instructor. Geology of selected Rocky Mountain area thoroughly investigated by means of four-day field trip to that area followed by seminar presentations on topics relevant to geology of specified area.

**GEOL 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**GER — GERMAN****GER 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**GERO — GERONTOLOGY****GERO 555 Grant Development and Administration (3)**

Overview of proposal planning and grant development process. Application of skills in identifying funding options, program planning, proposal writing, budgeting and establishing controls for grant administration.

**GERO 560 Community Resources for the Elderly (3)**

Leadership/managerial community based learning required. Review needs of older persons in the community and evaluate the continuum of long-term care resources available, service gaps, program models, and funding mechanisms.

**GERO 565 Management Concepts for Aging Services (3)**

Examines basic concepts of management and administration of human service organizations. Emphasizes principles and practices currently used in public, private nonprofit and proprietary aging programs.

**GERO 595 Special Topics in Gerontology (1-4)**

Course designed to investigate specific aspect of Gerontology. Repeatable, maximum of six credits, under different subtitles.

**GERO 620 Individual Development and Aging (3)**

Applies developmental theories to explain concepts of aging. Examines developmental and psychological theories and frameworks, with emphasis on current research in exploration of issues of individual development facing older adults.

**GERO 622 Directed Study in Gerontology (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**GERO 625 Psychosocial Aspects of Aging (3)**

Later life issues are explored using an ecological approach that highlights the benefits and consequences of aging for the individual, family, and society.

**GERO 630 Intervention Strategies with the Elderly (3)**

Analyze major intervention strategies and techniques for utilization with older adults. Emphasizes individual, group and paraprofessional systems. Classroom practice of actual treatment techniques.

**GERO 635 Social Policies of Aging (3)**

Traces history and current status of major policies that benefit elderly. Reviews legislation, levels of policy-making and policy concerns of older population. Includes recent policy changes and policy directions.

**GERO 640 Health Aspects of Gerontology (3)**

Identifies major health problems, concerns and practices of the elderly. Examines health care policies, financing, health promotion and wellness concepts.

**GERO 655 Program Planning and Evaluation in Gerontology (3)**

Survey of basic concepts used in the development and implementation of aging programs. Emphasizes methods and skills needed for the assessment, development and evaluation of programs.

**GERO 660 Financial Management and Budgeting for Aging Programs (2)**

Overview of financial and budgeting functions within human services. Emphasizes public and private non-profits. Directed to non-accountants. Develop basic skills in financial control and fund-raising.

**GERO 692 Graduate Internship in Gerontology (1-12)**

Only 9 credits may be counted towards degree program. S/U graded. Repeatable, maximum of 12 credits. There shall be 40 contact hours per credit hour.

**GERO 694 Practicum in Gerontology (1-4)**

Make application to the department before registration. Repeatable, maximum of eight credits.

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

S/U graded. Repeatable, no limitations.

**GERO 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

 **HESA — HIGHER EDUCATION AND STUDENT AFFAIRS LEADERSHIP**

**HESA 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**HESA 611 Groups, Teams, and Organizations in Higher Education and Student Affairs (3)**

An exploration of groups and organizations within higher education and student affairs. Study will begin within the context of group dynamic and move to organizational theory and application.

**HESA 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**HESA 650 College Student Development: Foundational Theory (3)**

Examines foundational and life span theories of college student development and applies them to students' lives and higher education and student affairs practice.

**HESA 651 Philosophical, Historical and Cultural Foundations of Student Affairs in Higher Education (3)**

Philosophies of education and epistemology. History of U.S. higher education. Origin/history of student affairs. Emphasizes cultural perspective of ethnic minorities, women and other cultural subgroups in higher education.

**HESA 652 Enrollment Management Services (3)**

Examines and reviews the history, purposes, functions, organization and administration of Admissions, Financial Aid, Records and Registration, Advising and Orientation.

**HESA 655 Multiculturalism in Higher Education and Student Affairs Leadership (3)**

Exploration of meaning making from individual cultural lenses to the application of theory to practice in higher education settings. Assessment of multicultural competence within HESAL.

**HESA 658 Management and Administration in Student Affairs (3)**

Application of management tools to student affairs. Skill development focuses on budgeting models, resource management, planning, evaluation and intervention strategies.

**HESA 661 Practicum in College Teaching for Student Development (6)**

Consent of instructor. Actual classroom experience in teaching under supervision any course that has as a part of its objectives, developmental content. S/U graded.

**HESA 669 College and University Curriculum (3)**

Develop an understanding of college and university curriculum by examining undergraduate and graduate program structures for liberal arts and professional programs, curriculum development processes, and current issues impacting curriculum.

**HESA 670 Internship in Higher Education and Student Affairs Leadership (6)**

Consent of instructor. Field-based experience, applying theoretical and conceptual knowledge in higher education setting. Minimum 20 hours per week. In-depth experience with overall functions of office/agency. Develop skills in specific professional role. S/U graded. Repeatable, maximum of 18 credits.

**HESA 671 Introduction to Leadership in Higher Education and Student Affairs Leadership (3)**

Course focuses on leadership theory to assist ethical scholar/leaders prepare for leadership roles in diverse organizations.

**HESA 675 Field Experience in Higher Education and Student Affairs Leadership (1-3)**

Consent of instructor. Application of theoretical/conceptual knowledge in field-based experience. Overview of role, function of higher education office/agency, with focus on specific projects or responsibilities. Requires 4 hours per week per credit hour. S/U graded. Repeatable, maximum of 12 credits.

**HESA 680 Law and Higher Education (3)**

Relate statutory provisions, court decisions, common law principles and constitutional requirements to legal problems affecting public and private higher education institutions and systems.

**HESA 683 Finance and Resource Management in Higher Education (3)**

Analyze issues of financing public and private higher education; examine alternative financing sources and methods; develop skill in resource allocation and management.

**HESA 685 Human Resources in Higher Education (3)**

The course focuses on understanding Human Resource Management (HRM) as an energy source for shaping institutions. Emphasis is on the practical application of achieving change through personnel and compensation administration.

**HESA 690 Public Policy in Higher Education (3)**

An examination of public policy issues in higher education. Study of role of state and federal policy as it impacts public and private institutions of higher education.

**HESA 695 Current Issues in Higher Education and Student Affairs Leadership (3)**

In this seminar students will examine and analyze current issues and trends in higher education. Specific content will vary, dependent upon the nature of contemporary issues and trends and student interests.

**HESA 696 Special Topics in Higher Education and Student Affairs Leadership (1-4)**

Study of special topics in higher education and student affairs leadership. Topics vary. Repeatable, maximum two times, under different subtitles.

**HESA 711 Organizations and Change in Higher Education and Student Affairs Leadership (3)**

Advanced theories of organizations; basic research on organizations and leader behavior; primary research about and models for facilitating change are combined to analyze, plan and evaluate major organizational change processes.

**HESA 750 College Students: Culture, Characteristics, Campus Life (3)**

Prerequisite: HESA 650 or consent of instructor. Investigates student affairs profession and impact on development of college students. Examines current college subcultures. Considers effect on students' progress and success, of campus norms and student characteristics.

**HESA 751 Advanced College Student Development: Social Identity (3)**

Prerequisite: HESA 650 or consent of instructor. Second of two student development theory courses. Examines the social identity of college students, including privilege and oppression, multiple identities and diversity development. Racial identity, ethnic identity, multiracial/multicultural identity, sexual identity, and additional dimensions of identity (class, gender, ability/disability) are also discussed.

**HESA 755 Advanced Research Seminar (1)**

Prerequisite: SRM 700 or take concurrently and 9 hours of statistics. Examine research needs of the profession. Develop a focused research question for the dissertation. Explore research planning and financial support. S/U graded. Repeatable, may be taken twice.

**HESA 760 Theoretical and Philosophical Foundations of Higher Education and Student Affairs Leadership (3)**

Seminar focusing on epistemological frameworks, their applications to leadership inquiry, and the macro perspective of the moral and ethical dimensions of leadership. This course is taken concurrently with HESA 761.

**HESA 761 Scholarly Writing for Scholar/Leaders (3)**

Seminar focusing on scholarly writing skills and examination of the macro perspective of leadership. This course is taken concurrently with HESA 760.

**HESA 765 Systems Thinking in Higher Education and Student Affairs (3)**

This course focuses on systems thinking in higher education and student affairs from multicultural perspectives.

**HESA 771 Advanced Leadership in Higher Education and Student Affairs Leadership (3)**

Prerequisite: HESA 671 or consent of instructor. Courses focuses on advanced leadership theory to assist ethical scholar/leaders prepare for leadership roles in diverse organizations. Emphasis is on advanced leadership theory and its application to diverse high education and student affairs organizations.

**HESA 780 Worldviews & Research Methods for Scholar Leaders (3)**

Prerequisites: HESA 760 and HESA 761. Taken concurrently with HESA 781. Continued doctoral study in higher education and student affairs leadership focusing on conceptualization of research design for scholar/leaders, from choosing a question and framework to data collection and analysis.

**HESA 781 Collaborative Inquiry for Scholar/Leaders (3)**

Prerequisites: HESA 760, HESA 761. Taken concurrently with HESA 780. Continued doctoral study in higher education and student affairs leadership focusing on collaborative research. Explores research framework and design through a collaborative research project.

**HESA 782 Research Capstone in Higher Education and Student Affairs Leadership (3)**

Prerequisites: HESA 760, HESA 761, HESA 780, HESA 781. This course focuses on three themes, data analysis and representation of findings, writing for publication, and navigating the comprehensive exam and dissertation processes.

**HESA 797 Doctoral Proposal Research (1-4)**

Permission of major advisor. Required dissertation proposal experience for all doctoral students. Four hours of credit must be earned in this course in partial fulfillment of requirements for doctoral degrees before admission to candidacy. S/U graded. Repeatable, maximum of four credits.

**HESA 799 Doctoral Dissertation (1-12)**

Permission of major advisor. Required of all doctoral candidates under the direction of a graduate faculty committee. May be taken only after admission to candidacy. S/U graded. Repeatable, no limitations.

**HESA 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**HHS — HEALTH AND HUMAN SCIENCES****HHS 508 Workshop in Health and Human Sciences (1-6)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**HHS 555 International Perspectives on Health and Human Services across the Lifespan (3)**

An interdisciplinary course designed to introduce students to different aspects of health and human services across the lifespan. It will prepare students for a dynamic, diverse and global society.

**HHS 758 Seminar in Collaborative Research in Human Sciences (3)**

Doctoral students only. Supervised experience in conducting collaborative research in human sciences. Students gain experience in research methods, design, statistical analyses and submit their research paper to an academic journal of their choice. Repeatable, maximum of six credits.

**HIST — HISTORY****HIST 400 Teaching History in the Secondary Curriculum (1)**

EDFE 120 or EDFE 125 required. Teaching history methods, emphasizing content based history standards at secondary school level. S/U grades.

**HIST 509 Modern Southeast Asia (3)**

Graduates only. An analysis of the historical experience of Vietnamese, Filipinos, Indonesians, Thais and others caught between China/India, religions of the West and East, colonialism/nationalism and traditional vs. modern life-styles.



**HIST 510 Modern China (3)**

Graduates only. An analysis of the Chinese experience from the impact of Western imperialism in the mid-19th century to the present. Emphasizes internal changes in China's political, social, economic and cultural institutions.

**HIST 511 Modern Japan (3)**

Graduates only. An historical analysis of the late Tokugawa period to the present. Emphasizes internal changes in political, social, economic and cultural institutions.

**HIST 512 Seminar in Asian History (3)**

Graduates only. Investigates selected topics in the history of China, Japan, India and Southeast Asia. Repeatable, maximum of six credits, under different subtitles.

**HIST 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**HIST 516 Seminar in Latin American History (3)**

Graduates only. Investigates selected topics in Latin American history. May focus on colonial or post-independence period. Repeatable, may be taken two times, under different subtitles.

**HIST 518 Modern Africa (3)**

Graduates only. A study of central issues of modern African history, including social transformation, the emergence of the nation-state, economic underdevelopment and the problem of southern Africa.

**HIST 520 Colonial America 1492 to 1763 (3)**

Graduates only. Investigates topics in the history of colonial and revolutionary America through direct research and/or readings.

**HIST 522 Seminar in Southwest History (3)**

Graduates only. Focus of seminar will be on research and writing topics for the American Southwest from the Spanish period through the territorial period to the statehood period when full admission secured.

**HIST 529 American Indian History (3)**

Graduates only. Covers the American Indian experience from prehistory to the present, emphasizing themes of environment, diversity and perception of native peoples by outside observers.

**HIST 530 Topics in American History (3)**

Graduates only. Investigation of a topic in American history. Content depends on instructor. Repeatable, maximum of 15 credits, under different subtitles.

**HIST 534 Advanced Placement Program in World History (1-3)**

Graduates only. Intensive course in the study and interpretation of world history, designed for secondary school teachers teaching advanced placement courses in world history. Includes writing of model syllabi and extensive historical analysis. S/U graded. Repeatable, no limitations.

**HIST 535 Advanced Placement Program-US History (1-3)**

Graduates only. Intensive course in United States historiography and interpretation, designed for secondary school teachers teaching advanced placement courses in United States history. Includes writing of model syllabi and extensive historical analysis. S/U graded. Repeatable, no limitations.

**HIST 536 Advanced Placement Program in European History (1-3)**

Graduates only. Intensive course in European historiography and interpretation, designed for secondary school teachers teaching advanced placement courses in European history. Includes writing of model syllabi and extensive historical analysis and assessment. S/U graded. Repeatable, no limitations.

**HIST 537 Advanced Study in the History of American Education (3)**

Graduates only. Review of the development of American education from colonial times to the present, focusing on the European roots of the educational system to its impact on America's character.

**HIST 550 Industrial America (3)**

Graduates only. Focus on the industrial transformation of the United States during the late nineteenth century. The economic developments as well as the political, social and cultural ones will be examined.

**HIST 552 History of World War II (3)**

Graduates only. A survey of World War II from the rise of the totalitarian states to the dropping of the atomic bombs, with an emphasis on American military and naval operations.

**HIST 557 Seminar in Medieval and Renaissance History (3)**

Graduates only. A seminar for advanced undergraduate and graduate students that will investigate select topics in Medieval and Renaissance history through research and readings.

**HIST 580 Seminar in History (3)**

Graduates only. Designed to assist M.A. candidates in researching and writing thesis proposals and chapters. Students will also present scholarly papers. Required for all M.A. students writing a thesis.

**HIST 589 Modern Europe (3)**

Graduates only. A consideration in depth of European historical development from 1815 to the present, focusing on political, diplomatic and economic matters. Repeatable, maximum of 15 credits, under different subtitles.

**HIST 600 Introduction to Graduate Historical Study (3)**

Examines the nature of history, historical research and the writing of history.

**HIST 622 Directed Studies (1-6)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

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

Optional for Master of Arts programs on recommendation of the major advisor. S/U graded. Repeatable.



**HRS — HUMAN  
REHABILITATIVE  
SERVICES**

**HRS 580 Rehabilitation Principles and Case Management (3)**

Introduction to comprehensive rehabilitation history, philosophy, legislation and process. Details role and functions of case management and coordination with community, government and industry.

**HRS 581 Vocational Evaluation and Assessment of People with Disabilities (3)**

Basic principles in vocational evaluation and assessment of persons with disabilities. Skills development in use of various testing instruments, methods and effective interpretation of results.

**HRS 585 Occupational Information and Job Placement (3)**

Presents theories of vocational choice and use of labor market information. Identifies job analysis, development and placement practices for successful transitions of handicapped client to gainful employment.

**HRS 595 Special Topics in Rehabilitation (1-4)**

Course designed to investigate a specific aspect of rehabilitation. Repeatable, maximum of nine credits, under different subtitles.

**HRS 597 Counseling and Treatment of the Substance Abuser (3)**

This course will provide advanced work in the area of substance abuse treatment and counseling. Instruction in treatment modalities, explore research topics and build counseling techniques appropriate for this population.

**HRS 601 Practicum in Rehabilitation (1-4)**

Supervised professional activity in student's major field; approximately 37 clock hours of work per credit. Two copies of well written paper must be filed before credit is given. Repeatable, no limitations.

**HRS 604 Family, Cultural and Psychological Aspects of Disability (3)**  
Develop an understanding of and sensitivity to the psychological, social, interpersonal, family and cultural aspects of and adjustments to disability, including successful vocational outcomes.

**HRS 605 Medical Aspects of Disability (3)**  
Appraises medical implications in rehabilitation: nature, cause, treatment, limitation, progress, social and occupational aspects of injury, medical terminology and the role of medical specialist.

**HRS 610 Interpretation and Evaluation of Behavioral Research (3)**  
Understanding of applications of appropriate statistical techniques and necessary skills for interpretation and evaluation of research in human services. Emphasizes basic concepts, design and utilization of behavioral research.

**HRS 622 Directed Studies in Human Rehabilitation (1-4)**  
Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**HRS 630 Human Services Counseling Theories and Techniques (3)**  
Analyze counseling theories as they are applied to human services. Develop basic counseling skills.

**HRS 631 Group Processes in Rehabilitation (3)**  
An integrated perspective of the stages of groups, basic concepts and goals of groups with rehabilitation clients.

**HRS 650 Human Resources System (3)**  
Addresses leadership issues in human resource planning, management and development necessary for achieving responsible change. Examines various organizational components and their interrelationship and interdependence with other organization systems.

**HRS 659 Seminar in Rehabilitation Counseling Supervision (3)**  
An investigation of the major approaches to counseling supervision intended to increase the student's understanding of clinical supervision as it relates to rehabilitation counselor training.

**HRS 692 Clinical Internship in Rehabilitation (1-18)**  
Prerequisites: HRS 630, HRS 694. Consent of instructor. Field experience for qualified Rehabilitation Counseling majors at approved locations. Written application to faculty internship supervisor at least one semester before registration. S/U graded. Repeatable, maximum of 18 credits.

**HRS 694 Supervised Counseling in Human Services (6)**  
Prerequisite: HRS 630. Meets minimum of 12 hours per week. Qualified human services majors engage in counseling interviews and activities under the supervision of one or more university staff members. S/U graded.

**HRS 695 Seminar in Foundations of Human Rehabilitation (3)**  
This graduate seminar will focus on core issues confronting the field of rehabilitation. Issues will be examined from a historical, theoretical and research perspective.

**HRS 696 Advanced Rehabilitation Counseling Theories and Approaches (3)**  
Prerequisite: HRS 630 or equivalent. Consent of instructor. Major counseling theories are comprehensively reviewed in terms of their utility with individuals who have disabilities and in order to enhance student preparation for rehabilitation counselor education and supervision.

**HRS 706 Advanced Seminar in Psychosocial Aspects of Disability (3)**  
Theoretical and conceptual frameworks of adjustment of various disabling conditions are comprehensively investigated. A thorough review of the research literature regarding psychosocial aspects of disability will be undertaken.

**HRS 755 Supervised Practicum in College Teaching (3)**  
Majors only. Experiences in observation and supervised practice in teaching at college or university level. Repeatable, maximum of nine credits.

**HRS 757 Advanced Seminar in Rehabilitation Administration (3)**  
Majors only. Students will receive supervised experience in administration, program planning, evaluation and grant writing. Approximately 150 clock hours per semester are required for three credits. Repeatable, maximum of nine credits.

**HRS 758 Seminar in Collaborative Research in Human Sciences (3)**  
Doctoral students only. Supervised experience in conducting collaborative research in human sciences. Students gain experience in research methods, design, statistical analyses and submit their research paper to an academic journal of their choice. Repeatable, maximum of six credits.

**HRS 759 Advanced Practicum in Rehabilitation Counseling Supervision (3)**  
Majors only. Students receive supervised experience in studying problems in training rehabilitation counselors. Approximately 150 clock hours per semester required for three credits. Repeatable, maximum nine credits.

**HRS 797 Doctoral Proposal Research (1-4)**  
Majors only. Required of doctoral students. Students must earn 4 hours of credit towards doctoral degrees before candidacy. S/U graded. Repeatable, maximum four credits.

**HRS 799 Doctoral Dissertation (1-12)**  
Majors only. Required of doctoral candidates. Students must earn 12 hours of dissertation credit for doctoral requirements. S/U graded. Repeatable, no limitations.

**HRS 999 Graduate School Continuous Registration (1)**  
To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.



## ID — INTERDISCIPLINARY STUDIES

**ID 508 Workshop (1-3)**  
A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**ID 513 Professional Renewal (1-4)**  
Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.



## INTR — INTERPRETER

**INTR 505 Supervision of Interpreting Systems (3)**  
This course focuses on supervision of interpreting systems. Students examine core skills shared by supervisors and analyze strategies that promote effective communication and resolve conflict in the workplace.

**INTR 506 Leadership in Interpreting (3)**  
This course introduces the major theories and concepts of leadership and their application to the field of interpreting. It will explore the link between leadership, ethics, and values.

**INTR 560 Ethics in Leadership (3)**  
This course addresses central issues of moral philosophy, seeking to identify and understand moral challenges peculiar to leadership. Ethical problems taking on a particular guise in leadership contexts are explored.

**INTR 561 Conducting Diagnostic Assessments for ASL-English Interpreters (3)**

This course provides supervisors of interpreters, lead interpreters and/or mentors with a common system, along with the tools and resources needed to effectively conduct skills-based diagnostic assessments.

**INTR 580 Overview of Interpreting in the American Legal System (4)**

Prerequisite: Placement by advisement only. This course introduces students to the American Judicial System including the scope and jurisdiction of federal and state courts and an overview of the civil and criminal court process.

**INTR 581 Civil Litigation (3)**

Prerequisite: Placement by advisement only. This course provides students with a foundation in civil law, procedures and systems that is essential to understanding the legal meaning of civil law proceedings to be interpreted.

**INTR 582 Criminal Law (4)**

Prerequisite: Placement by advisement only. This course examines criminal law and its associated procedures, as well as the implications of the criminal procedure and legal language on the interpreting process.

**INTR 583 Internship: Skills Development for Legal Interpreters (4)**

Prerequisite: Placement by advisement only. This course provides the student with a firm foundation in the tasks of interpreting legal texts and guides the practicum experience.

**LIB — UNIVERSITY LIBRARIES****LIB 550 Library Research in Criminal Justice (1)**

(1 lecture) Active learning experience in managing information in a dynamic research environment. Skills include identifying, retrieving, organizing, and evaluating information necessary for graduate level research in Criminology and Criminal Justice.

**MAS — MEXICAN AMERICAN STUDIES****MAS 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**MAS 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**MAS 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**MATH — MATHEMATICS****MATH 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**MATH 510 Seminar in Mathematics (1)**

Study discussion and student presentation of topics in mathematics. S/U graded. Repeatable, under different subtitles.

**MATH 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**MATH 520 Functions and Equations (3)**

Graduates only. Polynomial equations including DeMoivre's Theorem, the Fundamental Theorem of Algebra, methods of root extraction (e.g. Newton, Graffe) multiplicities, symmetric functions, matrices and determinants. Elementary computer applications.

**MATH 522 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**MATH 523 Modern Algebra (3)**

A study of groups, rings and fields with a special emphasis on groups and fields.

**MATH 525 Linear Algebra I (3)**

Prerequisite: MATH 321. Vector spaces, linear transformations, matrices, eigenvalues, canonical forms, quadratic forms and other selected topics.

**MATH 528 Discrete Mathematics (3)**

Graduates only. Broad, deep, survey of topics in combinatorics, graph theory addressing existence, enumeration, optimization. Blend of mathematics, applications and development of mathematical reasoning skills, guided by the NCTM standards.

**MATH 529 Mathematical Problem Solving (3)**

Graduates only. Techniques in problem solving applied to algebra, number theory, geometry, probability, discrete mathematics, logic and calculus. A study of Polya's heuristic rules of mathematical discovery.

**MATH 531 Basic Analysis I (4)**

Prerequisite: MATH 233 with a grade of "C" or better (C- is not acceptable), and permission of instructor. Sequence of two courses to extend studies of calculus and analysis into the mathematical rigor and logic of analysis. Includes: real numbers, sequences, topology, limits, continuity, differentiation, series and integration.

**MATH 532 Basic Analysis II (4)**

Prerequisite: MATH 531. Continuation of MATH 531.

**MATH 534 Continuous Mathematics (3)**

Graduates only. Students will explore selected topics in mathematical analysis such as differential mappings and chaotic systems.

**MATH 537 Mathematical Modeling (3)**

Graduates only. Introduction to the process of mathematical modeling and its use in teaching secondary school mathematics. Emphasizes development and communication of models.

**MATH 540 Introduction to Topology (3)**

Point-set topology and the foundations of real analysis.

**MATH 543 Modern Geometry (3)**

A survey of both traditional Euclidean geometry and contemporary geometries, in which applications of geometry are integrated into the study of the mathematical structure of geometrical systems.

**MATH 545 Introductory Analysis (3)**

Prerequisite: MATH 540. Sequences, series, differentiation, Riemann-Stieltjes Integral, series of functions, special functions and functions of several variables.

**MATH 550 Applied Probability and Statistics (3)**

Graduates only. Concepts include history, counting techniques, distributions and inference (confidence intervals, point estimation, testing, ANOVA, regression, non-parametrics). The Context focus is secondary level mathematics.

**MATH 560 Introductory Complex Variables (3)**

Prerequisite: MATH 432 or equivalent. First course in complex variables, especially for potential calculus teachers. After preliminaries, proceed directly to power series, Laurent's series, contour integration, residue theory, polynomials and rational functions.

**MATH 591 Abstract Algebra and Number Theory (3)**

Basic methods of problem solving in abstract algebra and number theory with applications in secondary school mathematics.

**MATH 595 Topics in Mathematics (1-3)**

Topics from various fields of mathematics which reflect specific interests of instructors and students. Repeatable, under different subtitles.

**MATH 609 Abstract Algebra I (3)**

Prerequisite MATH 523 or equivalent. Groups and rings and their structure. Sylow theorems. Modules. History and applications.



**MATH 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**MATH 623 Abstract Algebra II (3)**

Prerequisite: MATH 609. Polynomial Noetherian rings and ideals. Fields and Galois theory. Structure of fields. History and applications.

**MATH 632 Complex Variables (3)**

Prerequisite: A course in complex analysis. Analytic and meromorphic functions in the complex plane. Integration, conformal mapping and advanced topics.

**MATH 633 Geometric Analysis (3)**

Prerequisites: MATH 525; MATH 540 recommended. Analysis of functions of several variables, unifying and extending ideas from calculus and linear algebra. Includes the implicit function theorem and Stokes' Theorem.

**MATH 635 Real Analysis (3)**

Abstract spaces, Lebesgue measure, continuity, integration and differentiation theorems, Baire category.

**MATH 644 Differential Geometry (3)**

Prerequisite: A course in Analysis. A course in the differential geometry of curves and surfaces. Both modern and classical aspects will be covered.

**MATH 664 Difference Equations and Chaos (3)**

Applications of difference equations in problem solving and modeling, especially in the area of chaos.

**MATH 678 Mathematical Logic (3)**

The notion of proof, first order logic, set theory, ordinals, cardinals and an overview of the most important recent results in the field.

**MATH 691 Number Theory (3)**

Prerequisite: MATH 632. A survey of topics in arithmetic and analytic number theory, such as Eulers' function, quadratic reciprocity, continued fractions and the distribution of prime numbers.

**MATH 695 Special Topics (3)**

Topics from various fields of mathematics, for example, algebraic topology, functional analysis, Lie groups and algebras or nonlinear analysis. Repeatable, under different subtitles.

**MATH 700 Advanced Seminar (2)**

Consent of Instructor. An advanced seminar in an active area of mathematical research. Content depends upon instructor's choice. Repeatable, may be taken two times, under different subtitles.

**MATH 727 Representation Theory (3)**

Introduction to Representation Theory of various mathematical structures. Emphasis is on group representations.

**MATH 728 Topics in Discrete Mathematics (3)**

Prerequisite: MATH 678. A broad yet deep survey of current topics in combinatorics and graph theory essential for teachers K-16, including applications to probability, coding theory, sorting and matching algorithms and optimization.

**MATH 736 Real Analysis II (3)**

Prerequisite: MATH 635. Topics from real and functional analysis such as: measure theory, distributions, metric spaces and other topics of the instructor's choice.

**MATH 797 Doctoral Proposal Research (1-4)**

Required of all doctoral students. Four hours of credit for doctoral dissertation proposal research must be earned in partial fulfillment of requirements before admission to candidacy. Repeatable, maximum of four credits.

**MATH 799 Doctoral Dissertation (1-12)**

Required of all doctoral candidates. S/U grading. Repeatable, no limitations.



## MED — MATHEMATICS EDUCATION

**MED 441 Methods of Teaching Mathematics (3)**

Prerequisite: EDFE 120 or EDFE 125; Co-requisite: STEP 363. For prospective teachers seeking licensure in middle grade or secondary school mathematics. Focus on teaching lessons, curriculum overviews, and applying theories of learning and teaching mathematics. Early field experience desirable.

**MED 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**MED 509 Advanced Placement Program AB and BC Calculus (1-3)**

Topics in calculus and pedagogical information related to establishing and maintaining a calculus advanced placement program. S/U graded. Repeatable, no limitations.

**MED 510 Advanced Placement Statistics (1-3)**

Topics in the content and pedagogy related to teaching and maintaining an Advanced Placement Statistics program. S/U graded. Repeatable, no limitations.

**MED 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**MED 514 Geometry in Middle School Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes measurement, symmetry, properties of figures, proof, and pedagogical content knowledge for teaching geometry at the middle grades.

**MED 515 Number and Operation in Middle School Mathematics Teaching (3)**

Topics in number theory, arithmetic operations and their representations (algebraic and geometric), and pedagogical content knowledge for teaching the middle grades, with particular emphasis on preparing students to enter algebra.

**MED 516 Algebra in Middle School Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes algebraic representations of patterns, numbers, and functions and pedagogical content knowledge for teaching algebra.

**MED 522 Topics in Mathematics Teaching at the Middle Level (1-3)**

A mathematics education course for current middle school teachers. Content includes mathematics education topics appropriate for teachers of middle level mathematics. Repeatable for a maximum of 6 credits.

**MED 528 Teaching of Discrete Mathematics (2)**

Graduates only. Methods of teaching discrete mathematics including using technology, projects, cooperative groups and the development of curriculum materials. Topics will include the teaching of existence problems, counting problems and optimization problems.

**MED 534 Teaching Algebra and Trigonometry (2)**

Graduates only. Current research on instruction in algebra/trigonometry; current curricular issues. Approach teaching of Algebra and Trigonometry from a conceptual and problem solving point of view.

**MED 543 Teaching Geometry (2)**

Graduates only. Students will develop teaching modules and models based on current theories of cognition and recommendations of professional societies.

**MED 550 Teaching Applied Probability and Statistics (2)**

Graduates only. Methods of teaching topics of probability and statistics including hands-on experience in collecting and analyzing data. Topics include descriptive techniques, random variables, curve fitting and use of technology.

**MED 587 Technology, Manipulatives and NCTM Standards (3)**

Classroom use of mathematics software, calculators, pattern blocks, attribute blocks, geoboards, geometric solids, MIRA's and others presented to teach problem solving, skills and concepts. S/U graded.

**MED 588 Implementation of Mathematics Standards in Instruction (1-3)**

A mathematics education internship course for current middle school teachers. Content includes mathematics and mathematics education topics appropriate for teachers of middle level mathematics, but is focused on participants' implementation and integration of program and course content in their own instruction. Repeatable for a maximum of 3 credits.

**MED 595 Teaching Advanced Topics in Secondary School Mathematics (2)**

Graduates only. Methods of teaching advanced mathematics topics in high school mathematics with emphasis on pedagogy, working cooperatively and developing curriculum materials for teaching such topics as vectors, fractals and transformations.

**MED 599 Action Research Project (1)**

Graduates only. Research a current problem in secondary mathematics education relevant to their own teaching situation. Develop goals, review relevant literature and plan the project while progressing through the program. Repeatable, may be taken three times.

**MED 600 Introduction to Research in Mathematics Education (3)**

For graduate students only. Examination and critique of current research in mathematics education. A focus on research design, analysis and reporting of both qualitative and quantitative research.

**MED 610 Survey of Research in Mathematics Education (3)**

Graduates only. The goals of this course are to synthesize and re-conceptualize past research, suggest areas of research most useful to advancing the field and provide implications for classroom practice.

**MED 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**MED 630 Technology in Mathematics Education (2)**

Prerequisite: MED 600 or consent of instructor. Graduates only. Hands-on training in using new software tools for the instruction of mathematics. Current research and curriculum reform efforts concerning technology in teaching will be examined. Repeatable, may be taken two times.

**MED 654 Seminar in College Mathematics Teaching (0-1)**

Prerequisite: Graduates only. Improvement of undergraduate mathematics teaching via active student-based learning and implementation of a learning cycle of informed practice and information gathering, reflection and analysis, and planning and modified practice. S/U graded. Repeatable, no limitations.

**MED 673 Teaching and Learning Mathematics on the Elementary Level (3)**

Prerequisite: B.A. in mathematics or equivalent. To prepare elementary/middle school mathematics specialists. Includes mathematics review of number theory, geometry and other content, NCTM curriculum, professional and assessment standards, use of technology and manipulatives and research.

**MED 674 Teaching and Learning Mathematics on the Secondary Level (3)**

Prerequisite: MED 610. Graduates only. Address and evaluate specific problems in mathematics education. Allow students to examine curricular concerns, evaluation, teaching special populations and cognitive issues relating specifically to the secondary level.

**MED 675 Teaching and Learning Mathematics on the Post-Secondary Level (3)**

Prerequisite: MED 610 or consent of instructor. Graduates only. Address community college and undergraduate level mathematics education issues. Focus on current curriculum reform and research into learning and teaching on the post-secondary level.

**MED 678 Special Topics (2-3)**

No more than six hours may be applied to any one graduate degree. Prerequisites and topics announced in Schedule of Classes. Repeatable, may be taken three times, under different subtitles.

**MED 700 Cognitive Processes in Mathematics (3)**

Prerequisite: MED 610. Analyze research concerning cognitive science in mathematics education. Conduct case study on cognition in mathematics.

**MED 701 Educational Mathematics Research (3)**

Prerequisites: MED 610 and SRM 502 or equivalent. Learn advanced research concepts and methods that are unique in the study of educational mathematics. Includes data analysis and advanced statistical techniques.

**MED 702 Qualitative Research in Mathematics Education (3)**

Prerequisite: MED 610. A focus on paradigms, issues and methods of qualitative research in mathematics education. This includes critical analysis of literature and of data collected from mathematics learning environments.

**MED 703 Teaching and Learning K-12 Mathematics (3)**

Prerequisite: MED 610. A focus on issues relevant to working with preservice and inservice K-12 mathematics teachers, and in promoting standards-based content, curriculum, pedagogy and assessment.

**MED 710 Seminar in Post-Secondary Mathematics Teaching (1)**

Curricular, pedagogical and ethical issues in college mathematics teaching. Students and faculty reflect on and discuss ways to improve and reform teaching. S/U graded.

**MED 750 History and Philosophy of Mathematics Education (3)**

Prerequisite: MED 700 or consent of instructor. An exploration of the underpinnings of current K-16 mathematics education by examining the historical development, perspectives and schools of thought that have influenced the teaching of mathematics.

**MET —  
METEOROLOGY****MET 501 Dynamic Meteorology I (3)**

Prerequisites: MET 215, MET 320, MATH 233, PHYS 242. The physical laws governing planetary and synoptic-scale atmospheric motions are developed mathematically based on conservation of mass, momentum, and energy.

**MET 502 Dynamic Meteorology II (4)**

(3 lecture, 2 laboratory) Prerequisite: MET 501. Continued mathematical development of physical laws governing atmospheric motions, emphasizing vorticity, quasi-geostrophic prediction, and buoyancy waves. Theory is applied to weather charts during laboratory sessions and daily weather discussions.

**MET 536 Biometeorology (3)**

Prerequisite: MET 205. Relationships between living organisms and atmospheric environment. Effects of weather on human health, agriculture and animals. Soil and air temperature, radiation and energy budgets, water cycle, heat units, comfort indices.

**MET 542 Synoptic Meteorology Laboratory (3)**

Prerequisite: MET 502. (6 laboratory) Use of weather data, manual analyses, and meteorological software tools in weather forecasting and case studies. Practice includes review of theory, student weather briefing, daily forecast, and statistical forecast verification.

**MET 551 Climatology (3)**

Prerequisite: MET 320. Factors affecting climate; analytical methods used to study climatology, general circulation of the atmosphere, oceans, and the global energy balance. Introduction to global climate models, projects of climate change.

**MET 552 Paleoclimatology (3)**

Prerequisites: MET 205 or consent of instructor. Juniors or above. Survey of climate history and methods of interpreting geological, paleontological, and paleobotanical climate proxies. Introduction to modeling, utility of using models to reconstruct past climate, and current research in paleoclimate.

**MET 565 Radar Meteorology (3)**

Prerequisites: MATH 132, MET 260, PHYS 241. Majors only. Principles of radar operation and radar remote sensing techniques. Types of radar and their applications in meteorology.

**MET 595 Special Topics in Meteorology (1-4)**

Consent of instructor. Explore topics in Meteorology beyond existing departmental offerings. Specific topics determined by student interest and instructor. Repeatable, under different subtitles.

**MET 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.



## MFT — MATHEMATICS FOR TEACHING

**MFT 514 Geometry in Middle School Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes measurement, symmetry, properties of figures, proof, and pedagogical content knowledge for teaching geometry at the middle grades.

**MFT 515 Number and Operations in Middle Level Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes topics in number theory, arithmetic operations and their representations (algebraic and geometric), problem-solving, numerical patterns and formulas, and pedagogical content knowledge for teaching these topics in the middle grades, with particular emphasis on preparing students to enter algebra.

**MFT 516 Algebra in Middle Level Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes algebraic representations of patterns, numbers, and functions and pedagogical content knowledge for teaching algebra at the middle grades.

**MFT 517 Data Analysis & Probability in Middle Level Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes introductory notions of probability and basic descriptive statistics appropriate for teachers of middle level mathematics.

**MFT 520 Survey of Mathematics (3)**

A mathematics course for current middle school teachers. Content includes history and development of various aspects of mathematics from a problem-solving perspective. Course provides breadth in mathematics while connecting the topics covered to the middle school curriculum. Topics are chosen from: fractals, cardinality of sets, ethnomathematics, number theory, abstract algebra, combinatorics, and graph theory.

**MFT 522 Topics in Middle Level Mathematics Teaching (3)**

A combined mathematics/mathematics education course for current middle school teachers. Content includes mathematics topics appropriate for teachers of middle level mathematics. "Repeatable, under different subtitles".

**MFT 530 Conceptions of Analytic Geometry and Calculus (3)**

A mathematics course for current middle school teachers. Content includes history and development of various aspects of analytic geometry and calculus from a problem-solving perspective. Topics include: functions, basic concepts of trigonometry and basic concepts of calculus (rates of change, limits, finding area under curves). Topics will be approached from multiple perspectives and their connections to the middle school curriculum will be highlighted.



## MUS — MUSIC

**MUS 100 Recitals, Concerts and Productions (0)**

Weekly departmental recitals. Convocations, plus a minimum of 12 major recitals, concerts and productions each semester in residence. S/U graded. Repeatable, no limitations.

**MUS 113 Music Theory I (2)**

Prerequisites: Successful completion of MUS 104 or Music Theory Placement Exam or AP Test score of at least 3 on both written and aural sections. Introduction to basic diatonic harmony, phrase structure, analysis, period form and four part writing in root position. Weekly keyboard labs reinforce the coursework.

**MUS 114 Aural Skills and Sight Singing I (2)**

Prerequisites: Successful completion of MUS 104 or Music Theory Placement Exam or AP Test Score of 3 on both written and aural sections. Exercises in sight singing, rhythmic reading and dictation. Sight singing of diatonic melodies, intervals, triads. Performance of rhythmic reading exercises. Ear training includes intervals, triad types, diatonic melodies, cadences and rhythmic dictation.

**MUS 115 Music Theory II (2)**

Prerequisites: Successful completion of both MUS 113 and MUS 114 or Music Theory Placement Exam or AP Test score of at least 4 on both written and aural sections. Introduction to harmony through four-part writing. Principles of harmonic progression, modulation, diatonic seventh chords and secondary dominants are included. Analysis of Binary and Ternary forms. Weekly keyboard labs reinforce the written material.

**MUS 116 Aural Skills and Sight Singing II (2)**

Prerequisites: Successful completion of both MUS 113 and MUS 114 or by placement exam or AP Test score of at least 4 on both written and aural sections. Exercises in sight singing, rhythmic reading and dictation. Sight singing of diatonic, modulating and chromatic melodies. Performance of rhythmic reading exercises which include syncopation and asymmetrical meters. Dictation includes diatonic chord progressions, diatonic and chromatic melodies, seventh chords, and rhythmic dictation with syncopation, and meters including 5/8 and 7/8.

**MUS 143 Musical Styles and Context (3)**

Music in its historical and cultural contexts: stylistic development and connections to the other arts. Intended for majors and musically literate non majors with a knowledge of basic music theory. (LAC, gtP)

**MUS 210 Introduction to Music Education (1)**

Prerequisite: EDFE 110 and MUS 113. Music majors only. For prospective teachers of music. Covers the history and present status of music in the schools, qualifications of music teachers and beginning instructional problems. Weekly observation and aiding required.

**MUS 213 Music Theory III (2)**

Prerequisite: Successful completion of MUS 115 and MUS 116. Introduction to chromatic harmony. Analysis of larger part forms.

**MUS 214 Aural Skills and Sight Singing III (1)**

Successful completion of MUS 115 and MUS 116. Ear training and sight singing, including chromatic harmonies, chromatic melodies, modulating melodies and rhythmic dictation.



**MUS 215 Music Theory IV (2)**

Prerequisite: Successful completion of MUS 213 and MUS 214. Introduction to musical styles and analysis techniques since 1900.

**MUS 216 Aural Skills and Sight Singing IV (1)**

Prerequisite: Successful completion of MUS 213 and MUS 214. Ear training and sight singing skills related to musical styles since 1900.

**MUS 243 History of Music I (3)**

The history of change in music from earliest times through the 16th Century to the end of the Baroque Period with emphasis on the changes in style. (LAC, gTP)

**MUS 244 History of Music II (3)**

A study of historical changes that took place in music in the Classic and Romantic Periods and the 20th Century. (LAC)

**MUS 292 Marching Band (1)**

Audition required. Open to all university students. To develop marching/playing skills by utilizing current practices in marching band formation design and special marching band musical arrangements. Repeatable, no limitations.

**MUS 310 Teaching General Music in Elementary Schools (2)**

Prerequisite: MUS 210, EDFE 110 or EDFE 125. A comprehensive study of the teaching of music to students in elementary school general music classes. Clinical experiences required.

**MUS 311 Teaching General Music in Secondary Schools (2)**

Prerequisite: MUS 310, EDFE 120 or EDFE 125. Study the role and nature of required and elective general music, arts and humanities courses in junior and senior high schools.

**MUS 312 Teaching Instrumental Music in Elementary Schools (2)**

Prerequisite: MUS 210, EDFE 120 or EDFE 125. Examine materials, methods and procedures for teaching instrumental music in elementary schools. In-class presentations and clinical experience required.

**MUS 314 Guitar in the Classroom (1)**

Music majors only or consent of instructor. Learn to play guitar, including basic folk and classical techniques. Covers development of a guitar program in public school music curriculum.

**MUS 317 Teaching Instrumental Music in Secondary Schools (2)**

Required clinical experience arranged. Prerequisite: MUS 312, EDFE 120 or EDFE 125. Develops understanding of skills necessary to maintain an outstanding secondary instrumental music program.

**MUS 319 Instrumental Techniques and Conducting (1)**

Prerequisite: MUS 202. Develop effective hand and baton technique; learn drill and various meter patterns, tempo, style, dynamics, musical terms; study and perform musical scores, using a laboratory band and orchestra.

**MUS 320 Wind Literature, Pedagogy and Conducting (2)**

Prerequisite: MUS 319. Designed to continue conducting instruction begun in MUS 319, with emphasis on wind literature and rehearsal techniques appropriate for elementary through high school bands.

**MUS 323 Choral Techniques and Conducting (2)**

Prerequisite: MUS 202. Develop basic conducting technique as a choral musician. Study and apply meter patterns, preparatory beats, cueing and releases. Discuss tone production, diction, blend, score preparation and rehearsal techniques.

**MUS 324 Choral Conducting and Pedagogy for Elementary and Secondary Schools (2)**

Prerequisite: MUS 323, EDFE 120 or EDFE 125. Continuation of MUS 323, refining conducting techniques. Examines materials, methods and procedures relevant to teaching vocal music in elementary and secondary schools.

**MUS 325 Choral Methods and Literature for Elementary and Secondary Schools (1)**

Prerequisite: MUS 320 or MUS 323, EDFE 120 or EDFE 125. Examine choral literature for use with elementary through high school choral organizations.

**MUS 330 String Techniques (1)**

The study of the problems of string playing through performance on string instruments and the study of available literature for teaching strings in preparation for establishing string classes upon graduation.

**MUS 331 String Pedagogy and Literature for the Instrumental Music Teacher (2)**

Prerequisite: MUS 319, MUS 330, EDFE 120 or EDFE 125. Laboratory required. Additional studies in string performance and literature are presented for the instrumental B.M.E. major.

**MUS 356 Marching Band Techniques (1)**

Prerequisite: EDFE 120 or EDFE 125. Designed to develop the necessary skills and knowledge needed to organize, administer, plan and teach marching band shows. Clinical experience required.

**MUS 360 Voice Class (1)**

Beginning instruction in singing. Primarily for the student who is not a voice major. Study will involve the elements of a basic technique for singing and beginning solo repertoire.

**MUS 361 Single Reed and Flute Class (1)**

Prerequisite: MUS 210. This course addresses fundamental issues in playing and teaching the clarinet, saxophone, and flute to assist music educators in the instructions of these instruments.

**MUS 362 Double Reed Class (1)**

Prerequisite: MUS 210. This course addresses fundamental issues in playing and teaching the oboe and bassoon to assist music educators in the instruction of these instruments.

**MUS 364 Brass and Percussion Class (2)**

Prerequisite: MUS 115. Develop a teaching knowledge of the brass and percussion instruments. Acquire sufficient playing skill for purposes of demonstration.

**MUS 367 Materials and Techniques for Brass and Percussion (1)**

Required of all music majors with vocal, piano and general music emphasis (B.M.E.). Covers the teaching fundamentals of brass and percussion instruments.

**MUS 410 Vocal Pedagogy (2)**

An introduction to the science and teaching of singing. Study of the skeletal system, muscles involved in breathing and phonation, vocal acoustics, and learning theories, past and present.

**MUS 414 Contemporary Issues in Music Education (2)**

Prerequisite: MUS 310, EDFE 120 or EDFE 125. Includes issues such as assessment and the inclusion of students with handicapping conditions into the classroom.

**MUS 450 Seminar in Student Teaching for Music Educators (1)**

Prerequisite: EDFE 120 or EDFE 125. This seminar is designed to provide student teachers in music education with pertinent information and a support system that will aid them during their field experience.

**MUS 492 Marching Band (1)**

Audition required. Open to all university students. To develop marching/playing skills by utilizing current practices in marching band formation design and special marching band musical arrangements. Repeatable, no limitations.

**MUS 501 18th Century Counterpoint (3)**

Prerequisites: MUS 401 and MUS 402, or passing grade on the Graduate Theory Placement Exam. Study through analysis and composition of counterpoint as found in the inventon, canon, fugue and choral prelude.

**MUS 502 Harmony and Form I (3)**

Study 18th and early 19th century harmonic practice and tonality concepts.

**MUS 503 Harmony and Form II (3)**

Prerequisite: MUS 502 or consent of instructor. The study of late 19th and 20th century harmonic and formal concepts.

**MUS 504 Music Theory Pedagogy (3)**  
Become familiar with methods and materials available for teaching AP and undergraduate music theory. Receive practical experience through observation and practice teaching under the guidance of qualified instructors.

**MUS 505 Sixteenth Century Counterpoint (3)**

Study the style of 16th century polyphonic music, emphasizing actual period music as well as theoretical concepts. Compose two-, three- and four-voice motets.

**MUS 506 UNC String Project Pedagogy and Supervised Teaching Practicum (1-2)**

Consent of Director, UNC String Project. Specific, supervised string teaching assignments. Credit hours, not to exceed two per semester, dependent upon classroom/clinical experience hours assigned. Repeatable, no limitations.

**MUS 507 History of Instruments and Instrumental Practices (3)**

A historical study of the background and development of musical instruments, with emphasis on the related performance practices.

**MUS 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**MUS 509 Electronic Music (3)**

Describe materials used in electronic music and the techniques and equipment employed to transform and organize these into compositions. Students learn to use the synthesizer.

**MUS 510 Vocal Pedagogy (2)**

An introduction to the science and teaching of singing. Study of the skeletal system, muscles involved in breathing and phonation, vocal acoustics, and learning theories, past and present.

**MUS 511 Wind Band Literature and Techniques (2)**

A survey of the origins, development and historical significance of the wind band, including an overview of its literature, instrumentation and specific considerations for conducting this repertoire.

**MUS 512 Symphonic Literature and Techniques (2)**

Historical overview of the symphony, opera, and ballet orchestras and their literature. Addresses questions of style, performance practice, and programming. Includes specific study of conducting considerations for this repertoire and a unit of study on music for younger orchestras.

**MUS 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**MUS 515 Keyboard Literature I (2)**

Sightreading at Level III or above required. The study of keyboard music from its earliest beginnings through the works of Frederic Chopin and Robert Schumann. Offered every other year.

**MUS 516 Keyboard Literature II (2)**

Sightreading at Level III or above required. Concentrate on keyboard works from Franz Liszt and Johannes Brahms through the twentieth century. Offered every other year.

**MUS 517 Comprehensive String Pedagogy for String Players (3)**

Graduate majors in violin, viola, cello or double bass (including graduate music education students) will enroll in this course upon consultation with their advisor. Pedagogy and practical application of technical literature from beginning through college preparatory for bowed stringed instruments (violin, viola, cello and bass). Teaching practicum is an integral part of the course.

**MUS 519 Foundations of Music Education (3)**

Study historical, philosophical and psychological issues and principles that provide the context for contemporary music education.

**MUS 533 Curriculum Trends in Music Education (3)**

Study curriculum trends in music education, including methods of teaching, curriculum development and aesthetic education.

**MUS 534 Acting for Singers (2)**

Instruction in the special needs of the singer/actor: staging of arias, improvisation, freeing the voice through movement.

**MUS 536 German Art Song (3)**

An introduction to the origins of the art song form with in-depth study of the German art song from its historical beginnings through the present day.

**MUS 538 French/Italian Art Song (2)**

Course in the performance of 19th and 20th century French and Italian Art Song with particular emphasis upon style, technical requirements and diction.

**MUS 539 British/American Art Song (2)**

In-depth study of British and American art song. Emphasis will be on research and performance of 20th century materials.

**MUS 540 Techniques of Vocal Coaching (2)**

Prerequisite: Consent of Instructor. Acquaint students with musical style, performance practice and interpretation appropriate to song literature, oratorio and opera.

**MUS 541 Chamber Music Literature for Keyboard (2)**

Prerequisite: Consent of Instructor. This course will acquaint students with literature for keyboard with other instruments, both in duos and larger ensembles.

**MUS 542 Jazz Pedagogy (2)**

Graduate and qualified senior music majors only. Takes a pedagogical approach to the analysis of jazz ensemble scores, rehearsal techniques and rhythm sections. Looks at concert planning and audience building.

**MUS 543 Jazz Program Administration, Planning and Development (2)**

Graduate students and qualified senior Music majors. Deal with public relations, grant writing, promotion, programming, recruiting and other aspects of the development of a Jazz Studies Program. Learn planning and follow-through of the annual Jazz Festival.

**MUS 544 Seminar in Jazz History (3)**

An in-depth study of the history, historiography, and literature of jazz from its precursors to the present. Research, listening, and critical writing skills are stressed.

**MUS 546 Arranging (2)**

Prerequisite: MUS 218 or consent of instructor. Fundamental considerations in arranging music for small instrumental jazz ensembles and vocal jazz groups. Stylistic elements of melody, harmony, rhythm, texture, and form. Details of notation, score preparation and layout.

**MUS 547 Advanced Arranging (2)**

Prerequisite: MUS 546 or consent of instructor. Discussion of common techniques used by great arrangers. Prepares students to write arrangements for large jazz ensemble and studio orchestra.

**MUS 548 Accompanying and Coaching I (2)**

Consent of instructor. Acquaint students with necessary skills for collaborative performance through the study of listening, rhythm, sightreading, technique and 4-hand repertoire. Class performances required. Repeatable, no limitations.

**MUS 549 Accompanying and Coaching II (2)**

Prerequisite: MUS 348/MUS 548 or consent of instructor. Acquaint students with skills needed for collaborative performance through score reduction and discussion, listening and performance of song and instrumental literature. Class performances required. Repeatable, no limitations.

**MUS 550 Score Reading and Analysis (1)**

Analysis of wind/orchestral/choral literature. Relates analysis techniques to preparation and performance. Literature studied varies from semester to semester. Repeatable, may be taken four times.

**MUS 551 Individual Performance in Conducting (2)**

Study of advanced problems in instrumental conducting. Regular conducting experience with University ensembles is an integral part of the course. Repeatable, may be taken four times.

**MUS 552 Principles of Piano Teaching I (2)**

Compare current piano methods. Study technical and musical problems with a beginning student. Offered every other year.

**MUS 553 Principles of Piano Teaching II (2)**

Prerequisite: MUS 352/MUS 552 or consent of instructor. A study of the methods of teaching musicianship and pianistic skills. Observe private and group lessons. Supervised teaching internship required. Offered every other year.

**MUS 554 Pedagogical Approaches to Keyboard Literature I (2)**

Evaluate various approaches to the study of keyboard literature through student participation in teaching and performing. Repeatable, no limitations.

**MUS 558 Choral Literature and Techniques (2)**

Examines selected choral orchestral works from the Baroque to the present. Includes specific study of conducting considerations for this repertoire.

**MUS 559 Opera History and Literature (2)**

Examine the historical significance and literature of the opera form from its precursors through the present time.

**MUS 560 Opera Directing Seminar (1-3)**

Prerequisites: Previous opera or music theatre performance experience. Consent of instructor. Study repertoire, floor plans, stage properties, hand properties, costume needs, make-up needs, and staging.

**MUS 564 Problems in Teaching Voice (2)**

Prerequisite: MUS 410/MUS 510 and consent of instructor. Emphasis is placed upon practical aspects of vocal pedagogy: repertoire selection, program building, learning theories and teaching concepts. Advanced studies in vocal acoustics and anatomy and vocal problems are included.

**MUS 565 Principles of Ensemble Intonation (1)**

Examine various tuning temperaments, emphasizing concepts of "just intonation" and its application to all flexible pitched ensembles. Employ electronic tuning devices with practical experience gained through small ensemble participation.

**MUS 580 String Techniques for the Conductor (2)**

The conductor will acquire the necessary skills to make musical and technical decisions based on a thorough understanding of orchestral string techniques.

**MUS 585 Advanced Jazz Improvisation (2)**

Consent of instructor. Study advanced jazz theory principles and apply to keyboard and other instrumental and vocal disciplines. Course content will change each semester. Repeatable, no limitations.

**MUS 600 Introduction to Musical Scholarship (2)**

Examines attitudes and aims of the music scholar, studies in bibliography reference materials, sources, and editions. Required of all Master's of Music candidates. Must be taken as early as possible.

**MUS 603 Analytical Studies in Music (3)**

Mastery of traditional harmony required. Students analyze the structure of music.

**MUS 604 Seminar in Schenker Analysis (2)**

A study of the application of the ideas of Heinrich Schenker to music analysis, performance and music theory.

**MUS 610 Research in Music Education (3)**

Develop concepts and skills for understanding and evaluating research in music education. Study the design and techniques of empirical research in music education. Complete research study to submit for publication.

**MUS 612 Psychology of Music Teaching and Learning (3)**

Introduces concepts of psychology in the acquisition and development of musical cognition, affect, and physiological response. Combines study of empirical research and practical approaches for use in the classroom.

**MUS 619 Latin Jazz Ensemble (1)**

Audition required. The Latin Jazz Ensemble studies and performs music exclusively from the Latin Jazz tradition. The repertoire reflects both Afro-Cuban and Brazilian influences fused with jazz performance practices. Repeatable with no limitations.

**MUS 620 Jazz Guitar Ensemble (1)**

Audition required. Comprised of several guitarists and a rhythm section, the Jazz Guitar Ensemble studies and performs music from diverse jazz styles arranged for this specific combination of instruments. Repeatable with no limitations.

**MUS 621 Small Jazz Ensembles (1)**

Open to any student by audition. Groups consist of rhythm section plus 3 or 4 horns. Groups are listed in Music degree section of this Catalog. Repeatable, no limitations.

**MUS 622 Directed Studies in Music (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**MUS 623 Individual Studies in Effective Teaching (1-3)**

Designed according to candidate's primary emphasis and satisfies the Seminar in Teaching (discipline) required of all D.A. candidates in Music. Repeatable, maximum of three credits.

**MUS 624 Vocal Jazz Ensembles (1)**

Audition required. Graduate student only. Each ensemble limited to 20 voices: 4 sopranos, 4 altos, 4 baritones, 4 basses, plus rhythm section and horns. Repeatable, no limitations.

**MUS 625 Jazz Ensembles (1)**

Audition required. Instrumentation is brass, woodwind and rhythm. Concentrate on jazz idiom music: show and dance music and concert jazz. Receive thorough preparation for teaching at both secondary and college levels. Repeatable, no limitations.

**MUS 628 Collegium Musicum (1)**

Audition required. Majors only. This performing group specializes in historically informed performance of early music. Historical treatises, appropriate ornamentation and improvisation and pre-19th century styles are the focus of the class. Repeatable, no limitations.

**MUS 630 Small Ensembles and Chamber Music (1)**

Small chamber groups that rehearse regularly and are coached by a faculty member. Repeatable, no limitations.

**MUS 636 Individual Performance in Jazz (2-4)**

Consent of Instructor. Private instruction in performance practice, technical study, and literature relevant to jazz.

**MUS 643 Seminar: Medieval Music (3)**

A study of musical style in its historical, theoretical and practical aspects during the Middle Ages.

**MUS 644 Seminar: Music in the Renaissance (3)**

A cultural and historical examination of music and musical style during the 15th and 16th centuries. Flemish composers, the Madrigal, the Venetian School and similar subjects will receive special attention.

**MUS 645 Seminar: The Baroque Period (3)**

Music from 1600 to 1750. Investigates opera from Florentine beginnings through Venetian, Neapolitan and French styles to 1750; growth of chamber, orchestral and solo instrumental music, and religious vocal music.



**MUS 646 Seminar: The Classic Period (3)**

Historical and cultural influences bearing upon emergence of 18th century classicism in music. The composers, representative works, forms, styles and media of the Classic era.

**MUS 647 Seminar: The Romantic Period (3)**

Representative composers, musical styles, works, related literary movements, aesthetic theories and musical criticism of the period will be researched and discussed.

**MUS 648 Seminar: Music Since 1900 (3)**

Study of major trends in this music, accompanied by investigation into their social and cultural bases. Technical aspects of this music are more thoroughly investigated in the course, MUS 503.

**MUS 649 Music History Pedagogy (3)**

Surveys philosophical approaches and methods to the teaching of Music Appreciation, Music History, and more specialized courses.

**MUS 650 Seminar: Choral Music (2)**

A seminar to allow discussion of a variety of subjects related to choral literature. Individual projects will be assigned, calling for creative research.

**MUS 653 Vocal Literature and Styles (3)**

A study of the stylistic, aesthetic and repertorial aspects of vocal music, including opera and choral music, through the various historical periods in music.

**MUS 657 Instrumental Literature and Styles (3)**

A study of the stylistic, aesthetic and repertorial aspects of instrumental music, including orchestral and chamber music, through the various historical periods in music.

**MUS 658 Brass Pedagogy (3)**

Prerequisite: MUS 364 or consent of instructor. In-depth study of brass materials and performance techniques. Examines brass teaching problems encountered by teachers at the K-12 and college levels.

**MUS 661 Percussion Pedagogy (2)**

Prerequisite: MUS 364 or consent of instructor. Explore advanced techniques, methods and materials related to all the percussion instruments.

**MUS 662 Woodwind Pedagogy (2)**

Prerequisites: MUS 361, MUS 362 or consent of instructor. Majors only. In-depth study of teaching material and techniques related to the flute, clarinet, saxophone, oboe and bassoon.

**MUS 663 Trumpet Literature and Pedagogy (2)**

Majors only. In depth study of literature and pedagogical techniques as related to the trumpet.

**MUS 665 Individual Performance in Collaborative Piano (2-4)**

Prerequisites: MUS 348, MUS 349 and MUS 465 or consent of instructor. In-depth study of repertoire and refinement of skills for the collaborative pianist. Repeatable, no limitations.

**MUS 666 Madrigal Singers (1)**

Membership in the Concert Choir required or by special permission. The UNC Madrigal Singers is a highly selected group of 16 to 20 performers. The group performs a wide variety of choral chamber works in concerts throughout the year. Repeatable, no limitations.

**MUS 667 University Symphony Orchestra (1-3)**

Audition required. Comprised of the best string, wind, brass, and percussion players. Reads and performs standard orchestra repertoire. Performs on and off campus. Repeatable, no limitations.

**MUS 668 Chamber Orchestra (1)**

Audition required. Comprised of outstanding strings Selected winds. Performs chamber orchestra literature from Baroque to the present. Presents concerts on and off campus. Repeatable, no limitations.

**MUS 670 Individual Performance in Voice (2-4)**

Consent of instructor. Repeatable, no limitations.

**MUS 671 Individual Performance in Piano (2-4)**

Consent of instructor. Repeatable, no limitations.

**MUS 673 Individual Performance in Strings, Harp, or Guitar (2-4)**

Consent of instructor. Repeatable, no limitations.

**MUS 674 Individual Performance in Woodwinds (2-4)**

Consent of instructor. Repeatable, no limitations.

**MUS 675 Individual Performance in Brass or Percussion (2-4)**

Consent of instructor. Repeatable, no limitations.

**MUS 677 Individual Instruction in Composition (2-4)**

Consent of instructor. Repeatable, no limitations.

**MUS 680 Mixed Concert Choir (1)**

Audition required. Limited to approximately 60-65 singers. Open to all students. The Choir performs a wide range of literature: classics to contemporary works. Widely recognized for its excellence, the Concert Choir performs concerts on campus and tours annually. Repeatable, no limitations.

**MUS 681 Women's Glee Club (1)**

Audition required. Open to all female students. Performs on campus and joins with the Concert Choir in large masterworks with orchestra. Repeatable, no limitations.

**MUS 682 University Singers (1)**

Audition required. Membership in Concert Choir required or consent of instructor. This select group of 25 singers performs an extremely varied repertoire from Renaissance motets to contemporary works. Repeatable, no limitations.

**MUS 684 Men's Glee Club (1)**

Audition required. Open to all male students. Performs on campus and in the community. Sings a wide variety of literature. Repeatable, no limitations.

**MUS 685 Performance in Opera Theatre (1-12)**

Audition required. Practical experience in the production and performance of a complete operatic work. Techniques of acting, singing, character analysis and stage direction will be studied. Repeatable, no limitations.

**MUS 686 Scene Studies in Opera (1-3)**

Audition required. Studying techniques of acting, singing, character analysis and stage deportment through the staging and performing of selected opera scenes and arias. Repeatable, no limitations.

**MUS 688 Concert Band (1-3)**

Audition required. Comprised of music majors and students from other disciplines. Members perform a wide variety of interesting literature selected from standard and current repertoire. Repeatable, no limitations.

**MUS 689 University Brass Choir (1)**

Select performing ensemble of 21 brass and percussion students. Concentrate on literature from brass instrumental media. Develop musical sensitivity, phrasing, style and intonation. Major ensemble credit. Repeatable, no limitations.

**MUS 690 Symphonic Band (1-3)**

Audition required. Selected from the finest performers on campus. Although most members are music majors, students specializing in other fields often qualify for this ensemble. Literature is drawn from contemporary and traditional repertoire. Repeatable, no limitations.

**MUS 691 Wind Ensemble (1-3)**

Audition required. Comprised of the most outstanding wind and percussion majors in the School of Music. The ensemble performs a repertoire of works requiring from 8 to 35 performers. Repeatable, no limitations.

**MUS 693 Practicum in Music (1-4)**

Open only by invitation to resident graduate students. Supervised professional activity in the major field, approximately two hours per day. Two copies of a well-written paper must be filed with instructor before credit is given. Repeatable, no limitations.

**MUS 695 Special Topics in Music (1-4)**

A seminar covering areas in performance, research, education, history and theory that are of concern to the contemporary graduate student. Topics will vary according to student interest and needs. Repeatable, under different subtitles.

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

Required of Master of Music students majoring in Theory and Composition. Consult respective department for specific requirements. S/U graded. Repeatable, no limitations.

**MUS 700 Introduction to Doctoral Research (3)**

Analytical studies in music writing and research techniques for dissertation and field studies; survey critical problems in music; prepare research and proposal outlines.

**MUS 794 Supervised Practicum in College Teaching (2)**

Observe and practice college teaching under supervision and as a basis for analysis of learning experiences. Repeatable, maximum six credits.

**MUS 797 Doctoral Proposal Research (1-4)**

Required of all doctoral students. Repeatable, maximum of four credits.

**MUS 799 Doctoral Dissertation (1-12)**

Required of all doctoral candidates. Repeatable, no limitations.

**NURS — NURSING****NURS 507 Leadership and Nursing Issues (3)**

Involves comprehensive investigation and analysis of health care issues and leadership theory and skills which are imperative in today's health care environment.

**NURS 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**NURS 510 Concepts in Transcultural Nursing (3)**

For seniors, post-B.S. or M.S. in nursing students. Summers only. Focuses on transcultural nursing and cultural assessment for the purpose of providing culturally congruent and competent nursing care. Describes culture care beliefs, values and practices of specific cultures.

**NURS 511 Advanced Transcultural Nursing and Research (3)**

Prerequisites: NURS 510. Summers only. The use of ethnonursing, ethnography and other qualitative research methods to generate and analyze cultural differences and similarities in care, health beliefs, values and practice of various cultures.

**NURS 512 Transcultural Nursing Field Experience (3)**

Pre or Co-requisite: NURS 511. Summers only. The application of the ethnonursing research methodology to analyze differences and similarities within a cultural experience as determined by the student and faculty. S/U graded.

**NURS 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general knowledge or methodologies. S/U or letter grades. Repeatable, under different subtitles.

**NURS 520 Clinical Instruction in Nursing (3)**

Prerequisite: BSN degree plus 1 or more years clinical experience, or consent of instructor. Development of theoretical/practical knowledge to support successful transition from nursing practice role to that of clinical instructor. Includes theory and practical application.

**NURS 600 Nursing Theory (3)**

Admission to Master's Program required. Introduction to theoretical foundations for advanced nursing practice. Application of theory to clinical nursing practice and to nursing education. Emphasis on the development, application and critique of nursing models.

**NURS 602 Management of Chronically Ill Populations I (4)**

Admission to master's program required. The impact of chronic illness across the lifespan is examined using a conceptual approach. Health promotion and illness management are emphasized through case management care delivery. 45 practicum hours required.

**NURS 604 Management of Chronically Ill Populations II (4)**

Application of the nursing process and case management is examined in the development of health promotion and illness management strategies for the chronically ill adult and child. 45 practicum hours required.

**NURS 605 Nursing Research (3)**

Advanced research concepts, methodology, and application of descriptive and inferential statistical components to data analysis. Critique selected research projects to determine relevance to nursing practice and contribution to theory development.

**NURS 610 Health Assessment (3)**

Emphasis in health history taking, physical assessment and interviewing of individuals across the life span. 45 practicum hours required.

**NURS 612 Advanced Pharmacology (4)**

Examine clinical pharmacokinetics and pharmacotherapeutics. Focus on selected drug groups and their safe and appropriate utilization in primary care practice.

**NURS 614 Advanced Pathophysiology (3)**

Focus on pathophysiology, symptomatology and etiology of commonly encountered acute and chronic clinical entities of children and adults.

**NURS 615 Advanced Seminar in Transcultural Theories and Methods (3)**

Consent of Instructor. This course is a survey of theories and research methods used in transcultural health care and other disciplines.

**NURS 622 Directed Studies (1-3)**

Graduate students only. Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**NURS 630 Teaching Strategies in Nursing (3)**

Practice teaching of nursing students, practicing nurses and/or clients. Analyze teaching strategies in academic and clinical settings.

**NURS 640 Health Care of Families I (4)**

Majors only. Application of theoretical and research based developmental approaches to primary health care of families with particular emphasis on childhood/adolescence. 45 practicum hours required.

**NURS 645 Health Care of Families II (4)**

Majors only. Application of theoretical and research based developmental approaches to primary care of families with particular emphasis on women's health and adult episodic care. 45 practicum hours required.

**NURS 650 Health Care of Families III (4)**

Majors only. Application of theoretical and research based developmental approaches to primary care of families with particular emphasis on chronically ill and older adults and psychosocial adjustment disorders. 45 practicum hours required.

**NURS 660 Nursing Education Seminar (4)**

Synthesis of concepts from nursing theory, research and education courses. Experience with curriculum development and analysis. 45 practicum hours required.

**NURS 665 Seminar Topics in Chronic Illness (3)**

Majors only or permission of instructor. Engage in a course of study designed to investigate a special topic in chronic illness. Emphasis may be in a specific area or applicable across chronic illnesses/ conditions.

**NURS 680 Advanced Practice Role Practicum (1-9)**

Majors only. Final clinical experience provides students an opportunity to practice advanced roles intervention in underserved and/or rural areas. S/U graded. Repeatable, maximum of 9 credits for a total of 405 practicum hours.

**NURS 690 Advanced Professional Role (2)**

Majors only. Advanced practice role development in health maintenance and illness management is examined from several perspectives.

**NURS 691 Applied Nursing Research (3)**  
Majors only. Application of concepts from graduate research in a completed scholarly project, under direction of a graduate faculty member.

**NURS 695 Advanced Academic Nursing Roles (3)**  
The emphasis of this course is on direct responsibility/accountability for experience in the role of academic clinical and didactic teaching or administrative roles. 45 practicum hours required.

**NURS 699 Thesis (1-6)**  
Terminal program course. All other courses should be taken before or concurrently. Guided research project that demonstrates evidence of original thought as well as advanced knowledge of the research process. S/U graded. Repeatable, no limitations.

**NURS 700 Advanced Nursing Theory (3)**  
Majors only or consent of instructor. The focus of this course is nursing knowledge development and the underpinnings of nursing science, practice and education.

**NURS 702 Advanced Concepts of Vulnerable Underserved Populations (3)**  
Majors only or consent of instructor. Examines contextual contributors to development of vulnerable populations and public response. Implications for nursing research and practice are explored.

**NURS 707 Leadership in Health Policy (3)**

Majors only or consent of instructor. Integrates theory and empirical research about leadership and health policy. Participates in the policy development process.

**NURS 710 Evaluation in Nursing Education (3)**  
Majors only. Emphasis on data collection needs assessment, instrument analysis and evaluation in nursing education.

**NURS 730 The Scholarship of Teaching and Practice in Nursing Education (2)**  
Majors only. This course is designed to prepare the learner for scholarship in nursing education, publication, presentation and grant writing activities.

**NURS 740 Intensive Teaching Practicum (3)**  
Majors only or consent of instructor. Discussion and guided experiences in teaching of nursing, including planning, developing, implementing and evaluating classroom and clinical instruction.

**NURS 760 Advanced Nursing Curriculum Design (3)**  
Majors only. Examines historical, philosophical, sociocultural, political, economic, and professional issues that impact curriculum in nursing education. The focus is on design and evaluation of a nursing curriculum.

**NURS 780 The Professorial Role in Nursing Education (3)**  
Prerequisite: Licensed RN and accepted into doctoral program. Involves comprehensive investigation of the academic nursing role in higher education relative to administration, student issues, program requirements and faculty expectations

**NURS 790 Research Colloquium (2)**  
Seminar exploring the nature of doctoral research in nursing and nursing scholarship. Possible dissertation topics are explored.

**NURS 797 Doctoral Proposal Research (1-4)**  
Majors only. All doctoral students must earn four hours as partial fulfillment of requirements for the doctorate. Explores dissertation research problems, theoretical framework, methodology and data analysis methods to launch dissertation research. S/U graded. Repeatable, maximum of 4 credits.

**NURS 799 Doctoral Dissertation (1-12)**  
Majors only. All doctoral students must earn 12 hours as partial fulfillment of requirements for the doctorate. Dissertation must be approved by and defended to the dissertation committee. S/U graded. Repeatable, maximum of 12 credits.

**NURS 999 Graduate School Continuous Registration (1)**  
To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.



## OCN — OCEANOGRAPHY

**OCN 622 Directed Studies (1-4)**  
Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum



## PHYS — PHYSICS

**PHYS 508 Physics Workshop (1-4)**  
A physics subject matter workshop course designed to improve the physics content background of teachers. Repeatable, under different subtitles.

**PHYS 509 Advanced Placement Institute in Physics (2)**  
Consent of instructor. Topics in physics content and pedagogy appropriate to the establishment, development and maintenance of an advanced placement program in physics. S/U graded. Repeatable, no limitations.



## PSY — PSYCHOLOGY

### PSY 347 Educational Psychology for Elementary Teachers (3)

Prerequisites: IDLA major and cumulative GPA of at least 2.75. Study the relationships between theory, research, and practice in learning, memory, child development, motivation, and educational assessment for elementary classroom settings.

### PSY 500 Educational Psychology for Teachers (3)

This course is designed to be an in-depth overview of research and theory on learning and cognition, social and personal development, individual differences, motivation and assessment of student learning. Particular attention will be given to the application of these topics to classroom settings.

### PSY 508 Workshop (1-3)

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

### PSY 513 Professional Renewal (1-3)

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline and knowledge or methodologies. S/U or letter graded. Repeatable under different subtitles.

### PSY 530 Life Span Developmental Psychology (3)

Human growth and development from conception through senescence, focusing on cognitive, affective, social and psychomotor development throughout the life span.

### PSY 540 Theories and Principles of Learning (3)

A survey of classical and contemporary theory and research related to human cognition. Topics include the study of learning processes, memory and higher cognitive functions.

### PSY 550 Cognitive Development (3)

Examine classic and contemporary research and theory on cognitive development of children, and specific topics such as attention, memory, and intelligence. Undergraduates may not register without permission of instructor.

### PSY 575 Educational Assessment (3)

Prerequisite: PSY 674. The course will provide educators with the skills needed to evaluate, explain, and apply assessment and testing data to inform classroom instruction and education decisions.

### PSY 580 Psychopharmacology (3)

Intended to educate clinicians about the various medications that are often used in the treatment of mental illness and the mechanisms that allow them to work.



**PSY 582 Behavioral Genetics (3)**

Prerequisite: PSY 120. Majors only. Juniors and above. 3.0 GPA and above. Introductory genetics course recommended. Consider genetic basis of behavior in humans and animals; contemporary issues include heritability, cognitive disabilities, psychopathology, personality disorders, and pharmacogenomics.

**PSY 590 Seminar in History and Systems (3)**

Philosophical perspectives and major theories and systems are reviewed as they contributed to the development of contemporary psychology. Course required for state psychology board licensing eligibility.

**PSY 595 Special Topics in Psychology (1-5)**

Scheduled on an irregular basis to explore special areas in psychology and carries a subtitle for each offering. Check department office for topics currently planned. Repeatable, under different subtitles.

**PSY 600 Graduate Research Methodology (3)**

Graduates only. Majors only. Introduction to basic concepts in psychology research, including experimental design, non-experimental methods, statistical analysis and researchers' ethical responsibilities. Overview of ongoing research in Psychology Department.

**PSY 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**PSY 625 Principles of Neuropsychology (3)**

Survey of functional neuroanatomy and neurophysiology related to human psychological processes. Discussion of theories of neuropsychology and their experimental and clinical applications. Introduction to neuropsychological disorders and their assessment/treatment.

**PSY 626 Introduction to Neuropsychological Assessment (3)**

Prerequisite: PSY 625. Principles of behavioral and neurophysiological assessment. Standards of practice. Practice experience with behavioral/neurophysiological measurement, development of problem-lists and report writing.

**PSY 627 Psychometrics (3)**

Survey of psychometric considerations within areas of personality, psychopathology, intelligence, neuropsychology. Topics include: domain theory test construction, test operating characteristics, multivariate methods within psychometrics, exemplars across major areas.

**PSY 630 Advanced Child and Adolescent Psychology (3)**

Prerequisite: EPSY 530 or equivalent. Physical, social and emotional development of children from conception through puberty, stressing normal development and major development theories.

**PSY 635 Individual Differences in Cognition (3)**

Prerequisite: PSY 540 or equivalent. Examine individual differences between learners from a cognitive viewpoint. Review verbal, mathematical and spatial abilities, cognitive styles, problem solving and gender and cultural differences. Seminar format.

**PSY 654 Seminar in College Teaching (3)**

Practices, issues and research in college teaching. Instructional models and methods, course planning, cognition, testing and grading, student-teacher interaction and ethics.

**PSY 661 Trends and Issues in Educational Psychology (3)**

Majors only. Examines professional, philosophical, theoretical issues and trends across the discipline. Students practice and receive feedback regarding written and oral communication skills. S/U graded.

**PSY 663 Apprenticeship (1-3)**

Consent of instructor. Work with faculty member on professional endeavors such as research, writing, course planning or public service. Requires 3 hours per week for each credit. S/U graded. Repeatable, maximum of nine credits.

**PSY 664 Advanced Social Psychology (3)**

Examine major areas of social psychology e.g., aggression, altruism, cooperation, attitude change, and impression management; learn about observation and other data-collection techniques. Possible laboratory observations.

**PSY 674 Measurement I: Educational Testing (3)**

Prerequisite: SRM 600. Construction and evaluation of tests and other measures. Topics include score and norm interpretation, reliability and validity. Item construction and analysis, rating scales and questionnaires.

**PSY 675 Measurement II: Advanced Techniques (3)**

Prerequisite: EPSY 674. Classical and modern measurement theory and methods. Derivations of reliability and validity formulae, test bias, item response theory, logistic models, score equating, standards, individual prediction and classification.

**PSY 680 Neuroscience Seminar (3)**

Graduates only. Reviews current theories and research regarding neurophysiological underpinnings of typical and atypical human behavior. Topics include: neuroscientific investigation of behavioral domains, cognitive models, genetic contributions, and developmental influences.

**PSY 681 Cognition and Instruction I (3)**

An introductory overview of various theoretical and applied perspectives on cognition and instruction, including behavioral, cognitive, meaningful learning, and situated cognition. Includes significant classroom-based observational and clinical interview experiences.

**PSY 682 Cognition and Instruction II (3)**

Prerequisite: EPSY 681 or EPSY 540. Assumes basic knowledge of cognitive and instructional theory. Focuses on research in development, cognition and instruction, subject matter, and social and cultural contexts of learning.

**PSY 683 Research Issues in Cognition and Development (3)**

Course will consist of an overview of a range of formal to semi-formal educational research models. It includes philosophical ideas and assumptions, qualitative quantitative research models and ethical issues.

**PSY 684 Advanced Seminar in Human Development (3)**

Prerequisite: EPSY 530. For Graduate students wishing to develop advanced competency. Periodically, seminar may focus on topic reflecting instructor's interest area or on developing a student's inquiry. Repeatable, maximum of nine credits.

**PSY 685 Advanced Seminar in Learning and Cognition (3)**

Prerequisite: EPSY 540. Pursue original research into learning and cognitive processes under the guidance of a faculty member. Arranged to reflect faculty and students' interests. Repeatable, maximum of nine credits.

**PSY 686 Advanced Seminar in Measurement and Assessment (3)**

For graduate students wishing to develop a competency in psychological and educational measurement. The seminar will focus on an advanced topic in contemporary measurement and assessment. Repeatable, maximum of nine credits.

**PSY 692 Internship in Educational Psychology (1-9)**

Consent of instructor. Full-or part-time assignment in a field-based setting under supervision. Students work a minimum of 3 hours per week for each hour of credit. S/U graded. Repeatable, maximum of 18 credits.

**PSY 693 Research Practicum (1-3)**

Each student will collaborate in research with a psychology professor. The research topic and nature of involvement are determined by consultation between student and professor. S/U graded.

**PSY 694 Practicum (3)**

Consent of instructor. Majors only. Supervised experience in diagnostics of neuropsychological deficits. Individual and group supervision emphasizing behavioral interview and psychometric data. S/U graded.

**PSY 695 Special Topics in Educational Psychology (1-3)**

Specialized topics or contemporary issues. Topics vary. Repeatable, maximum of two times, under different subtitles.

**PSY 697 Master's Project in Psychology (3-6)**

Majors only. Consent of advisor. For Master's students in psychology as an approved alternative to the written comprehensive examination. Students will enroll with major advisor to develop research proposal, conduct project and report results. S/U graded. Repeatable, maximum of six credits.

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

Recommended in place of M.A. project, especially for students applying to doctoral programs. S/U graded. Repeatable, no limitations.

**PSY 797 Doctoral Proposal Research (1-4)**

Doctoral students must earn 4 hours as partial fulfillment of requirements for the doctorate. Check with the Graduate School regarding appropriate procedures and formats. S/U graded. Repeatable, maximum of four credits.

**PSY 799 Doctoral Dissertation (1-12)**

Must earn 12 hours as partial fulfillment of requirements for the doctorate. Dissertation must be approved by and defended before the dissertation committee. S/U graded. Repeatable, no limitations.

**PSY 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.

**SCED — SCIENCE EDUCATION****SCED 441 Methods of Teaching Secondary School Science (3)**

Prerequisite: EDFE 120 or EDFE 125. Consider curriculum and classroom organization, testing and evaluation, procedures and materials, relationship of subject area to total secondary program, emphasizing teaching techniques.

**SCED 513 Professional Renewal (1-12)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**SCED 530 Laboratory, Field, and Studio Safety (1)**

Emphasizes formation of a "safety culture" in science and/or art. Federal and state regulations are covered. Course product is a safety manual for the laboratory or studio.

**SCED 535 Context-based Conceptual Chemistry (3)**

(3 lecture, 2 laboratory) Prerequisites: CHEM 111 and CHEM 112 or consent of instructor. The emphasis of this course is on how to teach chemistry concepts within the context of the kitchen, medicine cabinet, household cleaning, and the garden. No credit for Chemistry M.S. or Chemical Education Ph.D.

**SCED 540 Secondary Science Methods I (2)**

(Laboratory) Become familiar with professional responsibilities of teaching science and provide entry level operational knowledge of instructional strategies, techniques, materials, and technology available along with required science content. Students lead discussions and teaching situations.

**SCED 541 Secondary Science Methods II (3)**

Prerequisite: EDFE 120 or EDFE 125. Prerequisite to student teaching. Consider curriculum and classroom organization, testing and evaluation, procedures and materials, relationship of subject area to total secondary program, emphasizing teaching techniques and of technology use. Students will lead discussions and teaching situations.

**SCED 555 Science Education for Adults and Communities (3)**

Provides an overview of the principles and skills required to teach non-formal and informal education with an adult/community education perspective.

**SCED 560 Principles and Teaching of Ecology (3)**

Ecological concepts, such as natural history, species interactions, ecosystems and global systems, are explored together with pedagogical strategies appropriate for teaching of these ecological principles. Delivered online.

**SCED 562 Principles and Teaching of Cell Biology (3)**

This course is an in-depth study of cell biology. Emphasis will be placed on cell structure, cell signaling/regulation, and cellular division/growth. In addition, students will explore effective teaching strategies to facilitate the learning of cell biology at secondary school level.

**SCED 570 Teaching Science in the Elementary School (3)**

(2 lecture, 2 laboratory) Prerequisite: EDFE 125. Develop a knowledge of objectives, methods and materials needed for teaching a functional elementary science program. Laboratory activities included.

**SCED 578 K-12 Science Inquiry (3)**

Students will explore and define the elements of inquiry in P-16 science education from the perspective of teaching with inquiry, ability to do inquiry, and as part of science content.

**SCED 600 Science Education Research for K-12 Teachers (2)**

Provides practicing K-12 teachers an examination and critique of current research in science education. It will focus on research design, analysis, and reporting of both qualitative and quantitative research.

**SCED 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**SCED 671 Elementary and Middle School Science Curriculum (3)**

Analyze elementary and middle level science programs regarding learning theory, research and the new Colorado Model Content Standards for science. Applications include strategies, management, and science technology and society.

**SCED 678 Science Education Seminar (1-2)**

Investigate current science education research, report on topics of interest in recent literature, discuss individual research problems. Repeatable, maximum of four credits.

**SCED 680 Science Curricula in Secondary/College Settings (3)**

A survey of contemporary trends and issues associated with designing, implementing and evaluating science curricula at the secondary and tertiary levels.

**SCED 694 Science Education Research (3)**

Prerequisite: SRM 502 or equivalent. An introduction to research in discipline-based science education, providing background and experience in the major activities associated with current practice in both field-based and quantitative studies.

**SCED 697 Action Research in Science Education (1-3)**

Research a current problem in P-12 science education relevant to their own teaching situation. Develop goals, review relevant literature, and plan the project while progressing through the program. Repeatable, may be taken three times.

**SCED 699, Thesis (1-6)**

Prerequisite: SCED 600 or equivalent. For majors in the Graduate Interdisciplinary Degree Program M.A. Natural Science K-12 Teaching Emphasis. and wish to complete a thesis. S/U Graded. Repeatable, maximum of 6 credits.



## SCI — SCIENCE

### SCI 532 Energy for Today & Tomorrow (3)

This course will familiarize students with fundamental energy concepts and physics laws along with common problems associated with and applications of energy use. Renewable energy and energy production will be discussed.

### SCI 536 Principles of Physics II (3)

Investigation of basic principles of energy related to thermodynamics and wave motion with technological applications. For certified teachers interested in improving understanding and pedagogic delivery of physics concepts.

### SCI 591 Computer Applications in Science (2)

(1 lecture, 2 laboratory) Science teachers will learn how to apply the microcomputer as a tool in the classroom for interfacing with equipment, data management, software evaluation, record keeping and word processing.



## SES — SPORT AND EXERCISE SCIENCE

*Courses numbered SES 100 to SES 195 are: Repeatable, no limitations.*

### SES 111 Bowling (1)

Gain knowledge and skill in the game of bowling. Participation fee.

### SES 113 Fly Fishing/Trap Shooting (1)

Gain knowledge and skill in the activities of fly fishing and trap shooting.

### SES 114 Golf (1)

Gain knowledge and skill in the game of golf. Participation fee.

### SES 116 Water Safety Instructor (2)

A current Basic and Emergency Water Safety or Lifeguard Training certificate is required. Course trains instructor candidates to teach the American Red Cross Water Safety courses.

### SES 118 Swimming (1)

Gain knowledge and skill in the activity of swimming.

### SES 120 Lifeguard Training (2)

American Red Cross skills and knowledge required for an individual to properly assume the responsibilities of a lifeguard at a swimming pool or a protected (non-surf) open water beach.

### SES 125 Hiking (1)

Gain knowledge and skill in the activities of hiking.

### SES 127 Cross-Country Skiing (1)

Gain knowledge and skill in the activity of cross-country skiing. Participation fee.

### SES 128 Cycling (1)

Gain knowledge and skill in the activity of cycling.

### SES 130 Kayaking (1)

Gain knowledge and skill in the activity of kayaking. Participation fee.

### SES 131 Orienteering (1)

Gain knowledge and skill in the activities of orienteering.

### SES 133 Scuba Diving (1)

Gain knowledge and skill in the activity of scuba diving. Participation fee.

### SES 134 Self Defense (1)

Gain knowledge and skill in the activity of self defense.

### SES 135 Rock Climbing (1)

Gain knowledge and skill in the activity of technical climbing.

### SES 152 Swimming Conditioning (1)

Improve personal skills and fitness through swimming activities.

### SES 153 Weight Training (1)

Improve personal skills and fitness through weight training activities.

### SES 170 Introduction to Field Based Experience (1)

Practical experience for those wishing to explore a career in teaching. Placement in most public or private schools, agencies, preschool through high school. Experience is to coordinate practice with theory. S/U graded. Repeatable, no limitations.

### SES 200 Weight Training and Conditioning (1)

Prerequisite: SES 220. Majors and minors only. Motor skill acquisition, advanced techniques, and knowledge appropriate for the successful participation and instruction in strength training activities and conditioning.

### SES 201 Track and Field (1)

Majors and minors only. To teach the rules, training principles, techniques, movement skills, and analyses of the sport of track and field to professional preparation candidates completing a physical education major.

### SES 209 Dance Activities (1)

Majors and minors only. Focus on participation and analyses of traditional, social, American folk and square, and popular dance forms appropriate for upper elementary and secondary physical education.

### SES 234 Mountain Biking (2)

Designed for outdoor education and recreation leaders implementing mountain biking into outdoor programs. The course covers technical skills, instructional methodology, leadership issues, and environmentally sound riding ethics.

### SES 235 Backcountry Skiing (2)

Concurrent enrollment in SES 238. Designed to develop outdoor education and recreation leaders' skills and knowledge of teaching and leading backcountry skiing. Including classic touring, telemarking, backcountry skills and avalanche awareness.

### SES 236 Technical Rock Climbing (2)

Develop students' knowledge and techniques for teaching and managing technical rock climbing activities, focusing on top-rope climbing. Topics include climbing and repelling skills, anchors, site management, equipment, and safety.

### SES 237 Paddle Sports (2)

Introduces outdoor education and recreation leaders to technical skills, leadership concepts, and instructional methodologies of paddle sports. Emphasis is on minimum impact paddling skills for lake and river travel.

### SES 238 Winter Wilderness Living (2)

Concurrent enrollment in SES 235. Develop knowledge and techniques for teaching and leading winter camping and backcountry travel activities. Topics include avalanche awareness, and fundamental camping and travel techniques for winter environments.

### SES 240 Secondary Physical Education Content I (3)

Majors and minors only. Facilitates enhanced performance, analysis, and tactical understanding of invasion games and field run/score games (e.g., basketball, soccer, team handball, football, speedball, ultimate frisbee, hockey, softball, cricket, and modified kickball).

### SES 243 Outdoor and Adventure Programming (3)

Majors only. Designed to provide physical education majors with activities and teaching strategies necessary for integrating and implementing outdoor and adventure activities into a school program.

### SES 266 Introduction to Physical Education as a Profession (3)

Prerequisites: 2.5 overall GPA, and 2.7 major GPA. Co-requisite: EDFE 110, EDFE 170. Majors and minors only. Focus on historical and current issues and philosophical perspectives of physical education, sport, and fitness. Implications for today's physical education programs will be identified and discussed.

### SES 323 Motor Learning and Development (3)

Study of the neuropsychological components of motor behavior, with an emphasis on movement problems. Laboratory provides application of concepts.

### SES 338 Teaching Diverse Populations (3)

Prerequisite: 2.5 overall GPA and 2.7 major GPA required. Majors and Minors only. This course is designed to assist students in acquiring methods and techniques for teaching diverse populations in traditional and alternative physical activity settings.



**SES 342 Teaching Health-Related Fitness (3)**

Prerequisites: SES 220, SES 340, EDFE 120 and 2.5 overall GPA and 2.7 major GPA required. Majors and minors only. Facilitates future teacher's knowledge, skills appreciation and confidence needed to lead school-aged children in the development of active healthy lives.

**SES 440 Developing Pedagogical Skills in Elementary Physical Education (4)** (3 lecture, 1 laboratory) Prerequisites: EDFE 120, SES 323, SES 210, SES 340 and 2.5 overall GPA and 2.7 major GPA required. Laboratory required. Majors and minors only. Course is the second in sequence of professional teaching courses in physical education. Designed to develop skills and knowledge related to elementary physical education. Laboratory provides application of principles.

**SES 442 Developing Pedagogical Skills in Secondary Physical Education (4)** (3 lecture, 1 laboratory) Prerequisite: EDFE 120, SES 440 and 2.5 overall GPA and 2.7 major GPA required. Laboratory required. Majors and minors only. Provides preservice physical education teachers with theoretical knowledge and practical experiences required to successfully teach secondary physical education. Laboratory provides application of principles.

**SES 500 Wilderness First Responder/CPR (3)**

Designed to provide outdoor practitioners with the knowledge needed to deal with emergencies in remote settings. 80-hour curriculum. Successful completion provides Wilderness First Responder certification.

**SES 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**SES 510 Cardiac Rehabilitation (3)**

Prerequisite: SES 322 or SES 626 or equivalent. Majors only. Basic electrocardiography and ECG interpretation will be studied. Emphasis is placed on interpretation of resting and exercise ECG's and monitoring procedures, interpretation of abnormalities and drugs that may affect exercise.

**SES 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**SES 520 Marketing of Sport (3)**

Develop an understanding of and skill in the marketing process as it relates to promotion and public relations activities in physical education athletics and commercial sport operations. Cannot be taken in lieu of SES 576 required in the Sport Administration graduate programs.

**SES 530 Challenge Course Programming (3)**

Study the procedures, techniques, and responsibilities for challenge course supervision, including operational guidelines and processes, maintenance and general inspection, equipment, safety procedures, and rescue.

**SES 550 Neural Aspects of Kinesiology (3)**

Advanced study of neurological influences to movement. Learn terminology, structures of the human nervous system, cellular and macroscopic neurophysiology, and clinical applications associated with reflexive and voluntary movements and posture.

**SES 555 Supervised Practicum in Teaching a College Basic Activity Course (1-3)**

Consent of advisor. Provide a supervised college teaching experience of a basic activity course for qualified graduate students. S/U graded. Repeatable, maximum of three credits.

**SES 560 Issues and Ethics in Sport Management (3)**

An exploration of major issues, ethical theories, moral reasoning and their impact on the operation of programs in sport, physical education, fitness, athletics and recreation.

**SES 570 Program Management (3)**

Develop an understanding of theories and principles involved in managing a program in the sport industry.

**SES 576 Sport Promotion and Marketing (3)**

Develop skill and understanding in the marketing process relating to the sport industry, athletics and commercial sport operations. Primary focus: application of marketing principles to specific sport scenarios.

**SES 580 Advanced Prevention, Care and Rehabilitation of Athletic Injuries (3)**

Prerequisite: SES 380 or equivalent. Analyze, evaluate and apply current techniques and practices to injuries in the school physical activity and sports programs.

**SES 585 Introduction to Sports Injuries for Coaches (2)**

Introductory athletic training principles and techniques for coaches/students. Emphasis on the prevention and treatment of athletic injuries. CPR/first aid certification recommended. Not acceptable for SES majors.

**SES 589 Bridging Theory and Practice in Sports Coaching (3)**

Examination of theoretical and applied concepts of sports coaching. Emphasis is placed on practical experience of coaching sport that concentrates on coach education theory and effective coaching practices.

**SES 594 Practicum in Outdoor Leadership (1-6)**

A field based, advanced course in wilderness-based teaching and leadership. Students develop skills and knowledge in group development, planning, and safe leadership of ethical and effective wilderness travel. Repeatable, maximum of 12 credits.

**SES 602 Introduction to Research in Sport and Exercise Science (3)**

Receive an introduction and some application of strategy and methods of research to problem solving in physical education, sport management and exercise science.

**SES 603 Professional Development Seminar (3)**

This seminar will provide a cross disciplinary knowledge of the sport and exercise science field while simultaneously preparing students to disseminate scholarly work.

**SES 604 Teacher Action Research (3)**

Provides introduction to self-inquiry and pedagogical reflection through teacher action research. Focuses on historical background, purpose, instruction and guidance for teachers to conduct action research.

**SES 605 Youth Development and Physical Activity (3)**

Advanced theoretical and applied understanding of youth development programs. Emphasis is on service learning experience with physical activity programs that concentrate on the goals of personal and social responsibility.

**SES 606 Scholarship in Youth Development (3)**

The intent of this course is to critically examine scholarly efforts concerning programs and issues in youth development.

**SES 612 Assessment in Sport Pedagogy (3)**

Disseminate knowledge that contributes to quality professional practice. Students will experience new ways of thinking about assessment. Alternative ways of determining student learning, evaluation, grading and reporting will be explored.

**SES 614 Analysis of Teaching in Physical Education (3)**

Present and analyze systems used in evaluating student behavior, teacher behavior and student-teacher interaction. Study strategies for planning and implementing effective teaching and supervising in physical education.

**SES 615 Qualitative Research in Sport and Exercise Science (3)**

SRM 680 or consent of instructor. The epistemological and practical underpinning of qualitative research as an alternative or complement to quantitative research will be studied in this course through readings, class discussions, and a practical project.

**SES 619 Advanced Biomechanics (3)**

Prerequisite: SES 221 or equivalent. Make an advanced study of the mechanical components of human movement, stressing the analysis of movement problems.

**SES 620 Neuromuscular Structure and Function (3)**

Prerequisite: SES 220 or equivalent. Make an advanced study of the structural components of human movement, with special attention to the analysis of movement problems.

**SES 622 Directed Studies (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**SES 624 Advanced Developmental Kinesiology (3)**

Prerequisite: SES 323 or equivalent. Advanced study of the influence of developmental and aging processes upon movement across the lifespan.

**SES 625 Laboratory Techniques in Kinesiological Research (3)**

Consent of instructor. Titles: Laboratory Techniques in Biomechanics; Techniques in Exercise Physiology; and Laboratory Techniques in Social Psychological Kinesiology. Repeatable, under different subtitles.

**SES 626 Advanced Physiological Kinesiology I (3)**

Prerequisite: SES 322 or equivalent. Advanced study of energy metabolism and exercise nutrition involved with human movement.

**SES 627 Advanced Physiological Kinesiology II (3)**

Prerequisite: SES 626 or equivalent. Advanced study of the muscular and endocrine systems involved with human movement.

**SES 628 Adventure Education (3)**

Planning and implementing adventure activities that provide challenge, choice, and opportunities for personal and group growth. Emphasis on program development, facilitation techniques, and direct application of adventure activities and principles.

**SES 629 Concepts in Kinesiology (3)**

Experiences provided are: Biomechanics of Locomotion, Cardiopulmonary Physiology and Motivation. Repeatable, under different subtitles.

**SES 631 Outdoor Education (3)**

Study the history, philosophy and principles of outdoor physical education. Focus will be on the interdisciplinary nature and educational growth through outdoor experiences.

**SES 635 Exercise and Sports Psychology (3)**

Application of psychological concepts, principles and empirical findings to exercise programs and organized sport settings.

**SES 640 Curriculum in Physical Education (3)**

Consider the principles underlying curriculum instruction, various curriculum elements and build a curriculum in physical education.

**SES 641 Instructional Strategies for Elementary School Physical Education (3)**

Study of research and advanced techniques in teaching elementary physical education. Emphasis on teacher instruction and management, student skill learning time and current program planning.

**SES 642 Instructional Strategies for Secondary School Physical Education (3)**

Study of research and advanced techniques in teaching secondary physical education. Emphasis on understanding the role of the secondary teacher and secondary student needs in teaching physical education.

**SES 650 Financial Management for Sport Organizations (3)**

Develop an understanding of and skill in financial resource management for the operation of programs in sport, physical education, fitness, athletics and recreation.

**SES 660 Sport Personnel Management (3)**

Develop understanding of and skill in human resource management for the operation of programs in sport, physical education, fitness and athletics.

**SES 665 Advanced Sociological Kinesiology (3)**

Advanced study of the application of sociological concepts and theories to current issues in kinesiology.

**SES 670 Sport and Higher Education (3)**

Identification and examination of the contemporary issues and problems in sport in American higher education, their historical foundation, and propose methods for their resolution.

**SES 672 Advanced Sport Law (3)**

Prerequisite: SES 688 Advanced study of employment law, intellectual property, labor law, antitrust, and contract law in sport business.

**SES 675 Management of Sports Facilities and Equipment (3)**

An examination of the functions of planning, management, evaluation, maintenance operations and situational analysis as they relate to management of sport facilities and equipment.

**SES 676 Sport Public Relations and Information Systems (3)**

Presentation of principles, standards and guidelines in sport public relations and information systems involved in sport information management.

**SES 678 Event Development and Management (3)**

Provide student with the skills necessary to develop, propose and conduct sport-related contests and special events including game management and facility management.

**SES 680 Perspectives in Sport Pedagogy (3)**

Philosophical perspectives of issues in physical education and sport, which are influenced by contemporary trends in American education.

**SES 685 Critical Pedagogy (3)**

Students will examine critical pedagogical philosophies and strategies while analyzing socialization process in schools. Also, students will learn how to develop critical awareness and take transformative action in schools.

**SES 688 Legal Aspects of Sport (3)**

Study the law and implications relative to physical education and sport. Emphasis on legal theory and responsibilities and risk management.

**SES 690 Graduate Seminar in Kinesiology (1)**

Consent of advisor. Examine professional and scholarly issues in kinesiology, physical education and sport administration through readings, discussions, laboratory tutorials and presentations of current research topics. S/U graded. Repeatable, maximum of three credits.

**SES 692 Graduate Internship in Sport and Exercise Science (1-6)**

Consent of instructor. Supervised experience structured to the special focus and functions of the student's graduate program. S/U graded. Repeatable, maximum of six credits.

**SES 694 Special Topics in Sport and Exercise Science (1-3)**

Engage in a course of study designed to investigate a special topic. Repeatable.

**SES 695 Seminar in Physical Education (2)**

Consent of instructor. Students will make an in-depth study of contemporary topics under guidance of qualified graduate faculty and consultants. Repeatable, may be taken two times.

**SES 696 College Teaching (3)**

Consent of instructor. Examines instructional models, issues and practices specific to teaching at the college level. Presentation modes such as lecture, discussion, questioning and small group procedures will be included.

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

Optional for Master of Science students on recommendation of major advisor. S/U graded. Repeatable, no limitations.

**SES 703 Research Seminar in Sport and Exercise Science (3)**

For doctoral candidates planning to conduct research in Physical Education or allied areas. Learn techniques and procedures of research and receive aids in development of required research outline for degree.

**SES 705 Seminar in Sport Administration (2)**

Student will undertake an in-depth study of current topics related to the administration and management of sport, physical education, fitness and athletic programs.

**SES 755 Supervised Practicum in College Teaching (1-6)**

Experience supervised teaching of undergraduate kinesiology lessons. Develop course outlines and effective teaching techniques. S/U graded. Repeatable, maximum of six credits.

**SES 797 Doctoral Proposal Research (1-4)**


Doctoral students must earn a minimum-maximum of 4 hours credit in partial fulfillment of degree requirements. S/U graded. Repeatable, maximum of four credits.

**SES 799 Doctoral Dissertation (1-12)**

Doctoral students must earn at least 12 hours of credit for the dissertation as a requirement of the student's doctoral program. S/U graded. Repeatable, no limitations.

**SES 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.


**SOC — SOCIOLOGY**
**SOC 508 Workshop (1-6)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**SOC 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles.

**SOC 523 Violence and the Family (3)**

Examine major issues in family violence such as defining family violence, comparing types of explanations from different disciplines and translating social science perspectives to policy and social service delivery systems.

**SOC 530 Organizational Analysis (3)**

Analysis of complex organizations in education, health, criminal justice, business and media. Application of theories in structures of organizations, behaviors of individuals within organizations and interorganizational relationships.

**SOC 532 Social Psychology and Group Dynamics (3)**

Analyze and discuss issues, trends, paradigms and applications. Includes social interaction theories, small group dynamics and group based methodologies.

**SOC 539 Seminar in Sociological Practice (3)**

Examine important issues and activities related to practicing sociology, survey research methods and intervention techniques used by sociologists, consider ethics of sociology, emphasize critical thinking, research and writing.

**SOC 544 Sociology of Criminal Law (3)**

Graduates only. Focus on substantive and procedural criminal law in the context of sociological theory, research and jurisprudence.

**SOC 551 Classical Social Theory (3)**

Study the major pioneering classical social theorists who established modern sociology during the late 19th and early 20th centuries. Focus on the emergence of sociology as a discipline.

**SOC 552 Applied Social Theory (3)**

Provide understanding of the role of theory in the social sciences, provide knowledge of major paradigms utilized in contemporary social science theory, assess applied explanatory strengths and weaknesses of paradigms.

**SOC 562 Social Statistics (3)**

Prerequisite: STAT 150. Introduce applied statistics in social science research. Levels of measurement; measures of central tendency and variability, probability; estimation and hypothesis testing; measures of association - chi square.

**SOC 563 Qualitative Methods (3)**

Examination of major qualitative methods in sociology: ethnography, participant observation, phenomenological sociology, ethnomethodology, Verstehen sociology, hermeneutics and other methods. Emphasis is on field research and application of specific qualitative methods.

**SOC 571 Sociology of Aging (3)**

Survey theories and research on the social aspects of aging with emphasis on later maturity and old age.

**SOC 580 Social Policy Analysis (3)**

Examines social policy and society. Socio-cultural historical conditions, social institutions which affect policy formation. Social change and social policy and utilization of sociological concepts and methods are examined.

**SOC 590 Proseminar (0)**

This course includes an overview of the field of sociology, career paths as well as orientation to graduate education, research approaches and possibilities. Ethical issues in the field today are discussed. Course meets one hour per week. Repeatable. S/U graded.

**SOC 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**SOC 660 Applied Social Research (3)**

Apply techniques of applied sociological research to an approved community project in applied social research, understand the relationship between basic and applied social research.

**SOC 690 Practicum in College Teaching of Sociology (3)**

Master's students contact graduate coordinator regarding desire to take course. Student is assigned to assist professor and will receive experience in observation and supervised practice in lower division course. A-F Graded. Audition required.

**SOC 691 Research Internship (1-9)**

Prerequisites: Nine hours of graduate credit in sociology and consent of instructor. S/U graded. Put classroom learning into practice with research in an organizational setting. Repeatable, maximum of nine credits.

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

Optional for Master of Arts students upon recommendation of major advisor. S/U graded. Repeatable.

**SOC 999 Graduate School Continuous Registration (1)**

To permit a graduate student to continue making progress in a degree program. S/U graded. Repeatable, no limitations.


**SOSC — SOCIAL SCIENCE**
**SOSC 341 Teaching Secondary Social Studies (3)**

Prerequisite: EDFE 120 or EDFE 125. Prerequisite to student teaching. Learn curriculum and course planning, teaching methods, strategies and techniques, materials, microcomputer applications, testing and evaluation.

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

Required of Master of Arts Candidates in Sociology on recommendation of major advisor. S/U graded. Repeatable, no limitations.


**SPAN — SPANISH**
**SPAN 502 Spanish Composition (3)**

Designed to increase the student's composition skills in Spanish through the use of original essays, descriptions, compositions, research papers and translations.

**SPAN 503 Spanish Conversation (3)**

A course designed to develop a high level of proficiency in spoken Spanish. Language functions are practiced in the context of practical everyday situations.



**SPAN 505 Spanish Phonetics and Dialects (3)**

The study of the major semantic, syntactic and phonological aspects of the Spanish language dialects and the standard Latin American Spanish found in the Americas.

**SPAN 506 Translation (2-3)**

Students will be introduced to techniques, theory and history of translation in understanding the complexities involved in the translation of English to Spanish or Spanish to English. Variable credit functions as follows: Summer course is offered for 2 credits; Academic Year is for 3 credits.

**SPAN 507 Spanish for Oral Proficiency (3)**

A course designed to develop oral proficiency by exposing students to advanced and superior linguistic functions.

**SPAN 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

**SPAN 510 Advanced Placement Program-Spanish (1-3)**

Consent of instructor. A course designed to provide content and pedagogical information related to the teaching of grammar and literature in the secondary school Spanish advanced placement program. S/U graded. Repeatable, no limitations.

**SPAN 521 Spanish Civilization and Culture (3)**

Designed to acquaint students with general trends of Spanish civilization and culture. Includes historical, economic, political and artistic developments of Spain from prehistoric times to the present.

**SPAN 531 Latin American Civilization and Culture (3)**

Designed to examine the historical and cultural development of the Latin American countries. Surveys the major historical events from the pre-Colombian period to the present.

**SPAN 550 Masterpieces of Spanish Literature (3)**

Chronological study of Spanish literary movements, schools and their literary masterpieces from Middle Ages to XXI Century. *Celestina*, 'el picaro', *Don Juan*, and *Don Quijote* will be presented.

**SPAN 551 Masterpieces of Latin American Literature (3)**

Chronological study of Spanish American literary movements, schools and their literary masterpieces from Pre-Colombian texts to XXI Century authors. Includes poetry, novel, essay and drama.

**SPAN 555 Literature for Children and Adolescents (3)**

A study of award-winning works of literature. Emphasis on multi-cultural books for children and adolescent literature of acclutration and assimilation.

**SPAN 560 Spanish Civilization and Culture (2)**

Interpretation of the civilization and culture of Spain from its earliest beginnings to the present. Includes an analysis of the artistic, political and economic currents that have shaped modern Spain.

**SPAN 561 Latin American Civilization and Culture (2)**

Designed to examine the cultural heritage of Latin America and its current state of political, economic and social development. Forces affecting the everyday life of the people are emphasized.

**SPAN 562 Mexico and United States Hispanic Civilization and Culture (2)**

The course examines the history and cultural heritage of the contemporary Mexican and of the Hispanics (Chicano, Cuban, Puerto Rican) living in the United States.

**SPAN 563 Hispanic Cultural Topics (1-6)**

Selected readings and discussion of a variety of cultural topics that manifest themselves in the everyday life of the Hispanic people. Customs and traditions will be emphasized. Repeatable, maximum of six credits.

**SPAN 570 Readings in United States Hispanic Literature (1-6)**

Designed to cover literature in English or Spanish by United States Hispanics: Mexican, Cuban or Puerto Rican Americans. Readings in narrative, theatre, poetry. Content is variable and determined by instructor. Repeatable, maximum of six credits.

**SPAN 571 Readings in Spanish Literature (1-3)**

Thorough coverage of topics such as any period of Spanish literature, especially the Golden Age, the generation of 1898 and post-Civil War novel. Repeatable, maximum three credits.

**SPAN 572 Readings in Latin American Literature (1-3)**

Designed to cover selected readings in Latin American literature. Course may be designed by author, themes or genre. Content is variable and will be determined by instructor. Repeatable, maximum of three credits.

**SPAN 575 Masterpieces of 20th and 21st Century Latin America (2)**

A study of the most representative Masterpieces of 20th century Latin American literature. Representative topics might include the modern novel, the essay, contemporary theatre and poetry and fantastic literature.

**SPAN 576 Mexican Literature (1-3)**

Provides a basic understanding of Mexican literature, its general trends and some of the most important authors in each of the four genres: poetry, novel, theatre and short story.

**SPAN 580 Grammar Topics (1-6)**

An in-depth study of difficult Selected structures of the language, which traditionally present problems; such as: the subjunctive mood, *ser* and *estar*, preterite vs. imperfect and others. Repeatable, maximum of six credits.

**SPAN 581 Advanced Spanish Grammar (2)**

An intensive study of the more complex theories and forms of Spanish grammar, with emphasis on mood, tense and voice.

**SPAN 582 Spanish for Oral Proficiency (2)**

A course designed to develop oral proficiency by exposing students to superior linguistic functions.

**SPAN 583 Oral and Written Discourse (2)**

Designed to enable students to speak and write extensively in Spanish, using description, narrations and exposition. Emphasis will be on fluency, accuracy and organization.

**SPAN 600 Introduction to Graduate Study and Research Methods (3)**

Orientation to graduate study in the MA in Foreign Languages: Spanish Teaching Emphasis, presents principles of design, analysis, and methodology of graduate-level research and writing the areas of pedagogy, linguistics, literature and cultural studies.

**SPAN 622 Directed Studies (1-3)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.



## SRM — STATISTICS AND RESEARCH METHODS

**SRM 502 Applied Statistics (4)**

Hypothesis formulation and testing; estimation and confidence limits; one- and two-sample tests; and statistical decision theory. Study inferences arising from distribution functions: *t*, *F*, chi-square, binomial, normal.

**SRM 520 Introduction to Statistical Computing (1)**

The course is designed to familiarize students with the use of statistical packages on both the mainframe and microcomputer platforms. Students will learn to organize, input, and analyze data.

**SRM 521 Statistical Computing with SPSS (1)**

Prerequisites: Completion of or concurrent enrollment in SRM 602; familiar with basic Windows commands and features, including use of pull-down menus, basic text editing features, etc. Course will acquaint students with the data management, data transformation and statistical analysis procedures available in SPSS for Windows.

**SRM 551 Mathematical Statistics with Applications I (4)**

Consent of instructor. Study of probability, random variables, distributions, moments, expected values and standard probability laws, probability bounds and point estimation.

**SRM 552 Mathematical Statistics with Applications II (4)**

Prerequisite: SRM 551. Continuation of SRM 551. Sampling distributions, estimation techniques, maximum likelihood, tests of hypothesis, confidence intervals, regression and chi-square tests.

**SRM 595 Special Topics in Applied Statistics and Research Methods (1-4)**

Specialized topics or contemporary issues. Topics vary. Repeatable, maximum two times, under different subtitles.

**SRM 600 Introduction to Graduate Research (3)**

Principles of research, design and analysis. Read and critique published research. Required of all first year graduate students except in those departments with substitutes. Taught every semester.

**SRM 602 Statistical Methods I (3)**

Prerequisite: SRM 600. Brief review of descriptive statistics. Covers probability, inference and sampling, correlation, hypothesis testing one-way ANOVA and an introduction to computer statistics packages.

**SRM 603 Statistical Methods II (3)**

Prerequisite: SRM 602. Continuation of SRM 602. Review of one-way ANOVA. Covers multiple comparisons, factorial designs, nested and mixed models, repeated measures, analysis of covariance and use of computer statistics packages.

**SRM 606 Multiple Linear Regression Analysis (3)**

Prerequisite: SRM 502 or Consent of instructor. Matrix approach to continuous and categorical variables, polynomial Selected non-linear models; formulation of ANOVA and ANCOVA designs and collinearity; regression methods; backward elimination, forward selection, stepwise regression.

**SRM 607 Non-Parametric Statistics (3)**

Prerequisite: SRM 502 or Consent of instructor. Study non-parametric tests; the rationale underlying the tests; examples of application of the tests in behavioral research; and comparison of the tests with their parametric equivalents.

**SRM 608 Experimental Design (3)**

Prerequisite: SRM 502 or SRM 603. Topics include factorial designs, crossed/nested designs, repeated measurements, blocking, analysis of covariance, pre- and post-multiple comparisons, trend analysis, power and use of computer software.

**SRM 609 Sampling Methods (3)**

Prerequisite: SRM 502 or Consent of instructor. Learn methods of survey sampling, including such topics as simple and stratified random sampling, ratio estimation, cluster sampling, systematic sampling, questionnaire design, problems of non-response and non-sampling errors.

**SRM 610 Statistical Methods III (3)**

Prerequisite: SRM 502 or SRM 603. Additional multiple regression topics. Introduction to MANOVA designs, discriminant analysis, factor analysis, cluster analysis, and path analysis.

**SRM 611 Advanced Statistical Data Analysis (3)**

Prerequisite: SRM 610. Student deals with large data sets and problems and issues that arise when working with such sets such as missing data, "dirty" data, rounding errors, storage issues, and the like.

**SRM 614 Linear Models (3)**

Prerequisite: SRM 502, SRM 551. Advanced topics in matrix algebra with applications to statistics. Development of the theory of linear models as a structure for handling problems in regression, analysis of variance, and experimental design.

**SRM 617 Biostatistics and Health Data Analysis (3)**

Prerequisite: SRM 600 or equivalent. Students will gain an understanding of biostatistical methods. This course enables students to develop the skills and knowledge necessary to manage and analyze health care and biomedical data.

**SRM 620 Advanced Statistical Programming (3)**

Prerequisites: SRM 520, SRM 502 or SRM 603, and SAS programming competence with data steps and basic data manipulation and statistical procedures. Introduces advanced programming tools using the SAS System. Designed to better qualify students for jobs in statistical data analysis.

**SRM 622 Directed Studies (1-3)**

Consent of instructor. Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**SRM 625 Applied Multiple Regression Analysis (3)**

Prerequisites: SRM 602 and SRM 603 or equivalent. Acquaint students with the major applications of and issues related to multiple regression analysis. Gain the skills necessary for conducting and interpreting studies involving multiple regression analysis.

**SRM 627 Survey Research Methods (3)**

Prerequisites: SRM 600, SRM 602 and EPSY 674 or equivalent. Covers the uses of surveys, the process involved in designing and implementing a survey study, and general issues related to survey research.

**SRM 635 Categorical Data Analysis (3)**

Principles of Categorical Data Analysis. Emphasis on loglinear and logic modeling techniques, which parallel many features of the general linear model in the continuous case. Taught alternate years.

**SRM 641 Special Topics (1-4)**

Consent of instructor. Advanced topics in applied statistics, measurement theory and research. Specific topics will be determined by the instructor and by current student needs. Repeatable, under different subtitles.

**SRM 645 Statistical Process Control (3)**

Prerequisites: SRM 502. Introduction to the use of statistical methods for quality improvement. Provides a comprehensive coverage of material from basic principles to state-of-the-art concepts and applications to both product and non-product situations.

**SRM 650 Research and Statistics Colloquium (1)**

Required of all Master's and doctoral students. Students present the results of their own research and critique and discuss the presentations of other students and faculty. S/U graded. Repeatable, no limitations.

**SRM 670 Evaluation: Models and Designs (3)**

Prerequisite: SRM 600. Theories and methods of program evaluation, models of evaluation and the social context of evaluation. Nature and types of evaluation, planning, proposal writing and measurements.

**SRM 680 Introduction to Qualitative Research (3)**

Prerequisite: SRM 600 or equivalent. This course introduces qualitative research. Students will explore the foundations, methods and processes of qualitative research and will learn to evaluate published research.

**SRM 685 Educational Ethnography (3)**

Prerequisite: SRM 680 or equivalent. Provides in-depth study of ethnography as related to educational research including issues of ethics, politics, diversity, and the researcher's role. Students will propose and conduct a mini-educational ethnography.

**SRM 686 Qualitative Case Study Research (3)**

Prerequisite: SRM 680 or equivalent. In-depth examination of qualitative case study research. Characteristics of general case studies along with specific types of case studies will be covered. Students will propose and conduct a mini-case study.

**SRM 687 Narrative Inquiry (3)**

Prerequisites: SRM 680 or equivalent. In-depth study of narrative research including life history, oral history, biography, and auto-ethnography. Group and individual narrative inquiries will be conducted. Interviewing, ethics and research benefiting participants will be emphasized.

**SRM 688 Writing as Analysis of Qualitative Research (3)**

Prerequisites: SRM 680 or equivalent and one of the following SRM 685, SRM 686 or SRM 687 or equivalent. An in-depth study of the role writing plays in quantitative research data collection, analysis and representation. Students will use data they collected in a variety of analysis and writing activities.

**SRM 689 Internship in Applied Statistics (1-10)**

Experiential learning in an on-campus setting, such as the Research Consulting Lab. Students work a minimum of 3 hours per week for each hour of credit. S/U graded. Repeatable, maximum of 10 credits.

**SRM 694 Practicum (1-9)**

Consent of instructor. Experiential learning in an on-campus setting, such as the Research Consulting Lab, in conjunction with supervision by a faculty member. Students work a minimum of 3 hours per week for each hour of credit. S/U graded. Repeatable, maximum of 18 credits.

**SRM 700 Advanced Research Methods (3)**

Prerequisites: Either SRM 502 or SRM 602. Advanced research designs, concepts and methods. Required of all specialist and doctoral candidates.

**SRM 705 Advanced Issues in Research Methods (3)**

Prerequisites: SRM 602, SRM 603, SRM 610, and EPSY 674 or equivalent; additional course work in research design, measurement and statistics is recommended. Seminar is designed to acquaint advanced doctoral students with selected current issues in the field of research methodology. Topics will vary based on instructor and student interest.

**SRM 731 Multivariate Analysis (3)**

Prerequisite: SRM 551, SRM 614. Introduces multivariate data structures including geometrical properties and interpretations, the multivariate normal distribution, multivariate one- and two-sample tests on mean vectors and covariance matrices, MANOVA, and profile analysis.

**SRM 763 Apprenticeship (1-3)**

Consent of instructor. Work with faculty member on professional endeavors such as research, writing, course planning or public service. Requires 3 hours per week for each credit. S/U graded. Repeatable, maximum nine credits.

**SRM 770 Evaluation: Advanced Methods (3)**

Prerequisite: SRM 670. Advanced methodological techniques for program evaluation. Topics include tailoring evaluations to the needs of clients and stakeholders, diagnostic procedures and needs assessments, program monitoring and judging the impact of programs.

**SRM 797 Doctoral Proposal Research (1-4)**

Required of all doctoral students. Doctoral students must earn 4 hours as partial fulfillment of requirements for the doctorate. Check with the Graduate School regarding appropriate procedures and formats. S/U graded. Repeatable, maximum of four credits.

**SRM 799 Doctoral Dissertation (1-12)**

Required of all doctoral candidates. Must earn 12 hours as partial fulfillment of requirements for the doctorate. Dissertation must be approved by and defended before the dissertation committee. S/U graded. Repeatable, no limitations.

**TED — TEACHER EDUCATION****TED 602 Teacher Leadership (3)**

Assist teachers in exploring their professional context (socially, politically and organizationally) and their role in enhancing, general schooling conditions, learning processes and outcomes.

**TED 605 Professional Seminar II (2)**

Prerequisites: SRM 600. This course is designed to be a capstone experience. Synthesize and integrate what has been learned in the content and pedagogy coursework with classroom teaching and other work related experiences.

**TASL — TEACHING AMERICAN SIGN LANGUAGE****TASL 501 First and Second Language Acquisition in ASL (3)**

The course will introduce major theories of acquisition, and similarities and differences between first language and second language acquisition and learning for teaching ASL as L1 and L2.

**TASL 502 ASL Teaching Methods (3)**

The course will introduce theories and methods for teaching ASL as L1 and L2 across multiple instructional settings: elementary, secondary and post-secondary.

**TASL 503 ASL Assessment and Testing (3)**

Prerequisites: TASL 501 and TASL 502. The course will discuss classroom assessment tools and evaluation techniques to assess L1 and L2 ASL students' receptive, expressive and conversational skills and socio-cultural knowledge across multiple instruction settings.

**TASL 504 ASL Curriculum Development and Design (3)**

Prerequisites: TASL 501 and TASL 502. The course will examine curriculum development in ASL education across multiple educational settings. Development and models of syllabi, including instruction technology and materials, along with lesson plans will be explored.

**TASL 505 Teaching Deaf Community, Culture, and ASL Literature (3)**

Prerequisites: TASL 502 and TASL 504. The course will focus on methods of teaching Deaf community and Culture, and ASL literature in ASL classes. Appropriate cultural, community and literature contents will be explored.

**TASL 506 Contemporary Professional Issues in Teaching ASL (3)**

Prerequisites: TASL 503 and TASL 504. The course will explore and address the contemporary issues in the profession of teaching ASL including language policy, state and national credentialing issues.

**TASL 507 ASL Research Methods (3)**

Prerequisites: SRM 600 and TASL 506. The purposes, values, designs and methods of research in educational setting will be introduced. The students will conduct research on a topic related to ASL teaching.

**TASL 593 Practicum for ASL Teaching I (3)**

Prerequisites: TASL 501, TASL 502, TASL 503 and TASL 504. Students will have observational learning experiences with other ASL teachers in ASL as first language or second language instruction in various educational settings.

**TASL 594 Practicum for ASL Teaching II (3)**

Prerequisite: TASL 593. Students will have in-depth teaching and learning experiences in teaching ASL as a first language or second language in an educational setting.

**THEA — THEATRE ARTS****THEA 385 Methods of Teaching Drama (3)**

Prerequisite: EDFE 120 or EDFE 125. Learn teaching techniques, curriculum and classroom organization, testing and evaluation, procedures and materials and relationship of the subject area to the total program.

**THEA 508 Workshop (1-3)**

A variety of workshops on special topics within the discipline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.



**THEA 513 Professional Renewal (1-3)**

Update skills and knowledge of professionals in the discipline. Goals and objectives will be specifically directed at individual professional enhancement rather than the acquisition of general discipline knowledge or methodologies. S/U or letter graded. Repeatable, under different subtitles

**THEA 601 Graduate Practicum in Theatre (1-4)**

Qualified graduate, permission of instructor, advisor and department. This specialized, supervised field work course involves theory and methodology in practice. Copies of written evaluation must be filed with instructor and department. Repeatable, maximum of four credits.

**THEA 622 Graduate Directed Research in Theatre (1-4)**

Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Repeatable, maximum concurrent enrollment is two times.

**THEA 650 Graduate Summer Theatre (10)**

Acceptance by Theatre Arts staff only. Graduate workshop in acting and technical theatre, with 8-hour daily rehearsals for 8 weeks for summer productions. Repeatable, maximum of 30 credits.

**THED — THEATRE EDUCATION****THED 530 Theatrical Production: Costuming, Make-Up, Props (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate recommended not required. Students will gain a solid working overview in the areas of costume design, costume construction, stage make-up, and properties. The concept of aesthetics will be discussed in detail and the beginning tools for achieving a desired aesthetic in the areas covered will be taught.

**THED 531 Theatrical Production: Lighting, Sound, and Scenic Design (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate recommended not required. Students will gain a solid working overview in the areas of scenic design, sound design and implementation, and lighting design and implementation. This course should be considered as a continuation of the ideals and concepts offered in THED 530.

**THED 540 Directing/Acting: Realism and Musical Theatre (3)**

Prerequisite: B.A. or B.S. degree, Teaching Certificate is recommended yet not required. This course will include two components: advanced studies in the approaches and techniques of directing and acting in realism; and exploring the tasks of directing, choreographing, and mounting a theatre production.

**THED 541 Directing/Acting: Non-Realism/Period Styles (3)**

Prerequisites: B.A. or B.S., Teaching Certificate recommended not required. This course explores acting and directing in the styles and theatrical periods of Henrik Ibsen, Anton Chekhov, and George Bernard Shaw, as well as Bertolt Brecht, Samuel Beckett and Vsevolod Meyerhold.

**THED 560 Innovative Strategies in Drama Education (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate recommended not required. Students will research theatre education strategies practiced in the US and internationally. Focus will be paid to investigating methods which break the mold of traditional practices in most secondary school settings.

**THED 561 Voice and Movement (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate recommended not required. This course is designed to provide an advanced working knowledge of the voice using fundamental through advanced exercises. The movement section of this course will provide working knowledge of the actor's body and its connection to vocal work.

**THED 600 Dramaturgy/Research Methodology (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate is recommended, yet not required. Students learn effective research strategies for the field of theatre arts. Students will produce a dramaturgical protocol, requiring detailed preparatory research, testing of ideas, and public presentation of theory and concepts in practice.

**THED 670 Advocacy, History and Philosophy of Theatre Education (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate is recommended yet not required. This course will explore the history and philosophy of theatre education in the U.S. Participants will investigate the guiding question: why is theatre education essential for every school?

**THED 680 Theatre Education Curriculum Development (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate recommended not required. The purpose of this course is for students to apply the techniques and strategies acquired from previous courses into creating actual curriculum for their classrooms. Students will conduct interviews with experienced teachers in the field, research national theatre curriculum, and analyze and develop new curriculum.

**THED 690 Thesis I (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate is recommended yet not required, THED 530, THED 540, THED 560. In this course, students will prepare a prospectus proposal and a portion of the prompt book for their Master's thesis project.

**THED 699 Thesis II (3)**

Prerequisites: B.A. or B.S. degree, Teaching Certificate is recommended, yet not required, 33 credit hours of program completed. In this course, students will finish the dramaturgical protocol and promptbook for their Master's thesis project and produce the show that accompanies them both.

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# ADMINISTRATION AND FACULTY

## Board of Trustees

In parentheses: the first year is the date of the first appointment; the second year is the expiration of the present term.

- Chair, Dick Monfort, Greeley (1999-2009)
- Vice Chair, Jerry Morgensen, Greeley, (2003-2011)
- Vish Iyer, Faculty Trustee (2008-2009)
- Robert Vincent, Student Trustee, (2008-2009)
- Ron Lambden, Secretary
- Randal L. Haack, Treasurer
- Gilbert Carbajal, Ft. Collins (2001-2009)
- Carlotta LaNier, Denver, (2006-2011)
- Darlene LeDoux, Lakewood (1993-1997) and (2007-2011)
- Richard James "Jim" Chavez (D), Highlands Ranch (2008-2011)
- Richard S. Gast (D), (2008-2011)

## President

**Kay Norton, J.D.**

(1998), President — B.A., Wellesley College; J.D., University of Denver

## General Administration

The UNC administration is listed with their name followed by their highest degree.

The year in parentheses is the first year of employment at UNC followed by all degrees conferred.

## Vice Presidents

### **Abe Harraf, Ph.D.**

(2007), Provost and Senior Academic Vice President — B.A., English Literature College of Translation, Iran; M.Ed., Guidance and Counseling and M.B.A., Sul Ross State University, Texas; Ph.D., Utah State University

### **Ronald Lambden, J.D.**

(2002), Vice President and General Counsel — B.A., M.A., University of Delaware; J.D., University of Denver

### **Randal L. Haack, Ph.D.**

(2006), Senior Vice President for Finance & Administration and Chief Financial Officer — B.S., University of Nebraska-Lincoln; M.A., University of Nebraska-Omaha; Ph.D., University of Nebraska-Lincoln

### **Chuck Leonhardt**

(2008), Vice President for University Relations — B.S., Utah State University

## Associate Vice President

### **Michelle F. Quinn, M.A., C.P.A.**

(2001), Associate Vice President of Finance — B.S., George Mason University; M.A., West Virginia University

## Assistant Vice Presidents

### **Robbyn R. Wacker, Ph.D.**

(1990), Assistant Vice President for Research and Dean Graduate School and International Admissions — B.A., B.S., M.S., University of Northern Colorado; Ph.D., Iowa State University (G, DR)

### **Thomas A. Smith, Ph.D.**

(2006), Assistant Vice President for Undergraduate Studies and Dean of University College — B.A., University of Washington; Dip.C.S., M.C.S., Regent College; M.A., Ph.D., University of Notre Dame

### **Jeanette Van Galder**

(1980), Assistant Vice President for Information Technology

### **Patricia A. Book, Ph.D.**

(2009), Assistant Vice President for Continuing Education and Academic Outreach — B.A., Oakland University; M.A., Ph.D., University of Connecticut

### **Tobias J. Guzman, M.A.**

(2000), Assistant Vice President, Enrollment Management and Student Access — B.A., University of Northern Colorado; M.A., Plymouth State University

### **Kirk Lechlitter, B.S.**

(1990), Assistant Vice President Facilities Management — B.S., University of Wyoming

### **Raul Cardenas, Jr., Ph.D.**

(2007), Assistant Vice President for Student Engagement and Dean of Students—B.A., Pepperdine University; M.Ed., Northern Arizona University; Ph.D., Arizona State University

## Internal Auditor

### **Brad Hoffner, B.A.**

(1995), Internal Auditor — B.A., University of Northern Colorado

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# College Administration

## College of Education and Behavioral Sciences

### **Eugene P. Sheehan, Ph.D., Dean**

(1987), B.A., University of Dublin; M.S., Queen's University of Belfast; M.S., University of Dublin; Ph.D., University of California, Santa Cruz (G, DR)

### **Carolyn W. Edwards, Ed.D., Assistant Dean**

(1999), B.A., University of Kansas-Lawrence; M.A., Ed.D., University of Northern Colorado (G)

## College of Humanities and Social Sciences

### **David Caldwell, Ph.D., Dean**

(1983), B.A., University of Texas; M.A., Ph.D., Ohio State University (G)

### **Karen M. Jennison, Ph.D., Assistant Dean**

(1972), B.A., University of Kansas; M.A., Washington University; Ph.D., Washington State University (G)

## Kenneth W. Monfort College of Business

### **Don Gudmundson, Ph.D., Dean**

(2008) B.S., University of Wisconsin, Madison; M.B.A., University of Wisconsin, Oshkosh; Ph.D., University of Kentucky

### **Sharon K. Clinebell, D.B.A., Assistant Dean of Undergraduate Programs**

(1987) B.S., College of the Ozarks; M.B.A., University of Arkansas; D.B.A., Southern Illinois University (G, DR)

## College of Natural and Health Sciences

### **Denise A. Battles, Ph.D., Dean**

(2005), A.B., Colgate University; Ph.D., University of California, Los Angeles

### **Douglas Marshall, Ph.D., Associate Dean**

(2007), B.S., University of Nebraska; M.S., University of Nebraska; Ph.D., University of Florida

## College of Performing and Visual Arts

### **Andrew Jay Svedlow, Ph.D., Dean**

(2005), B.A., George Washington University; M.S., Bank Street College; Ph.D., Pennsylvania State University

### **Vergie Amendola, M.M., Assistant Dean**

(1991), Professor of Music — B.A., University of Northern Colorado; M.M., Northwestern University (G)

## Graduate School

### **Robbyn R. Wacker, Ph.D.**

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## University College

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## University Libraries

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## A

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