2014-2015 Graduate Catalog

Greeley, Colorado

Effective Dates: August 15, 2014 to August 14, 2015

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2| UNIVERSITY OF NORTHERN COLORADO 2014-2015 GRADUATE CATALOG

ABOUT 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.

At UNC, there are over 100 undergraduate and 100-plus graduate programs of study spread among six colleges: Humanities and Social Sciences, Business, Education and Behavioral Sciences, Natural and Health Sciences, Performing and Visual Arts, and University College. With more than 2,000 courses available, university advisors help students build an education that will make them competitive in the global job market.

There are approximately 12,000 students from all 50 states and 49 countries who attend classes on our beautiful 260-acre campus. The student population is 62 percent female, 38 percent male and 19 percent minorities.

We offer first-class facilities and a wealth of resources for the university community to access. 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.

Students can get engaged in more than 150 student organizations on campus, including leadership, professional, social, cultural and honorary groups. They can choose to join one of 10 fraternities and nine sororities or participate in service or experiential learning projects.

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, local festivals, nightlife, a symphony orchestra, theater and much more.

With its rich 125-year history, dedicated faculty, active students and NCAA Division I athletic teams, the University of Northern Colorado is a place where students can get a high-quality education, create endless opportunities and truly find their niche.

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 University of Northern Colorado education. You'll find faculty who are dedicated to teaching excellence.

Pursuing a university 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 the University of 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.

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 2014-2015 academic year 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.

Calendar

Please reference the 3-year calendar at http://www.unco.edu/regrec/PDF%20Forms/Calendar_3 yr.pdf for detailed information.

Dates are subject to change.

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

- UNC is a recipient of the prestigious Christa McAuliffe Award for Excellence in Teacher Preparation from the American Association of State Colleges and Universities.
- 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.
- 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.
- DownBeat Magazine has rated UNC's University Orchestra the top university orchestra in the United States repeatedly for more than 10 years.
- Our graduating nursing students regularly score in the top 10 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.
- According to a 2007 study, 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.
- The Jazz Studies program has won more than 100 DownBeat Magazine awards in the last 30 years.
- For seven successive years, graduating business students have scored 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.
- UNC has 19 NCAA Division I sports primarily in the Big Sky Athletic Conference.

University of Northern Colorado Traditions

Traditions at the University of Northern Colorado reflect our rich 125-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 was demolished in 1972, but its cornerstone was salvaged and can still be seen 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 UNC 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 UNC 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 Higher Learning Commission (HLC) of 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 Interpreter 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
- · 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
- Accreditation Council for Education in Nutrition and Dietetics
- · Society for Public Health Education.

UNC holds membership to 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 throughout 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

Dean of the Graduate School and International

Admissions:

Linda Black, Ed.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.

Graduate Dean's 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.

GENERAL INFORMATION

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
- 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 course work 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.

International Admission

Admission requirements for UNDERGRADUATE International Students are found in the UNC Undergraduate catalog at: http://catalog.unco.edu or call 970/351-2831. You may also contact the Graduate School and International Admissions Office at 970/351-2831.

An international student is a student who is not a citizen of the United States or classified by United States Immigration and Immigration Service (USCIS) as a Legal Permanent Resident (Green Card Holder). International applicants must meet English proficiency requirements as well as academic and financial requirements prior to being regularly admitted to the University. Application for admission for an individual holding refugee or asylee status is also processed in the Graduate School/International Admissions office. Legal Permanent Residents and undocumented applicants, if it is determined Intensive English Language training is needed, are also processed in the GSIA office. There are specific application requirements for students with any of the aforementioned statuses. Please contact the International Admissions Coordinator at +1(970) 351-2831 for assistance, or visit the Graduate School/International Admissions office website at www.unco.edu/grad.

All applications must be submitted 90 calendar days before the semester start date. Supporting materials and related credentials must be received by the Graduate School & International Admissions no later than 60 calendar days before the semester that the student wishes to enroll (see www.unco.edu/grad/international/howtoapply.html for deadlines). International applicants must take these steps to be considered for admission:

- Obtain and complete the appropriate International Application for Admission forms from the Graduate School and International Admissions website.
- 2. Pay the non-refundable application fee.
- 3. Submit financial documents verifying funding to support the cost of attending UNC for one academic year. See http://www.unco.edu/grad/international/index.html for acceptable documentation.
- 4. Submit official transcripts, mark sheets, diplomas and certificates from each high school, college or university attended. If they are not in English, submit a notarized English translation with each document.
- 5. Photo quality copies of the bio page of your passport and your student visa (if you have one).
- 6. Official Graduate Record Examination (GRE) scores are required for all doctoral programs and many masters programs. Check with your program area for further requirements. GRE scores must be sent from ETS directly to UNC (UNC School code is 4074). The scores must be no more than five years old. Your program may require other examinations; please check with the program.
- 7. International students who are not native speakers of English are required to provide evidence of English language proficiency by submitting official minimum scores of one of the following:
 - a. Test of English as a Foreign Language (TOEFL):
 - i. Graduate program admissions are: **550** (paperbased), **80** (internet-based) with cut scores no lower than: Listening (18), Reading (20), Speaking (18), and Writing (20)
 - b. International English Language Testing System (IELTS):
 - i. Graduate program admissions: 7.0
 - c. Pearson Test of English (PTE):
 - i. Graduate program admissions: 54
 - d. Official transcripts showing completion of a college degree program from an accredited U.S. institution within the previous two years.

Students who do not provide sufficient English proficiency documentation will be admitted provisionally to UNC and will be assessed and may be required to participate in the Intensive English program (IEP). (See

http://www.unco.edu/cie/iep.html 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.

Provisional Admission — English Language

International applicants whose academic record is sound but whose English language proficiency fails to meet the UNC minimum admission standard may be granted a provisional admission to UNC. However, as the provision for admission, they must first study Intensive English to demonstrate their proficiency. Based on their TOEFL, IELTS or PTE 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. Students in the Intensive English Program register as full-time students at UNC but may not be released from provisional admission status until successful completion of the Intensive English Program. Students enrolled in this program will receive all the benefits and services provided to full-time students at UNC.

Intensive English Program — International

Qualification Criteria. A TOEFL, IELTS or PTE score is not required for international students to be considered for admission to the Intensive English Program at UNC. Students must have completed high school or the equivalent. Students need to submit a full UNC Intensive English Program application, official copies of their most recent transcripts, passport bio page, and financial documentation to the Graduate School & International Admissions Office to apply for admission to the Intensive English Program.

Classes Offered in the IEP. The mission of the Intensive English Program is to:

- provide international students with English language instruction for academic purposes at appropriate levels in order to prepare students for academics at an American university
- provide on-going language support in the form of language tutors
- increase international students' understanding of intercultural communication

Core classes of speaking/listening, grammar, writing, and reading/vocabulary are offered at six levels of instruction. In addition, Graduate Oral Presentation and Graduate Research Writing target skills necessary for graduate students' success. Skill courses also cover a variety of topics.

Length of the IEP. Students are placed into the appropriate level of the IEP based on their scores on the Academic English Assessment. Students are required to meet an 80% proficiency level in order to advance in the

program. Each session lasts for 8 weeks. For more details about the program, see http://www.unco.edu/cie/iep.html.

Doctoral Admission

Each applicant for the doctoral degree must:

- Possess a baccalaureate degree or master's degree from a regionally 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 146 on the verbal and at least 140 on the quantitative sections of the GRE-General Test with a combined score of at least 297 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.

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.

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 a regionally 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 each 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 a regionally 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 individual studies in effective teaching. 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. A wide range of topics is permitted for this document, and the study may develop a presentation that is unique to the discipline.

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.

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.

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 crosscultural 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 semesters 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.

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.

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

Returning UNC Students

Students who have not attended UNC within the last 12 months will need to update their student information before they can register. Returning students must submit a Student Information Form online.

https://apps.unco.edu/StudentInformationForm/

Unclassified Graduate and Visiting Students

Undergraduate students admitted to another university may take classes at UNC to transfer back to their respective home institution. Unclassified graduate status refers to a student who has at least a Bachelor's degree and has either applied to the Graduate School or wanting to take classes but not pursue a degree. To register for either status, students must submit a Student Information Form online.

https://apps.unco.edu/StudentInformationForm/

Classes For Personal Interest

Non-degree seeking students must submit a Student Information Form online. Students cannot have been previously denied admission by the Admissions Office.

Audit

When students audit a course, there is no need to complete assignments or exams, but students are expected to attend class. If students don't attend class they may be removed from the roster. If students successfully complete the class, they will be given a grade of "NC" (no credit). Tuition and fees are charged for audited courses and the course is not eligible for the COF stipend. Current students

registered for an audit course should contact the Registrar's Office to change their registration status to an audit. Students may not change the status for any course, including audit courses, after the add deadline for a given term. For visiting students, please contact the Registrar's Office at 970-351-2231.

If you are age 65 or older and wish to audit a course, you may do so with **no tuition charge (course fees may apply).**

Registration may occur beginning the first Monday following the last day of pre-registration for UNC students. Registration is subject to space availability. If you have any questions or need additional information, please contact the Registrar's Office at 970-351-2231.

UNC and AIMS Community College Cooperative Registration Agreement

Graduate or undergraduate students enrolled for **12 on-campus credits** and paying full-time tuition to UNC or Aims Community College are eligible to take one undergraduate class (maximum 5 credits) at the other school during the corresponding term without additional tuition charges. Interim term is not included.

The free course at the host school must not be offered at your home school during that same term you are taking the class.

Please refer to the Colorado Transfer Guide to determine which courses will transfer between Aims and UNC. Equivalent course titles between institutions are listed on the course equivalency guide available at the UNC Admissions Office or Aims Admissions Office. Remember:

- Students must meet prerequisite requirements and must pay any course fees other than tuition.
- Continuing Education courses do not count in the 12 credit full-time requirement.
- Continuing Education courses cannot be taken as the free class.
- Aims students register for UNC courses at the UNC Registrar's Office 3002 Carter Hall. Students will be allowed to register the Monday following the last day of pre-registration for UNC students.
- UNC students register for Aims course via normal procedures outlined in the Aims Schedule of Classes; however, in place of payment, the UNC student completes a certifying form at the Aims Cashier's Office.
- At the end of the term, students found to be ineligible will be billed for and must pay tuition charges to the host school.

 Once the course has been completed, please have an official transcript sent to your home institution in order to receive transfer credit.

Graduate Exchange Program with CU/CSU/School of Mines

The state has authorized graduate students to take one course per term at another state-supported institution without charge. Participating institutions include Colorado State University, University of Colorado and Colorado School of Mines.

Registration Criteria:

- Students must be full time (9 credits) at UNC and in a Graduate degree program.
- Continuing Education, on-line courses and distance delivered courses are not eligible as exchange agreement courses and are not considered as part of the full-time enrollment status criteria.
- The exchange class cannot be offered at UNC or scheduled in such a way that the student can enroll in the class.
- Registration information and applications can be obtained at the UNC Registrar's Office, Carter Hall 3002.
- Both a representative of the Graduate School and the student's advisor need to sign the form giving approval for the course. This form must be completed and submitted before the registration period for the class begins.

Once the exchange has been approved, the Registrar's Office will send the form to the "host" institution. Registration processes at host institutions vary so please check with the host institution's Registrar's Office for more information on how to register. **Students are responsible for registering for the course.**

A student's grade is sent back to UNC by the host institution on the Exchange Agreement form and then recorded on the UNC transcript as non-residency transfer work. Students should remind the instructor to submit the Exchange Form with the grade to the host Registrar's Office after the course is completed.

Continuous Registration for Graduate Students

All Doctoral 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. Doctoral Students must be enrolled for at least 1 credit hour each academic semester (fall and spring) to be in compliance to this policy. Those doctoral students not in compliance with the continuous registration policy will automatically be assessed the \$150 continuous registration fee each semester.

All Doctoral, Specialists, and Master's 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. GRAD 999, Graduate School Continuous Registration, is available for all Graduate students to enroll in to assist in maintaining compliance to the continuous registration policy.

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. Beginning Fall 2010, 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, be re-accepted by their program and the Graduate Dean, and pay the \$150 continuous registration fee if they wish to resume their studies. Acceptance is not guaranteed. Additional coursework and examinations may be required for students who are reactivated.

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:

 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/department chair of the major program. The Directed Study form must be submitted to the Office of the Registrar at the time of enrollment and requires the signatures of the student, the supervising faculty member and the school director/department chair. A rationale for course credit form should be completed and filed in the academic program office. 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.

Non-Scheduled Courses

Non-Scheduled courses are offered to students when a particular course(s) are not scheduled for the current semester in which the student seeks to enroll in the course.

Students registering for a non-scheduled course(s) must complete and submit to the Office of the Registrar a Non-Scheduled Course form for each course by the appropriate semester add deadlines. The Non-Scheduled Course form requires the signatures of the student, the supervising faculty member and the school director/department chair.

Schedule Changes (Adds/Drops)

Schedule changes may be handled through Web Registration http://www.unco.edu/regrec/Current%20Stude https://www.unco.edu/regrec/Current%20Stude <a href="https://www.unco.edu/regrec/Current%20Stude <a hr

Students may add courses using **URSA** through the 5th day of the semester for full semester courses. After the 5th day of the semester all adds require the signature of the instructor and must be processed at the Registrar's Office in Carter Hall. Short course add deadlines are available online at www.registrar.unco.edu/calendars.html

- Days 6-10:the instructor may add the class by accessing URSA, then selecting the Faculty tab and electronically submitting the add request form to the Registrar's Office. Students may also access the add request form on the Registrar's web site and fax it to 970-351-1870 or submit it to the Registrar's Office. The add request form will only be available on the Registrar's website during days 6-10.
- Only in unusual circumstances can a student add a course(s) after day 10. Student's must complete a Petition for Extension of the Add Deadline form and either fax or submit to the Registrar's Office.

Students may drop courses using **URSA** through the 10th day of the semester for full semester courses. Tuition and fees are adjusted if applicable. Short course drop deadlines are available online at

www.registrar.unco.edu/calendars.html

The number of credits for which a student is registered at the time of the add/drop deadlines 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).

Summer Account Balances

Students who do not pay past due summer balances will be dropped from the subsequent Fall semester course schedule. Students will be notified via the UNC Bear email account when courses will be dropped. If a student's courses are dropped and the past due summer balance is subsequently paid, the student is responsible for registering for courses that were dropped on a space available basis.

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: 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: 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.

Withdrawal from Program

A student who has been admitted to a Graduate program and decides not to attend or who attends and decides to leave the program between semesters must notify the Graduate School in writing in order to have their file closed. Once notified by the student, the Graduate School will notify the Office of the Registrar, which will drop any registration for subsequent semesters and notify the student via the student's Bearmail.

A student who decides to leave a Graduate program during a semester must initiate the withdrawal process in the Office of the Registrar and notify the Graduate School in writing in order to have their file closed.

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 (www.unco.edu/ofa) administers several types of state, federal, and institutional aid programs including grants, loans, employment and scholarships.

Educational Loans. UNC participates in the following programs: Federal Perkins Loans, Federal Direct Subsidized and Unsubsidized Stafford Loans and Federal Direct Graduate PLUS Loans. Eligibility for Federal Perkins Loans and Federal Direct Subsidized Stafford Loans is based upon need, as determined by the completion of the Free Application for Federal Student Aid (FAFSA), www.fafsa.gov. Graduate PLUS Loans, while not based upon need, do require approved credit by the U.S. Department of Education. Loan funds plus interest must be repaid, 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 has never attended classes or 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 Graduate 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. 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 Work Study programs provide on- and off-campus jobs to students demonstrating financial need. Students who do not qualify for the Work Study programs can find 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.

Satisfactory 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. 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, the Standards of Satisfactory Academic Progress is available in the Financial Aid office and on our website.

Applying for Financial Aid

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

The FAFSA form is available on-line at www.fafsa.gov.

To receive the maximum amount of funding, the application must be completed by March 1 prior to the award year. An application processed after March 1 is considered late and the applicant will have limited funding opportunities. To apply for a Federal Direct Stafford or Federal Direct Graduate PLUS Loan for Graduate Students, students must accept the loan on URSA. Students will also need to complete a Master Promissory Note on the Federal Direct Loan website.

Applying for Scholarships

Students must be admitted to UNC to be considered for scholarships. Eligibility for some scholarships is based on information obtained from the admission application. Students are encouraged to complete the UNC Universal Scholarship Application at www.unco.edu/ofa.

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 funding for books, tuition, fees, housing and utility deposits as well as other expenses associated with the beginning of the year. Financial aid funds are usually available at the beginning of each semester as a credit to charges on the student's bill. A refund will be deposited in the student's checking account if the aid exceeds all institutional charges and a direct deposit has been established.

Financial aid awards are typically offered for an academic year (Fall/Spring). A separate brief internal application is required for funding during the summer session; students should contact the office for more details.

Renewal of financial aid is not automatic. A FAFSA must be completed for each academic year before the March 1 priority date. The student's academic progress as well as financial need determine the continuance of funding.

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 generally returned to financial aid accounts. Students can refer to 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.

Housing and Residential Education

www.unco.edu/housing

Who are we:

Student housing at UNC is known as the Department of Housing and Residential Education and provides housing for more than 3,200 undergraduate and graduate students in traditional residence halls, apartments, and houses.

At the core of what we do:

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 hall facilities:

Residence halls and apartments are located on Central Campus and West Campus. The Central Campus residence halls are located on a beautiful, tree-lined area, and include Belford, Decker, Gordon, Brown, Luján, Dickeson, Bond, Hansen-Willis, Sabin, Snyder, Wiebking, and Wilson Halls. These halls house between 28 and 280 students. West Campus residence halls are located west of the University Center and house between 330 and 542 students per hall. These buildings include Harrison, Lawrenson, Turner, North and South.

Living on campus is part of the learning experience:

Many students enjoy the opportunity to live on theme floors. Interest-Based Communities include: Ubuntu, Common Ground, Pet Friendly, Spectrum, Women's Community, Transfer Community, and Leadership. The Academic-Based Communities include: Biology, Honors, Scholars & Leaders, Pre-Nursing, Cumbres, Monfort College of Business, Elementary Education, Sustainability, and Performing & Visual Arts. These floors offer programs, activities and experiences centered around the respective theme.

Services:

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 available on both sides of campus and provide air-conditioned dining as well as the convenience of Gourmet to Go and Bear On The Run take-out meals. Laundry facilities, study lounges, game rooms, and television lobbies are also available for student use.

Accommodations:

Residence halls and apartments on both sides of campus are available for students with disabilities and include numerous accommodations and helpful features. Housing and Residential Education 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 Residential Education as early as possible to ensure timely planning and preparation of a room or apartment.

Apartment Life at Arlington Park Student Apartments and University Apartments

Arlington Park Student Apartments are located 1 block east of West Campus and provides housing to all students. UNC students are welcome to apply for housing in one of 3 options, 2 bedroom / 1 bathroom lofts, 4 bedroom / 2 bathroom apartments or 2 bedroom / 2 bathroom apartments. Each apartment contains a full kitchen with stove, refrigerator with ice maker, garbage disposal, dishwasher and microwave. 4 bedroom & 2 bedroom / 2 bath units have private washer & dryer in each unit; 2 bedroom lofts have free washer & dryer access located in the building. Each bedroom is private with individual locks. All apartments are furnished with full size extra long bed, dresser, computer desk and desk chair, couch, chair coffee and end table and breakfast bar with bar stools. All utilities are included except for electricity. Additional amenities include a fitness center, computer lab, game room with large screen TV and free WIFI in the courtyards and community room.

The University Apartments complex is a five-minute walk from Central Campus and provides housing to all students. Students and students with families are welcome to apply for housing in these two-bedroom, furnished and unfurnished apartments. Rent includes 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 on-site laundry facility, playground, fitness room, and a community center with large screen television.

University Owned Houses:

There are 5 University Owned Houses available for all students. Three of the houses are located near Central Campus and two are located near West Campus. Each house is fully furnished with couches, chairs, desks, and standard twin beds as well as spacious dining areas and full-size kitchens. Each kitchen is equipped with a microwave, refrigerator and range. Cable TV, local telephone service, laundry, wireless high-speed internet service, 24-hour on call maintenance, and UNCPD security is available at each of the houses.

Visit the Housing and Residential Education web site for detailed descriptions and floor plans as well as answers to commonly asked questions at www.unco.edu/housing.

Housing and Residential Education, Dining Services

Room and	Board	Rates	by	Semester
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Residence Halls, 2014-2015**	Semester Rate
Belford, Decker, Gordon, Sabin, Snyder, Wiebking and Wilson	\$2,400.00
Harrison	\$2,500.00
Bond, Brown, Dickeson, Hansen-Willis, Lawrenson Efficiencies, and Luján	\$2,733.00
Lawrenson Suites*†	\$2,903.00
Turner Efficiencies	\$2,908.00
Turner Suites	\$3,070.00
North and South	\$3,261.00
Off Campus Properties *†	\$1912.00
University Apartments [†]	Monthly Rates
Academic Year Lease	
Unfurnished	\$704.00/apt
	\$352.00/person
Furnished	\$756/apt
	\$378.00/person
12-Month Lease	
Unfurnished	\$684.00/apt
	\$342.00/person
Furnished	\$736.00/apt
	\$368.00/person
Month-to-Month Lease	
Unfurnished	\$790.00/apt
	\$395.00/person
Furnished	\$844.00/apt
	\$422.00/person
	-

Arlington Park Apartment Monthly Rates**

(12 month lease)

2 Bedroom / 1 Bathroom loft	\$484/person
4 Bedroom / 2 Bathroom	\$494/person
2 Bedroom / 2 Bathroom	\$514/person

^{*}Break housing included in Lawrenson Hall, Harrison Hall and off-campus properties.

[†]Lawrenson, University Apartments, Arlington Park Apartments and off-campus properties do not require a meal plan.

Meal Plans, 2014-2015**	Semester Rate
Any Meal/Any Time + 10 Bonus Meals + 100 Dining Dollars	\$2,990.00
19 Meals Per Week + 15 Bonus Meals + 150 Dining Dollars	\$2,780.00
14 Meals Per Week + 20 Bonus Meals + 200 Dining Dollars	\$2,540.00
10 Meals Per Week + 25 Bonus Meals + 250 Dining Dollars	\$2,265.00
10 Meals Per Week	\$1,850.00
5 Meals Per week + 30 Bonus Meals + 300 Dining Dollars	\$1,620.00
Bear Plans:	
160 Meals	\$1,650.00
120 Meals	\$1,250.00
80 Meals	\$845.00
50 Meals	\$535.00
25 Meals	\$270.00

^{**}Prices are subject to change. For current tuition and pricing, visit www.unco.edu/costs

Dining Services

UNC Dining Services provides a variety of meals in several dining settings for students, faculty, staff, and guests. Holmes Dining Hall and Tobey-Kendel Dining Room provide an "all you care to eat" menu seven days a week with take-out meal options available. Students can choose from a hot to-go meal called a "Bear On The Run" or they can choose a "Gourmet To Go" when they would

like a to-go meal they can eat at another time. Meal plans are also accepted at the UC Food Court and Bears Bistro.

The DASH food line is available at both Holmes Dining Hall and Tobey-Kendel Dining Room and can accommodate students with special dietary needs or food allergies. The DASH allows customers to consistently find healthy items that follow specific nutritional guidelines. A Registered Dietitian is on staff to assist with any special dietary needs. UNC students living off-campus can purchase either a Bear Plan or an On-Campus Meal Plan. Students can use Dining Dollars to purchase food and beverage items at any of our campus retail operations. The locations that accept Dining Dollars include campus locations of Starbucks[®], Taco Bell[®] Express, Subway[®], Einstein Bros.® Bagels, Munchy Mart, and Bears Bistro, as well as three Coffee Corner locations in Kepner Hall, Michener Library, and Turner Hall and select vending machines across campus. Dining Services also provides catering for special occasions, 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.

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. Housing and Residential Education and Dining Services will follow the University rate schedule with the first 10 days being charged at a daily rate up to the 25% withdrawal charge. For more information contact the Registrar's Office 970.351.2231 or at their website www.unco/regrec/registration.

100% of non-refundable fees will be assessed. Some federally-funded aid programs mandate a different withdrawal/cancellation computation. See www.unco.edu/regrec each term for exact dates.

Semester Bear Plans

Students who purchase Bear Plans can use their UNC Card to access Holmes Dining Hall, Tobey-Kendel Dining Room, the UC Food Court, and Bears Bistro. Cash and credit cards are accepted in all dining rooms and campus retail operations. Use Dining Dollars in any retail dining location, including select vending machines across campus. UNC Dining Services offers Bear Plans to residents of Lawrenson Hall, University Apartments, Arlington Park Apartments, as well as off-campus students. For daily menus, please call the Food Line at (970) 351-3663. Visit www.unco.edu/dining for weekly menus and hours of operation. Contact Dining Services at 970-351-2652 if you have further questions.

^{**}Prices are subject to change. For current pricing, visit www.arlingtonparkunc.com

Rates

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

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.

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 health service record requirements 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.

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 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.

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 st u dent'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.

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 prorated 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 with no additional fees. 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 and Fees: 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.

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 the start of an academic term 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 two weeks prior to the first day of classes for the given school term that the student desires a change in classification. Under exceptional circumstances, petitions may be accepted up to the first day of the semester.

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) or on the Registrar's Office webpage at www.registrar.unco.edu. 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: Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming. If you are a resident of one of these states, and the program you wish to attend is a part of WGRP, you are eligible to participate. This allows students to pay tuition at the resident rate. For more information, please go to the Graduate School Website http://www.unco.edu/grad/funding/wrgp.html.

Alumni Relations

www.uncalumni.org

The University of Northern Colorado Alumni Association (UNCAA) serves UNC alumni and current students to engage them with *alma mater*. The UNCAA sponsors programs, services, and communications that promote the lifelong relationships shared between UNC and the more than 135,000 graduates and students. Current students are encouraged to become members of the UNC Student Alumni Association, which is dedicated to connecting students and alumni, preparing graduates for life after graduation, and encouraging school spirit and Bear Pride across campus.

Membership in the Association is automatic upon graduation; there are no membership fees. Members are eligible to take advantage of special events, promotions and discounts exclusively available to UNC alumni. New graduates are encouraged to participate in the work of the Young Alumni Council which provides alumni who have graduated in the last 10 years a variety of events and activities geared toward meeting the specific needs of this group.

Whether alumni plan on staying close in Colorado or venturing around the globe after graduation, the UNCAA is never far away. We stay connected to our alumni in a variety of ways and create meaningful relationships that last. Remember, *Once a Bear, Always a Bear!*

Bookstore

www.unco.edu/uc

The University Bookstore, located on the lower level of the University Center, provides course textbooks and general reading books. The University Bookstore 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, textbook rental, special order books and book information.

Bursar, Office of

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

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 and varied interests, as well as create a supportive environment to ensure every participant has a positive and successful experience. Several activity spaces are available including a weight room for strength training and conditioning, three multi-purpose gymnasiums with hardwood floors (featuring a total of six basketball courts), an indoor 1/10 mile jogging track, two racquetball courts, an indoor climbing wall, two group fitness rooms, locker rooms, swimming pool and meeting spaces. As part of the student fee package, students who are members of the Campus Recreation Center only need to bring their student ID to gain access to the facility.

The Fitness and Wellness program provides integrated programs, resources, and services 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 20 different class formats, including kickboxing, yoga, cycling, aquafit, ZumbaTM, 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 the specific needs of each participant. Wellness Education programs and services include nutrition counseling, workshops and special events.

Intramural sports offer participants the opportunity to play organized sports in a recreational but competitive atmosphere, learn new sports skills, 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 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.

The Outdoor Pursuits program provides opportunities for outdoor education and leadership experiences through trips and workshops. Trips include skiing and snowboarding, white water rafting, camping, hiking and more. Outdoor gear can also be checked out for free at the Outdoor Pursuits Gear Shop, located in Harrison Hall.

The Blue Cruiser bike program is a free service that offers students an affordable and environmentally sustainable form of transportation. This program strives to provide an alternative to driving and promote bear pride on campus. Campus Recreation has a fleet of 100 cruiser bicycles, designed unique to UNC. All bikes come with a helmet and lock, as well as the option to use a front-mounted basket.

Campus Recreation has a variety of special events, activities and programs throughout the year for all ability levels. Programs include RecFest, Climbing for Cans, Video Game Nights, Movie Nights (in pool and wall), and more. Visit our website for more information about programs and events.

The Center for International Education

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

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 Management and Technology

http://www.unco.edu/it

Information Management & 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. Information Management & Technology provides printing services in public computing labs and other public locations for use in support of the University's mission. 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 Management & Technology Website at http://www.unco.edu/it.

Information Management & 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 Management & Technology or for 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 by physicians and nurse practitioners to UNC students. No appointments are needed for most care. The Center is located on the first floor or 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, email career services@unco.edu or call (970) 351-2121.

Disability Support Services (DSS)

www.unco.edu/dss

The DSS office provides disability accommodations for students with documented disabilities to ensure equal opportunity and equal access to information, programs, and services. Services may include accommodations such as testing assistance, use of a volunteer note-taker, ASL interpreters, textbooks in alternative format, and assistive technology.

Students must submit disability documentation to DSS and meet with a DSS staff member to discuss eligibility and to determine appropriate accommodation. Call (970) 351-2289 or e-mail ann.murphy@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.

Veteran and Military Services

(Roudebush Cottage) The University of Northern Colorado is a Yellow Ribbon Program participant and maintains a full-time Veterans Services office for the convenience of student veterans, military members, and their dependents. The UNC Office of Veterans Services is designed to be a one stop shop for veteran benefits and support services. UNC is an approved institution for students to receive educational benefits from the Department of Veterans Affairs (VA). Staff can assist students in receiving other VA benefits, academic, financial, career, disability, or mental health assistance. VA work-study and UNC student positions may be available for those attending at least three quarter time. For more information concerning veterans and military students inquire at (970) 351.1403 or veterans.services@unco.edu.

The University Center

www.unco.edu/uc

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 Office of Student Engagement and Dean of Students, Center for International Education, Career Services, and is the home for Student Activities.

A variety of vendors serve the campus community on the UC lower level including several food retailers (Starbucks, Einstein Brothers Bagels, Subway, Food Court, Taco Bell Express, Bears Italian Bistro), the University Bookstore, UNC Convenience Store, Bear Logic, Wells Fargo Customer Service Center, James Campus Salon, and vending areas.

The Information Desk at the UC provides campus and community information, sells tickets to all on-campus events for Intercollegiate Athletics, Performing and Visual Arts, Student Activities, Club Sports, Clubs and Organizations and other departments, sells stamps, provides free copying and faxing, and sells parking permits.

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.

The UNC CARD is the official identification card for all members (faculty, staff and students) of the university community. On campus, the UNC card functions as a library card, dining card, activities card, recreation center pass, and as security access to various buildings and rooms. Students may also use the UNC Card as an ATM/debit card when linking it to the free Wells Fargo Checking Account. The account then permits direct deposit of financial aid and student payroll to the free 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 University Libraries consist of the James A.

Michener Library and the Howard M. Skinner Music
Library, which house tangible collections and provide
access to a wide range of online resources. 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 a state-of-the-art classroom, interlibrary loan,
reference, circulation, and electronic reserves.

The **Howard M. Skinner Music Library**, named for Howard M. Skinner, former Dean of the College of Performing and Visual Arts, includes a bibliographic instruction classroom, a group study room, study alcoves and carrels. The tangible collection includes comprehensive holdings of scores, recordings, periodicals, and monographs.

Access to the University Libraries tangible materials and online resources is provided from the Libraries home page. The Libraries has over 55,000 electronic journals, over 44,000 ebooks, and over 400 databases.

Prospector, a shared online catalog that provides access to the collections of 40 participating libraries in Colorado and Wyoming, is also available from the Libraries home page. Materials from the collections of the participating libraries can be requested directly through Prospector. The Libraries interlibrary loan service obtains library material for UNC students and faculty from libraries within the state and nation as well as foreign countries.

The University Libraries has 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.

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.

Student Bill of Rights

The General Assembly implemented the Student Bill of Rights (C.R.S. 23-1-125) to assure that students enrolled in public institutions of higher education have the following rights:

- 1. A quality general education experience that develops competencies in reading, writing, mathematics, technology and critical thinking through an integrated arts and science experience.
- 2. Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit

- hours unless there are additional degree requirements recognized by the commission;
- A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
- Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
- 5. Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
- Students, upon successful completion of core general education courses should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;
- 7. Students have a right to know if courses from one or more public higher education institutions satisfy the students' graduation requirements;
- A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferable.

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 Code of Conduct 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 Director of Community Standards and Conflict Resolution or designee shall decide whether the Student Code of Conduct shall be applied to conduct occurring off

campus, on a case by case basis, at his/her 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 is the student withdraws from school while a disciplinary matter is pending.

Prohibited Student Conduct

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

- 1. Acts of dishonesty, including but not limited to the following:
 - a. Cheating, plagiarism, or other forms of academic dishonesty.
 - Furnishing false information to any University official.
 - Forgery, alteration, or misuse of any instrument of identification, University document, or record.
- 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 the 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 ensures.
- 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, either 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.
- 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 other persons' or University property.

- 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, other controlled substances, and/or paraphernalia 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, possessed by or distributed to any person under twenty-one (21) years of age.
- 15. Possession of firearms, ammunition, explosives, other weapons, or dangerous chemicals 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 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. 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 prior 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 University
 Hearing Officer or designated 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 University Hearing Officer or designated University Official.
 - c. Disruption or interference with the orderly conduct of a University Hearing proceeding.
 - d. Institution of a student code of conduct processing in bad faith.
 - e. Attempting to discourage an individual's proper participation in, or use of, the student conduct system.
 - f. Attempting to influence the impartiality of a University Hearing Officer or Appeal Reader prior to, during the course of, or after a University Hearing proceeding.
 - g. Harassment (verbal or physical) and/or intimidation of a University Hearing Officer or Appeal Reader prior to, during the course of, or after a Hearing proceeding.
 - h. Failure to comply with the sanction(s) imposed under the Student Code of Conduct.
 - 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 or 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/student_code_conduct/pdf/StudentCode_cofConducthandbook.pdf. Revised 8/14/2009 — Please refer to link above for the most current version of the Student Code of Conduct.

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.

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. Once notified by the instructor, the Registrar's Office will contact the student to confirm non-attendance. The student will be issued a drop by the instructor from the course if prior to the drop deadline for the given term or issued a grade of UW if after the drop deadline for a given course. 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.

Academic Appeals

Students may appeal any academic decision that they consider arbitrary or capricious, or contrary to University policy. The procedures for appealing an academic decision can be found at www.unco.edu/dos/academicconcerns

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 non-degree certification program, or any combination thereof.

Full Time/Half Time/Less than half time/Overload Enrollment

Fall, Spring, and Summer: Full-time enrollment is considered 9 or more credit hours for graduate students. Half time enrollment is 5-8 credit hours. Less than half time enrollment is 4 credit hours or less.

An overload is more than 17 credit hours for Fall and Spring terms and 12 credit hours for the Summer term. Overload limitations apply to work completed in both oncampus and off-campus programs. The signed Graduate Credit Overload Permit

(http://www.unco.edu/regrec/PDF%20Forms/Graduate_St_udent_Overload.pdf) must be submitted to the Registrar's Office, 3002 Carter Hall or faxed to 970-351-1870.

The Interim term has a 4 credit hour limit; no overload will be permitted.

A graduate student with a GPA lower than 3.0 may not petition for an overload.

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 Doctoral 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. Doctoral Students must be enrolled for at least 1 credit hour each academic semester (fall and spring) to be in compliance to this policy. Those doctoral students not in compliance with the continuous registration policy will automatically be assessed the \$150 continuous registration fee each semester.

All Doctoral, Specialists, and Master's 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. GRAD 999, Graduate School Continuous Registration, is available for all Graduate students to enroll in to assist in maintaining compliance to the continuous registration policy.

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. Beginning Fall 2010, 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, be re-accepted by their program and the Graduate Dean, and pay the \$150 continuous registration fee if they wish to resume their studies. Acceptance is not guaranteed. Additional coursework and examinations may be required for students who are reactivated.

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/index.html

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.

Course Credit

Definition of a Credit Hour

Credit Hour as required by the U.S. Department of Education (34 C.F.R. § 600.2)

An amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

- One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester or the equivalent amount of work over a different amount of time; OR
- 2. At least an equivalent amount of work for other academic activities as established by the institution, including laboratory work, internships, practica, studio

work, and other academic work leading to the award of credit hours.

Base Contact Hour. The faculty Base Contact Hour represents a standard measurement of consumption of faculty resources by students. It consists of the number of scheduled minutes of instructional activity involving direct contact of faculty with students in a given term utilizing a particular method of instruction. The standard measurement for a faculty Base Contact Hour is:

• **Semester system term** . One Base Contact Hour = a minimum of 750 minutes. This translates to a MINIMUM of fifteen 50-minute hours per semester.

Some UNC courses may be repeated for credit; they are specifically noted in the course description section of this *Catalog* with the maximum amount of credit allowed for each course.

For repeated courses, grades of "F," "U," "NC," "NG," "NR," "IP," "UW," "W," and "I" that have not been completed within the allotted time, the credit hours are not included in earned credits.

Students may audit a course for "no credit" but must pay the same tuition and fees as those taking the course for credit. No audit or visitor cards are issued. Students auditing a course must enroll through the Registrar's Office before the add deadline. Students need not complete assignments or exams used but are expected to attend classes when auditing a course.

If you are age 65 or older and wish to audit a course, you may do so with **no tuition charge (course fees may apply)**.

Registration may occur beginning the first Monday following the last day of pre-registration for UNC students. Registration is subject to space availability. If you have any questions or need additional information, please contact the Registrar's Office at 970-351-2231.

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.

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.

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. Four 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 001-099 are not counted in cumulative credits, total credits toward graduation, GPA, nor for financial aid purposes.
- Lower division 100-199 range are 1st-year (freshmen) courses and 200-299 are 2nd-year (sophomore) courses.
- Upper division 300-399 are 3rd-year (junior) courses and 400-499 are 4th-year (senior) courses.
- Graduate level 500-699 are Master's courses and those numbered 700 or higher are Doctoral/Specialist courses.
 - Juniors and seniors with a cumulative GPA of 3.00 or higher are permitted to take 500-level courses.
 - Undergraduates may be permitted to take courses with numbers 600-699 if they have applied to and have been accepted into a Master's level program at UNC. 600-699 courses may not be counted towards and undergraduate degree.
 - Undergraduates are not permitted to take courses with numbers 700-799.

Note: Applicability of coursework to a higher degree as an undergraduate student: please refer to specific details on the petition to count toward the next highest degree http://www.unco.edu/grad/forms/pdfs/PetitiontoCountWorkTowardHigherDegree.pdf

Undergraduate students may not count courses numbered 600-799 toward undergraduate degree programs.

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.

Courses at the university are sequentially numbered. Courses numbered 100-499 are for undergraduate credit. Courses numbered 500-599 may count as undergraduate or graduate credit. If a course numbered 500-599 is not counting toward the correct level, the student may contact the Office of the Registrar to request that it be changed. A course numbered 500-599 counting as undergraduate credit

cannot be counted toward a graduate degree; a course numbered 500-599 counting as graduate credit cannot be counted toward an undergraduate degree. Undergraduate students seeking to apply 500-599 courses to their graduate degree must contact the Graduate School. Courses numbered 600-799 are for graduate credit only.

Occasionally, courses that do not appear in the Catalog may appear in the Schedule of Classes(www.unco.edu/sched/). These course number 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 Drop/Withdrawal Appeal During Current Semester

The course drop and withdrawal deadlines are strictly enforced. Any request for an exception to these deadlines must be submitted using the Registration Appeal Form. This appeal applies only to current semester registrations and must be filed in the Office of the Registrar prior to the end of the current semester.

- Course drop/withdrawal appeals will only be considered when there were extenuating circumstances beyond the student's control that kept the student from adhering to the normal deadlines. These extenuating circumstances could include medical conditions, death or illness in the family, unanticipated financial problems or University errors.
- Factors not accepted for a course drop/withdrawal appeal include, but are not limited to, such things as poor academic performance in a class, time management related situations or lack of adherence to/awareness of University policy and deadlines.
- If the student received financial aid, the student must have the appeal form signed by Financial Aid prior to submitting to the Office of the Registrar. Please visit http://www.unco.edu/ofa/aid/maintaining/index.as p for more information.
- Submission of the student's request does not guarantee any type of refund.
- All petitions must be in writing and signed by the student, legal guardian, power of attorney, or executor (in case of death). Documentation may be required if the petition is from someone other than the student.
- The student should include a written statement describing the circumstances and reasons for the appeal and any required documentation.

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.

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	
Total	11	32.337	= 2.939 GPA

Grading

Grading		
Standard	l Grading	Quality Points
A	= superior	4.000
A-	= A minus	3.667
B+	= B plus	3.334
В	= above average	3.000
B-	= B minus	2.667
C+	= C plus	2.334
C	= average	2.000
C-	= C minus	1.667
D+	= D plus	1.334
D	= poor, passing	1.000
D-	= D minus, passing	0.667
F	= failure	0.000
S	= satisfactory - credit granted	++
U	= unsatisfactory - no credit	+
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 +

Notes:

A "CR" indicates credit awarded for AP, IB, CLEP, Military, and/or for courses from other institutions assigning a grade of "CR".

A "*" indicates basic skills, fresh-start, and grade forgiveness on a student's records. Credits not used to compute grade point average (GPA) and not counted toward graduation.

A "**" indicates fresh-start prior to March 1993. Credits not used to compute GPA but counted toward graduation.

A "." indicates basic skills coursework. Credits not used to compute grade point average (GPA) and not counted toward graduation.

An "NC" indicates no credit and is assigned for audited courses.

An "NG" indicates a no graded course and is only used for ISE 100/101 and NSE 100 course designations.

A "W" indicates an approved withdrawal from the course and is assigned only when the student has completed the official withdrawal processes. Credits not used to compute grade point average (GPA) and not counted toward graduation.

A "UW" indicates an unauthorized withdrawal and is assigned **only** when the student has **never** attended the class for which he/she enrolled. Credits not used to compute grade point average (GPA) and not counted toward graduation.

An "F", or "W", or "U" grade requires the submission of a last date of a student's "academic-related activity". "UW" grades are only submitted when the student never attended the class. As outlined by the U.S. Department of Education (34 C.F.R. 668.22), the submission of the "Last Date of Attendance" is necessary to ensure that any student receiving a failing grade actually attended the class and, therefore, is eligible for any federal financial aid they may have received.

As defined by the U.S. Department of Education, an "academically-related activity" includes, but is not limited to—

- Physically attending the class
- Submitting an academic assignment

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

⁺⁺Credits not used to compute GPA but counted toward graduation. "S" is a UNC assigned course grade. "CR" is non-UNC assigned course grade.

- Taking an exam, and interactive tutorial, or computerassisted instruction
- Attending a study group that is assigned by the institution
- Participating in an online discussion about academic matters
- Initiating contact with a faculty member to ask a question about the academic subject studies in the course

"Academic attendance" and "attendance at an academicrelated activity" do not include activities where a student may be present, but not academically engaged, such as:

- Living in institutional housing
- Participating in the institution's meal plan
- Logging into an online class without active participation; or
- Participating in academic counseling or advisement (34 C.F.R. 668.22)(I)(7)(i)(A)

UNC is required to determine "academic attendance" or "attendance at an academically-related activity" for all students. (34 C.F.R. 668-22(I)(7)(ii). (Also see Withdrawal from the University)

At the discretion of the instructor, a temporary grade of Incomplete - "I" may be given to a student who demonstrates that he/she could not complete the requirements of the course due to circumstances beyond the student's control and not reasonably foreseeable. A student must be passing a course at the time that an Incomplete is requested unless the instructor determines that there are extenuating circumstances to assign an Incomplete to a student who is not passing the course. Credits not used to compute grade point average (GPA) and not counted toward graduation.

Students completing an Incomplete grade should not register for the course a second time.

The instructor must submit to the department chair or school director, a written notice of the specific coursework to be completed before the final grade is determined as well as reasons for the Incomplete grade; a copy is kept in the school/department and one is provided to the student.

To change an Incomplete grade, the instructor must submit the grade change request form to the Office of the Registrar. Grade change requests submitted after the six week period of the subsequent term the student originally enrolled in the course must be approved and signed by the instructor, the school director/department chair and the Dean of the College (or designee). Forms are available within URSA, under the Faculty tab. No grade change request forms delivered by students will be accepted.

Additional information is available at www.registrar.unco.edu.

If the course requirements are not completed and the grade change form received in the Office of the Registrar after a maximum of one year, the grade will be recorded on the academic record as a failing or unsatisfactory grade. Once the incomplete grade(s) have rolled to unsatisfactory/failing, a grade change(s) will not be permitted.

Degrees will not be conferred upon students with outstanding "I" grades.

The grade of "NR" is used for courses that have been granted approval for "NR" grading at the undergraduate level. 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. "NR" grades will roll to an "F" or "U" if not completed within one academic year of the initial grade assignment. Once "NR" grades have rolled to an unsatisfactory/failing, grade changes will not be permitted.

The course syllabus contains important information regarding course requirements and the grading system utilized. It is the responsibility of the students to read the syllabus and consult the instructor if they have questions.

Courses for which "C-", "D+", "D", "D-", "F", "U", "W", "NR", or "I" grades are awarded will not count in graduate degree programs and will not satisfy program deficiency requirements.

Graduate students are not eligible for grade forgiveness.

Immunization Regulation

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 Heath 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

www.unco.edu/ship/

UNC's Board of Trustees requires that all undergraduate students registered for at least 9 credits or more and all degree seeking graduate students registered for at least 6 credit hours have health insurance. International students who are registered for at least 9 or more (6 or more for graduate students) credit hours must also have health insurance.

Undergraduate students enrolled for 9 or more credit hours and degree seeking graduate students enrolled for 6 or more 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 https://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 https://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.

If you participate in a Health Care Sharing Ministry Program approved by the Federal Health and Human Services division, contact the Student Health Insurance office at (970) 351-1915 for further instructions on waiving the UNC sponsored insurance plan.

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.

Undergraduate students enrolled for less than 9 hours and graduate students enrolled for less than 6 hours of classes 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.

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.

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 finals week of the semester in which the course was offered. Grade changes or corrections must be submitted within the first six weeks of the following academic-year semester, and must be signed by the instructor and the department chair/school director. Changes to grades for classes taken in the fall semester are due within the first six weeks of the spring semester; changes to grades for classes taken in the spring or summer semester are due within the first six weeks of the fall semester. Grade change forms are available in URSA, under the Faculty tab. No grade change forms delivered by students will be accepted. Any grade change after the six week period must follow the Academic Appeal process.

Name Change

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, onor 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. 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.

Non-Attendee Retroactive Withdrawal Appeal

A non-attendee retroactive withdrawal appeal is permitted if you registered for courses at UNC, never attended the institution, and did not notify the institution to be removed from courses.

The Registrar will determine, in consultation with faculty members, the Dean of Students and others as appropriate, if the retroactive withdrawal should be granted. If your appeal is submitted more than 90 days after the end of the course(s), University Leadership approval will be required in addition to the Registrar.

If granted, the courses will be removed from your transcript and tuition and fees will be adjusted if applicable. Certain charges related to your registration such as student insurance, fines, permits and/or emergency cash advances will be charged at 100%.

- If the petition is denied, you will be charged 100% of tuition and fees, as well as certain charges related to your registration such as student insurance, fines, permits, and/or emergency cash advances.
- All petitions must be in writing and signed by the student, legal guardian, power of attorney, or executor (in case of death). Documentation may be required if the petition is from someone other than the student.
- You should include a written statement describing the circumstances and reasons for the appeal and any required documentation.

Retroactive Withdrawal Appeal

A retroactive withdrawal appeal may be necessary when you experienced extenuating circumstances, or an incident of such trauma and major proportions, that you could not have reasonably been expected to possess the normal capabilities necessary to complete the academic period satisfactorily or complete a University withdrawal.

- Factors not accepted for a retroactive withdrawal appeal could include, but are not limited to, such things as poor academic performance in a class, time management related situations, or lack of adherence to/awareness of University policy or deadlines. Partial course withdrawals will not be considered, only complete schedule withdrawals.
- The Registrar will determine, in consultation with faculty members, the Dean of Students and others as appropriate, if the retroactive withdrawal should be granted. If your appeal is submitted more than 90 days after the end of the course(s), University Leadership approval will be required in addition to the Registrar.
- All petitions must be in writing and signed by the student, legal guardian, power of attorney, or executor (in case of death). Documentation may be required if the petition is from someone other than the student.
- You should include a written statement describing the circumstances and reasons for the appeal and any required documentation.

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.

Transfer Credit

A student who wishes to transfer credit must obtain and complete a *Transfer of Credit* form at www.unco.edu/grad/forms/pdfs/TransferOfCredit.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.
- 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).

The University of Northern Colorado only accepts credit from institutions of higher education holding full regional accreditation from one of the following agencies:

Middle States Association of Colleges and Schools

- New England Association of Schools and Colleges
- The Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools
- Northwest Commission on Colleges and Schools
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges

To find out if your previous college or university is regionally accredited by one of these agencies, visit http://www.ope.ed.gov/accreditation/

Student Complaints

If a disagreement regarding the transferability of credits for coursework or a degree occurs between and student and the institution, the Colorado Department of Higher Education will facilitate an expeditious review and resolution of the matter. Complaints can be filed at http://highered.colorado.gov/Academics/Complaints/default.html. The Colorado Commission on Higher Education shall have final authority in resolving transfer disputes.

Tuition Appeal

A tuition appeal is necessary when a student is requesting an adjustment to the tuition and fees that were charged as a result of a University withdrawal for the current semester.

- Tuition appeals will only be considered when there
 were extenuating circumstances that were beyond the
 student's control that necessitated a University
 withdrawal. These circumstances could include medical
 conditions, death or illness in the family, unanticipated
 financial problems, or university errors.
- Factors not accepted for a tuition appeal include, but are not limited to, such things as poor academic performance in a class, time management related situations, or lack of adherence to/awareness of University policy or deadlines.
- All petitions must be in writing and signed by the student, legal guardian, power of attorney, or executor (in case of death). Documentation may be required if the petition is from someone other than the student.
- You should include a written statement describing the circumstances and reasons for the appeal and any required documentation.
- Upon receipt of the tuition appeal, an appeals committee will convene to determine whether or not to approve the request. A member of the appeals committee will contact the student via the student's BEAR mail with the decision. The committee's decision is final.

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

A notice of intent to withdraw requires a student to contact an office designated by an institution as the point where the official withdrawal process begins, as defined by U.S. Department of Education (34 CFR 668.22).

At the University of Northern Colorado, official notification of intent to withdraw occurs when a student notifies the Office of the Registrar of his or her intent to withdraw (via telephone, in person, or through written notification).

The date a student notifies the Office of the Registrar of his or her intent to withdraw will be used as the official withdrawal date from UNC. Please note that if a student sends a letter to the Office of the Registrar to provide notification of intent to withdraw, the official withdrawal date is the date that the letter is received by the UNC Registrar.

Current withdrawal deadline dates can be found on the Office of the Registrar website at http://www.unco.edu/regrec/Current%20Students/Registrat ion/Withdrawal.html.

In some instances UNC may use a student's last documented date of attendance or academic engagement in an academically related activity in one or more courses as the official withdrawal date if the date of attendance or academic engagement occurred after the official notification described above.

Students who wish to completely withdraw from all courses in the current semester, whether planning to return to UNC or not, must contact the Registrar's Office at 970-351-2231 to begin this process.

Requesting information about withdrawal, such as the potential consequences of withdrawal, does not constitute an official notification of intent to withdraw from the University of Northern Colorado.

Withdrawals must be completed by the complete schedule withdrawal deadline of the semester; withdrawals after the deadline will not be permitted. See the Short Course calendar for courses that do not meet for the entire semester.

If a student withdraws from UNC due to major extenuating circumstances, or an incident of such trauma and major proportions that the student could not have reasonably been expected to possess the capabilities necessary to complete the academic period satisfactorily or complete the University withdrawal process described above, UNC will determine the withdrawal date that most accurately reflects when a student ceased academic attendance or academic engagement (See Grading Language, Academic Attendance). In such cases, students must file the appropriate appeal form located on the Office of the Registrar's website at

 $\frac{http://www.unco.edu/regrec/Current\%20Students/Registrat}{ion/Withdrawal.html}.$

In some instances, a second party (e.g., Dean of Students personnel, Counselor, etc.) may provide notification of student's intent to withdraw to the Office of the Registrar when circumstances prevent the student from following the standard withdrawal process.

In cases where a student is dismissed administratively (e.g., expelled), UNC will use the date that the institution terminates the student's enrollment as the official withdrawal date

A student with financial aid should contact the Office of Financial Aid at 970-351-2502 prior to withdrawing to determine the effect of the withdrawal on financial aid. The website of the Office of Financial Aid may be found at http://www.unco.edu/ofa/aid/maintaining/index.asp.

The Office of Financial Aid will use the official withdrawal date documented by the Office of the Registrar for the purpose of calculating the return of Title IV funds.

Students will receive a grade of "W" on the transcript for each course that has not been completed. The grade of "W" does not impact the student's GPA. Grades for courses that

have been completed during the current semester will remain on the transcript.

Financial Aid Recipients

The Office of Financial Aid will use the official withdrawal date documented by the Office of the Registrar for the purpose of calculating the Return of Title IV funds. Students who fail to attend classes may have to repay part or all of Title IV funding received.

Students who withdraw from school prior to completing 60% or a term may be required to repay a portion of the federal financial aid received for that term. Federal aid includes Federal Stafford Loan, Federal Perkins Loan, Federal PLUS Loan, Federal Pell Grant, and Federal Supplemental Education Opportunity Grant. Students may also become ineligible for future aid — see "Standards of Satisfactory Academic Progress".

Students who receive all "F" or "UW" grades will be classified as an "Unauthorized Withdrawal" and the Office of Financial Aid will use the official last date of attendance documented by the Office of the Registrar, if available, for the purpose of calculating the Return of the Title IV funds. Students planning to leave school, it is important to follow the formal withdrawal procedures with the Office of the Registrar and understand the financial obligations.

For more information on how your withdrawal will impact financial aid, please visit http://www.unco.edu/ofa/aid/maintaining/Withdrawing/index.asp.

Housing and Residential Education and Dining Services

The Housing and Residential Education and Dining Services Departments will follow the University rate schedule with the first ten days being charged at the daily rate up to the 25% withdrawal charge.

PROGRAM REQUIREMENTS

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 advisors are responsible for assisting students with questions regarding their academic programs and professional guidance. These responsibilities include explaining Graduate School policies and procedures, expectations for comprehensive examinations, theses, or internships, as guided by school, university and Graduate School and assist students with planning for their academic and professional future. 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. It is the responsibility of the school or program to notify the Graduate School of the advisor assignment and any change in advisor assignment.

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.

The student must complete a *Request for Change of Major* form and receive appropriate school approvals: www.unco.edu/grad/forms/pdfs/ChangeMajor.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. Program faculty may use past comprehensive examination responses as models for instructional purposes as long as all student identifications are removed by faculty.

Graduation Requirements

Graduation requirements are checked in accordance with the university Catalog. The student must specify the Catalog under which he/she wishes to be evaluated and must meet all requirements in that 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 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 partial requirements in one version of the Catalog and other requirements in another version of the Catalog.

To graduate in any given semester, all graduation requirements must be completed (with relevant documentation submitted to the Registrar's Office, as necessary) by the Wednesday prior to the date that diplomas are released for the semester.

Degrees are not awarded during the Interim term; students who complete their graduation requirements in an Interim term are considered graduates of the subsequent Spring semester.

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/pdfs/GraduateStudentPetitionF orException.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 or department chair 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:

- The major school/program recommends that the student's program be terminated based on an overall evaluation of the student
- The school declines to issue a letter of continuation based on an overall evaluation of a specialist or doctoral student's progress
- The graduate student has not maintained 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 Office of Sponsored Programs via their website: www.unco.edu/osp.

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.

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/pdfs/MastersAndSpecialistGrad uationApplication.pdf no later than the end of the semester preceding the semester that a student plans to graduate. The schedule of deadlines for the Graduate School can be found at www.unco.edu/grad/forms/deadlines.html. 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. 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. Programs 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" (p. 41)

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 created by the program faculty. 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*, the Dean of the Graduate School or his/her designee shall review 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 resubmission. 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 program, 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:

- 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. In approving the appointment, the Graduate Dean charges that person with upholding the standards of the Graduate Faculty. 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 defense. The faculty member must hold graduate faculty status. The faculty representative is expected to actively contribute conceptual, theoretical, methodological and/or academic expertise from an alternative disciplinary perspective and provide an impartial evaluation of the student's academic work.

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

http://www.unco.edu/grad/forms/pdfs/PlanOfStudy.pdf, 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 filed in the student's folder and electronically archived. 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.
- Annual progress review from program on file for each year prior to student scheduling their oral exam.
- 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:

- 1. pass;
- 2. 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,
- 3. 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 (799) is 12 semester hours.

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 by the Graduate School. 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. The proposal shall be presented to the student's entire committee in a timely manner. Students coordinate with their research advisor to schedule the proposal hearing. The student is responsible for scheduling the dates, time and location of the proposal hearing. The faculty representative must be present at both, the proposal hearing and the final dissertation defense. 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 (including securing IRB approval prior to data collection). 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.

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 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/pdfs/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. 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(s) 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(s). All students must follow the program and graduate school guidelines for writing the doctoral dissertation or Capstone Project. The Graduate School Dissertation Manual can be found at http://www.unco.edu/grad/forms/pdfs/DoctoralDissertationFormatManual.pdf and the Capstone Project Manual can be found at

http://www.unco.edu/grad/forms/pdfs/CapstoneResearchProjectFormatManual.pdf. The student should discuss discipline specific 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 found at www.unco.edu/grad/forms/pdfs/ScheduleDocExam.pdf.

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 two weeks prior to the scheduled date. The Graduate School forwards 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 Results 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 *Results 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 Results 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 Results 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 Results 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 the lower section 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 *Results 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 at least 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 and capstone will be electronically stored 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). Should the committee member file an objection, the Dean of the Graduate School will appoint a review committee to assess the specific objection(s). 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 research 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 exhibiting advanced knowledge and/or

demonstrating a 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.

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.

GRADUATE PROGRAMS

Master's Degrees

ACCOUNTING M.ACC.

Kenneth W. Monfort College of Business

Degree Requirements — 30 Credits

See "Accounting M.Acc. (MAcc Degree)" (p. 158).

All MAcc program students will have to complete a written comprehensive exam or equivalent in the semester they plan to graduate. The MAcc degree requires that students complete the following courses and 30 credit hours.

DEGREE REQUIREMENTS

Required Ma	njor Credits — 27 hours	
BAAC 521	Contemporary Issues in Financial	3
	Reporting Topics	
BAAC 524	Professional Accounting Research,	3
	Communications, and Ethics	
BAAC 525	Contemporary Issues in Auditing	3
	Topics	
BAAC 528	Contemporary Issues in Accounting	3
	Information Systems	
BAAC 529	Contemporary Issues in Tax	3
BACS 500	Information Technology for	3
	Accounting Controls and	
	Information Security	
MBA 632	Business Law	3
MBA 670	Advanced Financial Management	3
and one of th	e following:	
BAMG 554	Managing and Developing People	3
MBA 660	Marketing Management	3
Required Ac	counting Elective - must take one of the	he
following cou		
BAAC 523	Cost and Managerial Accounting II	3
BAAC 527	Governmental and Institutional	3
	Accounting	
BAAC 592	Internship in Accounting	1-3
BAAC 595	Special Topics in Accounting	1-3
BAAC 622	Independent Research Directed	1-3
	Studies	

APPLIED STATISTICS AND RESEARCH METHODS M.S.

College of Education and Behavioral Sciences Degree Requirements — 30 Credits

See "Applied Statistics and Research Methods M.S." (p. 138).

DEGREE REQUIREMENTS

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	

SRM 650: (1 credit/term)

SELECT ONE CONCENTRATION AREA — 20 HOURS

1. Applied Sta	tistics Concentration — 20 hours	
SRM 551	Mathematical Statistics with	4
	Applications I	
SRM 552	Mathematical Statistics with	4
	Applications II	
SRM 608	Experimental Design	3
SRM 614	Linear Models	3
	Elective Credits (minimum)	6
2. Research M	Iethods 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 AND DESIGN M.A.

College of Performing and Visual Arts

Degree Requirements — 30 Credits

The Art & Design M.A. offers two delivery options, On-Campus and Low Residency.

See "Art & Design M.A." (p. 175).

DEGREE REQUIREMENTS

Required Ma	jor Credits — 12 hours	
ART 600	Research Methods in Art	3
ART 680	Seminar in Art History	1 -
		4
ART 680: Tak	te 3 hours	
On-Campus (Option:	
ART 699	Thesis	1 -
		6
ART 699: Tak	te 6 hours	
Low Residence	cy Option:	
ART 696	Action Research in Art Education I	3
ART 697	Action Research in Art Education II	3

Art Electives — 18 hours

For students enrolled in the Low Residency option

This is a two-year program. The Co-Coordinators of Graduate Studies for the School of Art & Design will serve as advisors for students and will develop with each of them a course of study for the degree program. Low Residency students will design, conduct and complete Action Research Projects and Final Reports in lieu of a comprehensive exam required by the graduate school. The Co-Coordinators will assign each student to a graduate committee, who will review and provide feedback for the Action Research Projects and Reports. Upon receiving approval from their graduate committees for their final Action Research Reports, students will submit their approved reports to reputable educational journals. If students fail to obtain approval for the Action Research Reports, they may resubmit a revised final report in the following fall, spring or summer semester.

For students enrolled in the On-Campus option

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

In conjunction with the required written 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: 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.

	CAL SCIENCES M.S. — NON- MPHASIS		BIO 555	Reproductive and Developmental Biology	3
-	Natural and Health Sciences		BIO 556	Current Topics in Biomedical Research	2
Ü			BIO 557	Mammalian Physiology I Laboratory	1
•	uirements — 30 Credits		BIO 558	Mammalian Physiology II Laboratory	1
_	cal Sciences M.S. (p. 160)".		BIO 559	Plant Reproductive Growth and	3
DEGREE F	REQUIREMENTS		210 000	Development	-
Rearch Core	e — 8 hours		BIO 560	Behavioral Ecology	3
BIO 594	Foundations of Biological Research	2	BIO 561	Plant Ecology	3
BIO 691	Seminar in Biological Sciences	1	BIO 563	Animal Communication	3
BIO 693	Review of Biological Literature	3	BIO 564	Plant Ecology Lab	1
BIO 697	Graduate Research	1 -	BIO 565	Current Topics in Ecology and	2
		6		Evolutionary Research	
DIO (01 T	. 11		BIO 568	Disturbance Ecology	3
BIO 691: 1W	o required hours		BIO 569	Conceptual Issues in Evolution	2
BIO 697: On	e required hour		BIO 570	Coevolution in Ecological Systems	3
	ve Credits — 10 hours		BIO 572	Species and Speciation	3 3 3
BIO 525	Molecular Genetics	3	BIO 580	Mammalian Endocrinology	
BIO 530	Plant Systematics	4	BIO 581	Neurobiology	3
BIO 533	General Parasitology	4	BIO 582	Cancer Biology	3
BIO 534	Mammalogy	4	Non-Thesis	Emphasis	
BIO 535	Survey of Fishes, Amphibians and	4		-	
DIO 333	Reptiles	•		he required BIO 697 (p. 199) credit for the	
BIO 537	Morphogenesis of Algae and Fungi	4		faster's degree, students must submit, and ha	
BIO 538	Ornithology	4		their advisor, a literature review and analys	
BIO 540	Anatomy and Morphogenesis of	4		o must pass a written evaluation pertaining t topic upon completion of the project, which	
B10 5 10	Plants	•		inistered by the advisor.	
BIO 542	Molecular and Cellular Laboratory	2	will be adilli	mistered by the advisor.	
BIO 550	Cell Physiology	3	DIOI OCI	ICAL SCIENCES M.S. — THESIS	1
BIO 554	General Plant Physiology	4			,
BIO 562	Conservation Biology	3	EMPHAS	SIS	
BIO 566	Animal Physiological Ecology	3	Collogo of	f Natural and Health Sciences	
BIO 567	Animal Physiological Ecology	1	Conlege of	i Naturai and Health Sciences	
	Laboratory		Degree Rec	quirements — 30 Credits	
BIO 576	Pharmacology	3	See "Biolog	ical Sciences M.S." (p. 160).	
Advanced St	tudy Electives — 12 hours		_	REQUIREMENTS	
BIO 512	TA Development Seminar	1	DEGILL	ILQUINLIVIO	
BIO 521	Advanced Genetics	3		ore — 4 hours	
BIO 524	Genomics	3	BIO 594	Foundations of Biological Research	2
BIO 526	Population Genetics	3	BIO 691	Seminar in Biological Sciences	1
BIO 527	Bioinformatics	3	BIO 601∙Tv	vo required hours	
BIO 528	Developmental Biology	3		•	
BIO 529	Developmental Biology Laboratory	1		ive Credits — 7-10 hours	_
BIO 541	Advanced Human Anatomy	3	BIO 525	Molecular Genetics	3
BIO 544	Comparative Vertebrate Adaptations	4	BIO 530	Plant Systematics	4
BIO 545	Pathogenic Microbiology	3	BIO 533	General Parasitology	4
BIO 546	Pathogenic Microbiology Laboratory	1	BIO 534	Mammalogy	4
BIO 547	Immunology and Disease	4	BIO 535	Survey of Fishes, Amphibians and	4
BIO 548	Virology	3	DIO 535	Reptiles	
BIO 549	Virology Laboratory	1	BIO 537	Morphogenesis of Algae and Fungi	4
BIO 552	Mammalian Physiology I	3	BIO 538	Ornithology	4
BIO 553	Mammalian Physiology II	3	BIO 540	Anatomy and Morphogenesis of	4

	Plants				3
BIO 542	Molecular and Cellular Laboratory	2	BIO 585	Topics in Field Biology	1 -
BIO 550	Cell Physiology	3	210 000	ropies in rivia Biology	10
BIO 554	General Plant Physiology	4	BIO 591	Biology Roundtable	1
BIO 562	Conservation Biology	3	BIO 592	Internship in Biological Sciences	1 -
BIO 566	Animal Physiological Ecology	3	B10 072	internamp in Biological Sciences	3
BIO 567	Animal Physiological Ecology	1	BIO 595	Special Topics in Biology	1 -
DIO 307	Laboratory	1	DIO 373	Special Topics in Diology	6
BIO 576	Pharmacology	3	BIO 622	Directed Studies	1 -
	••	3	DIO 022	Directed Stadies	4
	udy Electives — 8 hours		SCED 513	Professional Renewal	1 -
BIO 512	TA Development Seminar	1	SCLD 313	1 Totessional Renewal	12
BIO 521	Advanced Genetics	3			12
BIO 524	Genomics	3		0 513, BIO 622, and SCED 513: See	
BIO 526	Population Genetics	3	"Variable To	pic Courses" (p. 37).	
BIO 527	Bioinformatics	3	Required Ele	ectives — 2-5 hours	
BIO 528	Developmental Biology	3	_		,
BIO 529	Developmental Biology Laboratory	1		selected with the approval of the student'	S
BIO 541	Advanced Human Anatomy	3		the above list of enrichment and non-	
BIO 544	Comparative Vertebrate Adaptations	4		sses or other appropriate classes in the	
BIO 545	Pathogenic Microbiology	3	sciences or C	ollege of Education and Behavioral Scien	ces.
BIO 546	Pathogenic Microbiology Laboratory	1	NOTES: Stu	idents must complete a minimum of 50	
BIO 547	Immunology and Disease	4	semester hour	rs in biological science of combined	
BIO 548	Virology	3	undergraduat	e and graduate courses.	
BIO 549	Virology Laboratory	1	Thesis Empl		
BIO 552	Mammalian Physiology I	3	-		
BIO 553	Mammalian Physiology II	3	BIO 699 The	esis (1-6) Research Elective, Take 6 hours	1
BIO 555	Reproductive and Developmental	3	NOTE: Stud	ents are also required to have submitted o	ne
	Biology			uscript for publication prior to graduation	
BIO 556	Current Topics in Biomedical	2	researen man	worther to be becaution brief to Standard	•
BIO 556	Research	2			•
BIO 557	Research Mammalian Physiology I Laboratory	1		CAL SCIENCE M.B.S.	
	Research Mammalian Physiology I Laboratory Mammalian Physiology II		BIOMEDI	CAL SCIENCE M.B.S.	
BIO 557	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory	1 1	BIOMEDI College of	CAL SCIENCE M.B.S. Natural and Health Sciences	
BIO 557	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and	1	BIOMEDI College of	CAL SCIENCE M.B.S.	
BIO 557 BIO 558	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development	1 1 3	BIOMEDI College of Degree Requ	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits	
BIO 557 BIO 558 BIO 559 BIO 560	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology	1 1 3 3	BIOMEDI College of Degree Requirements See "Biomed	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161).	
BIO 557 BIO 558 BIO 559	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology	1 1 3 3 3	BIOMEDI College of Degree Requirements See "Biomed	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits	
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication	1 1 3 3	BIOMEDI College of Degree Requ See "Biomed DEGREE F	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS	
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab	1 1 3 3 3 3 1	BIOMEDI College of Degree Required Marketing BIOMEDI College of Degree Required Marketing	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours	<u> </u>
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and	1 1 3 3 3 3	BIOMEDI College of Degree Required DEGREE F Required Ma BIO 502	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers	
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research	1 1 3 3 3 3 1	BIOMEDI College of Degree Required See "Biomed DEGREE F Required Management M	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics	1 3
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology	1 1 3 3 3 3 1 2	BIOMEDI College of Degree Required See "Biomed DEGREE F Required Ma BIO 502 BIO 525 BIO 542	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory	1 3 2
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution	1 1 3 3 3 3 1 2	BIOMEDI College of Degree Required Management See "Biomed DEGREE F Required Management See See See See See See See See See Se	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology	1 3 2 3
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems	1 1 3 3 3 3 1 2 3 2 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE F Required Management See See See See See See See See See Se	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I	1 3 2 3 3
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution	1 1 3 3 3 3 1 2 3 2 3 3 3	BIOMEDI College of Degree Required Ma BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II	1 3 2 3 3 3 3
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569 BIO 570	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems	1 1 3 3 3 3 1 2 3 2 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE FRequired Management See See See See See See See See See Se	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research	1 3 2 3 3 3 2
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569 BIO 570 BIO 572	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation	1 1 3 3 3 3 1 2 3 2 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE F Required Management See BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 596 Exit Examin	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a	1 3 2 3 3 3 2
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 569 BIO 570 BIO 572 BIO 580	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology	1 1 3 3 3 3 1 2 3 2 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE FRequired Management See" BIO 502 BIO 502 BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 596 Exit Examin comprehensive	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a we examination covering material from co	1 3 2 3 3 3 2
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569 BIO 570 BIO 572 BIO 580 BIO 581 BIO 582	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology Neurobiology Cancer Biology	1 1 3 3 3 3 1 2 3 2 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE FRequired Management See" BIO 502 BIO 502 BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 596 Exit Examin comprehensive	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a	1 3 2 3 3 3 2
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569 BIO 570 BIO 572 BIO 572 BIO 580 BIO 581 BIO 582 Enrichment	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology Neurobiology Cancer Biology and Non-Scheduled Electives — 3 hour	1 1 3 3 3 3 1 2 3 3 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE F Required Management See BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 553 BIO 596 Exit Examina comprehensive courses in order.	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a we examination covering material from co	1 3 2 3 3 3 2
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569 BIO 570 BIO 572 BIO 580 BIO 581 BIO 582	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology Neurobiology Cancer Biology	1 1 3 3 3 3 1 2 3 3 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE FRequired Management See" BIO 502 BIO 502 BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 596 Exit Examin comprehensive courses in order the seed of the	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a we examination covering material from co der to graduate from the program. dits — 13 hours	1 3 2 3 3 3 2 a re
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 569 BIO 570 BIO 572 BIO 580 BIO 581 BIO 582 Enrichment BIO 501	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology Neurobiology Cancer Biology and Non-Scheduled Electives — 3 hour Current Issues in Biology	1 1 3 3 3 3 1 2 3 3 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE F Required Management See BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 596 Exit Examin comprehensive courses in order See Cree Other 500 levenses See College See	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a we examination covering material from co der to graduate from the program. dits — 13 hours	1 3 2 3 3 3 2 a re
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 568 BIO 569 BIO 570 BIO 572 BIO 572 BIO 580 BIO 581 BIO 582 Enrichment	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology Neurobiology Cancer Biology and Non-Scheduled Electives — 3 hour	1 1 3 3 3 3 1 2 3 3 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Manager See "Biomed DEGREE F Required Manager See BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 553 BIO 596 Exit Examin comprehensive courses in ord Elective Cree Other 500 lev Biochemistry	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a we examination covering material from co der to graduate from the program. dits — 13 hours rel courses with a BIO prefix or a course is may be substituted with prior approval.	1 3 2 3 3 3 2 a ree
BIO 557 BIO 558 BIO 559 BIO 560 BIO 561 BIO 563 BIO 564 BIO 565 BIO 569 BIO 570 BIO 572 BIO 580 BIO 581 BIO 582 Enrichment BIO 501	Research Mammalian Physiology I Laboratory Mammalian Physiology II Laboratory Plant Reproductive Growth and Development Behavioral Ecology Plant Ecology Animal Communication Plant Ecology Lab Current Topics in Ecology and Evolutionary Research Disturbance Ecology Conceptual Issues in Evolution Coevolution in Ecological Systems Species and Speciation Mammalian Endocrinology Neurobiology Cancer Biology and Non-Scheduled Electives — 3 hour Current Issues in Biology	1 1 3 3 3 3 1 2 3 3 3 3 3 3 3 3 3 3 3 3	BIOMEDI College of Degree Required Management See "Biomed DEGREE F Required Management See BIO 502 BIO 525 BIO 542 BIO 550 BIO 552 BIO 553 BIO 596 Exit Examin comprehensive courses in order See Cree Other 500 levenses See College See	CAL SCIENCE M.B.S. Natural and Health Sciences uirements — 30 Credits ical Science M.B.S." (p. 161). REQUIREMENTS ajor Credits — 17 hours Biomedicine and Careers Molecular Genetics Molecular and Cellular Laboratory Cell Physiology Mammalian Physiology I Mammalian Physiology II Foundations of Clinical Research ation: Students will be required to pass a we examination covering material from co der to graduate from the program. dits — 13 hours	1 3 2 3 3 3 2 a re

Compensation, Rewards, and

MBA 683

BIO 545	Pathogenic Microbiology	3	1.57.4.60.4	Performance Management	•
BIO 547	Immunology and Disease	4	MBA 684	Managing Organizational Change	2
BIO 548	Virology	3	MBA 685	Strategic Human Resources	1
BIO 555	Reproductive and Developmental Biology	3		Management	
BIO 576	Pharmacology	3	MBA Thesis		
BIO 570	Mammalian Endocrinology	3	SRM 600	Introduction to Graduate Research	3
BIO 581	Neurobiology	3	MBA 699	Thesis	1-6
BIO 582	Cancer Biology	3	MBA 699: Ta	ike 6 credits total.	
BUSINESS	S ADMINISTRATION M.B.A.		above tracks	o do not wish to specialize in any of the must complete an equivalent of nine cre	
Kenneth V	V. Monfort College of Business		mours of grad MBA courses	luate MACC and/or 600-level non-core	
Degree Requ	uirements — 36 Credits		СПЕМІСТ	RY M.S. — EDUCATION	
DEGREE F	REQUIREMENTS		EMPHASI		
Foundation (Courses		College of	Natural and Health Sciences	
	do not have an undergraduate degree in		Degree Requ	uirements — 30 Credits	
listed below u	be required to take the Foundation Courses inless they can document that they have the		See "Chemist	ry M.S." (p. 162).	
	vledge provided in the courses.		DEGREE F	REQUIREMENTS	
MBA 510	Financial & Managerial Accounting	2	Research Cro	edits — 9 hours	
MD 4 550	Concepts	2	CHEM 600	Seminar in Chemistry	1
MBA 550 MBA 565	Foundations of Economic Analysis Business Statistics	2		and either	
MBA 570	Fundamentals of Business Finance	2 2	CHEM 695	Thesis Proposal	1
		2	CHEM 699	Thesis	1 -
	re — 27 Credit Hours	2			6
MBA 610	Managerial Accounting	3		or	
MBA 625	Information Technology Strategies for Managers	3	CHEM 693	Chemical Research	1 - 9
MBA 632	Business Law	3	NOTE: All -4	and a second data of the Chief M (00) to a second	
MBA 650	Economics of Managerial Decisions	3		udents must take CHEM 600 two separates of 2 hours. Students completing a thes	
MBA 654	Leadership and Organizational	3	must also take	e 1 hour of CHEM 695 and 6 hours of CI	HEM
MD 4 656	Behavior	2		completing the non-thesis option must ta	
MBA 656 MBA 660	Strategic Management	3		M 693 instead of CHEM 695 and CHEM	
MBA 665	Marketing Management Business Quantitative Methods	3	699.		
MBA 670	Advanced Financial Management	3	Chemistry E	lective Credits — 6-15 hours	
		3	CHEM 522	Advanced Analytical Chemistry	3
-	cializations — 9 Credit Hours*		CHEM 523	Chemical Spectroscopy	3
	dministration		CHEM 533	Organic Synthesis and	3
MBA 671	Current Issues in Healthcare Policy	2		Stereochemistry	
	& Management		CHEM 534	Theory and Mechanisms of Organic	3
MBA 672	Managing Healthcare Organizations	2		Reactions	
MBA 673	Managing Healthcare Quality and	2	CHEM 543	Organometallic Chemistry	3
MD 4 674	Compliance	2	CHEM 560	Environmental Chemistry	2
MBA 674	Healthcare Managerial Accounting & Reimbursement	3	CHEM 581	General Biochemistry I	4
			CHEM 582	General Biochemistry II	4
	urces Management	•	CHEM 587 CHEM 590	Toxicology Advanced Topics in Chemistry	3
MBA 681	Talent Management	2	CHEM 590 CHEM 693	Chemical Research	3 1 -
MBA 682	Training and Organization Development	2	CHENI 073	Chemical Research	9

2

Pedagogy Credits — 6-15 hours

CHEM 682	Problems in Teaching Chemistry	3
SCED 694	Science Education Research	3

Pedagogy/Research Methods Electives

In conjunction with their advisor, candidates can select appropriate graduate-level courses in supporting areas such as:

Statistics and Research Methods (SRM) Psychology (PSY) Educational Technology (ET) Science Education (SCED)

All students must successfully complete a comprehensive examination in chemical education. Students completing a thesis must successfully defend the thesis.

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."

CHEMISTRY M.S. — RESEARCH EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Chemistry M.S." (p. 162).

DEGREE REQUIREMENTS

Research Cr	edits — 12 hours	
CHEM 600	Seminar in Chemistry	1
CHEM 693	Chemical Research	1 -
		9
CHEM 695	Thesis Proposal	1
CHEM 699	Thesis	1 -
		6

NOTE: Students must take CHEM 600 two separate times for a total of 2 hours. Students must also take 3 hours of CHEM 693 and complete a total of 6 hours of CHEM 699. Students must also meet a physical chemistry requirement if not previously taken. CHEM 551/CHEM 552 and CHEM 451L/CHEM 452L 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	3
	Stereochemistry	

CHEM 534	Theory and Mechanisms of Organic	3
	Reactions	
CHEM 543	Organometallic Chemistry	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
CHEM 693	Chemical Research	1 -
		9

General Electives — 0-6 hours

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

Note: 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 MENTAL HEALTH COUNSELING M.A.

College of Education and Behavioral Sciences

Degree Requirements — 60 Credits

See "Clinical Mental Health Counseling M.A." (p. 137).

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

Program Objectives

See "Clinical and School Counseling Requirements" (p. 137).

DEGREE REQUIREMENTS

Required Ma	ajor Credits — 60 hours	
APCE 558	Diagnosis and Treatment Planning	3
APCE 603	Understanding Children,	3
	Adolescents, and Their Systems	
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	3
	Assessment	
APCE 619	Practicum II in Individual	3
	Counseling	
APCE 623	Understanding and Counseling	3
	Diverse Populations	
APCE 624	Assessment and Treatment of	3
	Substance Abuse	
APCE 650	Orientation to Community	3
	Counseling	
APCE 657	Legal and Ethical Aspects of	3
	Counseling and Psychology	
APCE 660	Psychological Consultation: Theory	3
	and Practice	
APCE 661	Psychological Trauma and	3
	Intervention for Individuals,	
	Families and Communities	
APCE 662	Group Dynamics and Facilitation	3
APCE 665	Family Systems	3 3 3
APCE 673	Appraisal and Assessment in	3
	Counseling	
APCE 692	Internship in Clinical Counseling	1 -
		9
PSY 530	Life Span Developmental	3
	Psychology	
SRM 600	Introduction to Graduate Research	3
APCE 692: Take 6 hours		

COMMUNICATION M.A.

(Select from two emphases)

College of Humanities and Social Sciences

Degree Requirements — 30-33 Credits

See "Communication M.A." (p. 153).

DEGREE REQUIREMENTS

Required Major Core Credits — 18 hours			
COMM 600	Graduate Study in Communication	3	
COMM 601	Qualitative Methods in	3	
	Communication Research		
COMM 602	Quantitative Methods in	3	
	Communication Research		
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	

NOTES: 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 COMMUNICATIONS: NON-THESIS OPTION EMPHASIS

Required Elective Credits — 15 hours 500 and/or 600-level coursework

HUMAN COMMUNICATIONS: THESIS OPTION EMPHASIS

Required Emphasis Credits — 6 hours
COMM 699 Thesis 1 -

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.

College of Humanities and Social Sciences

Degree Requirements — 34 Credits

See "Department of Criminal Justice" (p. 153).

DEGREE REQUIREMENTS

Required Major Core Credits — 22 hours		
CRJ 510	Criminal Justice System	3
CRJ 550	Organization and Management of	3
	Criminal Justice	
CRJ 560	Crime Theories	3
CRJ 570	Issues of Diversity in Criminal	3
	Justice	
CRJ 580	Advanced Research Methods for	3
	Criminal Justice	
CRJ 582	Statistics for Criminal Justice	3
	Research	
CRJ 610	Criminal Justice Planning, Policy,	3

and Change
LIB 550 Library Research in Criminal Justice 1

Elective Credits — 12 hours

Select one of the elective options from the list below:

Thesis Option: Complete 6 credit hours of CRJ 699 (Thesis), and 6 credit hours of 500-level or above CRJ-prefix courses or advisor-approved courses from other departments. Students must have at least a 3.5 GPA in their graduate program in order to be approved for this option.

Capstone Project Option: Complete 3 credit hours of CRJ 697 (Capstone Project), and 9 credit hours of 500-level or above CRJ-prefix courses or advisor-approved courses from other departments. At least 3 credit hours must be CRJ-prefix credits. Students who choose this option will complete an applied project in consultation with an agency.

Comprehensive Examination Option: Complete 12 credit hours of 500-level or above CRJ-prefix courses or advisor-approved courses from other departments. At least 6 credit hours must be CRJ-prefix credits. Students who choose this option must take the written comprehensive examination in the semester in which they graduate and must be registered for UNC credit that semester.

DANCE EDUCATION M.A.

College of Performing and Visual Arts

Degree Requirements — 33-36 Credits

The program will be delivered through both on line learning and on campus classes. The on line learning would take place during the fall and spring semesters, while the students would be on campus during the summers for face-to-face intensive classes. The summer classes would include three classes taught over a three week time period.

DEGREE REQUIREMENTS

Required Courses 33-36 Credits		
DNCE 550	Dance History - Tribal Cultures to	3
	Current Times	
DNCE 560	Dance Movement Skills &	3
	Pedagogical Approaches	
DNCE 565	Interdisciplinary Teaching and	3
	Advocacy in Dance	
DNCE 570	Doing, Teaching & Appreciating	3
	Choreography & Creative Dance I	
DNCE 575	Dance Lesson, Curriculum and	3
	Assessment Design	
DNCE 600	Movement and Dance - Framing a	3
	Research Question	
DNCE 690	Thesis I	3
DNCE 693	Popular Dance Forms	3

DNCE 695	Doing, Teaching and Appreciating	3
	Choreography II	
DNCE 697	Dance Production Techniques	3
DNCE 699	Thesis II	3-6

The Coordinator of the M.A. in Dance Education degree 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 discuss the graduate review with the academic advisor and the Coordinator of the M.A. in Dance Education Program. The student will assume responsibility for scheduling graduate reviews. Two unsuccessful graduate reviews will be considered grounds for termination of the student's involvement in the program. In conjunction with DNCE 690 and DNCE 699, 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.

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.

EARTH SCIENCES M.A.

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Earth Sciences M.A." (p. 163).

DEGREE REQUIREMENTS

ESCI 599

Thesis Option	on Required Emphasis Credits — 12-	16
ESCI 599	Seminar in Earth Sciences	1
ESCI 600	Introduction to Earth Science Research	2
ESCI 695	Special Topics in Earth Sciences	2
ESCI 699	Thesis	1 - 6
ESCI 599: M	inimum of 2 credits	
ESCI 699: Ta	ake 6-10 credits	
Thesis Option	on Elective Credits — 14-18 hours	
Select course	s from the Elective Credits listed below	r.
Non-Thesis hours	Option Required Emphasis Credits –	- 8-12

Seminar in Earth Sciences

1

ESCI 600	Introduction to Earth Science	2
	Research	
ESCI 695	Special Topics in Earth Sciences	2
ESCI 697	Graduate Research	1 -
		6

ESCI 697: Take 2-6 credits

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** 4 **ESCI 575** Earth Systems Science Education 6 **ESCI 584** Earth Sciences Field Experiences 1 -15 **GEOL 510** Groundwater Geology 2 **GEOL 515** Ore Geology 3 Igneous and Metamorphic Petrology 4 **GEOL 521 GEOL 540** Paleontology 4 Sedimentology and Stratigraphy **GEOL 550** 3 **GEOL 560** Geomorphology Glacial and Quaternary Geology 3 **GEOL 564** Volcanic Geology 3 **GEOL 567** 2 Geologic Field Techniques **GEOL 581** Rocky Mountain Geology Seminar 2 **GEOL 590** Directed Studies **GEOL 622** 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 3 Directed Studies OCN 622 1 -4 Elementary and Middle School 3 **SCED 671** Science Curriculum Science Education Seminar **SCED 678** 1 -2 3 **SCED 680** Science Curricula in Secondary/College Settings

AST 622, GEOL 622, MET 622, and OCN 622: See "Variable Topic Courses" (p. 37).

NOTES: 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.

EDUCATION M.A.T. — CURRICULUM STUDIES EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 30 Credit Hours

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

See "Education M.A.T." (p. 150).

DEGREE REQUIREMENTS

Required Major Credits — 21 credit hours		
EDF 610	Teacher Research	3
EDF 619	Pluralism in Education	3
EDF 640	Psychological Foundations of	3
	Education	
EDF 662	Foundations of Curriculum	3
	Development and Instructional	
	Practice	
EDF 664	Current Issues in Instruction and	3
	Assessment Practices	
EDF 685	Philosophical Foundations of	3
	Education	
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.

EDUCATION M.A.T. — ELEMENTARY EDUCATION WITH LICENSURE EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 46 Credit Hours

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

See "Education M.A.T." (p. 150).

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.

DEGREE REQUIREMENTS

Required Credits — 46 hours		
EDEL 303	Health Education in the Elementary	1
	School	
EDEL 520	Effective Instruction in Elementary	3
	School Mathematics	
EDEL 525	Integrated Methods: Visual Arts,	1 -
	Music and Physical Education	3
EDEL 544	Elementary Student Teaching and	8
	Capstone Seminar	
EDEL 550	Effective Instruction in Elementary	3
	School Social Studies	
EDEL 602	Elementary School Practicum	2
EDEL 612	Elementary School Curriculum	2 3 3 3
EDF 500	Conceptions of Schooling	3
EDRD 510	Achieving Effective Instruction in	3
	Developmental Reading	
EDRD 511	Elementary Reading Diagnosis and	3
	Individualization	
EDSE 430	Exceptional Student in the	2
	Elementary Classroom	
ET 501	Introduction to Applications of	3
	Educational Technology in PK-12	
	Education	
PSY 347	Educational Psychology for	3
	Elementary Teachers	
SCED 570	Teaching Science in the Elementary	3
	School	
SRM 600	Introduction to Graduate Research	3

EDEL 525: Take 3 hours

EDEL 544 (8) (Student Teaching) must be completed in grade K-6 in an elementary school setting and be taken in conjunction with CH 303 (1) in order for students to be full-time graduate students with 9 credit hours.

- Candidates must pass the Praxis or Place test prior to Student Teaching.
- Candidates may not take extra courses with Student Teaching without prior approval from the Program Coordinator and the STE Director.
- All PTEP Field Experiences and methods courses need to be successfully completed prior to Student Teaching.
- Student Teaching outside the supervision of UNC Faculty may or may not be approved.
- Teacher Candidates will not be placed in a school where they were once students or where they have a close relative attending and/or working.

EDUCATION M.A.T. — ENGLISH EDUCATION EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 30 Credit Hours

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

See "Education M.A.T." (p. 150).

DEGREE REQUIREMENTS

Required Ma	ajor Credits — 30 credits	
Education co	ore — 12 hours	
EDF 619	Pluralism in Education	3
EDF 664	Current Issues in Instruction and	3
	Assessment Practices	
EDF 685	Philosophical Foundations of	3
	Education	
SRM 600	Introduction to Graduate Research	3
English core	— 15 hours	
ENG 600	Introduction to Graduate Study	3
British Liter	ature (3): Select one	
ENG 623	Old English	3
ENG 624	Middle English	3
ENG 625	Studies in the Renaissance	3 3 3 3
ENG 626	Studies in the Restoration and	3
	Eighteenth Century	
ENG 627	British Romantic Literature	3
ENG 628	Studies in the Victorian Period	3
ENG 629	20th Century British Literature	3
American Li	terature (3): Select one	
ENG 630	American Literature to the Civil War	3
ENG 631	Studies in American Literature Civil	3
	War to WW1	
ENG 632	American Literature WW1 to	3
	Present	
Advance Cor	mposition (3): Select one	
EED 541	Methods for Teaching Composition	3
	in Secondary Schools	
ENG 640	History and Theory of Rhetoric	3
ENG 641	Studies in Composition Research	3
	and Pedagogy	
Theory or La	anguage (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.

EDUCATION M.A.T. — CULTURALLY AND LINGUISTICALLY DIVERSE EDUCATION EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 33 Credit Hours

Admission to this program requires a teaching Licensure or enrollment in a teacher preparation program; three credits of approved literacy instruction; and evidence of familiarity with a second language. (The latter two of these requirements can be completed while completing other program requirements, and are not a condition of admission.)

See "Education M.A.T." (p. 150).

DEGREE REQUIREMENTS

	ourse — 3 credit hours	
SRM 600	Introduction to Graduate Research	3
Required Ma	ajor Credits — 30 credit hours	
Choose 30 cr	edit hours from the courses below:	
EDF 610	Teacher Research	3
ECLD 592	Second Language Acquisition Theory	3
ECLD 593	Language, School and Society	3
ECLD 594	Foundations of Language and	3
	Linguistics for ESL/Bilingual Educators	
ECLD 602	Teaching Culturally & Linguistically	3
	Diverse Learners	
ECLD 603	Methods and Assessment in	3
	Culturally & Linguistically Diverse	
	Education	
ECLD 604	Field Experience in Culturally &	3
	Linguistically Diverse Education	
ECLD 605	Seminar in Multilingual Teaching	3
	and Learning I	
ECLD 606	Culturally and Linguistically Diverse	3
	Learners in the U.S. Educational	
	System	
ECLD 607	Seminar in Multilingual Teaching	3
	and Learning II	
EDRD 523	Reading and Writing in the Content	3
	Areas	

EDUCATIONAL LEADERSHIP M.A.

College of Education and Behavioral Sciences

Degree Requirements — 30 Credits

See "Educational Leadership M.A." (p. 140).

DEGREE REQUIREMENTS

Required Courses — 15 hours		
ELPS 601	Leadership Development Through	3
	Inquiry	
ELPS 603	Shaping Organizations: Management	3
	and Leadership in Education	
ELPS 604	Understanding People: Professional	3
	Development and Educational	
	Leadership	
ELPS 605	External Environments: Social,	3
	Political, and Economic Influences	
	in Educational Leadership	
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	3
	Supervision	
ELPS 660	Law and the Administrator	3
ELPS 670	The Principalship: Leadership at the	3
	School Site Level	
2. 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: Satisfactory performance on a concluding activity approved by division faculty, in accordance with Graduate School policy, must be demonstrated.

EDUCATIONAL LEADERSHIP AND SPECIAL EDUCATION ADMINISTRATION M.A. — WITH DUAL LICENSURE AS A PRINCIPAL AND SPECIAL EDUCATION DIRECTOR

College of Education and Behavioral Sciences

Degree Requirements — 39 Credits

See "Educational Leadership and Special Education Administration M.A. (p. 141) under Educational Leadership and Policy Studies, or under the School of Special Education (p. 148).

DEGREE REQUIREMENTS

Research — 3	hours	
SRM 600	Introduction to Graduate Research	3
Educational L	eadership Courses — 21 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 650	School Finance and Budgeting	3
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
Special Educa	tion Administration Courses — 9 hour	·s
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
Field-based Learning — 6 hours		
ELPS 606	Internship in Educational Leadership	1 - 9
EDSE 697	Externship in Special Education: Administration	1 - 12
ELPS 606: take 3 credits		
EDSE 697: take 3 credits		
MOTE: Catiafa	atami narfarmanaa an a aanaliidina aatiiii	4

NOTE: Satisfactory performance on a concluding activity demonstrating attainment of program outcomes and approved by faculty, in accordance with Graduate School policy, must be demonstrated.

EDUCATIONAL PSYCHOLOGY M.A.

College of Education and Behavioral Sciences 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." (p. 144).

DEGREE REQUIREMENTS

Theoretical Fo	oundations — 9 hours	
PSY 530	Life Span Developmental	3
	Psychology	
PSY 540	Theories and Principles of Learning	3
PSY 590	Seminar in History and Systems	3
Research Met	hods — 6 hours	
PSY 600	Graduate Research Methodology	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	3
	Psychology	
PSY 674	Measurement I: Educational Testing	3
Elective Credi	ts — 6 hours	

NOTES: 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 (p. 255) 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.

Accelerated (4 + 1) Psychology B.A. and Educational Psychology M.A.

Motivated and high-achieving students may seek to complete the requirements for the B.A. in Psychology and M.A. in Educational Psychology in five years. To obtain both degrees, students must complete all the requirements for the B.A. described in the Undergraduate Catalog and all of the requirements for the M.A. described in the Graduate Catalog. Completing the requirements for both degrees in the accelerated Master's program is made possible by taking 9 credits of graduate course work in the junior and senior years (paid for at the undergraduate

tuition rate). These 9 credit hours will be counted towards both the B.A. and M.A. degree requirements. Students remain eligible for financial aid as an undergraduate; any Graduate School aid is not available until students are admitted as a Graduate student.

Students interested in transferring into an accelerated Master's Program must:

- have a cumulative GPA of at least 3.0 to take graduatelevel courses as a junior or senior.
- Meet with the program's advisor in their junior year, apply (following the same procedure and meeting the same requirements as other M.A. applicants). Full admission is dependent on completing the B.A. requirements in the senior year while maintaining a minimum 3.0 GPA.
- Students and faculty identify the graduate courses the students should take. The program application will be signed and forwarded to the Graduate School with signatures of the program advisor indicating the approval of graduate course transfer.

EDUCATIONAL PSYCHOLOGY M.A. — TEACHING APPLICATIONS EMPHASIS

College of Education and Behavioral Sciences 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." (p. 144).

DEGREE REQUIREMENTS

Required Ma	jor Credits — 30 credit hours	
PSY 500	Educational Psychology for Teachers	3
PSY 530	Life Span Developmental	3
	Psychology	
PSY 540	Theories and Principles of Learning	3
PSY 575	Educational Assessment	3
PSY 600	Graduate Research Methodology	3
PSY 640	Cultural Issues in Educational	3
	Psychology	
PSY 644	Motivation in Education	3
PSY 681	Cognition and Instruction I	3
PSY 697	Master's Project in Psychology	3 -
	- , , , , ,	6

Elective Credits — 3 hours

This program is offered according to a cohort model in which all students take the courses in the same sequence. All students will register for the same elective course that is offered during the specified semester. The required comprehensive examination will be satisfied by successful

completion of the MA Project, as set forth in program guidelines.

EDUCATIONAL TECHNOLOGY M.A.

College of Education and Behavioral Sciences Degree Requirements — 33 Credits

See "Educational Technology M.A." (p. 139).

DEGREE REQUIREMENTS

Required Ma	ijor Credits — 33 hours	
ET 500	Introduction to Instructional Design	3
	and Technology	
ET 502	Instructional Design	3
ET 503	Instructional Materials Design I	3
ET 504	Instructional Materials Design II	3
ET 524	Design of Computer-Assisted	3
	Instruction	
	or	
ET 613	Teaching in an Online Environment	3
ET 601	Managing People, Projects, and	3
	Technology Systems	
ET 602	Performance Technology for	3
	Instructional Environments	
ET 604	Computer Graphics and Visual	3
	Literacy	
ET 692	Internship	3
PSY 540	Theories and Principles of Learning	3
SRM 600	Introduction to Graduate Research	3

NOTES: 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.

College of Humanities and Social Sciences

Degree Requirements — 30 or 36 Credits

See "English M.A." (p. 153).

DEGREE REQUIREMENTS

Required	Major Credits — 15 hours	
ENG 600	Introduction to Graduate Study	3
	One course in Theory	3
	Two courses in British Literature,	6
	one before and one after 1800	
	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:

- Comprehensive Exam. In pursuing this option, students must take an additional two courses from ENG 600level offerings (6 credits). Students pursuing this track will also pass a written comprehensive exam, covering five areas of concentration, during their final semester of study.
- 2. a Master's Project (ENG 697)
- 3. a Creative Project (ENG 697) (with faculty consent)

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.

FOREIGN LANGUAGES M.A. — SPANISH TEACHING EMPHASIS

College of Humanities and Social Sciences Degree Requirements — 30 Credits

See "Foreign Languages M.A." (p. 154).

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.

DEGREE REQUIREMENTS

Required Ma	ajor Credits — 30 hours	
FL 531	Teaching of Foreign Languages	2
SPAN 600	Introduction to Graduate Study and	3
	Research Methods	
FL 531: Take	minimum of 4 credit hours	
Civilization -	— at least 6 hours:	
SPAN 560	Spanish Civilization and Culture	2
SPAN 561	Latin American Civilization and	2
	Culture	
SPAN 562	Mexico and United States Hispanic	2
	Civilization and Culture	
SPAN 563	Hispanic Cultural Topics	1 -
		6
Literature —	- at least 9 hours:	
SPAN 555	Literature for Children and	3
	Adolescents	
SPAN 570	Readings in United States Hispanic	1 -
	Literature	6
SPAN 571	Readings in Spanish Literature	1 -
	-	3
SPAN 572	Readings in Latin American	1 -
	Literature	3
SPAN 575	Masterpieces of 20th and 21st	2
	Century Latin America	
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-	1 -
	Spanish	3
SPAN 560	Spanish Civilization and Culture	2
SPAN 580	Grammar Topics	1 -
GD 137 501		6
SPAN 581	Advanced Spanish Grammar	2 2
SPAN 583	Oral and Written Discourse	2

NOTES: 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, SPAN 521, SPAN 531, SPAN 550, SPAN 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" (p. 37).

GERONTOLOGY M.A.

College of Natural and Health Sciences

Degree Requirements — 33 Credits

See "Gerontology M.A." (p. 165).

DEGREE REQUIREMENTS

Required Major Credits — 24 hours		
GERO 555	Grant Development and	3
	Administration	
GERO 560	Community Resources for Older Adults	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
CH 610	Program Planning and Evaluation	3
SRM 600	Introduction to Graduate Research	3
HRS 610	or Interpretation and Evaluation of Behavioral Research	3
Program Elec	ctives — 9 hours	
GERO 692	Graduate Internship in Gerontology	1 - 12
	or	
GERO 694	Practicum in Gerontology	1 -
HRS 630	Human Carriaga Councelina	3
HKS 030	Human Services Counseling Theories and Techniques	3
HRS 694	Supervised Counseling in Human	6
11103 094	Services	U
GERO 630	Intervention Strategies with the Elderly	3
GED 0 (00	or	
GERO 699	Thesis	1 -
	0.5	6
	or	

GERO 692: Must take at least 9 credits if choosing this elective

HRS 694: Prerequisite HRS 630

GERO 699: With supervisor approval; must take 6 credits total

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.

GRADUATE INTERDISCIPLINARY DEGREE PROGRAM M.A. – MIDDLE LEVEL MATHEMATICS TEACHING EMPHASIS

College of Natural and Health Sciences

See "Middle Level Mathematics Teaching Emphasis" (p. 173).

Degree Requirements — 30 Credits

DEGREE REQUIREMENTS

MED 588

DECKEE IN	Lacintemento	
Required Cou MED 600	irses — 9 hours Introduction to Research in	3
	Mathematics Education	
MFT 520	Survey of Mathematics	3
MFT 530	Conceptions of Analytic Geometry and Calculus	3
	600 satisfies the Graduate School or Introduction to Graduate Studies.	
Required Elec	ctive Credits — 9 hours	
Choose 3 of th	e following:	
MFT 514	Geometry in Middle School	3
	Mathematics Teaching	
MFT 515	Number and Operations in Middle	3
	Level Mathematics Teaching	
MFT 516	Algebra in Middle Level	3
	Mathematics Teaching	
MFT 517	Data Analysis & Probability in	3
	Middle Level Mathematics Teaching	
Elective Majo	r Credits — 12 hours	
	electives may be chosen from above coursing or approved substitutes:	ses
MED 522	Topics in Mathematics Teaching at	1 -
	the Middle Level	3

Implementation of Mathematics Standards in Instruction 1 -

MED 599	Action Research Project Seminar	1-3
MED 673	Teaching and Learning Mathematics	3
	on the Elementary Level	
MED 674	Teaching and Learning Mathematics	3
	on the Secondary Level	
MFT 518	Proportional Reasoning for Middle	3
	Level Mathematics Teachers	
MFT 522	Topics in Middle Level Mathematics	3
	Teaching	
	Two additional approved elective	
	courses for up to 6 hours	
	1	

MED 522: Repeatable for a maximum of 6 credits

MED 588:Repeatable for a maximum of 3 credits

MED 599:Repeatable 3 times

MFT 522: Repeatable under different subtitles

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: For more information about the Interdisciplinary Studies: Graduate Interdisciplinary Degree (p. 132).

GRADUATE INTERDISCIPLINARY DEGREE PROGRAM M.A. – SCIENCE EDUCATION EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Graduate Interdisciplinary Degree Program M.A." (p. 173).

DEGREE REQUIREMENTS

Required Cou	rses — 18 hours	
ECLD 602	Teaching Culturally & Linguistically	3
	Diverse Learners	
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-	3
	12 Teachers	
SCED 678	Science Education Seminar	1 -
		2
SCED 695	Action Research in Science	1
	Education I	
SCED 696	Action Research in Science	1
	Education II	
	Education II	
SCED 697	Action Research in Science	1

SCED 678: Take 2 credits

EDSE 509 or PSY 640 may be substituted for ECLD 602 with approval from your advisor.

PSY 500 or PSY 540 may be substituted for PSY 681 with approval from your advisor.

Science Pedagogical Content Electives — 12 hours

Choose 12 hours from the following courses: SCED 521 Physics in Modern Medicine 3 SCED 531 Teaching Chemistry for the Future 3 **SCED 561** Using Controversial Biological 3 Topics to Teach Nature of Science **SCED 581** Earth Systems: WATER 3 **SCED 605** Global Change 3

NOTES: The goal of this program is to enhance the science and pedagogical knowledge of professional science teachers in the K-12 environment.

For the research experience, students will complete a series of Action Research courses and are required to form an advisory committee with a minimum of three qualified faculty. These courses require research on a current problem in K-12 science education relevant to students' teaching situations. The student will develop goals, review relevant literature and plan and complete an action research project.

A research paper will also be developed with the assistance of the student's advisor and committee.

Comprehensive Exam: Students are required to provide an oral presentation of the research to the student's advisor and committee.

HIGHER EDUCATION AND STUDENT AFFAIRS LEADERSHIP M.A.

College of Education and Behavioral Sciences

Degree Requirements — 39 Credits

See "Higher Education and Student Affairs Leadership M.A." (p. 143).

DEGREE REQUIREMENTS

Required Cou	rrses — 30 hours	
HESA 601	Introduction to Higher Education &	3
	Student Affairs	
HESA 611	Organization and Administration	3
HESA 650	College Student Development:	3
	Foundational Theory	
HESA 651	Philosophical, Historical and	3
	Cultural Foundations of Student	
	Affairs in Higher Education	
HESA 668	College Students: Culture,	3
	Characteristics, Campus Life	
HESA 671	Introduction to Leadership in Higher	3
	Education and Student Affairs	
	Leadership	
HESA 675	Field Experience in Student Affairs	1 -
		3
HESA 680	Law and Higher Education	3
HESA 683	Finance and Resource Management	3
	in Higher Education	
SRM 600	Introduction to Graduate Research	3
HESA 675: mi requirements	nimum of 3 credits to meet program	

Elective Courses — 9 hours

Choose from the following courses:
HESA 612 Higher Education Assessment and

HESA 612	Higher Education Assessment and	3
	Evaluation	
HESA 652	Enrollment Management Services	3
HESA 655	Multiculturalism in Higher	3
	Education and Student Affairs	
HESA 658	Helping Skills for Practitioners	3
HESA 660	Women in Higher Education and	3
	Student Affairs	
HESA 665	International Higher Education and	3
	Student Affairs	
HESA 669	Culturally Responsive Aspects of	3
	Transformative Learning	
HESA 670	Internship in Higher Education and	6

Student Affairs Leadership	
Human Resources in Higher	3
Education	
Public Policy in Higher Education	3
Current Issues in Higher Education	3
and Student Affairs Leadership	
Special Topics in Higher Education	1 -
and Student Affairs Leadership	4
	Human Resources in Higher Education Public Policy in Higher Education Current Issues in Higher Education and Student Affairs Leadership Special Topics in Higher Education

Satisfactory performance on a concluding activity approved by division faculty, in accordance with Graduate School policy, must be demonstrated. All coursework for the program must be completed with a grade of "B-" or better.

HISTORY M.A.

College of Humanities and Social Sciences

Degree Requirements — 30 Credits

See "History M.A." (p. 154).

DEGREE REQUIREMENTS

Required Courses — 3 hours
HIST 600 Historiography 3
Elective Courses — 27 hours

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

NOTE: Candidates for the M.A. in history should consult with the history director of graduate studies 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 director of graduate studies. Candidates, in consultation with the major field advisor, will select two other program members who together will constitute the candidate's examining committee. For thesis candidates, one member of the committee must be from outside their concentration area. Candidates are urged to consult frequently with the faculty who compose their committee.

Thesis Option

Candidates opting to write a thesis will take at least fifteen hours of graduate coursework in one of the following concentration areas: American, European, or African/Asian/Latin American History. They shall also take six hours of graduate history coursework from outside their concentration area. In addition, students will take six hours of HIST 699: Thesis as they write a thesis on a subject that falls within their area of concentration. No comprehensive examination is required. However, an oral examination and thesis defense will be held after the student's thesis committee chair has accepted the thesis for presentation to the candidate's committee. Students will be responsible during the oral examination for a mastery of

their field, including the reading list they have finalized with their committee.

Non-Thesis Option

Candidates opting for the non-thesis option will take at least fifteen hours of coursework in one of the following areas: American, European, or African/Asian/Latin American History. The area chosen will become the student's concentration. Twelve additional hours of graduate history courses must be completed from 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 area. Students will be responsible on the oral examination for a mastery of their field of study, including the reading list they have finalized with their committee.

Concentration Areas in History

NOTES: Candidates must obtain permission from the Department of History's director of graduate studies allowing them to take their comprehensive or thesis oral examinations no later than the sixth week of the semester in which the examination will be taken. At this time a specific date will be set by the director of graduate studies with the advice of the candidate's committee.

A maximum of six hours may be earned in HIST 622, Directed Studies. Candidates must obtain prior approval and the signatures of their advisor, the director of graduate studies and the chair of History before enrolling.

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

Please see "Variable Topic Courses" (p. 37).

All students will be examined orally by a committee after completing nine hours of coursework, typically in their second semester. However, students who plan to write a thesis must consult with their committee, who may delay this oral qualifying examination until they have completed a thesis prospectus. In this instance, the student's committee chair shall notify the student in writing when the qualifying oral examination must be taken. A "pass" or "conditional pass" recommendation by the committee will permit a student to continue in the History M.A. program. A "fail" recommendation will mean the student will not continue in the History M.A. program. All students without exception must satisfy the thirty hour master's degree requirement.

Comprehensive and Thesis Fields in History:

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

MARRIAGE, COUPLES, AND FAMILY COUNSELING/THERAPY M.A.

College of Education and Behavioral Sciences

Degree Requirements — 66 Credits

See "Marriage, Couples, and Family Counseling/Therapy M.A. (p. 137)"

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

Program Objectives

See "Clinical and School Counseling Requirements" (p. 137).

DEGREE REQUIREMENTS

Required Maj	or Core Credits — 66 hours	
APCE 558	Diagnosis and Treatment Planning	3
APCE 603	Understanding Children,	3
	Adolescents, and Their Systems	
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	3
	Assessment	
APCE 623	Understanding and Counseling	3
	Diverse Populations	
APCE 624	Assessment and Treatment of	3
	Substance Abuse	
APCE 650	Orientation to Community	3
	Counseling	
APCE 657	Legal and Ethical Aspects of	3
	Counseling and Psychology	
APCE 660	Psychological Consultation: Theory	3
	and Practice	
APCE 661	Psychological Trauma and	3
	Intervention for Individuals,	
	Families and Communities	
APCE 662	Group Dynamics and Facilitation	3
APCE 665	Family Systems	3
APCE 668	Sexuality Counseling	3
APCE 669	Advanced Methods: Couples and	3
	Family Therapy	
APCE 673	Appraisal and Assessment in	3

	Counseling	
APCE 691	Internship in Clinical	1 -
	Counseling:Couples and Family	9
	Therapy	
APCE 694	Practicum in Couples and Family	4
	Therapy	
APCE 695	Seminar: Contemporary Issues in	3
	Couples and Family Therapy	
PSY 530	Life Span Developmental	3
	Psychology	
SRM 600	Introduction to Graduate Research	3

APCE 691: Take 2 hours

MATHEMATICS M.A. — LIBERAL ARTS EMPHASIS

This program is intended for students who do not already possess a Master's degree and wish to continue into the Ph.D. program in Educational Mathematics. It is not intended as a stand alone program. Students who complete this program and are deemed to be making good progress are automatically admitted to continue with the Ph.D. program.

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Mathematics M.A." (p. 168).

Applicants to this program must submit the same application materials required for the Ph.D. program in Educational Mathematics: a CV (curriculum vitae); at least three letters of recommendation with the UNC cover sheet; current general GRE scores (the subject exam is not required); and an essay of approximately 500 words about their personal educational goals and specific interest in the University of Northern Colorado's Educational Mathematics Ph.D. program.

DEGREE REQUIREMENTS

Required Emphasis Credits — 18 hours 3 **MATH 525** Linear Algebra I **MATH 531** Basic Analysis I 3 3 **MATH 532** Basic Analysis II Introduction to Topology **MATH 540** 3 **Introductory Complex Variables MATH 560** 3 MED 610 Survey of Research in Mathematics Education

Required Elective Credits — 12 hours

Electives must be graduate level (500 or above) MATH, MED, or SRM courses, and must be approved by the student's advisor. At most 3 of the required elective credits can be from Math 599 or MED 599.

Comprehensive Examinations

A student may select any of the following options to satisfy the comprehensive examination requirement. At least two faculty members will be involved in judging whether or not the selected option has been completed satisfactorily.

- Option 1. Completion of an Action Research Project involving the selection of a problem related to the student's teaching, review of relevant literature, plan, analysis and discussion. A copy of this project must be filed with the School; in addition, the student must make a presentation of the project. Students who choose this option will normally take MED 599 or MATH 599 to support their work on the project.
- Option 2. Completion of a Master's Research Project involving the selection of a problem, review of relevant literature, plan, analysis and discussion. A copy of this project must be filed with the School; in addition, the student must make a presentation of the project. This project may be associated with a course the student is taking, as long as it is an independent research project of high enough quality and approved in advance by the graduate program coordinator.
- Option 3. A written comprehensive examination over at least 2 of the required courses agreed upon in advance with the graduate program coordinator. Up to two hours of oral examination will be given upon successful completion of the written examination.

MATHEMATICS M.A. — TEACHING EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Mathematics M.A." (p. 168).

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.

DEGREE REQUIREMENTS

Required Emphasis Credits — 9 hours		
MATH 534	Continuous Mathematics	3
MATH 543	Modern Geometry	3
MED 600	Introduction to Research in	3
	Mathematics Education	

NOTE: 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 3 **MATH 528** Discrete Mathematics Mathematical Problem Solving **MATH 529** 3 **MATH 537** Mathematical Modeling 3 3 **MATH 550 Applied Probability and Statistics MATH 591** Abstract Algebra and Number 3 Theory Mathematics Action Research 3 **MATH 599 Project Seminar** Group B (6 hours) 2 MED 528 Teaching of Discrete Mathematics 2 **MED 534** Teaching Algebra and Trigonometry MED 543 **Teaching Geometry** 2 Teaching Applied Probability and MED 550 2 Statistics Teaching Secondary Math for 3 MED 555 Understanding Culture in the Math Classroom 3 **MED 560** MED 565 **Quantitative Reasoning in Secondary** 3 Mathematics **MED 595** Teaching Advanced Topics in 2 Secondary School Mathematics Action Research Project Seminar 1-3 MED 599 MED 673 Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics 3 MED 674 on the Secondary Level

MED 599 and MATH 599: Only one of these may be counted in the program, and only 3 total credits of either can be counted in the program.

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 or MATH 599 to support their work on the project.

MUSIC M.M. — COLLABORATIVE PIANO EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 30-31 Credits

See "Music M.M." (p. 177).

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.

DEGREE REQUIREMENTS

Required Emphasis Credits — 24 hours

Studies in Maj	or Area	
MUS 540	Techniques of Vocal Coaching	2
MUS 541	Chamber Music Literature for	2
	Keyboard	
MUS 600	Introduction to Musical Scholarship	2
MUS 693	Practicum in Music	1 -
		4
MUS 665	Individual Performance in	2 -
	Collaborative Piano	4
	Ensemble by advisement	2

MUS 693: Take 2 hours

MUS 693: Recital and correlative paper.

MUS 665: Take 8 hours

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	3
	Instrumental Practices	
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	1
	Music	
MUS 671	Individual Performance in Piano	2 -
		4

MUSIC M.M. — CONDUCTING EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 30-31 Credits

See "Music M.M." (p. 177).

DEGREE REQUIREMENTS

Required I	Emphasis Credits — 26 hours	
MUS 511	Wind Band Literature and	2
	Techniques	
MUS 512	Symphonic Literature and	2
	Techniques	
MUS 550	Score Reading and Analysis	1
MUS 551	Individual Performance in	2
	Conducting	
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	4
	Instrument or Voice	
	Major Performing Organization	2

MUS 551: Take 4 hours

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.

MUSIC M.M. — INSTRUMENTAL PERFORMANCE EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 30-31 Credits

See "Music M.M." (p. 177).

DEGREE REQUIREMENTS

Required En	nphasis Credits — 22-23 hours	
Studies in the	Major Area (14 hours)	
MUS 600	Introduction to Musical Scholarship	2
MUS 693	Practicum in Music	1 -
		4
	Individual Performance	8
	Major Performing Organization	2

MUS 693: Take 2 credits

MUS 693: Recital and Correlative Paper

String, Woodwind, Brass, and Percussion performers will participate in a major ensemble each semester in residence.

Keyboard majors will enroll in ensemble by advisement.

Other Studies in Music (8-9 hours)

Music History, Music Theory	6
Pedagogy	2-3

NOTES: 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.

NOTES: 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.

MUSIC M.M. — JAZZ STUDIES EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 32 Credits

See "Music M.M." (p. 177).

DEGREE REQUIREMENTS

Required Em	phasis 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
	or	
MUS 555	Seminar in Jazz Composition	2
MUS 600	Introduction to Musical Scholarship	2
MUS 625	Jazz Ensembles	1
MUS 636	Individual Performance in Jazz	2 -
		4
	or	
MUS 637	Individual Instruction in Jazz	2 -
	Composition	4
MUS 693	Practicum in Music	1 -
		4
MUS 625: Take 2 hours		
MUS 636: Tal	ce 8 hours	
MUS 693: Tal	ce 2 hours	
Other Studies	s in Music	

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

Music History, Music Theory

6

Elective Emphasis Credits — 3 hours

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

NOTES: 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 M.M. — MUSIC EDUCATION EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 30 Credits

See "Music M.M." (p. 177).

DEGREE REQUIREMENTS

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 3 Education 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.

NOTES: 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 M.M. — MUSIC HISTORY AND LITERATURE EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 30 Credits

See "Music M.M." (p. 177).

DEGREE REQUIREMENTS

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	4
	and/or Individual Performance	

Elective Credits — 3 hours

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

NOTES: 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 M.M. — MUSIC THEORY AND COMPOSITION EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 33 Credits

See "Music M.M." (p. 177).

DEGREE REQUIREMENTS

Required Em	phasis 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	2 -
	Composition	4
MUS 699	Thesis	1 -
		6
	Music Performing Organization and/or Individual Performance	2
	Music History	6

MUS 677: Take 8 credits

MUS 699: Thesis: Take 6 credits (or original composition)

Studies in Music History will be selected by advisement based upon candidate's needs identified through advisory examination.

NOTES: 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.

MUSIC M.M. — VOCAL PERFORMANCE EMPHASIS

College of Performing and Visual Arts Degree Requirements — 30-33 Credits

See "Music M.M." (p. 177).

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.

DEGREE REQUIREMENTS

Required En	ıphasis 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
	Individual Performance	8
	Major Performing Organization	2
MUS 693: Recital and Correlative Paper		
Studies in the	e 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 t	he following courses: (2 hours)		
MUS 534	Acting for Singers	2	
MUS 685	Performance in Opera Theatre	1 -	
		12	
MUS 686	Scene Studies in Opera	1 -	
	•	3	
MUS 685 and MUS 686: Take 2 hours			
Other Studies in Music (6 hours)			
	Music History, 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

NOTES: 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. — CLINICAL NURSE LEADER (CNL) EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 42 Credits

See "Nursing M.S." (p. 169).

Prerequisites: Baccalaureate Degree In Nursing

DEGREE REQUIREMENTS

Required Maj	or Core Credits — 12 hours	
NURS 504	Quality and Safety in Health Care	3
	Systems	
NURS 507	Policy, Leadership, and Nursing	3
	Issues	
NURS 601	Theoretical Foundations for	3
	Advanced Nursing	
NURS 606	Research and Evidence-based	3
	Practice in Nursing	
CNL Emphasis — 30 hours		
NURS 610	Health Assessment	3
NURS 612	Advanced Pharmacology	4
NURS 614	Advanced Pathophysiology	3
NURS 616	Measurement of Clinical Outcomes	3
	for Advanced Nursing Practice	

NURS 620	Clinical Nurse Leader: Managing	3
	Clinical Outcome	
NURS 625	Clinical Nurse Leader: Managing	3
	the Care Environment	
NURS 635	Clinical Nurse Leader:Developing	4
	Leadership Roles	
NURS 681	Advanced Role Practicum for	1-7
	Clinical Nurse Leaders	

NURS 681: Take 7 hours

Successful completion of a comprehensive exam is required to complete the Master of Science program.

Completion of a master's thesis is an option: NURS 699 Master's Thesis (6).

NURSING M.S. — FAMILY NURSE PRACTITIONER (FNP) EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 48 Credits

See "Nursing M.S." (p. 169).

Prerequisites: Undergraduate Research, Undergraduate Physical Assessment Course

DEGREE REQUIREMENTS

Required Major Core Credits — 12 hours		
NURS 504	Quality and Safety in Health Care	3
	Systems	
NURS 507	Policy, Leadership, and Nursing	3
	Issues	
NURS 601	Theoretical Foundations for	3
	Advanced Nursing	
NURS 606	Research and Evidence-based	3
	Practice in Nursing	
FNP Emphas	is — 36 hours	
NURS 610	Health Assessment	3
NURS 612	Advanced Pharmacology	4
NURS 614	Advanced Pathophysiology	3
NURS 624	Health Promotion and Disease	3
	Prevention in Advanced Practice of	
	Nursing	
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
NURS 680: Ta	ake 9 hours	
	mpletion of a comprehensive exam is	

Successful completion of a comprehensive exam is required to complete the Master of Science program. Completion of a master's thesis is an option: NURS 699 Master's Thesis (6).

PHYSICAL EDUCATION M.A.T.

College of Natural and Health Sciences

Degree Requirements — 30 hours

Course Requirements

SES 503	Teaching Fitness Concepts	3
SES 603	Professional Development Seminar	3
SES 604	Teacher and Coach Action Research	3
SES 612	Assessment in Sport Pedagogy	3
SES 614	Analysis of Teaching in Physical	3
	Education	
SES 628	Adventure Education	3
SES 640	Curriculum in Physical Education	3
SES 641	Instructional Strategies for	3
	Elementary School Physical	
	Education	
SES 642	Instructional Strategies for	3
	Secondary School Physical	
	Education	
SES 680	Perspectives in Sport Pedagogy	3
	1 2 23	

NOTES: EDFE 555 – Student Teaching – 8 – 12 hours is required (for those using the program for an additional teaching endorsement).

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

College of Natural and Health Sciences

Degree Requirements — 42 Credits

See "Public Health M.P.H. (p. 164)".

DEGREE REQUIREMENTS

Required Ma	jor Credits — 33 hours	
SRM 617	Biostatistics and Health Data	3
	Analysis	
CH 509	Behavior Change Theories	3
CH 520	Foundations in Public Health	2
CH 530	Strategies for Community Health	3
	Promotion	
CH 535	Effective Community Health	3
	Engagement	
CH 550	Environmental Health	3
CH 610	Program Planning and Evaluation	3
CH 620	Epidemiology	3
CH 635	Policy, Advocacy, Leadership &	3
	Management in Community Health	

CH 686 CH 693	MPH Masters Project MPH Practicum	2 2
CH 520: This 6600.	s course is offered through CSPH as PUB	Н
Select one of	the following two courses:	
HRS 610	Interpretation and Evaluation of Behavioral Research	3
SRM 600	Introduction to Graduate Research	3
Required El	ective Credits — 9 hours	
UNC's Comm Colorado Sch suggestions p to focus their	merous elective courses available through nunity Health Program, as well as through nool of Public Health. The elective provided below are for students who may education in a specialization area. All ts are selected with consent of advisor.	1 the
Electives for	Specialization Area of Coordinated Sc	hool
Health:		
CH 525	Contemporary Issues in School Health	3
EDF 500	Conceptions of Schooling	3
Electives for be selected for	Specialization Area of Gerontology marom:	ay

Students must complete 150 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 satisfies the completion of the comprehensive exam.

Community Resources for Older

Psychosocial Aspects of Aging

Health Aspects of Gerontology

Social Policies of Aging

3

3

3

3

READING M.A.

GERO 560

GERO 625

GERO 635

GERO 640

College of Education and Behavioral Sciences

Degree Requirements — 33 Credits

See "Reading M.A." (p. 150).

DEGREE REQUIREMENTS

Required Major Credits – 33 hours			
EDRD 611	Language, Literacy and Cognitive	3	
	Development		
EDRD 612	Reading in the Elementary Schools	3	
EDRD 614	Literature for Children, Adolescents	3	
	and Young Adults		
EDRD 617	Evaluation and Improvements of	4	
	Literacy Teaching and Learning		
EDRD 620	Reading in the Middle and	3	

3

EDRD 642	Secondary Schools Teaching the Writing Process in	3	HRS 650	Administration Human Resources System	3
	Schools		NOTES: To	complete requirements for rehabilitation	
EDRD 645	Reading Research	3		2 semester hours of electives, approved b	by the
EDRD 670	Directing a School-Wide	3		or, must be taken.	y inc
	Reading/Literacy Program				41
EDRD 692	Clinical Practicum in Literacy	4		major courses are offered online, during	
EDDD (02	Coaching			I in a weekend workshop format in order the academic needs of adult learners	ιο
EDRD 693	Capstone Reading Seminar	1			
SRM 600 REHABIL	Introduction to Graduate Research ITATION COUNSELING M.A	. 3	national exan	Certified Rehabilitation Counselor (CRC) mination is required for successful completed Arts degree in Rehabilitation Counse	etion
College of	Natural and Health Sciences			program is fully accredited by the Counc	
Degree Rea	uirements — 60 Credits			n Education (CORE) and qualifies studer rtified Rehabilitation Counselor (CRC)	its to
•	itation Counseling M.A." (p. 166).		designation.	runea remainment counselor (circ)	
DEGREE F	REQUIREMENTS		SCHOOL	COUNSELING M.A.	
Required Ma HRS 580	ajor Credits — 48 hours Rehabilitation Principles and Case	3	College of	Education and Behavioral Scier	ices
11KS 360	Management		Degree Req	uirements — 63 Credits	
HRS 581	Vocational Evaluation and	3	This program	is accredited by the Council for	
	Assessment of People with			of Counseling and Related Educational	
HDG 505	Disabilities	2	Programs.	Č	
HRS 585	Occupational Information and Job Placement	3	_	Counseling M.A." (p. 137).	
HRS 604	Family, Cultural and Psychological	3		• • •	
	Aspects of Disability		DEGREE	REQUIREMENTS	
HRS 605	Medical Aspects of Disability	3	Required M	ajor Credits — 63 hours	
HRS 610	Interpretation and Evaluation of	3	APCE 558	Diagnosis and Treatment Planning	3
	Behavioral Research		APCE 602	Foundations of School Counseling	3
HRS 630	Human Services Counseling	3	APCE 603	Understanding Children,	3
	Theories and Techniques			Adolescents, and Their Systems	
HRS 631	Group Processes in Rehabilitation	3	APCE 605	Group Laboratory Experience	1
HRS 692	Clinical Internship in Rehabilitation	1 -	APCE 606	Theories and Practices in Group	3
		18	A D.C.E. (07	Guidance	2
HRS 694	Supervised Counseling in Human	6	APCE 607	Theories of Counseling	3
DCV 520	Services	2	APCE 608	Organization, Administration and	3
PSY 530	Life Span Developmental	3		Evaluation of School Counseling Programs	
	Psychology		APCE 612	Practicum in Individual Counseling	5
HRS 692: Ta	ke 15 credits		APCE 614	Internship in School Counseling and	1 -
HRS 692: Mi	ust be completed in an approved rehability	tation	THE CE OF I	Guidance	9
counseling se			APCE 616	Career Theory, Counseling and	3
_	dits — 12 hours			Assessment	
APCE 624	Assessment and Treatment of	3	APCE 619	Practicum II in Individual	3
AFCE 024	Substance Abuse	3		Counseling	
EDSE 541	Introduction to Visual Impairment	3	APCE 623	Understanding and Counseling	3
EDSE 341	and Deaf-Blindness	3		Diverse Populations	
EDSE 546	Principles of Orientation and	3	APCE 624	Assessment and Treatment of	3
	Mobility	J		Substance Abuse	
EDSE 548	Medical and Educational	3	APCE 657	Legal and Ethical Aspects of	3
	Implications of Visual Impairments	-		Counseling and Psychology	
GERO 555	Grant Development and	3	APCE 660	Psychological Consultation: Theory	3

Grant Development and

GERO 555

	and Practice	
APCE 661	Psychological Trauma and	3
	Intervention for Individuals,	
	Families and Communities	
APCE 665	Family Systems	3
APCE 673	Appraisal and Assessment in	3
	Counseling	
PSY 530	Life Span Developmental	3
	Psychology	
SRM 600	Introduction to Graduate Research	3

APCE 614: Take 6 hours.

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.

SCHOOL LIBRARY EDUCATION M.A.

College of Education and Behavioral Sciences

Degree Requirements — 32 Credits

See "School Library Education M.A." (p. 139).

DEGREE REQUIREMENTS

Required Major Credits — 32 hours				
EDRD 614	Literature for Children, Adolescents	3		
	and Young Adults			
EDRD 620	Reading in the Middle and	3		
	Secondary Schools			
ET 502	Instructional Design	3		
ET 503	Instructional Materials Design I	3		
ET 504	Instructional Materials Design II	3		
ET 533	Information Literacy & Reference	3		
ET 535	School Library Administration and	3		
	Leadership			
ET 538	Selection, Evaluation and Utilization	3		
	of Library Materials and Cataloging			
ET 604	Computer Graphics and Visual	3		
	Literacy			
ET 694	Elementary School Library	1		
	Internship			
ET 696	Secondary School Library Internship	1		
SRM 600	Introduction to Graduate Research	3		

NOTE: 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.

SOCIOLOGY M.A. — APPLIED EMPHASIS

College of Humanities and Social Sciences Degree Requirements — 30 Credits

See "Sociology M.A. (p. 155)"

The master's program in Sociology emphasizes the application of sociological theory and research methods to various social problems experienced by groups, communities, organizations, schools, and governmental bodies. The applied emphasis program culminates in a professional research report based on the research internship experience.

DEGREE REQUIREMENTS

Required Soci	ology Credits — 18 credits	
SOC 552	Applied Social Theory	3
SOC 590	Proseminar	
SOC 595	Special Topics in Inequality	3
SOC 660	Applied Social Research	3
SOC 691	Research Internship	1 -
		9
SOC 691: Take	e 6 credits	
Take one of the	e following (both preferred):	
SOC 562	Social Statistics	3
SOC 563	Qualitative Methods	3
Elective Credi	its — 12 credits	
Elective credits Sociology.	s may be any 500 or 600 level courses in	

Professional Research Report:

The professional research report is completed in conjunction with six SOC 691 Research Internship credit hours to be taken in 3-credit increments. In consultation with their advisor, students work with their internship site supervisor to plan and conduct a research project which culminates in a professional research report.

SOCIOLOGY M.A. — THESIS EMPHASIS

College of Humanities and Social Sciences Degree Requirements — 30 Credits

See "Sociology M.A. (p. 155)"

The master's program in Sociology emphasizes the application of sociological theory and research methods to various social problems experienced by groups, communities, organizations, schools, and governmental bodies. The thesis emphasis program culminates in a thesis research project.

DEGREE REQUIREMENTS

Required Soci	iology Credits — 18 credits	
SOC 552	Applied Social Theory	3
SOC 590	Proseminar	
SOC 595	Special Topics in Inequality	3
SOC 660	Applied Social Research	3
SOC 699	Thesis	1 -
		6
SOC 699: Tak	te 6 credits	
Take one of the	e following (both preferred):	
SOC 562	Social Statistics	3
SOC 563	Qualitative Methods	3
Elective Cred	its — 12 credits	

Elective Credits — 12 credits

Elective credits may be any 500 or 600 level courses in Sociology.

Thesis:

The thesis requires six SOC 699 credit hours to be taken in 3-credit increments. Completion of the thesis requires oral defenses of the proposal and the final draft before a faculty committee. Students who are interested in conducting a thesis project must consult their advisor and apply for this option to the Sociology graduate faculty during their second semester of study.

SPECIAL EDUCATION M.A. — DEAF AND HARD OF HEARING EMPHASIS

College of Education and Behavioral Sciences Degree Requirements — 49-61 Credits

See "Special Education M.A.".

NOTE: Students admitted to one of the Master of Arts degree programs in Special Education without teacher licensure are obliged to complete additional (separate) Professional Teacher Education Program (PTEP) admission and course requirements.

DEGREE REQUIREMENTS

Required Prof	fessional Teacher Education Program			
Courses for Initial Teacher Licensure Graduate				
Students — 12	2 credit hours			
EDF 500	Conceptions of Schooling	3		
EDFE 125	Application for Graduate Licensure			
	Admission to PTEP			
EDRD 611	Language, Literacy and Cognitive	3		
	Development			
EDSE 130	Student Teaching Application			
EDSE 507	Field-Based Experience	3		
PSY 500	Educational Psychology for	3		
	Teachers			
Required Maj	or Core Credits — 3 hours			
SRM 600	Introduction to Graduate Research	3		
Required Pro	requisites — 7 hours			
ASLS 266	Normal Speech and Language	3		
ASLS 200	Development Development	5		
ASLS 370	Basic Audiology	4		
	2,	•		
	municate, with advanced proficiency in			
_	Language and/or a sign system.			
	phasis Credits — 39 hours			
EDSE 510	Foundations of Special Education	3		
EDSE 511	Learning Environments and Cultural	3		
	Considerations			
EDSE 512	Assessment, IEP Development and	3		
	Instructional Planning			
EDSE 550	Foundations of Deaf Education	3		
EDSE 651	Collaboration: Deaf/Hard of Hearing	3		
EDSE 652	Auditory Skill Development:	3		
	Deaf/Hard of Hearing			
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:	3		
	Deaf/Hard of Hearing			
EDSE 657	Practicum: Deaf/Hard of Hearing	6 -		

NOTE: Students are required to complete a sign language proficiency test which will be administered before each student's practicum placement.

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SPECIAL EDUCATION M.A. — EARLY CHILDHOOD SPECIAL EDUCATION EMPHASIS

College of Education and Behavioral Sciences Degree Requirements — 36-48 Credits

See "Special Education M.A." (p. 147).

NOTE: Students admitted to one of the Master of Arts degree programs in Special Education without teacher licensure are obliged to complete additional (separate) Professional Teacher Education Program (PTEP) admission and course requirements.

DEGREE REQUIREMENTS

Required Professional Teacher Education Program Courses for Initial Teacher Licensure Graduate Students — 12 credit hours EDF 500 Conceptions of Schooling 3 Application for Graduate Licensure **EDFE 125** Admission to PTEP **EDRD 611** Language, Literacy and Cognitive 3 Development **EDSE 130** Student Teaching Application Field-Based Experience 3 **EDSE 507** Educational Psychology for 3 **PSY 500 Teachers** Required Major Core Credits — 3 hours **SRM 600** Introduction to Graduate Research 3 Required Emphasis Credits — 33 hours **EDSE 510** Foundations of Special Education 3 **EDSE 511** Learning Environments and Cultural 3 Considerations EDSE 512 Assessment, IEP Development and 3 **Instructional Planning** 3 **EDSE 530** Family/Professional Partnerships Assessment and Planning in Early **EDSE 531** 3 Childhood Special Education **EDSE 532** Typical and Atypical Early Child 3 Development: Application to Early Childhood Special Education **EDSE 533** Curriculum and Instruction in Early 3 Childhood Special Education **EDSE 534** Research, Policy, and Advocacy in 3 Early Childhood Special Education Practicum in EC/ESCE: Infants and 2 **EDSE 537 Toddlers** 2 **EDSE 538** Practicum in EC/ECSE: 3-5 years **EDSE 539** Practicum in EC/ECSE: 5-8 years 2 **EDSE 616** Scientifically Based Literacy 3 Interventions

SPECIAL EDUCATION M.A. — GENERALIST EMPHASIS

College of Education and Behavioral Sciences Degree Requirements — 33-45 Credits

See "Special Education M.A." (p. 147).

NOTE: Students admitted to one of the Master of Arts degree programs in Special Education without teacher licensure are obliged to complete additional (separate) Professional Teacher Education Program (PTEP) admission and course requirements.

DEGREE REQUIREMENTS

Courses for	ofessional Teacher Education Program Initial Teacher Licensure Graduate 12 credit hours	1	
EDF 500	Conceptions of Schooling	3	
EDFE 125	Application for Graduate Licensure		
	Admission to PTEP		
EDRD 611	Language, Literacy and Cognitive	3	
Development			
EDSE 130	Student Teaching Application		
EDSE 507	Field-Based Experience	3	
PSY 500	Educational Psychology for	3	
	Teachers		
Required M:	ajor Core Credits — 3 hours		
SRM 600	Introduction to Graduate Research	3	
EDSE 510	nphasis Credits — 30 hours	2	
	Foundations of Special Education	3	
EDSE 511	Learning Environments and Cultural	3	
EDGE 513	Considerations	2	
EDSE 512	Assessment, IEP Development and	3	
EDGE (12	Instructional Planning	2	
EDSE 613	Applied Assessment	3	
EDSE 614	Behavioral Interventions	3	
EDSE 616	Scientifically Based Literacy	3	
EDGE (17	Interventions	2	
EDSE 617	Mathematics and Content Area	3	
	Learning for Students with		
EDGE (10	Disabilities	2	
EDSE 618	Educating Students with Significant	3	
	Support Needs		
EDSE 619	Secondary Services	3	
EDSE 693	Practicum in Special Education	3 -	
		12	
EDSE 693: T	ake 3 hours		

SPECIAL EDUCATION M.A. — GIFTED AND TALENTED EDUCATION EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 36 Credits

See "Special Education M.A." (p. 147).

NOTE: 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.

DEGREE REQUIREMENTS

Required Major Core Credits — 3 hours				
SRM 600	Introduction to Graduate Research	3		
Emphasis Rec	quirements — 33 hours			
EDSE 682	Foundations in Gifted Education	3		
EDSE 683	The Gifted Learner: Nature and	3		
	Needs			
EDSE 684	Assessment and Identification in	3		
	Gifted Education			
EDSE 685	Curriculum & Instructional Practice	3		
	in Gifted Education			
EDSE 686	Emotional and Social Development	3		
	of the Gifted and Talented			
EDSE 687	Program Strategies and Services for	3		
	the Gifted and Talented			
EDSE 688	Communication and Leadership in	3		
	Gifted Education			
EDSE 689	Creativity in Gifted Education	3		
EDSE 690	Highest Levels of Learning for the	3		
	Gifted and Talented			
EDSE 691	Practicum in Teaching the Gifted	1 -		
	and Talented	12		

EDSE 691: 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.

SPECIAL EDUCATION M.A. — INTERVENTION SPECIALIST EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 34-36 Credits

See "Special Education M.A." (p. 147).

NOTE: 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.

DEGREE REQUIREMENTS

Required Ma	ajor Core Credits — 3 hours			
SRM 600	Introduction to Graduate Research	3		
Required En	nphasis Credits — 31-33 hours			
EDSE 670	Legal and Policy Foundations of	3		
	Special Education			
EDSE 672	Leadership in the School	3		
	Community			
EDSE 673	Research and Reflective Practice	3		
EDSE 675	Issues in Special Education	3		
	Assessment			
EDSE 676	Assessment and Interventions for	3		
	Students with Challenging Behaviors			
EDSE 677	Transition to Adulthood for Youth	3		
	with Exceptionalities			
EDSE 678	Strategies for Students with	3		
	Autism/Significant Needs			
EDSE 679	Interventions for Students with	3		
	Cultural and Linguistic Differences			
EDSE 696	Practicum in Instructional Coaching	1-9		
EED 610	Interventions in Literacy	3		
MED 645	Interventions in Mathematics	3		
EDSE 696: To	ake 1-3 credits			
SPECIAL	SPECIAL EDUCATION M.A. — VISUAL			

IMPAIRMENT EMPHASIS

College of Education and Behavioral Sciences

Degree Requirements — 45-57 Credits

See "Special Education M.A." (p. 147).

NOTE: Students admitted to one of the Master of Arts degree programs in Special Education without teacher licensure are obliged to complete additional (separate) Professional Teacher Education Program (PTEP) admission and course requirements.

DEGREE REQUIREMENTS

Required Professional Teacher Education Program Courses for Initial Teacher Licensure Graduate Students — 12 credit hours

Students — 12	a credit nours	
EDF 500	Conceptions of Schooling	3
EDFE 125	Application for Graduate Licensure	
	Admission to PTEP	
EDRD 611	Language, Literacy and Cognitive	3
	Development	
EDSE 130	Student Teaching Application	
EDSE 507	Field-Based Experience	3
PSY 500	Educational Psychology for	3
	Teachers	

Required Ma SRM 600	ajor Core Credits — 3 hours Introduction to Graduate Research	3	ASLS 682	Language Disorders in Early Childhood and Preschool	3
		3	ASLS 684	Disorders of Language & Literacy:	3
Required En EDSE 510	nphasis Credits — 42 hours Foundations of Special Education	3	11025 001	School-Age and Adolescent	3
EDSE 510 EDSE 511	Learning Environments and Cultural	3	Select one of	the following courses (2-3 hours)	
EDGE 311	Considerations	3	ASLS 658	Assistive Technology for	2
EDSE 512	Assessment, IEP Development and	3		Communication Disorders	
	Instructional Planning		ASL 101	American Sign Language I	3
EDSE 541	Introduction to Visual Impairment	3	Research Co	ourses (4 hours)	
EDSE 543	and Deaf-Blindness Braille Codes and Formats	3	ASLS 515	Foundations of Research and	1
EDSE 545 EDSE 546	Principles of Orientation and	3	A CT C (15	Writing	
22523.0	Mobility	5	ASLS 615	Research in Audiology and Speech- Langauge Pathology	1 - 4
EDSE 548	Medical and Educational	3	ASLS 686	Capstone in Speech-Language	2
	Implications of Visual Impairments		11828 000	Pathology	_
EDSE 549	Assessment of Students with Visual Impairments	3	ASI	LS 615: Take 1 hour	
EDSE 640	Methods of Teaching Students with	3		cticum — 14-17 hours	
EDSE 010	Visual Impairment	3	ASLS 474	Clinical Practicum in Audiology	1
EDSE 642	Advanced Seminar in Education of	3	ASLS 567	Diagnostic Procedures: Introduction	1 -
	Students with Visual Disabilities				2
EDSE 644		6 -	ASLS 568	Diagnostic Procedures: Intermediate	1 -
EDSE 645	with Visual Impairments K-12 Advanced Braille Codes and	12	A CT C 560	D' (' D 1 41 1	2
EDSE 043	Formats	3	ASLS 569	Diagnostic Procedures: Advanced	1 - 2
Saa "Orianta			ASLS 580	Practicum in Rehabilitative	1 -
128)"	tion and Mobility (O&M) Endorsement (p.			Audiology	2
120)			ASLS 583	Clinical Practicum: Introduction	2
SPEECH-I	LANGUAGE PATHOLOGY M.A		ASLS 585	Clinical Practicum in Speech-	1 -
Callana	N-4 1 11 - 141 C-1		ASLS 586	Language Pathology: Intermediate Clinical Practicum in Speech-	2 2
_	Natural and Health Sciences		ASLS 500	Language Pathology:	2
Degree Requ	uirements — 66-82 Credits			Intermediate/Advanced	
See "Audiolo	gy and Speech-Language Sciences" (p. 163).	ASLS 588	Clinical Practicum in Speech-	2
DEGREE F	REQUIREMENTS			Language Pathology: Advanced	
			ASLS 474: if	Audiology hours are needed	
HRS 610	the following research courses (3 hours) Interpretation and Evaluation of	3	ASLS 567: T	ake 2 hours	
11115 010	Behavioral Research	5	ASLS 568: T	ake 2 hours	
SRM 600	Introduction to Graduate Research	3	ASLS 569: T		
	e following courses (31 hours)				
ASLS 516	Professional Issues in SLP	2	ASLS 580: 11	Aural Rehabilitation hours are needed	
ASLS 555	Neuroanatomy and Neurophysiology of Communication	3	ASLS 585: T	Take 2 hours	
ASLS 563	Voice and Resonance Disorders	3	Internships -	— 12-24 hours	
ASLS 571	Speech and Hearing Science	4	Must be arrai	nged by internship coordinator.	
ASLS 655	Acquired Disorders of Language &	3	ASLS 592	Internship in Public Schools	2 -
	Cognition			•	15
ASLS 656	Feeding and Swallowing Disorders:	2	ASLS 692	Internship in Medical Settings	2 -
ASLS 657	Lifespan Motor Speech Disorders: Lifespan	2			16
ASLS 657 ASLS 661	Articulation and Phonological	2		udents who do not pursue a thesis must	
11020 001	Disorders in Children			h internships: ASLS 592, Internship in Pu	
ASLS 664	Fluency Disorders	3	Schools and	ASLS 692, Internship in Medical Settings	s, for

7-12 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 (ASHA) and for licensure from the Colorado Department of Education. Eight weeks of internship in public schools are required to be eligible 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.

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. — EXERCISE SCIENCE EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 33 Credits

See "Sport and Exercise Science M.S." (p. 171).

1. BIOMECHANICS CONCENTRATION — 33 HOURS

Required C	Required Credits (9 hours)			
SES 602	Introduction to Research in Sport	3		
	and Exercise Science			
SES 625	Laboratory Techniques in Exercise	3		
	Science Research			
SRM 602	Statistical Methods I	3		
Concentrati	on area requirements (15 hours)			
SES 550	Neural Aspects of Kinesiology	3		
SES 619	Advanced Biomechanics	3		
SES 620	Neuromuscular Structure and	3		
	Function			
SES 629	Concepts in Kinesiology	3		
SES 629: Bio	omechanics of Locomotion			
Select two o	f the following courses:			
SES 624	Advanced Developmental	3		
	Kinesiology			
SES 626	Metabolism	3		
SES 627	Muscle Physiology	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	1 -
	Exercise Science	6

2. EXERCISE PHYSIOLOGY CONCENTRATION — 33 HOURS

Required Cr	edits (9 hours)	
SES 602	Introduction to Research in Sport	3
	and Exercise Science	
SES 625	Laboratory Techniques in Exercise	3
	Science Research	
SRM 602	Statistical Methods I	3
Concentratio	on area requirements (15 hours)	
SES 505	Exercise Programming for Cancer	3
	Patients	
	or	
SES 510	Electrocardiography	3
SES 626	Metabolism	3
SES 627	Muscle Physiology	3
SES 632	Cardiovascular Physiology	3
Select one of	the following courses:	
SES 550	Neural Aspects of Kinesiology	3
SES 619	Advanced Biomechanics	3
SES 620	Neuromuscular Structure and	3
	Function	
SES 624	Advanced Developmental	3
	Kinesiology	

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/Comprehensive Exams option. Courses used as a part of the concentration area requirements may not also be used as electives.

The following courses are recommended electives:

i ne ionowing	courses are recommended electives:	
SES 505	Exercise Programming for Cancer	3
	Patients	
SES 510	Electrocardiography	3
SES 550	Neural Aspects of Kinesiology	3
SES 619	Advanced Biomechanics	3
SES 620	Neuromuscular Structure and	3
	Function	
SES 624	Advanced Developmental	3
	Kinesiology	
SES 692	Graduate Internship in Sport and	1 -
	Exercise Science	6
BIO 550	Cell Physiology	3
BIO 552	Mammalian Physiology I	3

BIO 553	Mammalian Physiology II	3
CHEM 581	General Biochemistry I	4
CHEM 582	General Biochemistry II	4
FND 555	Nutrition for Fitness and Athletic	3
	Performance	

3. SOCIAL PSYCHOLOGY OF SPORT AND PHYSICAL ACTIVITY CONCENTRATION — 33 HOURS

Required Credits (9 hours)			
SES 602	Introduction to Research in Sport	3	
	and Exercise Science		
SES 625	Laboratory Techniques in Exercise	3	
	Science Research		
SRM 602	Statistical Methods I	3	
Concentration	area requirements (15 hours)		
SES 624	Advanced Developmental	3	
	Kinesiology		
SES 629	Concepts in Kinesiology	3	
SES 635	Exercise and Sports Psychology	3	
SES 665	Advanced Sociological Kinesiology	3	
SES 629: Moti	vation		
Select one of t	he following courses:		
SES 619	Advanced Biomechanics	3	
SES 620	Neuromuscular Structure and	3	
	Function		
SES 626	Metabolism	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:

The following	courses are recommended electrics.	
CH 530	Strategies for Community Health	3
	Promotion	
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	3
	Dynamics	
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 in the Biomechanics and Social Psychology of Sport and Physical Activity Concentrations. Students must see an advisor in the Biomechanics or Social Psychology of Sport and Physical Activity concentrations to develop a program matrix and research paper topic.

Students in the Exercise Physiology Concentration must pass a specified national certification exam and provide

proof of successful completion to satisfy the comprehensive examination requirement. The specified certification must be one of the following:

- American College of Sports Medicine's Health Fitness Specialist
- Clinical Exercise Specialist
- Registered Clinical Exercise Physiologist
- Cancer Exercise Trainer
- National Strength and Conditioning Association's Strength and Conditioning Specialist certification

The comprehensive exams (certification) must be completed during the final semester.

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 AND EXERCISE SCIENCE M.S. — SPORT ADMINISTRATION EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Sport and Exercise Science M.S." (p. 171).

DEGREE REQUIREMENTS

ohasis Credits — 21 hours	
Issues and Ethics in Sport	3
Management	
Program Management	3
Sport Promotion and Marketing	3
Introduction to Research in Sport	3
and Exercise Science	
Management of Sports Facilities and	3
Equipment	
Sport Public Relations and	3
Information Systems	
Legal Aspects of Sport	3
	Management Program Management Sport Promotion and Marketing Introduction to Research in Sport and Exercise Science Management of Sports Facilities and Equipment Sport Public Relations and Information Systems

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 3
Educational Technology in PK-12
Education

ET 504	Instructional Materials Design II	3
SES 650	Financial Management for Sport	3
	Organizations	
SES 670	Sport and Higher Education	3
SES 678	Event Development and	3
	Management	
SES 692	Graduate Internship in Sport and	1 -
	Exercise Science	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: 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 AND EXERCISE SCIENCE M.S. — SPORT PEDAGOGY EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 33 Credits

See "Sport and Exercise Science M.S." (p. 171).

DEGREE REQUIREMENTS

Required Emphasis Credits — 27 hours		
SES 602	Introduction to Research in Sport	3
	and Exercise Science	
SES 603	Professional Development Seminar	3
SES 612	Assessment in Sport Pedagogy	3
SES 614	Analysis of Teaching in Physical	3
	Education	
SES 628	Adventure Education	3
SES 640	Curriculum in Physical Education	3
SES 643	Instructional Strategies for K-12	3
	Physical Education	
SES 645	Supervision in K-12 Physical	3
	Education	
SES 680	Perspectives in Sport Pedagogy	3

Elective Credits — 6 hours

Select one of the following options:

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).

Endorsement: By completing the Sport Pedagogy Emphasis 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.)

SPORTS COACHING M.A.

College of Natural and Health Sciences

Degree Requirements — 30 Credits

See "Sports Coaching M.A." (p. 172).

DEGREE REQUIREMENTS

Required Co	ourses	
SES 582	Psychology for Sports Coaches	3
SES 583	International Perspectives of Sports	3
	Coaching	
SES 584	Sport Administration for Sports	3
	Coaches	
SES 585	Introduction to Sports Injuries for	2
	Coaches	
SES 586	Training and Conditioning Principles	3
	for Sports Coaches	
SES 587	Sports Coaching Principles and	3
	Perspectives	
SES 588	Evaluation of Coaching using	3
	Technology	
SES 589	Bridging Theory and Practice in	3
	Sports Coaching	
SES 604	Teacher and Coach Action Research	3
SES 692	Graduate Internship in Sport and	1 -
	Exercise Science	6

NOTE: There are no endorsements or licenses associated with this degree.

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 coaching. Public exhibition of the portfolio before an audience of faculty and students is required.

TEACHING AMERICAN SIGN LANGUAGE M.A.

College of Education and Behavioral Sciences Degree Requirements — 30 credits

See "Teaching American Sign Language M.A. (p. 151)"

DEGREE REQUIREMENTS

Required Courses		
SRM 600	Introduction to Graduate Research	3
TASL 501	First and Second Language	3
	Acquisition in ASL	
TASL 502	ASL Teaching Methods	3
TASL 503	ASL Assessment and Testing	3
TASL 504	ASL Curriculum Development and	3
	Design	
TASL 505	Teaching Deaf Community, Culture,	3
	and ASL Literature	
TASL 506	Contemporary Professional Issues in	3
	Teaching ASL	
TASL 507	ASL Research Methods	3
TASL 593	Practicum for ASL Teaching I	3
TASL 594	Practicum for ASL Teaching II	3

NOTE: 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 the course requirements listed under Professional Teacher Education prior to TASL 593 and TASL 594.

Professional Teacher Education — 12 hours

r rotessionar i	eacher Education — 12 hours	
EDF 500	Conceptions of Schooling	3
EDFE 125	Application for Graduate Licensure	
	Admission to PTEP	
EDRD 523	Reading and Writing in the Content	3
	Areas	
EDSE 509	Strategies for Students with	3
	Exceptionalities	
PSY 500	Educational Psychology for	3
	Teachers	

All students are required to demonstrate proficiency in ASL prior to acceptance into the program and complete a ASL proficiency test prior to their first practicum course, TASL 593. In addition, all students are expected to complete two teaching practica experiences, a portfolio,

and a research project as part of their graduation requirements.

THEATRE EDUCATION M.A. - THEATRE EDUCATOR INTENSIVE

College of Performing and Visual Arts

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.

DEGREE REQUIREMENTS

_		
Required Cou	ırses — 33 credits	
THED 530	Theatrical Production I	3
THED 531	Theatrical Production II	3
THED 540	Directing/Acting: Realism and Non-	3
	Realism/Period Styles	
THED 541	Directing/Acting: Musical Theatre	3
THED 560	Innovative Strategies in Drama	3
	Education	
THED 561	Voice and Movement	3
THED 600	Dramaturgy/Research Methodology	3
THED 670	Advocacy, History and Philosophy	3
	of Theatre Education	
THED 680	Theatre Education Curriculum	3
	Development	
THED 690	Thesis I	3
	or	
THED 696	Action Research I	3
THED 699	Thesis II	3
	or	
THED 697	Action Research II	3
Theatre Elect	rives — 3 credits	
	Approved 500 or 600 Level Theatre	3
	Course	

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 discuss the graduate review with the academic advisor and the Coordinator of the M.A. in Theatre Education: Theatre Educator Intensive program. The student will assume responsibility for scheduling graduate reviews. Two unsuccessful graduate reviews will be considered grounds for termination of the program. In conjunction with THED

690 or THED 696 and THED 699 or THED 697, the student will prepare and submit a written thesis or action research 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 or action research project 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.

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

EDUCATIONAL LEADERSHIP ED.S.

College of Education and Behavioral Sciences

Degree Requirements — 30 Credits

See "Educational Leadership Ed.S." (p. 141).

DEGREE REQUIREMENTS

Research — 3	hours	
Select one of the	he 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 I	Leadership Courses — 15 hours	
ELPS or HES	A Prefix Courses (15 hours)	
Field-Based L	earning — 3 hours	
Select from an	nong the following courses:	
ELPS 606	Internship in Educational Leadership	1 - 9
ELPS 695	Practicum in Educational Leadership	1 - 3
HESA 670	Internship in Higher Education and	6
	Student Affairs Leadership	
HESA 675	Field Experience in Student Affairs	1 -
		3
Electives — 9	hours	
	Courses Fulfilling Professional	9
	Needs and Interests	

NOTE: Satisfactory performance on a concluding activity approved by division faculty, in accordance with Graduate School policy, must be demonstrated.

EDUCATIONAL LEADERSHIP AND SPECIAL EDUCATION ADMINISTRATION ED.S.

College of Education and Behavioral Sciences Degree Requirements — 39 Credits

See "Educational Leadership and Special Education Administration Ed.S." (p. 141) under Educational Leadership and Policy Studies, or in the School of Special Education (p. 148)

DEGREE REQUIREMENTS

	-			
Research —	- 3 hours			
SRM 670	Evaluation: Models and Designs	3		
Educational Leadership Courses — 21 hours				
ELPS 601	Leadership Development Through	3		
EL DG (02	Inquiry	2		
ELPS 603	Shaping Organizations: Management and Leadership in Education	3		
ELPS 604	Understanding People: Professional	3		
ELI 5 004	Development and Educational	3		
	Leadership			
ELPS 650	School Finance and Budgeting	3		
ELPS 654	Instructional Leadership and	3		
ELDG (()	Supervision	2		
ELPS 660	Law and the Administrator	3		
ELPS 670	The Principalship: Leadership at the School Site Level	3		
-	ication Administration Courses — 9 hou			
EDSE 680	Administration and Supervision of Special Education	3		
EDSE 681	Administrative Planning and	3		
	Program Evaluation in Special			
EDGE 710	Education	2		
EDSE 718	Advanced Seminar in Education of	3		
	Students with Hearing and/or Visual Handicaps			
Field-based	Learning — 6 hours			
ELPS 606	Internship in Educational Leadership	1 - 9		
EDSE 697	Externship in Special Education:	1 -		
	Administration	12		

NOTE: Satisfactory performance on a concluding activity demonstrating attainment of program outcomes and approved by faculty, in accordance with Graduate School policy, must be demonstrated.

SCHOOL PSYCHOLOGY ED.S.

College of Education and Behavioral Sciences Degree Requirements — 70 Credits

See "School Psychology Ed.S." (p. 146).

The Ed.S program is approved by the National Association of School Psychologists.

See "School Psychology Admission Requirements" (p. 145).

DEGREE REQUIREMENTS

Required Major Credits — 70 credits

1 3				
Psychological	and Educational Foundations (39 hou	ırs)		
APCE 607	Theories of Counseling	3		
APCE 625	Applied Developmental Science	3		
APCE 638	Human Behavior Analysis	3		
APCE 640	School-Based Psychological	3		
	Consultation			
APCE 655	Social and Community Psychology	3		
APCE 667	Crisis Intervention in the Schools	3 2 3		
APCE 670	Principles of Psychometrics and	3		
	Assessment			
APCE 737	Single-Case Research Methods	2 4		
APCE 747	Psychological Aspects of Academic	4		
	Programming and Intervention			
APCE 757	Intervention for Severe and Low	3		
	Incidence Disabilities			
APCE 758	Advanced Psychopathology	3		
APCE 763	Legal and Professional Foundations	4		
	of School Psychology			
APCE 781	Evaluation of Psychological Services	3		
Applied Practice in School Psychology (22 hours)				
APCE 618	Practicum in Child, Adolescent, and	5		
	Family Interventions			
APCE 644	Assessment I: Cognitive and	5		
	Academic Functioning			
APCE 645	Social and Behavioral Assessment in	3		
	the Schools			
APCE 648	Assessment III: Early Childhood	3		
APCE 779	Practicum in School Psychology	3		
ADCE 770. M.		لمسما		
	ust be taken twice, over consecutive fall	and		
spring semeste				
	Understanding (3 hours)			
APCE 623	Understanding and Counseling	3		
	Diverse Populations			
Supervised Fi	eld Work (6 hours)			
APCE 789	Internship in School Psychology	1 -		
	1 , 2	8		

APCE 789: A minimum of 6 credits must be taken, 2 credits across three semesters.

A written comprehensive examination is a program requirement, and it is satisfied by achieving a score of 165 or higher on the National School Psychology Exam.

Doctoral Degrees

APPLIED STATISTICS AND RESEARCH METHODS PH.D.

College of Education and Behavioral Sciences Degree Requirements — 64 Credits

See "Applied Statistics and Research Methods Ph.D." (p. 138).

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.

DEGREE REQUIREMENTS

Required Major Credits — 6 hours			
SRM 689	Internship in Applied Statistics	1 -	
		10	
	or		
SRM 694	Practicum	1 -	
		9	
SRM 763	Apprenticeship	1 -	
		3	
SRM 689, SR	M 694, SRM 763: Take 3		
Complete one	of the following Concentration Areas:		
Applied Stati	stics Concentration — 26 hours		
Applied Statis SRM 606	stics Concentration — 26 hours Multiple Linear Regression Analysis	3	
		3	
SRM 606	Multiple Linear Regression Analysis	3	
SRM 606 SRM 607	Multiple Linear Regression Analysis Non-Parametric Statistics	3 3 3	
SRM 606 SRM 607 SRM 609	Multiple Linear Regression Analysis Non-Parametric Statistics Sampling Methods	3	
SRM 606 SRM 607 SRM 609 SRM 635	Multiple Linear Regression Analysis Non-Parametric Statistics Sampling Methods Categorical Data Analysis	3 3 3 3 3	
SRM 606 SRM 607 SRM 609 SRM 635 SRM 636 SRM 637 SRM 645	Multiple Linear Regression Analysis Non-Parametric Statistics Sampling Methods Categorical Data Analysis Applied Bayesian Statistics	3 3 3 3 3	
SRM 606 SRM 607 SRM 609 SRM 635 SRM 636 SRM 637	Multiple Linear Regression Analysis Non-Parametric Statistics Sampling Methods Categorical Data Analysis Applied Bayesian Statistics Applied Time Series Analysis	3 3 3 3 3	

1

2 -

15

2 -

16

Research Methods Concentration — 26 hours SRM 521 Statistical Computing with SPSS 1 AUDIOLOGY AU.D. SRM 625 Applied Multiple Regression 3 **College of Natural and Health Sciences** Analysis SRM 627 Survey Research Methods 3 Degree Requirements — 117 Credits 3 SRM 670 Evaluation: Models and Designs See "Audiology Au.D." (p. 164). SRM 680 Introduction to Oualitative Research 3 SRM 705 Advanced Issues in Research 3 **DEGREE REQUIREMENTS** Methods **Elective Credits** 10 Core Requirements — 54 hours ASLS 555 Neuroanatomy and Neurophysiology 3 **Cognate Option** of Communication A student in the research methods concentration may elect ASLS 570 Rehabilitative Audiology 2 to complete 15 semester hours within a cognate area in lieu 4 **ASLS 571** Speech and Hearing Science of the elective credits requirement. These hours must be at 3 **ASLS 582 Educational Audiology** the graduate level and approved by the student's advisor. 3 **ASLS 668** Cochlear Implants The intent of the cognate is to equip the student in a 3 Auditory Physiology **ASLS 711** substantive discipline within which the dissertation may be 3 **ASLS 712** Amplification I written. 2 **ASLS 721** Psychoacoustics Approved electives may be substituted for required 3 Amplification II **ASLS 723** courses completed during a Master's program. **ASLS 724** Differential Diagnosis of Auditory 3 Research Core — 16 hours Disorders Statistical Methods III 3 SRM 610 2 **ASLS 731 Auditory Processing Disorders** SRM 611 Advanced Statistical Data Analysis 3 **ASLS 741** Hearing Loss Prevention 3 SRM 620 Advanced Statistical Programming 3 **ASLS 742** Advanced Diagnosis of Auditory 2 SRM 650 Research and Statistics Colloquium 1 Disorders SRM 700 Advanced Research Methods 3 3 **ASLS 743** Medical Aspects of Audiology **ASLS 744** Vestibular Assessment and 2 SRM 650: Take 4 hours (1 credit/term) Management Research Proposal/Dissertation — 16 hours 2 **ASLS 751** Otopharmacology SRM 797 Doctoral Proposal Research 1 -2 **ASLS 772 Audiology Practice Management** 4 2 Professional Issues in Audiology **ASLS 774** SRM 799 **Doctoral Dissertation** 1 -**ASLS 775** Advanced Electro-diagnosis 4 12 ASLS 782 Pediatric Audiology 3 SRM 797: Take 4 hours **Teaching Requirements (1 hours)** ASLS 720 Supervised Teaching in Audiology SRM 799: Take 12 hours Clinical Practicum (9 hours) **Research Tools** ASLS 574 Clinical Practicum in Audiology 1 All Ph.D. students must demonstrate competency in two **ASLS 580** Practicum in Rehabilitative 1 acceptable research tools. Audiology 2 **Deficiencies** ASLS 594 Practicum and Advanced Topics in 1 -Students who enter the doctoral program without a Audiology working knowledge of SAS programming must take SRM ASLS 580: 2 credits required 520 early in their doctoral program. ASLS 594: 6 credits required

ASLS 592: Eight weeks 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.

Internship in Public Schools

Internship in Medical Settings

Internships (9 hours)

ASLS 592

ASLS 692

ASLS 592: 4 c	credits required		PSY 575	Educational Assessment	3
ASLS 692: 5 d	eredits required		PSY 654	Seminar in College Teaching	3
	•		PSY 674	Measurement I: Educational Testing	3
Externship (2 ASLS 792	Externship in Audiology	3 -	PSY 675	Measurement II: Advanced	3
ASLS 172	Externship in Audiology	12	PSY 681	Techniques	2
			SCED 555	Cognition and Instruction I Science Education for Adults and	3
	expected to complete ASLS 792, Clinical		SCED 333	Communities	3
•	three semesters of nine credits each.		SCED 678	Science Education Seminar	1 -
Elective Cour	rses (2 hours)		5025 0,0	Serence Bulletine Seminar	2
Students will o	choose at least 2 credits from courses		SCED 680	Science Curricula in	3
	ne program advisor. Electives will be cho			Secondary/College Settings	
	specialized career needs. For example, s		Content Elec	ctive Credits — 18-19 hours	
	elect to become more proficient in Amer		Rasic Electiv	ves — 8 hours-maximum	
	e; others who desire a medical emphasis dditional courses in genetics or	may	BIO 525	Molecular Genetics	3
pharmacology			BIO 530	Plant Systematics	4
-			BIO 533	General Parasitology	4
	rses (15 hours) Foundations of Research and	1	BIO 534	Mammalogy	4
ASLS 515	Writing	1	BIO 535	Survey of Fishes, Amphibians and	4
ASLS 615	Research in Audiology and Speech-	1 -		Reptiles	
ASLS 013	Langauge Pathology	4	BIO 537	Morphogenesis of Algae and Fungi	4
ASLS 715	Applied Research in Audiology	1 -	BIO 538	Ornithology	4
11020 /10	rippined research in riddiology	4	BIO 540	Anatomy and Morphogenesis of	4
SRM 602	Statistical Methods I	3	DIO 540	Plants	•
SRM 603	Statistical Methods II	3	BIO 542	Molecular and Cellular Laboratory	2
ASI S 615 and	ASLS 715: 4 credits required		BIO 550 BIO 554	Cell Physiology General Plant Physiology	3 4
ASLS 013 and	ASES 713. 4 cicuits required		BIO 562	Conservation Biology	3
RIOI OGIC	CAL EDUCATION PH.D.		BIO 566	Animal Physiological Ecology	3
DIOLOGIC	AL EDUCATION III.D.		BIO 567	Animal Physiological Ecology	1
College of I	Natural and Health Sciences			Laboratory	
Degree Reau	irements — 64 Credits		BIO 576	Pharmacology	3
	al Education Ph.D." (p. 161).		NOTE: All	of the above courses are double-numbered.	
_	• /		Advanced E	lectives (10-11 hours — minimum)	
	route to the Ph.D.		BIO 512	TA Development Seminar	1
	tted to the Ph.D. program in Biological		BIO 521	Advanced Genetics	3
	y complete a thesis master's degree in ate to completion of the doctoral degree.	٨	BIO 524	Genomics	3
	imultaneous master's degree in a discipli		BIO 526	Population Genetics	3
	logy will not be accepted. The student, i		BIO 527	Bioinformatics	3
	with the student's advisor, will develop a		BIO 528	Developmental Biology	3
	udy that includes clearly distinct master'		BIO 529	Developmental Biology Laboratory	1
	equirements. The student will be require		BIO 541	Advanced Human Anatomy	3
	requirements of both the master's and th		BIO 544	Comparative Vertebrate Adaptations	4
	es. The student must graduate from the		BIO 545	Pathogenic Microbiology	3
	e program a minimum of one semester p	rior	BIO 546	Pathogenic Microbiology Laboratory	1
to conferring o	of the doctoral degree. The maximum tin	ne	BIO 547	Immunology and Disease	4
allowed for co	mpletion of the doctorate is eight calend	ar	BIO 548	Virology	3
years beginnin	g with the students' first semester of		BIO 549	Virology Laboratory	1
	er admission has been granted.		BIO 552	Mammalian Physiology I	3
DECDEE D	EOHIDEMENTS		BIO 553	Mammalian Physiology II	3
DEGREE R	EQUIREMENTS		BIO 555	Reproductive and Developmental	3
	Elective Credits — 6-7 hours			Biology	
ET 502	Instructional Design	3	BIO 556	Current Topics in Biomedical	2
PSY 540	Theories and Principles of Learning	3		Research	

BIO 557 BIO 558	Mammalian Physiology I Laboratory Mammalian Physiology II	1 1	
210 000	Laboratory	-	
BIO 560	Behavioral Ecology	3	
BIO 561	Plant Ecology	3	
BIO 563	Animal Communication	3	
BIO 564	Plant Ecology Lab	1	
BIO 565	Current Topics in Ecology and	2	
	Evolutionary Research		
BIO 568	Disturbance Ecology	3	
BIO 569	Conceptual Issues in Evolution	2 3 3 3 3 3	
BIO 570	Coevolution in Ecological Systems	3	
BIO 572	Species and Speciation	3	
BIO 580	Mammalian Endocrinology	3	
BIO 581	Neurobiology	3	
BIO 582	Cancer Biology		
BIO 591	Biology Roundtable	1	
BIO 591: Lim			
	re — 23-24 hours		
BIO 622	Directed Studies	1 -	
DIO (01	a p. 1 . 1a .	4	
BIO 691	Seminar in Biological Sciences	. 1	
BIO 792	Doctoral Supervised Teaching	1 -	
CDM 502	Amuliad Statistics	6 4	
SRM 502 SRM 700	Applied Statistics Advanced Research Methods	3	
SKW 700	Advanced Research Methods	3	
BIO 622: Tak			
BIO 691: Tak	e 4 hours		
BIO 792: Tak	e 4 hours		
Select one of	the following two courses:		
BIO 594	Foundations of Biological Research	2	
SCED 694	Science Education Research	3	
Research Pro	pposal/Dissertation — 16 hours		
BIO 797	Doctoral Proposal Research	1 -	
	•	4	
BIO 799	Doctoral Dissertation	1 -	
		12	
BIO 797: Take 4 credits			
BIO 799: Take 12 credits			
Research Tools			

All Ph.D. students must demonstrate competency in two acceptable research tools.

NOTES: 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.

College of Natural and Health Sciences

Degree Requirements — 64-94 Credits

See "Chemical Education Ph.D." (p. 162).

Select either the B.S. to Ph.D. or the master's to Ph.D. options.

The student must have completed requirements of an ACS-certified baccalaureate degree in chemistry or must remove any deficiencies. If not previously taken, physical chemistry (CHEM 551, CHEM 552, CHEM 453, CHEM 454) and biochemistry (CHEM 581) may be taken to partially meet this requirement.

Research Tools

Students must demonstrate research skills in areas pertinent to the dissertation research topic. The Students' competence in these skills will be assessed by the Students' oral exam committee and/or dissertation committee members.

The skills may include statistical analysis, 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 earth sciences.

Qualifier Examinations. Qualifier examinations are scheduled during the week preceding the beginning of classes each semester. Pre-Master's students 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. If a qualifier exam is failed, the student is required to attend the appropriate undergraduate course(s) in that area. Any cost associated with enrollment in undergraduate courses is the responsibility of the graduate student.

Comprehensive Examinations. A written and oral comprehensive examination must be passed in one subdiscipline of chemistry (a minimum of two graduate-level courses are required in the subdiscipline prior to taking the exam). The standardized ACS exam in general chemistry I and II must be taken and passed (with a minimum average of 90 percent). A written and oral comprehensive examination must be passed in chemical education.

NOTE: 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 academic and research advisors.

B.S. TO PH.D. REQUIREMENTS — 94 CREDITS

Chemistry Component — minimum 18 hours

Each student must complete a minimum of 18 hours in this category. Each student 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.

Electives — 18 hours **CHEM 522** Advanced Analytical Chemistry 3 Chemical Spectroscopy 3 **CHEM 523** Organic Synthesis and **CHEM 533** 3 Stereochemistry **CHEM 534** Theory and Mechanisms of Organic 3 Reactions Solid State Chemistry 3 **CHEM 541 CHEM 543** Organometallic Chemistry 3 **CHEM 551** Physical Chemistry I CHEM 552 Physical Chemistry II 4 **CHEM 560 Environmental Chemistry** 2 **CHEM 581** General Biochemistry I 4 **CHEM 582** General Biochemistry II 4 **CHEM 587** Toxicology 3 Advanced Topics in Chemistry **CHEM 590** 3 **CHEM 622 Directed Studies** 3 **CHEM 693** Chemical Research 1 -

CHEM 551, CHEM 552, CHEM 581, CHEM 582: These courses may not be taken if equivalent courses were previously taken at the undergraduate level.

Pedagogy Component — minimum 13 hours

Each student must complete a minimum of 13 hours in this category.

Required — 10				
CHEM 682	Problems in Teaching Chemistry	3		
CHEM 755	Supervised Practicum in College	1 -		
	Teaching	4		
SCED 694	Science Education Research	3		

Electives —3

In conjunction with their advisor, candidates can select appropriate graduate-level courses in supporting areas such as:

> Statistics and Research Methods (SRM) Psychology (PSY) Educational Technology (ET) Science Education (SCED)

Research Component — minimum 63 hours

Each student must complete the 63 required hours in this category. Research competence must be demonstrated in both chemistry and chemical education at the level of a chemistry master's thesis and a chemical education doctoral dissertation. The results of the dissertation project (or part of the project) must be submitted, after research advisor approval, and accepted for publication to a peer-reviewed, professional journal prior to graduation.

Research Coursework — 16-19

Required Seminars — 4

CHEM 600 Seminar in Chemistry

CHEM 600: one seminar each on chemical literature, chemical thesis or thesis equivalent research, chemical education literature, and chemical education dissertation research.

1

12

Methodology (12-15)

Required 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

Electives

In conjunction with their advisor, candidates can select appropriate graduate-level courses in supporting areas such as:

Statistics and Research Methods (SRM) Psychology (PSY) Educational Technology (ET) Science Education (SCED)

Required Research — Minimum of 44 hours

Masters Research — 10

CHEM 693	Chemical Research	1 -
		9
CHEM 695	Thesis Proposal	1
CHEM 699	Thesis	1 -
		6
CHEM 602.	Falsa 2 aradita	

CHEM 693: Take 3 credits

CHEM 699: Take 6 credits

Doctoral Research — Minimum of 34 hours

CHEM 793	Doctoral Research Practicum-	1 -
	Chemistry	9
CHEM 797	Doctoral Research Proposal-	1 -
	Chemistry	4
CHEM 799	Doctoral Dissertation-Chemistry	1 -

CHEM 793: Take a minimum of 18

CHEM 797: Take 4 CHEM 799: Take 12

MASTER'S TO PH.D. REQUIREMENTS — 64 HOURS

Pedagogy Component — minimum 13 hours

Each student must complete a minimum of 13 hours in this category.

Required — 10

CHEM 682	Problems in Teaching Chemistry	3
CHEM 755	Supervised Practicum in College	1 -
	Teaching	4
SCED 694	Science Education Research	3

Electives — 3

In conjunction with their advisor, candidates can select appropriate graduate-level courses in supporting areas such as:

Statistics and Research Methods (SRM) Psychology (PSY) Educational Technology (ET) Science Education (SCED)

Research Component — minimum 51 hours

Each student must complete the 51 required hours in this category. Research competence must be demonstrated in both chemistry and chemical education at the level of a chemistry master's thesis and a chemical education doctoral dissertation. A prior master's thesis in chemistry may be used, with approval of the Graduate Committee, as evidence of competency in chemistry research. The results of the dissertation project (or part of the project) must be submitted, after research advisor approval, and accepted for publication to a peer-reviewed, professional journal prior to graduation.

Research Coursework — 14-17

Required Seminars — 2

CHEM 600	Seminar in Chemistry	1
CIILIVI 000	Seminar in Chemistry	1

CHEM 600: one seminar each on chemical education literature, and chemical education dissertation research

Methodology — 12-15

Required 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

Electives

In conjunction with their advisor, candidates can select appropriate graduate-level courses in supporting areas such as:

> Statistics and Research Methods (SRM) Psychology (PSY) Educational Technology (ET) Science Education (SCED)

Required Doctoral Research — Minimum of 34 hours

CHEM 793	Doctoral Research Practicum-	1 -
	Chemistry	9
CHEM 797	Doctoral Research Proposal-	1 -
	Chemistry	4
CHEM 799	Doctoral Dissertation-Chemistry	1 -
		12
CHEM 793: T	Take a minimum of 18	

COUNSELING PSYCHOLOGY PH.D.

College of Education and Behavioral Sciences Degree Requirements 121 Credits*

Degree Requirements — 121 Credits*

CHEM 797: Take 4

CHEM 799: Take 12

SRM 680

SRM 700

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/.

REQUIRED MAJOR CREDITS

Introductory Core Required — 20 hours APCE 558 Diagnosis and Treatment Planning 3 APCE 612 Practicum in Individual Counseling 5 APCE 660 Psychological Consultation: Theory 3 and Practice APCE 665 Family Systems 3 APCE 669 Advanced Methods: Couples and 3 Family Therapy **SRM 600** Introduction to Graduate Research 3 Counseling Psychology Core — 8 hours Career Theory, Counseling and APCE 616 3 Assessment APCE 701 Professional Development Seminar 1 in Counseling Psychology Life Span Developmental 3 **PSY 530** Psychology APCE 701: Take two times Research Core — 16 hours Research Apprenticeship APCE 733 1 3 SRM 602 Statistical Methods I 3 Statistical Methods II SRM 603 3 SRM 610 Statistical Methods III

Introduction to Qualitative Research

Advanced Research Methods

3

	ectives for Students Completing			ore — 24 hours	
Quantitative SRM 607	Dissertations: Non-Parametric Statistics	3	APCE 623	Understanding and Counseling Diverse Populations	3
SKW 007	Or	3	APCE 657	Legal and Ethical Aspects of	3
SRM 609	Sampling Methods	3	111 02 03 7	Counseling and Psychology	5
	or		APCE 682	Biological Bases of Behavior	3
SRM 625	Applied Multiple Regression	3	APCE 707	Seminar in Personality and	3
	Analysis			Counseling Theories	
CD14 (27	or	2	APCE 758	Advanced Psychopathology	3
SRM 627	Survey Research Methods	3	PSY 540 PSY 590	Theories and Principles of Learning Seminar in History and Systems	3 3
	ectives for Students Completing		PSY 664	Advanced Social Psychology	3
Qualitative E SRM 685	Educational Ethnography	3		, .,	
SKW 003	or	3	Internship - APCE 791	Internship in Counseling Psychology	1 -
SRM 686	Qualitative Case Study Research	3	THI CL 191	internsinp in Counseling I sychology	5
	or		A DCE 701. 1	Vaca 2000 Harra	
SRM 687	Narrative Inquiry	3		Year, 2000 Hours	
	or			oposal/Dissertation — 16 hours	1
SRM 688	Writing as Analysis of Qualitative	3	APCE 797	Doctoral Proposal Research	1 - 4
	Research		APCE 799	Doctoral Dissertation	1 -
	uired — 24 hours	4			12
APCE 694	Practicum in Couples and Family	4	APCE 797: T	Calca A	
APCE 702	Therapy Practicum in Counseling	4			
APCE 712	Advanced Practicum in Indvidual	4	APCE 799° Take 12		
111 02 ,12	Counseling	•	NOTES: * A	A student entering with previously comple	eted
APCE 714	Practicum in Supervision of	3 -		rsework equivalent to coursework require	
	Counseling	6		gree may have course(s) waived with advi	
APCE 715	Seminar in Counselor Supervision	2	consent and may significantly reduce the total number of hours required to complete the program. A plan of study		
A DOE 7/2	and Theory	4		e must contain a minimum of 72 hours of	
APCE 762 APCE 793	Practicum in Group Facilitation Psychological Services Clinic I	4 3		n addition to doctoral research (16) and	
		3	internship ho		
	credits required.		In addition to	o formal course requirements, students are	e
	actica Electives:		required to si	uccessfully complete a doctoral	
APCE 617	Play Therapy: Theory and Practicum	3		ve examination, a dissertation and a one-	year,
APCE 713	Practicum in Supervision of Play Therapy	3	2000-hour in	ternship.	
APCE 773	Practicum in Supervision of Group	3	COUNSEI	LOR EDUCATION AND	
A DCE 774	Facilitation	2	SUPERVI	SION PH.D.	
APCE 774	Practicum in Supervision of Family Therapy	3	-		
APCE 794	Psychological Services Clinic II	1	College of	Education and Behavioral Scien	ces
APCE 795	External Practicum in Counseling	3	Degree Req	uirements — 89-101* Credits	
	Psychology		See "Counsel	lor Education and Supervision Ph.D." (p.	136)
Assessment (Core Required — 10 hours				,
APCE 674	Assessment for Intervention:	5	DEGREE	REQUIREMENTS	
	Cognitive and Academic		Required Ma	ajor Credits — 40-46 hours	
APCE 678	Assessment for Intervention:	5	Counseling (Core (12 hours)	
	Personality and Behavior		APCE 702	Practicum in Counseling	4
	sessment Elective:	2	APCE 712	Advanced Practicum in Indvidual	4
APCE 782	Introduction to Rorschach	3	ADCE 7/2	Counseling	
	Administration and Scoring		APCE 762	Practicum in Group Facilitation	4

APCE 714 Practicum in Supervision of Counseling 6 APCE 715 Seminar in Counselor Supervision and Theory and Theory and Theory and Theory and Practicum in Supervision of Payer Processional Consultation: Theory and Practicum in Counselor Supervision and Practicum in Supervision Play Therapy APCE 603 Advanced Methods: Couples and Family Therapy APCE 604 Advanced Methods: Couples and Family Therapy APCE 605 Seminar: Contemporary Issues in Couples and Family Therapy APCE 604 Advanced Methods: Couples and Family Therapy APCE 605 Seminar: Contemporary Issues in Couples and Family Therapy APCE 707 Internation Supervision of Play Therapy: Theory and Practicum in Supervision of Play Therapy Theory and Practicum in Supervision of Play Therapy Shoot Occursely Flowers and Their Systems APCE 606 Foundations of Play Therapy Theory and Practicum in Supervision of Play Therapy Shoot Advanced Methods: Couples and Family Therapy APCE 707 Internation of School Counseling ApCE 608 Foundations of Play Therapy Theory and Practicum in Supervision of Play Therapy Shoot Advanced Methods: Couples and Family Therapy APCE 708 Foundations of Play Therapy Theory and Practicum in Supervision of Play Therapy Shoot Advanced Methods: Couples and Family Therapy APCE 709 Advanced Methods: Couples A		Core (8 hours)	2	A DOE 740	Guidance	9
APCE 715 Seminar in Counselor Supervision and Theory Theory and Instruction Core (20-26 hours) APCE 660 Psychological Consultation: Theory and Practice and Processional Practicum in Supervision of Pay Therapy School Courseling (15 hours) APCE 761 Psychological Trauma and Intervention for Individuals, Families and Communities and Communities and Communities and Communities and Evaluation in Counseling and Psychology and Evaluation of Play Therapy and Practicum in Couples and Family Therapy and Practicum in Couples and Family Therapy and Practicum in Supervision of Pamily Therapy and Practicum in Supervision of Pamily Therapy and Practicum in Supervision of Play Therapy and Practicum in Supervision of Play Therapy and Practicum in Supervision of Play Therapy and Practicum in Supervision of School Counseling and Practi	APCE /14			APCE /48		3
APCE 608 Psychological Consultation: Theory and Practice APCE 608 Psychological Trauma and practice APCE 608 Psychological Trauma and Intervention for Individuals, Families and Communities APCE 703 Professional Development Seminar in Counselor Education in Counselor and Sychology APCE 708 Seminar in Instruction, Pedagogy, and Evaluation in Counselor and Sychology APCE 709 Advanced Seminar in Counselor 3 Education and Supervision Paper 2 Internship in Counselor Education 1- and Supervision Individuals, Education and Supervision APCE 709: Take 6-12 hours APCE 703: Must be taken twice APCE 704: And Family (19 hours) APCE 605 Understanding Children, Adolescents, and Their Systems APCE 606 Advanced Methods: Couples and Family Therapy APCE 607 Seminar: Contemporary Issues in Couples and Family Therapy APCE 608 Seminar: Contemporary Issues in Couples and Family Therapy APCE 607 Practicum in Supervision of Play Therapy APCE 608 Foundations of School Counseling APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 609 Organization, Administration and Evaluation of School Counseling Programs APCE 609 Organization, Administration and Evaluati	APCE 715	Seminar in Counselor Supervision			Take 6 hours	
APCE 660 Psychological Consultation: Theory and Practice	Theory and	Instruction Core (20-26 hours)				2
APCE 619 Psychological Trauma and Intervention for Individuals, Families and Communities APCE 703 Professional Development Seminar in Counselor Education APCE 703 Professional Development Seminar in Instruction, Pedagogy, and Evaluation in Counseling and Psychology APCE 746 Advanced Seminar in Counselor Beducation and Supervision APCE 797 Destruction Counselor Education and Supervision APCE 798 Internship in Counselor Education and Supervision APCE 799 Internship in Counselor Education and Supervision APCE 791 Internship in Counselor Education and Supervision APCE 792 Internship in Counselor Education and Supervision APCE 793: Must be taken twice APCE 793: Must be taken twice APCE 793: Must be taken twice APCE 795 Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 603 Understanding Children, Adolescents, and Their Systems APCE 688 Sexuality Counseling 3 Family Therapy APCE 694 Practicum in Couples and Family APCE 695 Couples and Family Therapy APCE 695 Seminar: Contemporary Issues in Couples and Family Therapy APCE 696 Foundations of Play Therapy APCE 697 Foundations of Play Therapy APCE 698 Foundations of Play Therapy APCE 699 Foundations of Play Therapy APCE 690 Advanced Mildren, Adolescents, and Their Systems APCE 609 Foundations of Play Therapy APCE 609 Foundations of School Counseling APCE 609 Advanced Child and Adolescent programs APCE 608 Organization, Administration and programs APCE 608 Organization, Administration and programs APCE 608 Organization, Administration and programs APCE 609 Foundations of School Counseling Programs APCE 608 Organization, Administration and programs and Apolescents in Special Counseling Programs APCE 608 Organization, Administration and programs and Application in Counseling Programs APCE 608 Organization, Administration and programs and Application in Counseling Programs APCE 609 Organization, Administration and programs and App			3			
APCE 701 Professional Development Seminar in Counselor Education and Evaluation in Counselor Education and Supervision and Sudertanding Children, Application Evaluation in Counselor Education and Supervision and Sudertanding Children, Agrication Evaluation in Counselor Education and Supervision and Sudertanding Children, Agrication Evaluation Evaluation in Counselor Education and Supervision and Sudertanding Children, Agrication Evaluation of School Counseling Programs APCE 603 Organization, Administration and Evaluation of School Counseling Programs APCE 604 Interval Evaluation Evaluation Evaluation Evaluation of School Counseling Programs APCE 605 Organization, Administration and Evaluation of School Counseling Programs APCE 607 Organization, Administration and Evaluation of School Counseling Programs APCE 608 Organization, Administration and Evaluation of School Counseling Programs APCE 609 Organization, Administration and Evaluation of School Counseling Programs APCE 609 Organization, Administration and Evaluation of School Counseling Programs APCE 609 Organization, Administration and Evaluation of School Counseling Programs APCE 609 Organization, Administration and Evaluation of School Counseling Programs APCE 600 Organization, Administration and Evaluation of School Counseling Programs APCE 604 Organization, Administration and Evaluation of School Counseling Programs APCE 605 Organization, Administration and Ev				GERO 300		3
Families and Communities APCE 703 Professional Development Seminar in Counselor Education APCE 710 Seminar in Instruction, Pedagogy, and Evaluation in Counseling and Psychology APCE 746 Advanced Seminar in Counselor 3 APCE 792 Internship in Counselor 6 Internship in Counselor 6 Internship in Counselor 1 APCE 792 Internship in Counselor 6 Internship in Counselor 6 Internship in Counselor 6 Internship in Counselor 7 Internship in Counselor 8 Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 608 Advanced Methods: Couples and Family Therapy APCE 609 Practicum in Couples and Family Therapy APCE 709 Practicum in Couples and Family Therapy APCE 709 Practicum in Supervision of Family 7 Practicum in Supervision of Play 7 Practicum in Supervi	APCE 661		3	GERO 625		3
APCE 703 Professional Development Seminar in Counselor Education in Counselor Education and Surface Proposal Dissertation — 1 Counselor Education and Supervision — 1 Education —						3
APCE 710 Seminar in Instruction, Pedagogy, and Evaluation in Counseling and Psychology APCE 746 Advanced Seminar in Counselor 3 Education and Supervision 1- and Supervision 2 Internship in Counselor Education and Supervision 3 APCE 792 Internship in Counselor Education and Supervision 6 Internship in Counselor Education and Supervision 7 Internship in Counselor Education 2 Internship in Counselor Education 3 APCE 792 Internship in Counselor Education 3 APCE 793 Must be taken twice APCE 792: Take 6-12 hours 1 Interest Areas (Select One) — 15-19 hours minimum 1 Secret One) — 15-19 hours Marriage and Family (19 hours) 1 Seminar Counseling 3 APCE 603 Advanced Methods: Couples and Family Therapy	APCE 703		1	GERO 640	Health Aspects of Gerontology	3
and Evaluation in Counseling and Psychology APCE 746 Advanced Seminar in Counselor 3 Education and Supervision 6 Internship in Counselor Education and Supervision 6 Internship in Counselor Education and Supervision 6 Internship in Counselor Education 6 Internship in Counseling Programs APCE 792: Take 6-12 hours APCE 793: Must be taken twice APCE 794: Take 6-12 hours APCE 795: Take 6-12 hours APCE 795: Take 6-12 hours APCE 796: Doctoral Dissertation 1 Internship in Counselor 6 Internship in Counselor 1 Internship in Counseling 7 Internship 1 Internship Intern		in Counselor Education				
APCE 746 Advanced Seminar in Counselor 3 Education and Supervision 1- and Supervision 2- laternship in Counselor Education 2- and Supervision 6	APCE 710		3	SRM 700	Advanced Research Methods	3
APCE 746 Advanced Seminar in Counselor Education and Supervision				(Additional s	ix hours under Research Tool 2.)	
Education and Supervision APCE 792 Internship in Counselor Education and Supervision APCE 793: Must be taken twice APCE 793: Must be taken twice APCE 792: Take 6-12 hours Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 603 Understanding Children, APCE 668 Sexuality Counseling APCE 669 Advanced Methods: Couples and Family Therapy APCE 694 Practicum in Couples and Family APCE 799 Doctoral Dissertation Research Tools — 15 hours Research Tool 1: Applied Statistics SRM 602 Statistical Methods II 3 SRM 603 Statistical Methods II 3 SRM 604 Statistical Methods II 3 SRM 605 Statistical Methods II 3 SRM 607 Statistical Methods II 3 SRM 608 Statistical Methods II 3 SRM 609 Statistical Methods II 3 SRM 609 Statistical Methods II 3 SRM 600 Statistical Methods II 3 SRM 601 Statistical Methods II 3 SRM 602 Statistical Methods II 3 SRM 603 Statistical Methods II 3 SRM 603 Statistical Methods II 3 SRM 608 Statistical Methods II 3 SRM 608 Statistical Methods II 3 SRM 608 Statistical Methods II 3 SRM 609 Statistical Methods II 3 SRM 609 Statistical Methods II 3 SRM 600 Statistical	APCE 746		3			
APCE 793: Must be taken twice APCE 792: Take 6-12 hours Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 603	111 027 10		J	APCE 797	Doctoral Proposal Research	
APCE 703: Must be taken twice APCE 703: Must be taken twice APCE 792: Take 6-12 hours Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 603 Understanding Children,	APCE 792			A DCE 700	Doctoral Dissertation	
APCE 792: Take 6-12 hours Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 603 Understanding Children, 3 Adolescents, and Their Systems APCE 669 Advanced Methods: Couples and Family Therapy APCE 694 Practicum in Couples and Family Therapy APCE 774 Practicum in Supervision of Family Therapy APCE 603 Understanding Children, 3 Adolescents, and Their Systems APCE 604 Practicum in Supervision of Family Therapy APCE 605 Seminar: Contemporary Issues in Couples and Family Therapy APCE 774 Practicum in Supervision of Family Therapy APCE 607 Advanced Child and Adolescents (15 hours) APCE 608 Seminar: Contemporary Issues in Couples and Family Therapy APCE 609 Therapy APCE 600 Understanding Children, 3 Adolescents, and Their Systems APCE 600 Foundations of Play Therapy PSY 630 Advanced Child and Adolescent Psychology School Counseling (18 hours) APCE 602 Foundations of School Counseling APCE 603 Understanding Children, Adolescents, and Their Systems APCE 604 Interest Areas (Select One) — 15-19 hours minimum Research Tool 1: Applied Statistical Methods II 3 SRM 603 Statistical Methods II 3 Research Seminar in Counselor I 3 APCE 716 Research Seminar in Counselor SRM 680 Introduction to Qualitative Research 1 **NOTES: 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 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 affairs Leadership doctoral minor in lieu of an emphasis area. Students who write a qualitative disserta		and Supervision	6	AFCE /99	Doctoral Dissertation	
Interest Areas (Select One) — 15-19 hours minimum Marriage and Family (19 hours) APCE 603	APCE 703: N	fust be taken twice		Research To	ols — 15 hours	
Interest Areas (Select One) — 15-19 hours minimum SRM 602 Statistical Methods I 3 3 SRM 603 Statistical Methods II 3 3 SRM 603 Statistical Methods II 3 3 SRM 606 Statistical Methods II 3 3 SRM 606 Statistical Methods III 3 3 SRM 607 Statistical Methods III 3 3 SRM 608 Statistical Methods III SRM 608 Statistical Methods III 3 SRM 608 Statistical Methods III SRM 608 Introduction to Qualitative Research SRM 608 Statistical Methods III SRM 608 Introduction to Qualitative Research SRM 608 Statistical Methods III SRM 608 Introduction to Cunseling SRM 608 Introduction to Qualitative Research SRM 6	APCE 792: T	ake 6-12 hours				
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89 hours). All students are required to complete all of the courses; 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.

College of Education and Behavioral Sciences

Degree Requirements — 64 Credits

See "Educational Leadership Ed.D." (p. 141).

DEGREE REQUIREMENTS

Educational Leadership Core — 21 hours			
ELPS 608	Issues in Educational Leadership:	3	
	Implications for Practice		
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 L	earning — 6 hours	
Select one or b	oth of the following courses:	
ELPS 606	Internship in Educational Leadership	1 -
		9
ELPS 695	Practicum in Educational Leadership	1 -
		3
Research Cor	e — 12 hours minimum	
ELPS 754	Research in Educational Leadership	3
SRM 602	Statistical Methods I	3
Select researc	h electives from the following courses	(or
	oproved 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 Prop	posal/Dissertation — 16 hours	
ELPS 797	Doctoral Proposal Research	1 -
	•	4
ELPS 799	Doctoral Dissertation in Educational	1 -
	Leadership and Policy Studies	12
Deficiencies of	r Additional Elective Courses	
ELPS 650	School Finance and Budgeting	3
ELPS 651	School Business Management	3
ELPS 654	Instructional Leadership and	3

	Supervision	
ELPS 660	Law and the Administrator	3
ELPS 662	Design and Delivery of Professional	3
	Development	
ELPS 665	Policy Analysis and Development	3
ELPS 670	The Principalship: Leadership at the	3
	School Site Level	

EDUCATIONAL MATHEMATICS PH.D.

College of Natural and Health Sciences

Degree Requirements — 71 Credits

See "Educational Mathematics Ph.D." (p. 168).

Master's Degree en route to the Ph.D.

Students may apply for admission to the Ph.D. in Educational Mathematics and complete the M.A. in Mathematics - Liberal Arts 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.

DEGREE REQUIREMENTS

Ph.D. Requirements

Mathematics Content Core — 27 semester hours

A. Required Courses - 12 hours			
MATH 709	Abstract Algebra I	3	
MATH 723	Abstract Algebra II	3	
MATH 732	Complex Variables	3	
MATH 735	Real Analysis	3	

B. Minimum of 15 hours chosen from the following courses: MATH 622 Directed Studies

		_
		4
MATH 700	Advanced Seminar	2
MATH 727	Representation Theory	3
MATH 728	Topics in Discrete Mathematics	3
MATH 733	Geometric Analysis	3
MATH 736	Real Analysis II	3
MATH 744	Differential Geometry	3
MATH 764	Difference Equations and Chaos	3
MATH 778	Mathematical Logic	3
MATH 791	Number Theory	3
MATH 795	Special Topics	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

1 -

MATH 532	Basic Analysis II	3
MATH 540	Introduction to Topology	3
Category II		
MATH 528	Discrete Mathematics	3
MATH 529	Mathematical Problem Solving	3
MATH 531	Basic Analysis I	3 3 3 3
MATH 543	Modern Geometry	3
MATH 560	Introductory Complex Variables	3
	re — 12 hours	
MED 610	Survey of Research in Mathematics Education	3
MED 700	Cognitive Processes in Mathematics	3
MED 701	Quantitative Research in	3
	Mathematics Education	
MED 702	Qualitative Research in Mathematics	3
	Education	
Educational	Core — 10 hours (minimum)	
A. Required	Courses (4 hours)	
MED 703	Teaching and Learning K-12	3
	Mathematics	
MED 710	Seminar in Post-Secondary	1
	Mathematics Teaching	
B. Elective C	Courses (6 hours)	
(Advisor mus	et approve courses)	
(Advisor mus MED 622	t approve courses) Directed Studies	1 -
MED 622	Directed Studies	3
	Directed Studies Technology in Mathematics	
MED 622 MED 630	Directed Studies Technology in Mathematics Education	3 2
MED 622	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics	3
MED 622 MED 630 MED 673	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level	3 2 3
MED 622 MED 630	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics	3 2
MED 622 MED 630 MED 673 MED 674	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level	3 2 3
MED 622 MED 630 MED 673	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics	3 2 3
MED 622 MED 630 MED 673 MED 674 MED 675	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level	3 2 3 3
MED 622 MED 630 MED 673 MED 674	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics	3 2 3 3 3 2-
MED 622 MED 630 MED 673 MED 674 MED 675 MED 678	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level Special Topics	3 2 3 3
MED 622 MED 630 MED 673 MED 674 MED 675	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level	3 2 3 3 3 2- 3
MED 622 MED 630 MED 673 MED 674 MED 675 MED 678 MED 750	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level Special Topics History and Philosophy of Mathematics Education	3 2 3 3 3 2- 3
MED 622 MED 630 MED 673 MED 674 MED 675 MED 678 MED 750	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level Special Topics History and Philosophy of	3 2 3 3 3 2- 3
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MED 622 MED 630 MED 673 MED 674 MED 675 MED 678 MED 750 Research Pro	Directed Studies Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level Special Topics History and Philosophy of Mathematics Education oposal/Dissertation — 16 hours	3 2 3 3 3 2-3 3 3
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MED 622 MED 630 MED 673 MED 674 MED 675 MED 678 MED 750 Research Promath 797	Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level Special Topics History and Philosophy of Mathematics Education oposal/Dissertation — 16 hours Doctoral Proposal Research Doctoral Dissertation	3 2 3 3 3 2-3 3 3
MED 622 MED 630 MED 673 MED 674 MED 675 MED 678 MED 750 Research Promath 797 MATH 799 MATH 797: 7	Technology in Mathematics Education Teaching and Learning Mathematics on the Elementary Level Teaching and Learning Mathematics on the Secondary Level Teaching and Learning Mathematics on the Post-Secondary Level Special Topics History and Philosophy of Mathematics Education oposal/Dissertation — 16 hours Doctoral Proposal Research Doctoral Dissertation	3 2 3 3 3 2-3 3 3

Additional Electives

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	
MED 701	Quantitative Research in	3	
	Mathematics Education		
SRM 608	Experimental Design	3	
	or		
SRM 610	Statistical Methods III	3	
SRM 502, SRM 608: or approved equivalent			

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.

NOTES: Electives must have the approval of the student's advisor and doctoral committee.

MED 710 is normally taken in the first year of the program.

Students in this program must pass written comprehensive exams in mathematics and mathematics education followed by an oral comprehensive exam over their entire program. A document describing examination procedures may be obtained from the program office or the program website.

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.

EDUCATIONAL PSYCHOLOGY PH.D.

College of Education and Behavioral Sciences Degree Requirements — 67 Credits

See "Educational Psychology Ph.D." (p. 145).

All students will take 18 credits of Foundation courses covering key disciplines within the field of Educational Psychology, including cognition and instruction, motivation, cultural issues, measurement, and development. In addition, students will take courses in the Research Core and select one Research Tool (in Measurement and Assessment, Qualitative Research, or a self-designed option) in order to gain the research skills, knowledge, and expertise to support their scholarly work while in the doctoral program. Finally, the student is given the opportunity to specialize their content knowledge and skills by selecting five courses of their choice, in consultation with their advisor.

DEGREE REQUIREMENTS

Foundations — 18 credits			
PSY 630	Advanced Child and Adolescent	3	
	Psychology		
PSY 640	Cultural Issues in Educational	3	
	Psychology		
PSY 644	Motivation in Education	3	
PSY 661	Trends and Issues in Educational	3	
	Psychology		
PSY 674	Measurement I: Educational Testing	3	
PSY 681	Cognition and Instruction I	3	
Research Core/Research Tool I — 12 credits			
PSY 663	Apprenticeship	1 -	
		3	
SRM 603	Statistical Methods II	3	
SRM 610	Statistical Methods III	3	
SRM 700	Advanced Research Methods	3	
PSY 663: Tak	e 3 credits		

Select ONE of the following options for Research Tool II:

Research Too	ol II: Qualitative Methods — 6 credits	
SRM 680	Introduction to Qualitative Research	3
and one of th	e following:	
SRM 685	Educational Ethnography	3
SRM 686	Qualitative Case Study Research	3
SRM 687	Narrative Inquiry	3
	or	
D 1.T	177 3/5	_

Research Tool II: Measurement and Assessment — 6 credits

PSY 675	Measurement II: Advanced	3
	Techniques	
PSY 686	Advanced Seminar in Measurement	3

and Assessment or

Research Tool II: Self-Designed — 6 credits

Two courses selected by the student in consultation with advisor, and contingent upon advisor and Graduate School approval. These courses would represent research tools that support the student's independent research and would need to be in compliance with Graduate School policies (see Graduate School Research Requirements (p. 50)).

Coursework for Specialization — 5 courses; 15 credits

Select 5 courses to total at least 15 credits from the courses below:

PSY 550	Cognitive Development	3
PSY 575	Educational Assessment	3
PSY 595	Special Topics in Psychology	1 -
		5
PSY 622	Directed Studies	1 -
		3
PSY 654	Seminar in College Teaching	3
PSY 664	Advanced Social Psychology	3
PSY 675	Measurement II: Advanced	3
	Techniques	
PSY 680	Neuroscience Seminar	3
PSY 682	Cognition and Instruction II	3
PSY 684	Advanced Seminar in Human	3
	Development	
PSY 686	Advanced Seminar in Measurement	3
	and Assessment	
PSY 693	Research Practicum	1 -
		3
PSY 694	Practicum	3
PSY 695	Special Topics in Educational	1 -
	Psychology	3

Other advanced coursework in Educational Psychology, SRM, Educational Technology, Educational Leadership, and others in consultation with advisor.

Research Proposal/Dissertation — 16 credits

PSY 797	Doctoral Proposal Research	1 -
DCV 700	De stand Dissentation	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 website or 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, qualitative research methods, or another approved area.

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. See Educational Psychology (p. 144) for more information. 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.

EDUCATIONAL STUDIES ED.D.

College of Education and Behavioral Sciences

Administered by the School of Teacher Education (p. 149). 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 in addition to the UNC Graduate School application.

Degree Requirements — 64 Credits

DEGREE REQUIREMENTS

Educational Studies Core — 12 hours		
EDF 670	Introduction of Research Literature	3
EDF 685	Philosophical Foundations of	3
	Education	
EDF 700	Implementation and Evaluation of	3

	Curriculum	
	or	
EDF 790	Supervised Practicum in Professional Teacher Preparation	3
EDF 701	Doctoral Seminar	1
EDF 701: Tal	ce at least three times	
Research Co	re — 12 hours	
	completed previously may be substituted the courses, within limits allowed by Grad	
SRM 602	Statistical Methods I	3
SRM 680	Introduction to Qualitative Research	3
Take two fro	m among the following:	
EDF 601	Discourse Analysis in Language and Literacy Research	3
SRM 603	Statistical Methods II	3
SRM 641	Special Topics	1 -
	1	4
SRM 685	Educational Ethnography	3
SRM 700	Advanced Research Methods	3

SRM 641: with advisor consent

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

Innovation and Education Reform

Dissertation — 16 hours

EDF 797	Doctoral Proposal Research	1 -
EDF 799	Doctoral Dissertation	4 1 -
		12

EDF 797: Take 4 hours EDF 799: 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. Students may take EDF 795 Comprehensive Seminar to support the writing of a scholarly paper.

EDUCATIONAL TECHNOLOGY PH.D.

College of Education and Behavioral Sciences

Degree Requirements — 67-76 Credits

See "Educational Technology Ph.D" (p. 139).

DEGREE REQUIREMENTS

Required Major Credits — 30 hours			
ET 615	Distance Education: Theories and	3	
	Practice		
ET 617	Development of Online Applications	3	
ET 627	Design of Games and Simulations	3	
ET 628	Design of Multimedia Learning	3	
	Environments		
ET 650	Case Studies in Performance and	3	
	Instructional Technology		
ET 702	Instructional Design Theory and	3	
	Research		
ET 782	Doctoral Seminar in Educational	3	
	Technology I		
ET 784	Doctoral Seminar in Educational	3	
	Technology II		
ET 692	Internship	3	
	or		
ET 693	Practicum	1 -	
		3	
PSY 682	Cognition and Instruction II	3	
ET 693: Take .	3 hours		
Elective Cour	ses — 9 hours		
	General Electives	9	
Research Cor	e — 12 hours		
SRM 602	Statistical Methods I	3	
SRM 603	Statistical Methods II	3	
SRM 680	Introduction to Qualitative Research	3 3 3	
SRM 700	Advanced Research Methods	3	
Research Proposal/Dissertation — 16 hours			
ET 797	Doctoral Proposal Seminar	1 -	
	F	4	
ET 799	Doctoral Dissertation	1 -	
		12	

ET 797: Take 4 hours ET 799: Take 12 hours

Research Tools — 0-9 hours

Doctoral students in educational technology must demonstrate competency in the two 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).

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.

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 proposal and dissertation are completed under the supervision of the research advisor and research committee.

2

HIGHER EDUCATION AND STUDENT AFFAIRS LEADERSHIP PH.D.

College of Education and Behavioral Sciences

Degree Requirements — 64 Credits

See "Higher Education and Student Affairs Leadership Ph.D." (p. 143).

DEGREE REQUIREMENTS

Required Courses — 9 hours		
Scholarly Writing for	3	
Scholar/Leaders		
Collaborative Inquiry for	3	
Scholar/Leaders		
Research Capstone in Higher Ed	3	
	Scholarly Writing for Scholar/Leaders Collaborative Inquiry for Scholar/Leaders	

NOTE: These three core courses are taught as a cohort and must be taken sequentially. These courses also fulfill the Graduate School requirements for second research tool.

Select 24 credits from the following, in consultation with advisor and committee:

with advisor	and committee:	
HESA 601	Introduction to Higher Education &	3
	Student Affairs	
HESA 611	Organization and Administration	3
HESA 612	Higher Education Assessment and	3
	Evaluation	
HESA 622	Directed Studies	1 -
		4
HESA 650	College Student Development:	3
	Foundational Theory	
HESA 651	Philosophical, Historical and	3
	Cultural Foundations of Student	
	Affairs in Higher Education	
HESA 652	Enrollment Management Services	3
HESA 655	Multiculturalism in Higher	3
	Education and Student Affairs	
HESA 658	Helping Skills for Practitioners	3
HESA 660	Women in Higher Education and	3
	Student Affairs	
HESA 661	Practicum in College Teaching for	3
	Student Development	
HESA 665	International Higher Education and	3
	Student Affairs	
HESA 668	College Students: Culture,	3
	Characteristics, Campus Life	
HESA 669	Culturally Responsive Aspects of	3
	Transformative Learning	
HESA 670	Internship in Higher Education and	6
	Student Affairs Leadership	
HESA 671	Introduction to Leadership in Higher	3
	Education and Student Affairs	
	Leadership	
HESA 675	Field Experience in Student Affairs	1 -

		3
HESA 680	Law and Higher Education	3
HESA 683	Finance and Resource Management	3
	in Higher Education	
HESA 685	Human Resources in Higher	3
	Education	
HESA 690	Public Policy in Higher Education	3
HESA 695	Current Issues in Higher Education	3
	and Student Affairs Leadership	
HESA 696	Special Topics in Higher Education	1 -
	and Student Affairs Leadership	4
HESA 751	Advanced College Student	3
	Development: Social Identity	
HESA 765	Advanced Multiculturalism	3
HESA 771	Advanced Leadership in Higher	3
	Education and Student Affairs	
	Leadership	
SRM 700	Advanced Research Methods	3
Research Cor	e — 15	
SRM 602	Statistical Methods I	3
SRM 603	Statistical Methods II	3
SRM 680	Introduction to Qualitative Research	3
	6 additional credit hours of SRM	6
	selected in consultation with your	
	advisor	
Dissertation P	roposal and Research — 16	
HESA 797	Doctoral Proposal Research	1 -
		4
HESA 799	Doctoral Dissertation	1 -
		12
HECA 707: T-	Lo Albarra	
HESA 797: Ta	ke 4 nours	
HESA 799: Ta	ke 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: 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.

College of Natural and Health Sciences

Degree Requirements — 64 Credits

See "Human Rehabilitation Ph.D." (p. 167).

DEGREE REQUIREMENTS

Required Maj	jor Courses — 21 hours	
HRS 659	Seminar in Rehabilitation	3
	Counseling Supervision	
HRS 758	Seminar in Collaborative Research	3
	in Human Sciences	
PSY 654	Seminar in College Teaching	3
Practicum —	Take any combination of the following	
for a minimum	m of 12 hours*	
HRS 755	Supervised Practicum in College	3
	Teaching	
HRS 757	Advanced Seminar in Rehabilitation	3
	Administration	
HRS 759	Advanced Practicum in	3
	Rehabilitation Counseling	
	Supervision	

^{*(}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 Prop	oosal/Dissertation — 16 hours	
HRS 797	Doctoral Proposal Research	1 -
	-	4
HRS 799	Doctoral Dissertation	1 -
		12

HRS 797: Take 4 credits HRS 799: Take 12 credits

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.

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: 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 four emphases listed below or three emphases listed separately)

College of Performing and Visual Arts

Degree Requirements — 67-71 Credits

See "Music D.A." (p. 178).

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" (p. 176) for more information.

Collaborative Piano Emphasis Conducting Emphasis Jazz Studies Emphasis Music Performance Emphasis

DEGREE REQUIREMENTS

Required Emphasis Credits — 5-9 hours MUS 623 Individual Studies in Effective 1Teaching 3 MUS 794 Supervised Practicum in College 2 Teaching

MUS 623: Take 3 credits MUS 794: Take 2-6 credits

Primary Emphasis — 18 hours

The primary emphasis area develops a major scholarly and/or performing function for the college and university level in Conducting, Collaborative Piano, Jazz Studies, 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 DA degree emphasis areas: Music History and Literature, Composition, Music Performance, Conducting, Collaborative Piano, Jazz Studies, 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 secondary 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

MUS 648

Research Core — 13 hours MUS 700 Introduction to Doctoral Research 3 Select one Course (3 hours) (music history exam) 3 MUS 643 Seminar: Medieval Music Seminar: Music in the Renaissance **MUS 644** 3 **MUS 645** Seminar: The Baroque Period 3 **MUS 646** Seminar: The Classic Period 3 **MUS 647** Seminar: The Romantic Period 3

Music history exam: Dependent upon results of advisory exams

Seminar: Music Since 1900

Select one Course (3 hours) (music theory exam)

MUS 501	18th Century Counterpoint	3
MUS 502	Harmony and Form I	3
MUS 503	Harmony and Form II	3
MUS 603	Analytical Studies in Music	3

Music theory exam: Dependent upon results of advisory exams

Select one Course (4 hours) (individual performance area)

area)		
MUS 551	Individual Performance in	2
	Conducting	
MUS 636	Individual Performance in Jazz	2 -
		4
MUS 665	Individual Performance in	2 -
	Collaborative Piano	4
MUS 670	Individual Performance in Voice	2 -
		4
MUS 671	Individual Performance in Piano	2 -
		4
MUS 673	Individual Performance in Strings,	2 -
	Harp or Guitar	4
MUS 674	Individual Performance in	2 -
	Woodwinds	4
MUS 675	Individual Performance in Brass or	2 -
	Percussion	4
MUS 677	Individual Instruction in	2 -

Composition	4
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Dependent upon acceptance in performance area.

Research Proposal/Dissertation — 16 hours		
MUS 797	Doctoral Proposal Research	1 -
		4
MUS 799	Doctoral Dissertation	1 -
		12

MUS 797: Take 4 credits MUS 799: Take 12 credits

NOTES: 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 faculty 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 D.A. — MUSIC COMPOSITION EMPHASIS

College of Performing and Visual Arts Degree Requirements — 70 Credits

See "Music D.A. — Music Composition Emphasis (p. 178)".

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 (p. 176)" for more information.

DEGREE REQUIREMENTS

Primary Emphasis — 18 hours

The primary emphasis area develops a focused scholarly and/or creative and pedagogical expertise to professional levels in Music Composition. Courses are selected by advisement based upon candidate's area of focus and upon the candidates needs identified through the advisory examination.

Secondary Emphasis — 10 hours

Elective Credits — 5 hours

Research and Pedagogy Core — 21 hours		
MUS 504	Music Theory Pedagogy	3
MUS 649	Music History Pedagogy	3
MUS 700	Introduction to Doctoral Research	3

Select two courses (6 hours) (music history advisory exam)

Period Seminars in Music History			
MUS 643	Seminar: Medieval Music	3	
MUS 644	Seminar: Music in the Renaissance	3	
MUS 645	Seminar: The Baroque Period	3	
MUS 646	Seminar: The Classic Period	3	
MUS 647	Seminar: The Romantic Period	3	
MUS 648	Seminar: Music Since 1900	3	

Music history exam: Dependent upon results of advisory exams.

Select two courses (6 hours) (music theory exam)

Graduate Music	c Theory and Analysis	
MUS 501	18th Century Counterpoint	3
MUS 502	Harmony and Form I	3
MUS 503	Harmony and Form II	3
MUS 505	Sixteenth Century Counterpoint	3
MUS 603	Analytical Studies in Music	3
MUS 604	Seminar in Schenker Analysis	2

Music theory exam: Dependent upon results of advisory exams

Research Proposal/Dissertation — 16 hours			
MUS 797	Doctoral Proposal Research	1 -	
		4	
MUS 799	Doctoral Dissertation	1 -	
		12	

MUS 797: Take 4 credits MUS 799: Take 12 credits

NOTES: 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 faculty 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 D.A. — MUSIC EDUCATION EMPHASIS

College of Performing and Visual Arts Degree Requirements — 66 Credits

See "Music D.A. — Music Education Emphasis" (p. 178).

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" (p. 178) for more information.

DEGREE REQUIREMENTS

Required Emphasis Credits — 25 hours

Primary	Emphasis	(15	hours))
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I I IIII ai y Eii	upnasis (13 nours)	
EDF 640	Psychological Foundations of	3
	Education	
EDF 685	Philosophical Foundations of	3
	Education	
MUS 519	Foundations of Music Education	3
MUS 533	Curriculum Trends in Music	3
	Education	
MUS 612	Psychology of Music Teaching and	3
	Learning	

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 Co	ore — 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 Pi	roposal/Dissertation — 16 Hours	
MUS 797	Doctoral Proposal Research	1 -
		4
MUS 799	Doctoral Dissertation	1 -
		12

MUS 797: Take 4 credits MUS 799: Take 12 credits

NOTE: 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.

MUSIC D.A. — MUSIC HISTORY AND LITERATURE EMPHASIS

College of Performing and Visual Arts

Degree Requirements — 70 Credits

See "Music D.A. — Music History and Literature Emphasis (p. 178)".

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 (p. 176)" for more information.

DEGREE REQUIREMENTS

Primary Emphasis — 18 hours

The primary emphasis area develops a focused scholarly and/or creative and pedagogical expertise to professional levels in Music History and Literature. Courses are selected by advisement based upon candidate's area of focus and upon the candidates needs identified through the advisory examination.

Secondary Emphasis — 10 hours

Elective Credits — 5 hours

Research and Pedagogy Core — 21 hours			
MUS 504	Music Theory Pedagogy	3	
MUS 649	Music History Pedagogy	3	
MUS 700	Introduction to Doctoral Research	3	

Select two courses (6 hours) (music history advisory exam)

Period Seminars in Music History		
MUS 643	Seminar: Medieval Music	3
MUS 644	Seminar: Music in the Renaissance	3
MUS 645	Seminar: The Baroque Period	3
MUS 646	Seminar: The Classic Period	3
MUS 647	Seminar: The Romantic Period	3
MUS 648	Seminar: Music Since 1900	3

Music history exam: Dependent upon results of advisory exams

Select two courses (6 hours) (music theory exam)

Graduate Music	c Theory and Analysis	
MUS 501	18th Century Counterpoint	3
MUS 502	Harmony and Form I	3
MUS 503	Harmony and Form II	3
MUS 505	Sixteenth Century Counterpoint	3
MUS 603	Analytical Studies in Music	3
MUS 604	Seminar in Schenker Analysis	2

Music theory exam: Dependent upon results of advisory exams

Research Proposal/Dissertation — 16 hours			
MUS 797	Doctoral Proposal Research	1 -	
		4	
MUS 799	Doctoral Dissertation	1 -	
		12	

MUS 797: Take 4 credits MUS 799: Take 12 credits

NOTES: 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 faculty 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.

NURSING D.N.P.

College of Natural and Health Sciences Degree Requirements — 33-81 credits

See "Nursing D.N.P." (p. 169).

(Select the Bachelor's to D.N.P. or the Master's to D.N.P. entry options)

BACHELOR'S TO D.N.P. REQUIREMENTS — 81 HOURS

Research Cor	e — 12 hours	
SRM 602	Statistical Methods I	3
NURS 606	Research and Evidence-based	3
	Practice in Nursing	
NURS 618	Epidemiology in Advanced Nursing	3
	Practice	
NURS 638	Concepts in Advanced Evidence-	3
	Based Practice	
Nursing Scien	ice BS to D.N.P. Core — 33 hours	
NURS 504	Quality and Safety in Health Care	3
	Systems	_
NURS 601	Theoretical Foundations for	3
1,012,001	Advanced Nursing	J
NURS 628	Information Technology in Health	3
110112 020	Care	J
NURS 658	Applied Nursing Genomics	3
NURS 668	Population Centered Health Care	3
NURS 678	Professional Practice and Healthcare	3
	Finance Seminar	_
NURS 685	DNP Practicum	1 -
		7
NURS 688	Advanced Nursing Leadership in	3
	Health Care Systems	
NURS 700	Advanced Nursing Theory	3
NURS 795	DNP Capstone Project Proposal	2
	Seminar	
NURS 796	DNP Capstone Project	1-4
NURS 685: Ta	ska 2 hours	
NUKS 065. 1a	ike 3 flours	
NURS 796: Ta	ike 4 hours	
Nursing Pract	tice FNP Emphasis — 36 hours	
NURS 610	Health Assessment	3
NURS 612	Advanced Pharmacology	4
NURS 614	Advanced Pathophysiology	3
NURS 624	Health Promotion and Disease	3
	Prevention in Advanced Practice of	
	Nursing	
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
NURS 680: T	ake 9 hours	

MASTER'S TO D.N.P. REQUIREMENTS — 33 HOURS

Students may also enter with a master's and complete the doctoral degree with 33 hours. The general plan of study for students who enter the DNP with a baccalaureate degree in nursing and a conferred master's degree is listed below

below.		
Research Cor	e — 6 hours	
NURS 618	Epidemiology in Advanced Nursing Practice	3
NURS 638	Concepts in Advanced Evidence- Based Practice	3
Nursing Scien	ce Master's to D.N.P. Core — 27 hou	rs
NURS 628	Information Technology in Health Care	3
NURS 658	Applied Nursing Genomics	3
NURS 668	Population Centered Health Care	3
NURS 678	Professional Practice and Healthcare	3
	Finance Seminar	
NURS 685	DNP Practicum	1 - 7
NURS 688	Advanced Nursing Leadership in	3
	Health Care Systems	
NURS 700	Advanced Nursing Theory	3
NURS 795	DNP Capstone Project Proposal	2
	Seminar	
NURS 796	DNP Capstone Project	1-4
NURS 796: Ta	ke 4 hours	
hours, some str 685 DNP Pract	documented Master's supervised clinical udents may need to take additional NUR ticum credit hours to achieve the minimours required for the DNP.	RS
MIDODIO	EDIICATIONI DII D	

NURSING EDUCATION PH.D.

College of Natural and Health Sciences

Degree Requirements — 65-77 credits

See "Nursing Education Ph.D." (p. 170).

(Select the BS to Ph.D. or the Master's to Ph.D. entry options)

DEGREE REQUIREMENTS

Research Core — 14 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	
NURS 790	Research Colloquium	2	

Research and	l Dissertation — 16 hours	
NURS 797	Doctoral Proposal Research	1 -
		4
NURS 799	Doctoral Dissertation	l -
		12
Research Too	ols	
quantitative st	SRM 603: The first research tool is atistical methods met by successful SRM 602 and SRM 603.	

SRM 680 and SRM 700: The second research tool is research methods met with successful completion of SRM 680 and SRM 700.

BS TO PH.D. REQUIREMENTS — 77 HOURS

Nursing Scien	ice BS to Ph.D. Core — 15 hours	
NURS 614	Advanced Pathophysiology	3
NURS 702	Advanced Concepts of Vulnerable	3
	Underserved Populations	
NURS 703	Philosophical Underpinnings of	3
	Nursing Science	
NURS 707	Leadership in Health Policy	3
NURS 711	Advanced Theory and Knowledge	3
	Development in Nursing	
Nursing Educ	eation — 26 hours	
NURS 631	Teaching Strategies for Practice and	3
	Academic Settings	
NURS 661	Planning and Evaluating Education	3
	in Practice and Academic Settings	
NURS 695	Advanced Academic Nursing Roles	3
NURS 730	The Scholarship of Teaching and	2
	Practice in Nursing Education	
NURS 740	Intensive Teaching Practicum	3
NURS 760	Advanced Nursing Curriculum	3
	Design	
NURS 780	The Professorial Role in Nursing	3
	Education	
PSY 681	Cognition and Instruction I	3
Choose one of	the following courses:	
NURS 710	Evaluation in Nursing Education	3
	or	
SRM 670	Evaluation: Models and Designs	3
Electives — 6	hours (with advisor approval)	

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.

	nce Master's to Ph.D. Core — 12 hours	
NURS 702	Advanced Concepts of Vulnerable	3
NURS 703	Underserved Populations Philosophical Underpinnings of	3
NUKS /03	Nursing Science	3
NURS 707	Leadership in Health Policy	3
NURS 711	Advanced Theory and Knowledge	3
	Development in Nursing	
	cation — 17 hours	
NURS 730	The Scholarship of Teaching and	2
NURS 740	Practice in Nursing Education Intensive Teaching Practicum	2
NURS 740 NURS 760	Advanced Nursing Curriculum	3
NORS 700	Design	5
NURS 780	The Professorial Role in Nursing	3
	Education	
PSY 681	Cognition and Instruction I	3
Choose one o	f the following courses:	
NURS 710	Evaluation in Nursing Education	3
	or	
SRM 670	Evaluation: Models and Designs	3
Electives —	6 hours (with advisor's approval)	
coursework in	lude transcultural nursing courses or n education, educational leadership, sychology, educational technology, statisti	CC.
gerontology,		cs,
Deficiencies		
	es or portfolio experience will determine d to take these additional hours (may be us	ed
NURS 631	Teaching Strategies for Practice and	3
NURS 661	Academic Settings	3
1100 CAUNI	Planning and Evaluating Education	3
	in Practice and Academic Settings	

SCHOOL PSYCHOLOGY PH.D.

en-route to the Ph.D.

College of Education and Behavioral Sciences

The BS to Ph.D. students will receive the master's degree

The Ph.D. program is fully accredited by the Commission on Accreditation of the American Psychological Association. Questions related to the program's accredited status should be directed to the Commission on Accreditation:

Office of Program Consultation and Accreditation American Psychological Association

750 1st Street NE Washington, DC 20002 Phone: (202) 336-5979 or Email: apaaccred@apa.org Web: www.apa.org/ed/accreditation/ The Ph.D. program in School Psychology is also approved		APCE 737 APCE 781	Psychology Single-Case Research Methods Evaluation of Psychological Services 3 elective credits in Statistics to be determined with Research Advisor	2 3 3	
by the National Association of School Psychologists.			APCE 663: Must complete 1 credit per semester for 4 semesters, excluding summer.		
•	uirements — 129-130 Credits REQUIREMENTS		Assessment APCE 644	Core — 13 semester hours Assessment I: Cognitive and Academic Functioning	5
	nology Core — 18 semester hours		APCE 646	Assessment II: Socio-emotional and	5
APCE 638	Human Behavior Analysis	3	A DOE: (40	Behavioral Functioning	2
APCE 640	School-Based Psychological	3	APCE 648	Assessment III: Early Childhood	3
	Consultation			Core — 19-20 semester hours	-
APCE 667	Crisis Intervention in the Schools	2	APCE 618	Practicum in Child, Adolescent, and Family Interventions	5
APCE 670	Principles of Psychometrics and Assessment	3	APCE 776	Externship in School Psychology	1
APCE 747	Psychological Aspects of Academic	4	APCE 779	Practicum in School Psychology	3
TH CE TIT	Programming and Intervention	·	APCE 776: T		
APCE 757	Intervention for Severe and Low	3			
	Incidence Disabilities		APCE 7/9: N spring semes	Must be taken twice, over consecutive fall	and
Foundations	in Psychology — 28 semester hours				
Biological Ba APCE 682	ases of Behavior Biological Bases of Behavior	3	APCE 617	f the following courses: Play Therapy: Theory and Practicum	3
	<u>-</u>	3	APCE 681	Practicum in Systems Consultation	3
APCE 625	ffective Bases of Behavior Applied Developmental Science	3	APCE 694	Practicum in Couples and Family	4
PSY 587	Social Cognitive Neuroscience	3	APCE 778	Therapy Clinical Neuropsychology Practicum	3
Social Bases	•	J		Core — 3 semester hours	3
PSY 664	Advanced Social Psychology	3	APCE 775	Supervision in School Psychology	3
Individual B				Core — 8 semester hours	
APCE 707	Seminar in Personality and	3	-		
	Counseling Theories		(Take 8 hours APCE 789	s over three semesters) Internship in School Psychology	1
APCE 758	Advanced Psychopathology	3	AFCE 769	internship in School Fsychology	1 - 8
Professional			Dissertation	Core — 16 semester hours	
APCE 763	Legal and Professional Foundations	4	APCE 797	Doctoral Proposal Research	1 -
	of School Psychology				4
History and		2	APCE 799	Doctoral Dissertation	1 -
PSY 590	Seminar in History and Systems	3			12
	Individual Differences		APCE 797: T	Take 4 credits	
APCE 623	Understanding and Counseling	3	APCE 799: T	Take 12 credits	
D	Diverse Populations		NOTE: A stu	dent entering with previously completed	
	re — 24 semester hours		graduate cou	rsework may be able to have courses wai	ved
Research Mo				consent. In addition to formal course	,
SRM 700	Advanced Research Methods	3		, students must complete written and oral we examinations. As part of their written	
Applied Stat		2		students must pass the National School	
SRM 602	Statistical Methods I	3	Psychology e	examination with a score of 165 or higher.	
SRM 603 SRM 610	Statistical Methods II Statistical Methods III	3	Students mus	t also complete a dissertation and a minir	
		J	1500 hour in	ternship.	
APCE 663	earch Methods Research Apprenticeship: School	1			
. H CL 003	resourch ripprenticeship. School	1			

SPECIAL EDUCATION PH.D.

College of Education and Behavioral Sciences Degree Requirements — 77-83 Credits

See "Special Education Ph.D." (p. 149).

The Ph.D. in Special Education is a flexible doctoral program with provisions for individual planning to prepare stewards of the discipline of special education 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 and gifts and talents. Graduates develop leadership knowledge and skills in exceptionalities 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.

DEGREE REQUIREMENTS

Students will be required to demonstrate literacy and competency in computer applications as part of the program.

Doctoral Core Courses (25 hours)

200001111	2041505 (20 110415)	
EDSE 701	Introduction to Doctoral Study in	1
	Exceptionalities	
EDSE 702	Law of Exceptionalities	3
EDSE 721	Theories of Exceptionality	3
EDSE 727	Issues and Trends in Exceptionalities	3
EDSE 728	Professional Writing	3
EDSE 732	Research in Exceptionalities	3
EDSE 733	Preparing Teachers of Students with	3
	Exceptionalities	
EDSE 744	Grant Writing Seminar	3
EDSE 745	Advanced Doctoral Seminar	3
Externships (3	3 hours - minimum)	
EDSE 730	Externship in Exceptionalities	1 -
	-	3

Externships are taken in one to three hour blocks and involve an off-campus experience. Variable titles related to inquiry, university teaching, research, 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 infants and preschool children with exceptionalities; one of the categorical areas of special education (autism, blind or visually impaired, deaf or hard of hearing, emotionally disturbed, learning disabilities, mental retardation, etc.); gifts and talents; 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 Prop	oosal/Dissertation — 16 hours	
EDSE 797	Doctoral Proposal Research	1 -

4

Requires permission of major advisor. Explores dissertation research problems, theoretical frameworks, methodology, and data analysis procedures expected to develop an approved dissertation proposal. Students enroll for 1- to 4-hour blocks for a maximum of 4 hours. The student works closely with the Research Advisor and Doctoral Committee members to develop the proposal.

EDSE 799	Doctoral Dissertation	1 -
		12

Requires permission of major advisor. Dissertation research is taken in 1- to 12-hour blocks for a maximum of 12 hours. The student works closely with the Research Advisor and Doctoral Committee members to develop the proposal.

Research Tools — 12-18 hours

Students in special education must demonstrate proficiency in two of the four research tools listed below:

1. Research Design/Applied Statistics (3 hours from the following courses)

The GPA for this course and the 12 hours of Research Core above must be 3.0 or higher.

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	3
	Analysis	
SRM 627	Survey Research Methods	3
SRM 629	Structural Equation Modeling	3

SRM 635 SRM 685 SRM 686 SRM 687 SRM 688	Categorical Data Analysis Educational Ethnography Qualitative Case Study Research Narrative Inquiry Writing as Analysis of Qualitative Research	3 3 3 3 3	one concentra	suing the Exercise Science emphasis selection area: 1) biomechanics, 2) exercise and 3) social psychology of sport and physical section (1) and physical psychology of sport and physical section (1) and physical section (1	
SRM 705	Advanced Issues in Research	3	1) Biomecha		
2. Evaluation ELPS 654	Methods 1 (9 hours from the following courses) Instructional Leadership and Supervision Policy Analysis and Development	3	Concentration SES 550 SES 619 SES 620	n Area Credits — 21 hours Neural Aspects of Kinesiology Advanced Biomechanics Neuromuscular Structure and Function	3 3 3
SRM 670 SRM 770	Evaluation: Models and Designs Evaluation: Advanced Methods	3 3	SES 622 SES 626	Directed Studies Metabolism	1 - 4 3
3. Instruction courses)	nal Technology (9 hours from the following	ing	SES 627	Muscle Physiology	3
ET 502 ET 602	Instructional Design Performance Technology for Instructional Environments	3 3	SES 550	dits (with advisor approval) — 15 hour Neural Aspects of Kinesiology	3
ET 617 ET 628	Development of Online Applications Design of Multimedia Learning Environments	3 3	SES 624 SES 629	Advanced Developmental Kinesiology Concepts in Kinesiology	3
ET 702	Instructional Design Theory and Research Field (9 hours)	3	SES 635 SES 665 SES 692	Exercise and Sports Psychology Advanced Sociological Kinesiology Graduate Internship in Sport and	3 3 1 -
Contact the do courses taken measurement, rehabilitation;	octoral coordinator for examples of approving a collateral field (cognition, instruction, psychology, human development, additional research courses may be nat will support the dissertation research (6)		SES 694 SES 755	Exercise Science Special Topics in Sport & Exercise Science Supervised Practicum in College Teaching	6 1 - 3 1 - 6
	nsive Performance Assessment			omechanics of Locomotion SES 755: Take 3 hours	
The comprehe	ensive examination consists of a written plus a matrix of performance options that		2) Exercise I		
demonstrates methodology,	competency in theory, pedagogy, research evidence-based practice, public acy, and collaboration.		SEŜ 625	ncentration Area Credits — 15 hours Laboratory Techniques in Exercise Science Research	3
EXERCISI	ND EXERCISE SCIENCE PH.D. E E SCIENCE EMPHASIS	_	SES 626 SES 627 SES 632 SES 755	Metabolism Muscle Physiology Cardiovascular Physiology Supervised Practicum in College	3 3 1-
C	Natural and Health Sciences			Teaching	6
•	uirements — 64-67 Credits		SES 755: Tal		
•	d Exercise Science Ph.D." (p. 172).		BIO 550	dits (with advisor approval) — 21 hour Cell Physiology	s 3
	REQUIREMENTS		BIO 552	Mammalian Physiology I	3
Prerequisites SES 602	s — 3 hours Introduction to Research in Sport and Exercise Science	3	BIO 553 CHEM 581 CHEM 582 GERO 555	Mammalian Physiology II General Biochemistry I General Biochemistry II Grant Development and	3 4 4 3
May be require program.	red if not taken during a student's Master's	1	SES 550	Administration Neural Aspects of Kinesiology	3

SES 619	Advanced Biomechanics	3	Research Proposal/Dissertation — 16 hours
SES 620	Neuromuscular Structure and Function	3	SES 797 Doctoral Proposal Research 1 -
SES 622	Directed Studies	1 - 4	SES 799 Doctoral Dissertation 1 - 12
SES 624 SES 635	Advanced Developmental Kinesiology Exercise and Sports Psychology	3	Research Tools Doctoral students in this degree must demonstrate
SES 665 SES 692	Advanced Sociological Kinesiology Graduate Internship in Sport and	3 1 -	competency in two research tools. Five possibilities are listed below:
	Exercise Science	6	1. Research Design. Applied Statistics/Quantitative
SES 694	Special Topics in Sport & Exercise Science	1 - 3	Methods. Complete 9-12 hours (excluding SRM 600 and SRM 700).
SES 755	Supervised Practicum in College Teaching	1 - 6	2. Research Design. Applied Statistics/Qualitative Methods. Complete 9-12 hours (excluding SRM 600 and SRM 700).
SES 755: Tal	ke 3 hours		,
	chology of Sport and Physical Activity		3. Discipline-Specific Laboratory Techniques. Exhibit competency in laboratory-based research work, which
	ncentration Area Credits — 12 hours	2	is specific to a student's concentration area.
SES 624	Advanced Developmental	3	Coursework supporting this requirement is acceptable,
CEC (20	Kinesiology	2	but not required.
SES 629 SES 635	Concepts in Kinesiology	3	4. Computer Applications. Complete a minimum of 9
SES 635 SES 665	Exercise and Sports Psychology Advanced Sociological Kinesiology	3	hours in graduate courses related to computer use with grades of "B" or better OR students can develop and
SES 629: Mo			demonstrate computer proficiency to satisfy a specific need in sport and exercise science. The students'
	dits (with advisor approval) — 24 hour		doctoral committee judges this program or proficiency
GERO 625	Psychosocial Aspects of Aging	3	acceptable or unacceptable.
PSY 664	Advanced Social Psychology Advanced Biomechanics	3	7 A 11 (1 C 11 C 1 1 1 1 1 1 1 1 1 1 1 1 1
SES 619		3	5. A collateral field of study may be used as a substitute
SES 620	Neuromuscular Structure and Function	3	for a research tool. See Graduate School policies for details.
SES 622	Directed Studies	1 - 4	NOTE: In order to advance to candidacy, students must demonstrate proficiency in theoretical and research
SES 626	Metabolism	3	foundations, teaching and communication, scholarship and
SES 627	Muscle Physiology	3	professional service. Criteria for proficiency are identified
SES 670	Sport and Higher Education	3	in the School of Sport and Exercise Science Doctoral
SES 680	Perspectives in Sport Pedagogy	3	Evaluation Matrix.
SES 692	Graduate Internship in Sport and Exercise Science	1 - 6	SPORT AND EXERCISE SCIENCE PH.D. —
SES 696	College Teaching	3	
SES 755	Supervised Practicum in College Teaching	1 - 6	SPORT ADMINISTRATION EMPHASIS
SOC 532	Social Psychology and Group	3	College of Natural and Health Sciences Degree Requirements — 64-67 Credits
SOC 552	Dynamics Applied Social Theory	3	•
	ore — 12 hours		See "Sport and Exercise Science Ph.D." (p. 172).
SRM 602	Statistical Methods I	3	DEGREE REQUIREMENTS
SRM 603	Statistical Methods II	3	Prerequisites — 3 hours
SES 703	Research Seminar in Sport and Exercise Science	3	SES 703 Research Seminar in Sport and 3 Exercise Science
SRM 610	Statistical Methods III or	3	or A graduate research course from
SRM 680	Introduction to Qualitative Research	3	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.

Required Emphasis	Credits —	27 hours
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SES 576	Sport Promotion and Marketing	3
		-
SES 650	Financial Management for Sport	3
	Organizations	
SES 660	Sport Personnel Management	3
SES 665	Advanced Sociological Kinesiology	3
SES 675	Management of Sports Facilities and	3
	Equipment	
SES 676	Sport Public Relations and	3
	Information Systems	
SES 678	Event Development and	3
	Management	
SES 688	Legal Aspects of Sport	3
SES 705	Seminar in Sport Administration	3
	1	

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

arcas.		
ELPS 601	Leadership Development Through	3
	Inquiry	
ELPS 650	School Finance and Budgeting	3
ET 501	Introduction to Applications of	3
	Educational Technology in PK-12	
	Education	
ET 504	Instructional Materials Design II	3
HESA 680	Law and Higher Education	3
SES 670	Sport and Higher Education	3
SES 692	Graduate Internship in Sport and	1 -
	Exercise Science	6
SES 696	College Teaching	3
SES 755	Supervised Practicum in College	1 -
	Teaching	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: 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.

Research Co	ore — 12 hours	
SRM 602	Statistical Methods I	3
SRM 603	Statistical Methods II	3
SES 703	Research Seminar in Sport and	3
	Exercise Science	
SRM 610	Statistical Methods III	3
	or	
SRM 680	Introduction to Qualitative Research	3
Research Pr	oposal/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).
- 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: 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.

SPORT AND EXERCISE SCIENCE PH.D. — SPORT PEDAGOGY EMPHASIS

College of Natural and Health Sciences

Degree Requirements — 65-68 Credits

See "Sport and Exercise Science Ph.D." (p. 172).

DEGREE REQUIREMENTS

Prerequisit	es — 3 hours	
SES 602	Introduction to Research in Sport	3
	and Exercise Science	

May be required if not taken during a student's Master's program.

Required Emphasis Credits — 22 hours

SES 614	Analysis of Teaching in Physical	3
	Education	
SES 640	Curriculum in Physical Education	3
SES 641	Instructional Strategies for	3
	Elementary School Physical	
	Education	
SES 642	Instructional Strategies for	3
	Secondary School Physical	
	Education	
SES 685	Critical Pedagogy	3
SES 695	Seminar in Physical Education	2
SES 696	College Teaching	3

SES 695: take twice

Elective Credits — 15 hours

NOTE: 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:

	J 1 &	
SES 619	Advanced Biomechanics	3
SES 620	Neuromuscular Structure and	3
	Function	
SES 624	Advanced Developmental	3
	Kinesiology	
SES 626	Metabolism	3
Research Co	ore — 12 hours	
SRM 602	Statistical Methods I	3
SRM 603	Statistical Methods II	3
SES 703	Research Seminar in Sport and	3
	Exercise Science	
SRM 610	Statistical Methods III	3
	or	
SRM 680	Introduction to Qualitative Research	3

Research Froposal/Dissertation — 10 hours		
SES 797	Doctoral Proposal Research	1 -
		4
SES 799	Doctoral Dissertation	1 -

16 hanna

12

SES 799 Doctoral Dissertation

Descarab Droposal/Dissortation

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: 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.

Doctoral Minors

APPLIED STATISTICS AND RESEARCH METHODS

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

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 3 3 3 3
SRM 610	Statistical Methods III	3
SRM 611	Advanced Statistical Data Analysis	3
SRM 625	Applied Multiple Regression	3
	Analysis	
SRM 627	Survey Research Methods	3
SRM 629	Structural Equation Modeling	3 3 3 3 3 3 3 3
SRM 635	Categorical Data Analysis	3
SRM 636	Applied Bayesian Statistics	3
SRM 637	Applied Time Series 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	3
	Research	
SRM 705	Advanced Issues in Research	3
	Methods	
SRM 770	Evaluation: Advanced Methods	3

NOTE: SRM 502 or SRM 617 may be substituted for SRM 602.

Features and Conditions

- 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.
- 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 LEADERSHIP AND POLICY STUDIES

College of Education and Behavioral Sciences Doctoral Minor Requirements — 15 Credits

The Educational Leadership minor is a 15 credit program 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 throughout the University to increase and expand their understanding of leadership theories, practices, strategies and research that support best practices in leading change and improvement of instructional settings. Completion of the minor will be noted in the student's transcript as "Minor in Educational Leadership and Policy Studies." 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.

DEGREE REQUIREMENTS

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:

ELPS 601	Leadership Development Through	3
	Inquiry	
ELPS 603	Shaping Organizations: Management	3
	and Leadership in Education	
ELPS 604	Understanding People: Professional	3
	Development and Educational	
	Leadership	
ELPS 605	External Environments: Social,	3
	Political, and Economic Influences	
	in Educational Leadership	
ELPS 608	Issues in Educational Leadership:	3
	Implications for Practice	
ELPS 622	Directed Studies	1 -
		3
ELPS 650	School Finance and Budgeting	3
ELPS 651	School Business Management	3
ELPS 654	Instructional Leadership and	3
	Supervision	

ELPS 660	Law and the Administrator	3
ELPS 662	Design and Delivery of Professional	3
	Development	
ELPS 665	Policy Analysis and Development	3
ELPS 666	Planning and Change in Education	3

Features and Conditions:

- No application for admission to the minor is required.
 In consultation with their doctoral program advisors, students will declare their intent to complete the minor on their doctoral program of studies filed with the Graduate School.
- 2. ELPS-prefixed courses used for the minor may be part of a student's program of required or elective courses.

EDUCATIONAL PSYCHOLOGY

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

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 a	nd Cognition Concentration
PSY 540	Theories and Principles of Learning

Development

PSY 590	Seminar in History and Systems	3
PSY 661	Trends and Issues in Educational	3
	Psychology	
PSY 681	Cognition and Instruction I	3
PSY 682	Cognition and Instruction II	3
PSY 685	Advanced Seminar in Learning and	3
	Cognition	
2) Human D	evelopment Concentration	
PSY 530	Life Span Developmental	3
	Psychology	
PSY 590	Seminar in History and Systems	3
PSY 630	Advanced Child and Adolescent	3
	Psychology	
PSY 661	Trends and Issues in Educational	3
	Psychology	
PSY 684	Advanced Seminar in Human	3

3) Research	and Measurement Concentration	
PSY 575	Educational Assessment	3
PSY 661	Trends and Issues in Educational	3
	Psychology	
PSY 674	Measurement I: Educational Testing	3
PSY 675	Measurement II: Advanced	3
	Techniques	
PSY 686	Advanced Seminar in Measurement	3
	and Assessment	

EDUCATIONAL TECHNOLOGY

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

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	3
E1 300	•	5
	and Technology	
ET 502	Instructional Design	3
ET 503	Instructional Materials Design I	3
ET 504	Instructional Materials Design II	3
ET 524	Design of Computer-Assisted	3
	Instruction	
ET 601	Managing People, Projects, and	3
	Technology Systems	
ET 602	Performance Technology for	3
	Instructional Environments	
ET 604	Computer Graphics and Visual	3
	Literacy	
ET 613	Teaching in an Online Environment	3
ET 615	Distance Education: Theories and	3
	Practice	
ET 617	Development of Online Applications	3
ET 627	Design of Games and Simulations	3
ET 628	Design of Multimedia Learning	3
	Environments	

Features and Conditions

3

- 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

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

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:

Detter Hom the	following courses.	
HESA 601	Introduction to Higher Education &	3
	Student Affairs	
HESA 611	Organization and Administration	3
HESA 612	Higher Education Assessment and	3
	Evaluation	
HESA 650	College Student Development:	3
	Foundational Theory	
HESA 651	Philosophical, Historical and	3
	Cultural Foundations of Student	
	Affairs in Higher Education	
HESA 652	Enrollment Management Services	3
HESA 655	Multiculturalism in Higher	3
	Education and Student Affairs	
HESA 658	Helping Skills for Practitioners	3
HESA 660	Women in Higher Education and	3
	Student Affairs	
HESA 668	College Students: Culture,	3
	Characteristics, Campus Life	
HESA 669	Culturally Responsive Aspects of	3
	Transformative Learning	

HESA 671	Introduction to Leadership in Higher Education and Student Affairs	3
	Leadership	
HESA 680	Law and Higher Education	3
HESA 683	Finance and Resource Management	3
	in Higher Education	
HESA 685	Human Resources in Higher	3
	Education	
HESA 690	Public Policy in Higher Education	3
HESA 695	Current Issues in Higher Education	3
	and Student Affairs Leadership	
HESA 751	Advanced College Student	3
	Development: Social Identity	
HESA 765	Advanced Multiculturalism	3
HESA 771	Advanced Leadership in Higher	3
	Education and Student Affairs	
	Leadership	

Features and Conditions

- 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.

READING

College of Education and Behavioral Sciences Doctoral Minor Requirements — 15 Credits

A Doctoral Minor in Reading is available to students in any UNC doctoral program with the approval of their doctoral program advisor.

REQUIREMENTS

Required courses — 15 hours

A minimum of five (5) courses completed during the student's UNC doctoral program with grades of "B-" or better among the following courses:

EDRD 611	Language, Literacy and Cognitive	3
	Development	
EDRD 612	Reading in the Elementary Schools	3
EDRD 614	Literature for Children, Adolescents	3
	and Young Adults	
EDRD 617	Evaluation and Improvements of	4
	Literacy Teaching and Learning	
EDRD 620	Reading in the Middle and	3
	Secondary Schools	
EDRD 642	Teaching the Writing Process in	3
	Schools	
EDRD 645	Reading Research	3
EDRD 670	Directing a School-Wide	3
	Reading/Literacy Program	
EDRD 692	Clinical Practicum in Literacy	4
	Coaching	
EDRD 745	Topical Seminar in Reading/	2 -
	Literacy	4

Features and Conditions

- 1. Completion of the minor will be noted in the student's transcript as Minor in Reading.
- 2. No other course substitutions are permitted without approval from the Reading Programs Coordinator.
- Some or all of the EDRD courses used for the minor may be part of a student's program of required or elective classes.
- 4. Because each 600-level course is also in the MA degree program, doctoral students must complete doctoral-level assignments with satisfactory grades according to the syllabus for each course.
- 5. In consultation with their doctoral program advisors, students must include sufficient Reading courses in their program of study to meet requirements for the minor. Because many of the courses are offered on a cohort model often through Extended Studies, doctoral Reading Minor students may need to seek permission from the instructor or program coordinator to enroll.

SPECIAL EDUCATION

College of Education and Behavioral Sciences Doctoral Minor Requirements — 18 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 Co	ourses — 9 hours	
EDSE 510	Foundations of Special Education	3
EDSE 511	Learning Environments and Cultural	3
	Considerations	
EDSE 512	Assessment, IEP Development and	3
	Instructional Planning	
Select one of	the following courses (3 hours):	
EDSE 532	Typical and Atypical Early Child	3
	Development: Application to Early	
	Childhood Special Education	
EDSE 541	Introduction to Visual Impairment	3
	and Deaf-Blindness	
EDSE 550	Foundations of Deaf Education	3
EDSE 613	Applied Assessment	3
EDSE 614	Behavioral Interventions	3
EDSE 616	Scientifically Based Literacy	3
	Interventions	
EDSE 617	Mathematics and Content Area	3
	Learning for Students with	
	Disabilities	
EDSE 618	Educating Students with Significant	3
	Support Needs	
EDSE 619	Secondary Services	3
EDSE 676	Assessment and Interventions for	3
	Students with Challenging Behaviors	
EDSE 677	Transition to Adulthood for Youth	3
	with Exceptionalities	
EDSE 678	Strategies for Students with	3
	Autism/Significant Needs	
EDSE 679	Interventions for Students with	3
	Cultural and Linguistic Differences	
EDSE 680	Administration and Supervision of	3
	Special Education	
EDSE 682	Foundations in Gifted Education	3
Select 6 hour	rs of the following courses:	
EDSE 702	Law of Exceptionalities	3
EDSE 721	Theories of Exceptionality	3
EDSE 727	Issues and Trends in Exceptionalities	3 3 3
EDSE 732	Research in Exceptionalities	
EDSE 745	Advanced Doctoral Seminar	3

Graduate Certificate Programs

CHILD AND ADOLESCENT GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

Required Cree	dits — 9 hours	
APCE 603	Understanding Children,	3
	Adolescents, and Their Systems	
APCE 609	Foundations of Play Therapy	3
Elective Credi	its — 6 hours	
APCE 638	Human Behavior Analysis	3
PSY 530	Life Span Developmental	3
	Psychology	
APCE 558	Diagnosis and Treatment Planning	3
Special Topics	s Courses	
(offered with a 513)	rotating sequence as APCE 508 or APCE	
,	Advanced Theories of Play Therapy	1
	Parent Child Interactive Therapy	1
	Play Therapy with Traumatized	1
	Children	
	Filial Therapy	1
	Play Therapy in School Settings	1
	Play Therapy with Special	1
	Populations	
	Therapeutic Parenting	1
Candidates wl	ho wish to be endorsed for registration	
	ssociation for Play Therapy will also be	
	ccessfully complete the following:	
APCE 617	Play Therapy: Theory and Practicum	3
CULTURA	L STUDIES AND EQUITY	
	E CERTIFICATE PROGRAM	
(NON-DEG	KEE)	

College of Education and Behavioral Sciences Certificate Requirements — 16 credits

Admission Requirements

For admittance to the certificate program, students should be successfully admitted to the University as a degree or non-degree seeking graduate student. No other prerequisites or admission standards beyond the university requirements are needed. In alignment with the Graduate School standards, all courses must be passed with a "B" grade or higher.

This graduate certificate program is intended for degree and non-degree seeking graduate students interested in issues of culture, diversity, equity and social justice. Students enrolled in any CEBS graduate program preparing for careers in teaching, administration, counseling, or research may obtain the certificate in addition to their graduate degree. Students in graduate programs outside of CEBS with interest in education are welcome, as are non-degree seeking practicing educators looking for professional development in cultural diversity.

REQUIREMENTS

Required Cre	edits — 7 credits	
EDF 618	Internship in Cultural Studies and	1
	Equity	
EDF 619	Pluralism in Education	3
ECLD 606	Culturally and Linguistically Diverse	3
	Learners in the U.S. Educational	
	System	
Elective credi	ts — 9 credits	
Choose from t	he following:	
APCE 623	Understanding and Counseling	3
	Diverse Populations	
ECLD 600	Literacy and Content Area	3
	Instruction in Spanish Bilingual	
	Classrooms	
ECLD 602	Teaching Culturally & Linguistically	3
	Diverse Learners	
ECLD 603	Methods and Assessment in	3
	Culturally & Linguistically Diverse	
EDI D 746	Education	2
EDLD 746	Sociocultural Theories and	3
EDGE (70	Linguistically Diverse Education	2
EDSE 679	Interventions for Students with	3
HESA 655	Cultural and Linguistic Differences Multiculturalism in Higher	3
ПЕЗА 033	Education and Student Affairs	3
HESA 669	Culturally Responsive Aspects of	3
TIESA 003	Transformative Learning	5
HESA 765	Advanced Multiculturalism	3
1111011 /03	1 to various ividitious distributions	5

A "B" grade in each of the courses must be achieved to earn the Cultural Studies and Equity Certificate.

GIFTED AND TALENTED EDUCATION GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Education and Behavioral Sciences Certificate Requirements — 12 credits

This four-course certificate program is designed for K-12 teachers who want to learn more about characteristics of students who are identified as needing Gifted Education services and programming. Teachers will complete the program with a foundation in Gifted and Talented Education that better prepares them to meet the needs of a wide variety of learners. The courses provide a broad overview of the field of Gifted Education. In addition, teachers will learn research-based instructional strategies and will be required to work directly with students to apply the knowledge and skills learned in the courses.

REQUIREMENTS

Required Credits — 12 credits **EDSE 683** The Gifted Learner: Nature and 3 Needs **EDSE 685** Curriculum & Instructional Practice 3 in Gifted Education **Emotional and Social Development EDSE 686** 3 of the Gifted and Talented Program Strategies and Services for **EDSE 687** 3 the Gifted and Talented **EDSE 689** Creativity in Gifted Education 3

FAMILY NURSE PRACTITIONER (FNP) GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Natural and Health Sciences Certificate Requirements — 36 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.

DEGREE REQUIREMENTS

Required FNP	Certificate Credits — 36 hours	
NURS 610	Health Assessment	3
NURS 612	Advanced Pharmacology	4
NURS 614	Advanced Pathophysiology	3
NURS 624	Health Promotion and Disease	3
	Prevention in Advanced Practice of	
	Nursing	
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)

College of Humanities and Social Sciences 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.

DEGREE REQUIREMENTS

Required Credits — 12 hours			
GEOG 513	Professional Renewal	1 -	
		3	
GEOG 520	Topics in Systematic Geography	3	
GEOG 592	Field Course in Geography	1 -	
		6	

GEOG 520: Take 2 times under different subtitles

GERONTOLOGY GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Natural and Health Sciences

Certificate Requirements — 12 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.

DEGREE REQUIREMENTS

Required Credits — 12 hours		
GERO 560	Community Resources for Older	3
	Adults	
GERO 625	Psychosocial Aspects of Aging	3
GERO 635	Social Policies of Aging	3
GERO 640	Health Aspects of Gerontology	3

MATHEMATICS TEACHER LEADERSHIP GRADUATE CERTIFICATE (NON-DEGREE)

College of Natural and Health Sciences

Certificate Requirements — 18 Credits

The courses for this certificate provide K-12 in-service mathematics teachers the opportunity to develop the knowledge, skills and dispositions to take leadership for improving K-12 mathematics education. The coursework supports teachers in learning 1) how to work with other teachers through coaching and professional development, 2) about the role of culture in mathematics, teaching, learning and leadership, 3) how to support the development of teachers' mathematics content knowledge and 4) how to negotiate and lead change and manage conflict.

Prerequisites: Must be an in-service, credentialed K-12 math teacher or math teacher leader.

DEGREE REQUIREMENTS

Required cree	dits:	
Three of the f	following (9 credits):	
MED 680	Teaching Math for Understanding I	3
MED 681	Teaching Math for Understanding II	3
MED 682	Implementing Mathematics	3
	Curriculum	
MED 684	Mathematics Coaching	3
Take one of the	he following combinations (6 hours):	
MED 685	Math Teacher Leadership I	2
MED 686	Math Teacher Leadership II	2
MED 687	Math Teacher Leadership III	2
OR		
MED 685	Math Teacher Leadership I	2
MED 687	Math Teacher Leadership III	2
MED 688	Math Teacher Leadership IV	2
Three of the f	Collowing (3 hours):	
MED 683	Seminar in Equity and Diversity	1 -
	Issues in Mathematics Education	3
	Subtitle: Exploring the role of	
	gender in mathematics education	
	Subtitle: Exploring the role of	

identity and agency in mathematics education Subtitle: Exploring the role of race in mathematics education

Subtitle: Exploring the role of socioeconomic status in mathematics education

MED 683: Repeatable under different subtitles

NURSING EDUCATION GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Natural and Health Sciences Certificate Requirements — 9-12 Credits

The Certificate in Nursing Education is designed to provide bachelor's, master's and doctorate-prepared nurses with advanced knowledge in nursing education for academic or practice settings. The courses are all or mostly online. Selections are tailored to meet student needs and additional choices may be available (confer with advisor). Students must complete each course with a grade of "B" or better.

Applicants must have a BSN and have/maintain an unencumbered RN license. Application materials are available on the UNC School of Nursing home page at http://www.unco.edu/nhs/nursing. If not currently enrolled in a nursing program at UNC, students must be admitted by the Graduate School and by the School of Nursing before enrolling in courses. Completed applications are submitted electronically and will be considered on an open schedule.

The Certificate in Nursing Education consists of a minimum of 9 credit hours of graduate level course work for the post-master's or doctoral student and 12 credit hours of graduate level course work for the post-bachelor's student. The recommended course work includes 1 course in teaching strategies, 1 course in teaching/learning theory, and 1 course in curriculum or evaluation. The postbachelor's student will select one additional course from one of these areas or an elective. A minimum of 6 credit hours must be in nursing for the post-master's or doctoral student, and a minimum of 9 credits must be in nursing for the post-bachelor's student.

DEGREE REQUIREMENTS

NURS 695

NURS 780

Take one course listed below from Teaching Strategies/Role: **NURS 521** Clinical Instruction and Precepting in Nursing Teaching Strategies for Practice and **NURS 631 Academic Settings**

Advanced Academic Nursing Roles

The Professorial Role in Nursing

3

3

3

3

ET 604	Computer Graphics and Visual Literacy	3
Take one cou	rse listed below from Teaching/Learning	5
Theory:		
PSY 540	Theories and Principles of Learning	3
PSY 681	Cognition and Instruction I	3
Take one cou	rse listed below from	
Curriculum/l	Evaluation:	
NURS 661	Planning and Evaluating Education	3
	in Practice and Academic Settings	
NURS 710	Evaluation in Nursing Education	3
NURS 760	Advanced Nursing Curriculum	3
	Design	
SRM 670	Evaluation: Models and Designs	3
Electives:		
NURS 504	Quality and Safety in Health Care	3
	Systems	
NURS 507	Policy, Leadership, and Nursing	3
	Issues	

Education

TEACHER LEADERSHIP GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Education and Behavioral Sciences Certificate Requirements — 16 Credits

The Teacher Leadership Certificate is a 16 credit program designed to support teachers' efforts to improve teaching and learning in schools. Participants will take four courses organized to broaden their perspectives of leadership and how it functions within a school setting. Additionally, participants will develop leadership strategies and capacities to engage in collaborative leadership with peers, community and administrators.

Target participants for this effort will be practicing teachers (P-12) interested in site-based leadership activities focused on improving teaching and learning.

The delivery model for this certificate program will be an on-line, cohort-based structure with a design that allows peer exchange and collaborative planning among participants sharing interests and instructional goals.

The certificate program will be completed over one academic year sequence.

DEGREE REQUIREMENTS

Core Courses — 12 hours		
ELPS 601	Leadership Development Through	3
	Inquiry	
ELPS 603	Shaping Organizations: Management	3
	and Leadership in Education	
ELPS 604	Understanding People: Professional	3
	Development and Educational	

ELPS 654	Leadership Instructional Leadership and Supervision	3
Internship – ELPS 606	- 4 hours Internship in Educational Leadership	1 - 9
	ake one credit of Internship with each Corfor a total of 4 hours.	re

TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) GRADUATE CERTIFICATE

College of Education and Behavioral Sciences

Certificate Requirements — 16 Credits

The Teaching English to Speakers of Other Languages (TESOL) Graduate Certificate is a 16 credit program designed to provide preparation to those interested in teaching English as a Foreign Language (EFL) in international settings, or teaching English as Second Language (ESL) in non K-12 (adult education) domestic settings. Participants will take five courses, with an experiential component, organized to prepare students at the graduate level for teaching in settings where disposition and skills are needed to work with diverse populations in a rapidly changing world. The program is not associated with any K-12 teaching license.

Admission Requirements:

For admittance to the certificate program, students should be successfully admitted to the University as a degree or non-degree seeking graduate student, including:

- An earned Bachelor's degree from an accredited institution;
- GPA of 3.0 or above in the last 60 semester hours or GRE consistent with criteria;
- TOEFL for international students: 80

Prerequisite: Enrollment as a degree or non-degree seeking graduate student at UNC.

CERTIFICATE REQUIREMENTS

Core Courses — 13 credits		
ECLD 592	Second Language Acquisition	3
	Theory	
ECLD 594	Foundations of Language and	3
	Linguistics for ESL/Bilingual	
	Educators	
ECLD 610	Practices in ESL/EFL Instruction	4
	and Assessment	
EDRD 523	Reading and Writing in the Content	3
	Areas	

ECLD 610: 30 hour practicum required.

Elective Credits - 3 credits

ECLD 593	Language, School and Society	3
	or Appropriate elective approved by the program coordinator/advisor	3
	program coordinator/advisor	

A "B-" grade or above in each of the courses and an overall GPA of 3.00 or above must be achieved to earn the TESOL Certificate.

TEACHING ONLINE GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Education and Behavioral Sciences Certificate Requirements — 12 Credits

Admission Requirements

For admittance to the certificate program, students should be successfully admitted to the University as a degree or non-degree seeking graduate student. No other prerequisites or admission standards beyond the university requirements are needed. This certificate is independent of state K12 licensure. It provides documentation of extended training in online pedagogy. Applicants to the certificate program are reviewed on an open schedule. In alignment with the Graduate School standards, all courses must be passed with a "B" grade or higher.

This graduate certificate program is intended for degree and non-degree seeking graduate students interested in becoming effective online educators. It serves to meet the growing demands for online teaching skills among today's K12 educators. The program develops knowledge and skills in information technology, interactive and collaborative teaching strategies, online classroom management and communication skills, and knowledge of legal and ethical issues in online learning.

Prerequisites: Enrollment as a degree or non-degree seeking graduate student at UNC.

CERTIFICATE REQUIREMENTS

Required credits — 12 credits			
ET 500	Introduction to Instructional Design	3	
	and Technology		
ET 502	Instructional Design	3	
ET 613	Teaching in an Online Environment	3	
ET 692	Internship	3	

TEACHING STUDENTS WITH AUTISM (TSA) GRADUATE CERTIFICATE PROGRAM (NON-DEGREE)

College of Education and Behavioral Sciences Certificate Requirements — 12 Credits

This certificate program was designed to increase the knowledge school-based personnel have when teaching students with autism. It is a 4-course online series designed to prepare teachers and related service providers e.g., speech Therapists, Occupational Therapist, School Psychologist) to deliver instruction to students with autism using scientifically-based strategies. Using the current research literature, these online courses were developed to determine the content and sequence of the courses.

Participants engage in a variety of learning opportunities throughout the courses including video enhanced learning modules and technology enhanced discussions. Curriculum includes an overview of autism and teaching strategies, administering and interpreting classroom-based assessments for instructional planning, applying scientifically-based teaching strategies to increase academic achievement, increasing communication, sensory, and social skills, and addressing behavioral challenges for students with autism.

While enrolled in the classes the participant must work with at least one pre K-12 grade student with autism or severe disabilities. In order to successfully complete the classes/program, participants must complete assignments by applying the knowledge learned to an aspect of the student's program (e.g., schedule, curriculum, programming) and demonstrating mastery of the concepts. To be awarded the Teaching Students with Autism Certificate, participants must pass each class with a grade of B- or better.

Required Cr	redits - 12 credits	
EDSE 678	Strategies for Students with	3
	Autism/Significant Needs	
EDSE 624	Communication, Sensory, and Social	3
	Skills Strategies for Working with	
	Students with Autism	
EDSE 625	Applied Behavior Analysis for	3
	Teachers	
EDSE 626	Instructional and Behavioral	3
	Interventions for Students on the	
	Autism Spectrum	

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 (p. 129).

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, unless otherwise noted. UNC Licensure officer Vicky Stromberger is located at McKee 216, (970) 351-1624 or; wicky.stromberger@unco.edu.

K-12 EDUCATION, POST BACCALAUREATE LICENSURE (K-GRADE 12)

College of Education and Behavioral Sciences

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 nonrelated 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.

DEGREE REQUIREMENTS

Required Cor	nmon PTEP — 21 credit hours	
EDF 500	Conceptions of Schooling	3
EDFE 125	Application for Graduate Licensure	
	Admission to PTEP	
EDFE 130	Application for Student Teaching	
EDFE 555	Supervised Student Teaching	9
EDRD 523	Reading and Writing in the Content	3
	Areas	
EDSE 509	Strategies for Students with	3
	Exceptionalities	
PSY 500	Educational Psychology for	3
	Teachers	

- Candidates must pass the Praxis or Place test prior to Student Teaching.
- Candidates may not take extra courses with Student Teaching without prior approval from the Program Coordinator and the STE Director.
- All PTEP Field Experiences and methods courses need to be successfully completed prior to Student Teaching.
- Student Teaching outside the supervision of UNC Faculty may or may not be approved.
- Teacher Candidates will not be placed in a school where they were once students or where they have a close relative attending and/or working.

SELECT ONE OF THE THREE CONTENT AREA PROGRAM OF STUDIES:

Physical Education (Sport and Exercise Science) — 49 credit hours

Content Courses

Outdoor Activ	ity (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 (se	elect one)	
SES 116	Water Safety Instructor	2

SES 118	Swimming	1	MUS 100	Recitals, Concerts and Productions	
SES 120	Lifeguard Training	2	MUS 113	Music Theory I	2
SES 133	Scuba Diving	1	MUS 114	Aural Skills and Sight Singing I	2
SES 152	Swimming Conditioning	1	MUS 115	Music Theory II	2 2 2 3 2
The follow	ing 10 hours:		MUS 116	Aural Skills and Sight Singing II	2
SES 134	Self Defense	1	MUS 143	Musical Styles and Context	3
SES 200	Weight Training and Conditioning	1	MUS 213	Music Theory III	2
SES 200	Track and Field	1	MUS 214	Aural Skills and Sight Singing III	1
SES 201	Dance Activities	1	MUS 215	Music Theory IV	1 2
SES 240	Secondary Physical Education	3	MUS 216	Aural Skills and Sight Singing IV	1
5L5 240	Content I	3	MUS 243	History of Music I	1 3 3
SES 243	Outdoor and Adventure	3	MUS 244	History of Music II	3
SES 2 13	Programming	5	MUS 100: ea	ich semester	
PTEP Cou				aration Courses - Instrumental Track	
SES 170	Introduction to Field Based	1	MUS 292	Marching Band	1
DES 170	Experience	•	MUS 319	Instrumental Techniques and	1
SES 266	Introduction to Physical Education	3	WIOS 519	Conducting	1
5E5 200	as a Profession	3	MUS 320	Wind Literature, Pedagogy and	2
SES 323	Motor Learning and Development	3	WIOS 320	Conducting	2
SES 338	Teaching Diverse Populations	3	MUS 330	String Techniques	1
SES 342	Teaching Health-Related Fitness	3	MUS 360	Voice Class	1
SES 440	Developing Pedagogical Skills in	4	MUS 361	Single Reed and Flute Class	1
DES 110	Elementary Physical Education	•	MUS 362	Double Reed Class	1
SES 442	Developing Pedagogical Skills in	4	MUS 364	Brass and Percussion Class	2
5E5 112	Secondary Physical Education	•	MUS 492	Marching Band	1
SES 612	Assessment in Sport Pedagogy	3	WOS 492	Individual Performance	14
SES 614	Analysis of Teaching in Physical	3		Major Ensemble	7
DES 011	Education	3		Piano Proficiency Examination	/
SES 641	Instructional Strategies for	3		•	
525 011	Elementary School Physical	5	-	rration Courses - Vocal/General/Piano	
	Education		Track		
SES 642	Instructional Strategies for	3	MUS 314	Guitar in the Classroom	1
	Secondary School Physical	-	MUS 323	Choral Techniques and Conducting	2
	Education		MUS 330	String Techniques	1
SES 688	Legal Aspects of Sport	3	MUS 361	Single Reed and Flute Class	1
	c 1	_	MUS 367	Materials and Techniques for Brass	1
Music - Ins	strumental Track		3.67.10.410	and Percussion	•
Foundation	al Courses		MUS 410	Vocal Pedagogy	2
MUS 100	Recitals, Concerts and Productions			Individual Performance	14
MUS 113	Music Theory I	2		Major Ensemble	7
MUS 114	Aural Skills and Sight Singing I	2	D ' , D'	Piano Proficiency Examination	
MUS 115	Music Theory II	2	Private Piano	o is recommended	
MUS 116	Aural Skills and Sight Singing II	2	Music PTEI	P Methods Courses - Instrumental Track	ζ.
MUS 143	Musical Styles and Context	3	MUS 210	Introduction to Music Education	1
MUS 213	Music Theory III	2	MUS 310	Teaching General Music in	2
MUS 214	Aural Skills and Sight Singing III	1		Elementary Schools	
MUS 215	Music Theory IV	2	MUS 312	Teaching Instrumental Music in	2
MUS 216	Aural Skills and Sight Singing IV	1		Elementary Schools	
MUS 243	History of Music I	3	MUS 317	Teaching Instrumental Music in	2
MUS 244	History of Music II	3		Secondary Schools	
MUS 100-	each semester		MUS 325	Choral Methods and Literature for	1
				Elementary and Secondary Schools	_
Vocal/Gen	eral/Piano Track		MUS 331	String Pedagogy and Literature for	2
Foundation	al Courses		MIIC 256	the Instrumental Music Teacher	1
			MUS 356	Marching Band Techniques	1

degree program at the same time he or she applies to

the Post-Baccalaureate Licensure program in

Secondary Education.

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MUS 414	Contemporary Issues in Music Education	2		ing, photographic imaging, photographic ions, printmaking, or sculpture.	
MUS 450	Seminar in Student Teaching for Music Educators	1	Professional ART 248	Teacher Education Program (PTEP) Introduction to Art Education/Art for	3
Music PTEP	Methods Courses - Vocal/General/Piar	10	-	the Exceptional Child	
Track			ART 345	Clinical Experience I: K-12 Art	3
MUS 210	Introduction to Music Education	1	ART 440	Foundations of Art Education	3
MUS 310	Teaching General Music in	2	ART 441	Cultural Studies in the K-12	3
	Elementary Schools			Curriculum	
MUS 311	Teaching General Music in	2	ART 442	Curriculum and Instruction in Art:	3
	Secondary Schools			Studio Strategies	
MUS 312	Teaching Instrumental Music in	2	ART 445	Clinical Experience II: K-12 Art	3
	Elementary Schools		ART 466	Visual Arts Student Teaching	1
MUS 324	Choral Conducting and Pedagogy for	2		Seminar	
	Elementary and Secondary Schools	_	C I D	N	
MUS 325	Choral Methods and Literature for	1	General R	Requirements	
1110002	Elementary and Secondary Schools	-	Eng — with	B or better	
MUS 414	Contemporary Issues in Music	2	_		
	Education		Comm — w	ith C or better	
MUS 450	Seminar in Student Teaching for	1	SECOND	ARY EDUCATION, POST	
	Music Educators			AUREATE (GRADES 7-12)	
Art and Desig	gn — 66 credit hours		DACCAL	AUREATE (GRADES 7-12)	
Foundations			College of	Education and Behavioral Science	es
ART 181	Ancient Art History	3	The program	includes a combination of on-campus and	
ART 182	Medieval to Rococo Art History	3		dies courses. See http://uncpostbac.com.	
ART 183	Art I	3			
ART 184	Art II	3	Admission	ı requirements	
ART 234	Drawing I	3	A comple	eted baccalaureate degree in one of the	
Required Ma	•			g majors: Biology, Chemistry,	
ART 231	Painting I	3		ications (Speech), Earth Science, English,	
ART 261	Sculpture I	3		Geography, German, History, Mathematics,	
ART 265	Jewelry	3		Social Science, Spanish, Theatre Arts.	
ART 203	Introduction to Photography	3		will have their transcripts evaluated for ma	jor
		3	content;	additional content classes may be required.	-
	om the following		Students	must complete their content classes prior to)
ART 253	Intaglio Printmaking I	3	beginning	g the PTEP (Professional Teacher Educatio	n
ART 254	Relief Printmaking I	3		These classes may be completed at UNC	or
ART 308	Workshop in Art	1 -	any other	accredited college or community college.	
		4	All applic	cants wishing to count licensure hours towa	ard
ART 356	Monotypes	3		of Arts degree in any area must apply to th	
Elective Cred	lits			School for admission into the MA or MA	
	Advanced Art History	4		ogram at the same time he or she applied to	
Calcat and fue	om the following			Baccalaureate Licensure program in	
ART 211	Ceramic Design I	2		ry Education.	
ART 211 ART 212	Wheel Throwing I	3			
	C	3		for admission in the last 60 credit hours of	
	om the following	_		ork. Different areas may have various conto GPA requirements.	111ل
ART 221	Fiber Design I	3			
ART 223	Weaving	3		cants wishing to count licensure hours towa	
Area of Conc	entration — Total 6 credits			of Arts degree in any area must apply to th	
A minimum o	f six credits (300 level or above) must be		Graduate	School for admission into the MA or MAT	Ľ

completed in one of the following areas of concentration:

art history, ceramics, computer graphics, drawing, graphic

 An interview with an appropriate content advisor is required.

DEGREE REQUIREMENTS

Required PT	EP Core Credits — 27 hours	
EDF 500	Conceptions of Schooling	3
EDFE 125	Application for Graduate Licensure	
	Admission to PTEP	
EDFE 130	Application for Student Teaching	
EDFE 554	Secondary Practicum	3
EDFE 555	Supervised Student Teaching	9
EDRD 523	Reading and Writing in the Content Areas	3
EDSE 509	Strategies for Students with	3
	Exceptionalities	
ET 501	Introduction to Applications of	3
	Educational Technology in PK-12	
	Education	
PSY 500	Educational Psychology for	3
	Teachers	
One of the following sequences:	llowing Content methods courses or	
EED 341	Methods for Teaching Composition	3
LLD 341	in Secondary Schools	3
	or	
EED 541	Methods for Teaching Composition	3
LLD 341	in Secondary Schools	3
	and	
EED 402	Methods for Teaching Literature in	3
LLD 402	Secondary Schools	3
	or	
EED 502	Methods for Teaching Literature in	3
LLD 302	Secondary Schools	5
	or	
FL 341	Methods of Teaching Foreign	3
	Languages	
	or	
SOSC 341	Teaching Secondary Social Studies	3
One of the fol	·	
HIST 400	Teaching History in the Secondary	1
11151 400	Curriculum	1
	or	
MED 441	Methods of Teaching Mathematics	3
THE THE	or	,
SCED 441	Methods of Teaching Secondary	3
	School Science	-
	or	
THEA 385	Methods of Teaching Drama	3
	Č	

 Candidates must pass the Praxis or Place test prior to Student Teaching.

- Candidates may not take extra courses with Student Teaching without prior approval from the Program Coordinator and the STE Director.
- All PTEP Field Experiences and methods courses need to be successfully completed prior to Student Teaching.
- Student Teaching outside the supervision of UNC Faculty may or may not be approved.
- Teacher Candidates will not be placed in a school where they were once students or where they have a close relative attending and/or working.

Initial Administrator and Special Licensure Programs

ADMINISTRATORS' LICENSURE: DISTRICT LEVEL LEADERSHIP

College of Education and Behavioral Sciences 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" (p. 128).) 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" (p. 78).

DEGREE REQUIREMENTS

Required Credits — 21 hours (minimum)

ELPS 606 Internship in Educational Leadership

		9
ELPS 654	Instructional Leadership and	3
	Supervision	
ELPS 660	Law and the Administrator	3
ELPS 665	Policy Analysis and Development	3
ELPS 667	Leadership at the District Level	3
EL DO (0)		

ELPS 606: minimum 2 hours at central office and 1 hour with other agencies.

Select one of the following two courses:

Select one of t	he following two courses:	
ELPS 651	School Business Management	3
ELPS 650	School Finance and Budgeting	3

PSY 674 Measurement I: Educational Testing 3 SRM 670 Evaluation: Models and Designs 3

GIFTED AND TALENTED SPECIALIST ENDORSEMENT

College of Education and Behavioral Sciences

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.

DEGREE REQUIREMENTS

Endorsement	Requirement — 24-27 hours	
EDSE 682	Foundations in Gifted Education	3
EDSE 683	The Gifted Learner: Nature and	3
	Needs	
EDSE 684	Assessment and Identification in	3
	Gifted Education	
EDSE 685	Curriculum & Instructional Practice	3
	in Gifted Education	
EDSE 686	Emotional and Social Development	3
	of the Gifted and Talented	
EDSE 687	Program Strategies and Services for	3
	the Gifted and Talented	
EDSE 688	Communication and Leadership in	3
	Gifted Education	
EDSE 691	Practicum in Teaching the Gifted	1 -
	and Talented	12

EDSE 691: Take 3-6 hours - Number of hours determined by advisor based on candidates; prior background and experiences in Gifted and Talented education.

ORIENTATION AND MOBILITY (O&M) ENDORSEMENT

College of Education and Behavioral Sciences

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.

DEGREE REQUIREMENTS

Endorsement	t Requirements — 15 Credits	
EDSE 547	Individual Instruction in Orientation	3
	and Mobility	
EDSE 647	Applied Methods in Orientation and	3
	Mobility	
EDSE 648	Practicum in Orientation and	3 -
	Mobility	9

EDSE 648: Repeatable, maximum of 9 credits

PRINCIPALS' LICENSURE

College of Education and Behavioral Sciences 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)" (p. 140).

Leadership Core — 12 hours			
ELPS 601	Leadership Development Through	3	
	Inquiry		
ELPS 603	Shaping Organizations: Management	3	
	and Leadership in Education		
ELPS 604	Understanding People: Professional	3	
	Development and Educational		
	Leadership		
ELPS 605	External Environments: Social,	3	
	Political, and Economic Influences		

in Educational Leadership

Additional Requirements — 15 hours minimum		
ELPS 606	Internship in Educational Leadership	1 -
		9
ELPS 654	Instructional Leadership and	3
	Supervision	
ELPS 660	Law and the Administrator	3
ELPS 670	The Principalship: Leadership at the	3
	School Site Level	

SPECIAL EDUCATION ADMINISTRATION LICENSURE

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

Required Major Credits — 28-39 hours		
EDSE 510	Foundations of Special Education	3
EDSE 511	Learning Environments and Cultural	3
	Considerations	
EDSE 512	Assessment, IEP Development and	3
	Instructional Planning	
Special Educa	tion Administration (22-33 hours)	
EDSE 680	Administration and Supervision of	3
	Special Education	
EDSE 681	Administrative Planning and	3
	Program Evaluation in Special	
	Education	
EDSE 697	Externship in Special Education:	1 -
	Administration	12
EDSE 718	Advanced Seminar in Education of	3

	Students with Hearing and/or Visual Handicaps	
ELPS 650	School Finance and Budgeting	3
ELPS 654	Instructional Leadership and	3
ELDC ((0	Supervision	3
ELPS 660	Law and the Administrator	3

NOTE: 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.

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.

BILINGUAL BICULTURAL EDUCATION (ENGLISH/SPANISH, K-GRADE 12)

College of Education and Behavioral Sciences 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			
ECLD 600	Literacy and Content Area	3	
	Instruction in Spanish Bilingual		
	Classrooms		
ECLD 604	Field Experience in Culturally &	3	
	Linguistically Diverse Education		
ECLD 605	Seminar in Multilingual Teaching	3	
	and Learning I		

ECLD 606	Culturally and Linguistically Diverse	3
	Learners in the U.S. Educational	
	System	
SPAN 555	Literature for Children and	3
	Adolescents	
	3 Graduate Credits of Spanish	3
	Language with approval of advisor	

CULTURALLY & LINGUISTICALLY DIVERSE EDUCATION (K-GRADE 12)

College of Education and Behavioral Sciences Requirements — 21 Credits

The graduate Culturally & 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 Culturally & 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 Culturally & Linguistically Diverse Education program requires the completion of 21 semester hours. 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 relevant literacy instruction, and evidence of familiarity with a second language.

ENDORSEMENT REQUIREMENTS

Required Credits — 21 hours		
ECLD 592	Second Language Acquisition	3
	Theory	
ECLD 593	Language, School and Society	3
ECLD 594	Foundations of Language and	3
	Linguistics for ESL/Bilingual	
	Educators	
ECLD 602	Teaching Culturally & Linguistically	3
	Diverse Learners	
ECLD 603	Methods and Assessment in	3
	Culturally & Linguistically Diverse	
	Education	
ECLD 604	Field Experience in Culturally &	3
	Linguistically Diverse Education	
EDRD 523	Reading and Writing in the Content	3
	Areas	

READING SPECIALIST (K-GRADE 12)

College of Education and Behavioral Sciences 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	3	
	and Young Adults		
EDRD 617	Evaluation and Improvements of	4	
	Literacy Teaching and Learning		
EDRD 620	Reading in the Middle and	3	
	Secondary Schools		
EDRD 642	Teaching the Writing Process in	3	
	Schools		
EDRD 645	Reading Research	3	
EDRD 670	Directing a School-Wide	3	
	Reading/Literacy Program		

EDRD 692	Clinical Practicum in Literacy Coaching	4
Select one of	the following courses:	
EDRD 622	Directed Studies	1 -
EDRD 622: 0	Content to be determined with Advisor	3
Select one of	the following courses:	
Required Su	pport Courses — 24 hours	
EDEL 620	Researched Applications for	3
	Instruction in Mathematics, K-9	
SRM 600	Introduction to Graduate Research	3
SRM 670	Evaluation: Models and Designs	3
ECLD 602	Teaching Culturally & Linguistically	3
	Diverse Learners	
ECLD 603	Methods and Assessment in	3
	Culturally & Linguistically Diverse	
	Education	
ELPS 662	Design and Delivery of Professional	3
	Development	
Select one of	the following courses:	
EDEC 670	Curriculum and Instruction in Early	3
	Childhood and Primary Education	
EDEL 612	Elementary School Curriculum	3
EED 541	Methods for Teaching Composition	3
	in Secondary Schools	

READING TEACHER (K-GRADE 12)

College of Education and Behavioral Sciences 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.

DEGREE REQUIREMENTS

Elementary and Secondary Reading Endorsement Requirements - 29 hours

Required Reading Credits – 29 hours

required rea	ung Credits – 27 nours	
EDRD 611	Language, Literacy and Cognitive	3
	Development	
EDRD 612	Reading in the Elementary Schools	3
EDRD 614	Literature for Children, Adolescents	3
	and Young Adults	
EDRD 617	Evaluation and Improvements of	4
	Literacy Teaching and Learning	
EDRD 620	Reading in the Middle and	3
	Secondary Schools	
EDRD 642	Teaching the Writing Process in	3
	Schools	
EDRD 645	Reading Research	3
EDRD 670	Directing a School-Wide	3
	Reading/Literacy Program	
EDRD 692	Clinical Practicum in Literacy	4
	Coaching	
	=	

SCHOOL LIBRARIAN (K-GRADE 12)

College of Education and Behavioral Sciences 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

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;

resource centers or media centers.

- 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 (nondegree) 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 b 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).

DEGREE REQUIREMENTS

Course Requirements		
EDRD 614	Literature for Children, Adolescents	3
	and Young Adults	
EDRD 620	Reading in the Middle and	3
	Secondary Schools	
ET 502	Instructional Design	3
ET 503	Instructional Materials Design I	3
ET 533	Information Literacy & Reference	3
ET 535	School Library Administration and	3
	Leadership	
ET 538	Selection, Evaluation and Utilization	3
	of Library Materials and Cataloging	
ET 694	Elementary School Library	1
	Internship	
ET 696	Secondary School Library Internship	1
SRM 600	Introduction to Graduate Research	3

NOTE: 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, a faculty member will be assigned from each discipline concerned to provide close supervision, participation, and coordination. It is imperative that the program be truly interdisciplinary and represents an integration of subject matter from each of the major disciplines. Programs that parallel other degree programs are not acceptable as interdisciplinary degree programs. 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 EdD). Secondary disciplines may also be included.

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 rational for pursuing the proposed interdisciplinary program. This must be a compelling statement clarifying why no single existing degree program could satisfy these goals.

- 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 Admissions (p. 8) 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 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 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:

- If the graduate faculty advisors determine a student has any course or degree deficiencies in his/her background, the proposal must list the course work necessary to alleviate those course or degree deficiencies. (Deficiency courses must be completed at the earliest possible date).
- 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.
- 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 (30) 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.

 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 designated 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 GIDP 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 GIDP 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: Oral (p. 46) section of this Catalog for further details).

Dissertation. Each interdisciplinary degree program student must complete a dissertation proposal and final dissertation that reflects the integrated nature of the interdisciplinary degree. Students in interdisciplinary degree programs must comply with the same policies and

procedures that guide research proposals and dissertations in distinct disciplines or areas of study.

COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES (EBS)

University Programs

Graduate Programs (p. 52)

Office of the Dean

Dean: Eugene P. Sheehan, Ph.D.

Associate Dean: Jingzi (Ginny) Huang, Ph.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 Applied Statistics and Research Methods and Educational 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 programs 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. The online Distance Opportunities Interpreter Training Center offers undergraduate programs in sign language interpretation.

Graduate programs are also offered to prepare school administrators, school psychologists, educational technology personnel, counselors and counseling psychologists for schools, 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 Department of Higher Education. The American Psychological Association and the Council for Accreditation of Counseling and Related Educational Programs accredit programs in School Psychology and Counseling and Counselor Education.

Other major units in the College are the 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.

Department of Applied Psychology and Counselor Education

Chair: Heather Helm, Ph.D.

Location: McKee 248 **Telephone:** 970.351.2731

Applied Psychology and Counselor Education Faculty: Vilma (Betty) Cardona, Ph.D.; Elysia Versen Clemens, Ph.D.; Fred J. Hanna, Ph.D.; Heather Helm, Ph.D.; Brian D. Johnson, Ph.D.; Laura K. Jones, Ph.D.; Jennifer L. Murdock, Ph.D.; M. Sean O'Halloran, Ph.D.; Jeffrey A. Rings, Ph.D.; Basilia (Lia) C. Softas–Nall, Ph.D.; Stephen L. Wright, Ph.D.

The Department of Applied Psychology and Counselor Education (APCE) offers a Ph.D. in Counseling Psychology (APA Accredited), a Ph.D. in Counselor Education and Supervision (CACREP Accredited), an M.A. in Clinical Mental Health Counseling (CACREP Accredited), an M.A. in Marriage, Couples, and Family Counseling/Therapy (CACREP Accredited), and an M.A. in School Counseling (CACREP Accredited).

Counseling Psychology Ph.D.

This program is designed to develop counseling psychologists who can independently apply scientific 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 research, assessment, clinical supervision, advocacy, and program evaluation. This program subscribes to the scientist-practitioner model, with an emphasis on training practitioners and researchers to work with diverse populations. Graduates obtain employment in faculty positions, counseling centers, private practice, community agencies, health care, and business. The program is APA accredited, which leads to eligibility for licensure as a psychologist.

The Department of Applied Psychology and Counselor Education, along with the Department of School Psychology, offers services to the University and the local community through the Psychological Services Clinic, a research and training facility.

Admission: Application materials must be completed and on file in the Graduate School by December 1st. 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 291 total, 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 1st. The supplemental materials include: completion of the Supplementary Data Sheet (included in the Counseling Psychology 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. (p. 93)

Counselor Education and Supervision Ph.D.

The doctoral program in counselor education and supervision prepares individuals for employment as counselor educators and supervisors for colleges and universities offering training in school counseling, clinical counseling, couples and family counseling/therapy, counseling with children and adolescents, and gerontology. Graduates are also qualified for licensure as professional counselors, marriage and family counselors, or school counselors. The Ph.D. in Counselor Education and Supervision is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

The Department of Applied Psychology and Counselor Education, along with the Department of School Psychology, offers services to the University and the local community through the Psychological Services Clinic, a research and training facility.

Admission: Application must be complete and on file in the Applied Psychology and Counselor Education Office by December 1, with decisions announced by the first week of March.

- All applicants should have a GPA of at least a 3.0 on a 4.0 scale, and have GRE Verbal and Quantitative scores of at least 500 each, or 291 total on the new scoring scale, 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 in an international applicant) needs to be submitted.
- A master's degree in counseling or a related area is required; CACREP accredited programs preferred.
- Three letters of recommendation are required from individuals who are familiar with the student's academic and clinical skills.
- Written statement must be completed regarding the relationship of the doctoral program to the future career goals of the applicant.

Attendance at a doctoral applicant interview day is required for the admission process to be completed. Admission decisions are based on the professional judgment of the Counselor Education and Supervision 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:

- · Diagnosis and Treatment Planning
- Career Counseling and Theory
- Counseling Theories
- Lifespan Development
- Family Systems
- · Group Counseling/Guidance
- Legal and Ethical Issues in Counseling
- Substance Abuse
- · Appraisal and Assessment
- · Introduction to Graduate Research

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. (p. 94)

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. Supervised training is provided through the Psychological Services Clinic to the University and the local community. 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 or in schools. 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. The Professional Counseling programs are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP).

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, or 291 total on the new scoring scale, and a minimum of 3.5 on the Analytical Writing subtest. 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 Mental Health Counseling M.A.

The Clinical Mental Health 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.

For degree and program requirements, see:

Clinical Mental Health Counseling M.A. (p. 57)

Marriage, Couples, and Family Counseling/Therapy M.A. The requirements for the Marriage, Couples, and Family Counseling/Therapy program are directed toward the development of competent professionals in the practice of marital and family counseling. The degree area specializes in relationships, interpersonal interaction, and systems theory.

For degree and program requirements, see:

Marriage, Couples and Family Counseling/Therapy M.A. (p. 69)

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. (p. 77)

Department of Applied Statistics and Research Methods

Chair: Jay R. Schaffer, Ph.D.

Location: McKee 518 **Telephone:** 970.351.2807

Faculty: Susan R. Hutchinson, Ph.D.; Maria K. E. Lahman, Ph.D; Trent L. Lalonde, Ph.D.; Robert Pearson, 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. (p. 52)

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. (p. 88) Applied Statistics and Research Methods Doctoral Minor (p. 115)

Department of Educational Technology

Chair: James E. Gall, Ph.D. Location: McKee 518 Telephone: 970.351.2816

Faculty: Jeffrey W. Bauer, Ph.D.; James E. Gall, Ph.D.; Linda L. Lohr, Ed.D.; Mia K. Williams, Ph.D.

The Department of Educational Technology oversees three degree programs and one related endorsement. The M.A. in Educational Technology is designed to develop knowledge and skills in instructional design and technologies for a variety of learning contexts (K-12, higher education, military training business/organizational, and international settings). The M.A. in School Library Education and the School Library Endorsement are programs tailored specifically to K-12 libraries and learning resource/media centers. The Ph.D. program provides a terminal degree in instructional design and technologies that culminates in a dissertation of original research in the field. Educational Technology is also an approved doctoral minor. The department also provides courses in educational technology for the college's various teacher preparation programs.

Graduate courses are offered in both face-to-face and online formats. Face-to-face classes within the department are scheduled to meet once a week starting no earlier than 4:00 PM to support local and commuting students that work full-time. Programs may be pursued on a part-time basis (although there are specific University limits on total program length and continuous registration). Unless otherwise specified, programs require participation in both online classes and face-to-face classes on the Greeley campus. International students are strongly represented in the program and are encouraged to apply.

The Ph.D. program in Educational Technology is a member of the Western Regional Graduate Program. Under this program residents of selected western states pay in-state rather than out-of-state tuition. Please contact the University for more information about eligibility for this program.

Educational Technology M.A.

The Master of Arts Degree in Educational Technology is designed to develop knowledge and skills in instructional design and technologies for a variety of learning contexts (K-12, higher education, online learning environments, military training, business/organizational, and international settings). Applications to this program are reviewed by the faculty throughout the calendar year and there is no application deadline. Applications require a two-page statement of career goals, three letters of reference, and transcripts from previous undergraduate work. The statement of career goals should specifically address how this degree program will assist the candidate in furthering his/her skills and knowledge and applying them in the future. The faculty review of applications generally takes one to two weeks. Major delays usually occur due to incomplete applications or insufficient information. International students are encouraged to apply early in order to be able to handle passport, visa, and other issues in a timely manner.

Potential students with limited English abilities are encouraged to examine the application options available through the University's Center for International Education. In many cases, students may be admitted to an academic program but begin their studies in the Intensive English Program.

For degree and program requirements, see: Educational Technology M.A. (p. 64)

Educational Technology Ph.D.

The Doctor of Philosophy in Educational Technology provides a terminal degree in instructional design and technologies that culminates in a dissertation of original research in the field. Graduates work in a variety of learning contexts (K-12, higher education, online environments, military training, business/organizational, and international settings) as researchers, consultants, and scholars. Cooperative research and other scholarly projects are encouraged among students and faculty. The program is designed to be rigorous but practical.

The doctoral faculty in the department review applications in both fall and spring semesters. The deadline for fall applications is November 1; the deadline for spring applications is March 1. Applications require a two-page statement of career goals, three letters of reference, and transcripts from previous undergraduate and graduate work. The statement of career goals should specifically address how this degree program will assist the candidate in furthering his/her skills and knowledge and applying them in the future. The applicant must also complete a short interview scheduled with the doctoral faculty. The interview may be conducted in person, by telephone, or by video conference. Interviews generally take place one to two weeks after the application deadline and final decisions are made shortly after that. Major delays usually

occur due to incomplete applications or insufficient information. International students are encouraged to apply early in order to be able to handle passport, visa, and other issues in a timely manner. Potential students with limited English abilities are encouraged to examine the application options available through the University's Center for International Education. In many cases, students may be admitted to an academic program, but begin their studies in the Intensive English Program.

For degree and program requirements, see:

Educational Technology Ph.D. (p. 100) Educational Technology Doctoral Minor (p. 116)

School Library Education M.A.

The Master of Arts in School Library Education is tailored specifically to K-12 professionals who would like to obtain employment in Colorado's K-12 libraries and learning resource/media centers. Applications to this program are reviewed by the faculty throughout the calendar year and there is no application deadline. Applications require a two-page statement of career goals, three letters of reference, and transcripts from previous undergraduate work. A teaching license valid for the State of Colorado is also required. The statement of career goals should specifically address how this degree program will assist the candidate in furthering his/her skills and knowledge and applying them in the future. The faculty review of applications generally takes one to two weeks. Major delays usually occur due to incomplete applications or insufficient information.

For degree and program requirements, see:

School Library Education M.A. (p. 78)

Department of Leadership, Policy and Development: Higher Education and P-12 Education

Chair: Matthew Birnbaum, Ph.D.

Location: McKee 418 **Telephone:** 970.351.2861

Faculty: Anthony Armenta, Ed.D.; Matthew Birnbaum, Ph.D.; Florence M. Guido, Ph.D.; Chayla Haynes, Ph.D.; Christopher Jenkins, Ph.D.; Gabriel Serna, Ph.D.; Linda R. Vogel, Ph.D.; Spencer Weiler, Ph.D.; Tamara Yakaboski, Ph.D.

The Leadership, Policy and Development Department includes the Educational Leadership and Policy Studies (ELPS) Program and the Higher Education and Student Affairs Leadership (HESAL) Program. For specific degree, licensure, and certificate programs offered, please refer to the following listing of the appropriate program of interest.

Educational Leadership and Policy Studies

Location: McKee 418 Telephone: 970.351.2861

Faculty: Anthony Armenta, Ed.D.; Christopher Jenkins, Ph.D.; Linda R. Vogel, Ph.D.; Spencer Weiler, 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:

Administrators Licensure: District Level Leadership (p. 127)

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 (p. 128)

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, background information form, 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. 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. (p. 62)

Educational Leadership and Special Education Administration M.A. with dual licensure as a Principal and Special Education Director

The Master's (M.A.) degree program in Educational Leadership and Special Education Administration prepares candidates to become effective leaders and managers of educational programs and services at both the school building and school district levels of impact. Candidates for this degree complete coursework in applied research/evaluation, the principalship, foundations of educational leadership, contextual understanding of systems, policy/legal/procedural information, program planning & organization, budget & resources, and parent/community engagement. The program provides opportunities for students to develop in-depth understanding about leadership roles and responsibilities, working with external environments, policy development, organizational behavior, and contemporary educational issues. The program prepares graduates to assume roles as building principals at elementary, middle, or high school levels: and district level positions as special education directors and/or central office administrators.

Upon successful completion of this program, students will earn a M.A. degree with dual licensure as a Principal and Special Education Director.

Graduate applications for this degree are evaluated by the Graduate School, Department of Educational Leadership and Policy Studies, and the School of Special Education. Entering students must possess a bachelors degree from an accredited college or university. The M.A. Degree requires 39 semester hours of graduate study beyond the bachelors

degree. Satisfactory performance on a concluding activity demonstrating attainment of program outcomes and approved by faculty, in accordance with Graduate School policy, must be demonstrated.

For degree and program requirements, see:

Educational Leadership & Special Education Administration Master of Arts with dual licensure as a Principal and Special Education Director (p. 63)

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, background information form, 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. (p. 87)

Educational Leadership and Special Education Administration Ed.S.

The interdisciplinary Educational Specialist (Ed.S.) degree program in Educational Leadership and Special Education Administration prepares candidates to become effective leaders and managers of educational program and services at both the school building and school district levels of impact. Candidates for this degree complete coursework in applied research/evaluation, the principalship, foundations of educational leadership, contextual understanding of systems, policy/legal/procedural information, program planning and organization, budget and resources, and parent/community engagement. The program provides opportunities for students to develop in-depth understanding about leadership roles and responsibilities, working with external environments, policy development, organizational behavior and contemporary educational issues. The program prepares graduates to assume roles as building principals at the elementary, middle, or high school levels: and district level positions as special education directors and/or central office administrators.

Graduate applications for this degree are evaluated by the Graduate School, Department of Educational Leadership and Policy Studies, and the School of Special Education. Entering students must possess a master's degree from an accredited college or university. The Ed.S. degree requires 39 semester hours of graduate study beyond the master's degree. Satisfactory performance on a concluding activity demonstrating attainment of program outcomes and

approved by faculty, in accordance with Graduate School policy, must be demonstrated.

For degree and program requirements, see:

Educational Leadership and Special Education Administration EdS

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, background information form, 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 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. (p. 87)

Higher Education and Student Affairs Leadership

Program Coordinator: Matthew Birnbaum, Ph.D.

Location: McKee 418 Telephone: 970.351.2861 Email: <u>HESAL@unco.edu</u>

Faculty: Matthew Birnbaum, Ph.D.; Florence M. Guido, Ph.D.; Chayla Haynes, Ph.D.; Gabriel Serna, Ph.D.; Tamara Yakaboski, Ph.D.

The Higher Education and Student Affairs Leadership (HESAL) program is distinguished for weaving social justice throughout the curriculum and helping students develop equity, diversity, and inclusion competencies. Our graduates are prepared to provide effective and ethical leadership in a variety of student affairs, academic, and policy arenas. The HESAL program emphasizes excellence in professional practice, research, and scholarly writing. Each of our fulltime faculty members is a former student

services administrator and coursework blends theory and practice. We welcome students from diverse backgrounds and life experiences.

The program offers M.A. and Ph.D. degrees on the Greeley campus and a Ph.D. through Extended Campus at the Lowry campus. The program also offers coursework for students in other graduate programs, including a doctoral minor.

Commitment to Social Justice and Diversity The HESAL faculty is committed to social justice, equity, diversity, and inclusion in our practice and scholarship. The curriculum is designed to raise critical consciousness, which we believe is fundamental to developing advanced professional leadership competencies. Students are expected to engage in coursework, practice, and research that explores inclusive perspectives in all areas of post-secondary education. The faculty believes in creating an atmosphere that supports multiple perspectives, both in the pursuit of individual research and as a community of scholars.

Program Approach to Graduate Study The HESAL program embraces a community-of-scholars model of interaction among students and faculty. The students are viewed as colleagues with progressively higher levels of responsibility and expertise. Cooperative research and other scholarly projects are encouraged among students and faculty.

Admission Process: There are two parts in the process of admission to the HESAL M.A. and Ph.D. Programs, including the Graduate School application process and the HESAL Program application process, which includes an interview.

To download the application packet from the HESAL Program, please visit our forms page, www.unco.edu/cebs/hesal/apply.htm. Visit the UNC Graduate School site for information about their part of the application process, http://www.unco.edu/grad/.

These two parts must be pursued simultaneously. It takes up to 20 working days for the Graduate School to set up a student record, evaluate eligibility for admission, and prepare a screening packet for our HESAL Selection Committee. Once the HESAL faculty has reviewed your full application, including the interview, they make a recommendation regarding your admission. If accepted to the program, students will be assigned an advisor and the recommendation will be forwarded on to the Graduate School. The Graduate Dean then communicates the official admission decision to you in writing, and the Graduate School staff record the decision on your student record.

The HESAL program has two deadlines for admissions. The first is usually in early spring and the second in May. Those individuals seeking a graduate assistantship should apply before the first deadline. Please see the HESAL webpage for current information.

Higher Education and Student Affairs Leadership M.A.

The Higher Education and Student Affairs Leadership (HESAL) Master of Arts (M.A.) degree is a 39 credit hour program that prepares effective student affairs professionals who value a social justice perspective. Students take a wide array of courses in consultation with an assigned advisor who assists you in preparing for a vocation in higher education and student affairs' diverse environments. Students are required to earn three (3) credit hours of field experience under the mentorship of experienced higher education and student affairs leaders. The HESAL M.A. program follows applicable C.A.S. standards.

For specific details on program requirements, curriculum, and course descriptions, please consult the University of Northern Colorado's Graduate Catalog.

Admission to M.A. program: Students must hold a bachelor's degree in any major from an accredited institution.

For degree and program requirements, see:
Higher Education and Student Affairs Leadership M.A.
(p. 68)

Higher Education and Student Affairs Leadership Ph.D.

The HESAL Ph.D. is a 64 credit hour program that integrates social justice and empirical research throughout the inquiry-based curriculum. The 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. Opportunities are provided for practical experiences under the mentorship of experienced higher education leaders. Students are admitted as a cohort group, with expectations that they 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 this requirement for admission purposes, 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. 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.

For degree and program requirements, see:

Higher Education and Student Affairs Leadership Ph.D. (p. 100)

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 Klaczynzki, 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 P. 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.

Accelerated (4 + 1) Psychology B.A. and Educational Psychology M.A.

Motivated and high-achieving students may seek to complete the requirements for the B.A. in Psychology and M.A. in Educational Psychology in five years. To obtain both degrees, students must complete all the requirements for the B.A. described in the Undergraduate Catalog and all of the requirements for the M.A. described in the Graduate Catalog. Completing the requirements for both

degrees in the accelerated Master's program is made possible by taking 9 credits of graduate course work in the junior and senior years (paid for at the undergraduate tuition rate). These 9 credit hours will be counted towards both the B.A. and M.A. degree requirements. Students remain eligible for financial aid as an undergraduate; any Graduate School aid is not available until students are admitted as a Graduate student.

Students interested in transferring into an accelerated Master's Program must:

- have a cumulative GPA of at least 3.0 to take graduate-level courses as a junior or senior.
- Meet with the program's advisor in their junior year, apply (following the same procedure and meeting the same requirements as other M.A. applicants). Full admission is dependent on completing the B.A. requirements in the senior year while maintaining a minimum 3.0 GPA.
- Students and faculty identify the graduate courses the students should take. The program application will be signed and forwarded to the Graduate School with signatures of the program advisor indicating the approval of graduate course transfer.

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 See Educational Psychology MA (p. 63) for more information. 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.

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. (p. 97) Educational Psychology Doctoral Minor (p. 116)

Department of School Psychology

Chair: Michelle S. Athanasiou, Ph.D.

Location: McKee 248 **Telephone:** 970.351.2731

School Psychology Faculty: Michelle S. Athanasiou, Ph.D.; Achilles N. Bardos, Ph.D.; John Mark Froiland, Ph.D.; Robyn S. Hess, Ph.D.; Kathrine Koehler Hak, Ph.D.

The Department of School Psychology is housed within the College of Education and Behavioral Sciences and offers graduate training at two levels:

- Educational Specialist in School Psychology (Ed.S.)
- Doctor of Philosophy in School Psychology (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. Ph.D. graduates are eligible to pursue licensure as psychologists.

Admission Requirements: Application materials must be completed and on file at the Graduate School by December 15th. Graduate School Application materials include: a completed application form and application fee, one official copy of all academic transcripts, one official copy of GRE scores, and three letters of recommendation from individuals familiar with the applicant's academic skills and relevant experience.

1. All entering students will hold at least a bachelor's degree, should have a GPA of at least 3.0 on a 4.0 scale, combined GRE Verbal and Quantitative scores of 300, and a minimum of 3.5 on the Analytical Writing subtest.

- 2. Applicants must submit a supplementary application directly to the Department of School Psychology by December 15. This material includes: a supplementary data sheet, current vita, and a written statement regarding the relationship of the program to the personal and professional goals of the applicant.
- 3. Finalists for the doctoral program are invited to attend an onsite interview.

Applications are evaluated competitively for a limited number of positions. The applicant must demonstrate clear potential for success. Admission decisions for the Ph.D. are typically announced by March 1st and decisions for the Ed.S. by March 15th.

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 entering with a bachelor's degree. A student with a master's degree in an area of professional psychology should meet with his or her advisor to develop a specific plan of study. A course in abnormal psychology is prerequisite to the program and must be completed prior to or during the first year of study.

This program is accredited by the National Association of School Psychologists and leads to licensure as a School Psychologist through the Colorado Department of Education.

For degree and program requirements, see:

School Psychology Ed.S. (p. 87)

School Psychology Ph.D.

The principal goal of the doctoral program is the training of a scientist-practitioner who possesses a broad and general knowledge of psychology and is able to apply these skills with proficiency in the areas of advanced intervention, assessment, consultation, research, and program evaluation. Doctoral students in School Psychology are expected to engage in scholarly work throughout their program of study to gain skill as a researcher. They are expected to work with an approved faculty member for five hours per week for a minimum of four semesters (summers excluded). The program is based on the student entering with a bachelor's degree. Students with advanced graduate degrees in an area of professional psychology may be able to waive some coursework and should meet with their advisors to develop a specific plan of study. A course in abnormal psychology is a prerequisite to the program and must be completed in the first year of study.

The Ph.D. program is fully accredited by the Commission on Accreditation of the American Psychological Association. Questions related to the program's accredited status should be directed to the Commission on Accreditation: Office of Program Consultation and Accreditation, American Psychological Association, 750 1st Street, NE, Washington, DC 20002, Phone: (202) 336-5979 / E-mail: apaaccred@apa.org, Web: www.apa.org/ed/accreditation. The Ph.D. program in School Psychology is also approved by the National Association of School Psychologists.

Doctoral graduates are eligible for licensure as psychologists through the state Department of Regulatory Agencies (DORA) and as school psychologists through the state Department of Education. Graduates are qualified to assume positions as school-based practitioners, university professors, consultants, educational researchers, and psychologists (after obtaining DORA licensure).

For degree and program requirements, see: School Psychology Ph.D. (p. 108)

School of Special Education

Director Harvey Rude, Ed.D.

Location: McKee 29 **Telephone:** 970.351.2691

Faculty: Rashida Banerjee, Ph.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.; Jennifer Ritchotte, Ph.D.; Harvey Rude, Ed.D.; Ann Sebald, Ed.D.; Todd H. Sundeen, Ph.D.; Jennifer Urbach, Ph.D.; Hasan Zaghlawan, 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 Disabilities, and an annual Special Education Summer Symposia Series 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.

For degree and program requirements, see:

Special Education M.A. — Deaf and Hard of Hearing Emphasis (p. 79)

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.

For degree and program requirements, see:

Special Education M.A. — Early Childhood Special Education Emphasis (p. 79)

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, behavior, elementary and secondary differentiated instruction, and technology. Teachers completing this program will demonstrate the skills needed to provide appropriate academic and behavioral supports and accommodations for students with disabilities. The Special Education Generalist candidate 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 Generalist 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 and determined by the licensing office.

For degree and program requirements, see:

Special Education M.A. — Generalist Emphasis (p. 80)

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.

For degree and program requirements, see:

Special Education M.A. — Gifted and Talented Education Emphasis (p. 80)

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.

For degree and program requirements, see:

Special Education M.A. — Intervention Specialist Emphasis (p. 81)

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. — Visual Impairment Emphasis (p. 81) Orientation and Mobility (O&M) Endorsement (p. 128) Teaching American Sign Language M.A. (p. 86)

Educational Leadership and Special Education Administration M.A. with dual licensure as a Principal and Special Education Director

The Master's (M.A.) degree program in Educational Leadership and Special Education Administration prepares candidates to become effective leaders and managers of educational programs and services at both the school building and school district levels of impact. Candidates for this degree complete coursework in applied research/evaluation, the principalship, foundations of educational leadership, contextual understanding of systems, policy/legal/procedural information, program planning & organization, budget & resources, and parent/community engagement. The program provides opportunities for students to develop in-depth understanding about leadership roles and responsibilities, working with external environments, policy development, organizational behavior, and contemporary educational issues. The program prepares graduates to assume roles as building principals at elementary, middle, or high school levels: and district level positions as special education directors and/or central office administrators.

Upon successful completion of this program, students will earn a M.A. degree with dual licensure as a Principal and Special Education Director.

Graduate applications for this degree are evaluated by the Graduate School, Department of Educational Leadership and Policy Studies, and the School of Special Education. Entering students must possess a bachelors degree from an accredited college or university. The M.A. Degree requires 39 semester hours of graduate study beyond the bachelors degree. Satisfactory performance on a concluding activity demonstrating attainment of program outcomes and approved by faculty, in accordance with Graduate School policy, must be demonstrated.

For degree and program requirements, see:

Educational Leadership & Special Education Administration Master of Arts with dual licensure as a Principal and Special Education Director (p. 63)

Educational Leadership and Special Education Administration Ed.S.

The interdisciplinary Educational Specialist (Ed.S.) degree program in Educational Leadership and Special Education

Administration prepares candidates to become effective leaders and managers of educational program and services at both the school building and school district levels of impact. Candidates for this degree complete coursework in applied research/evaluation, the principalship, foundations of educational leadership, contextual understanding of systems, policy/legal/procedural information, program planning and organization, budget and resources, and parent/community engagement. The program provides opportunities for students to develop in-depth understanding about leadership roles and responsibilities, working with external environments, policy development, organizational behavior and contemporary educational issues. The program prepares graduates to assume roles as building principals at the elementary, middle, or high school levels: and district level positions as special education directors and/or central office administrators.

Graduate applications for this degree are evaluated by the Graduate School, Department of Educational Leadership and Policy Studies, and the School of Special Education. Entering students must possess a master's degree from an accredited college or university. The Ed.S. degree requires 39 semester hours of graduate study beyond the master's degree. Satisfactory performance on a concluding activity demonstrating attainment of program outcomes and approved by faculty, in accordance with Graduate School policy, must be demonstrated.

For degree and program requirements, see:

Educational Leadership and Special Education Administration Ed.S. (p. 87)

Special Education Ph.D.

The Ph.D. program in Special Education is designed to prepare candidates in theory, pedagogy, research methodology, evidence-based practice, public policy and advocacy, and collaboration. The philosophy of the doctoral program is based on the concept that learning is an active, self-regulated process. The doctoral program is composed of required courses in special education. research methods, electives, research tools, and requires the completion of a dissertation. Doctoral learners are guided through their program by their advisor (who usually serves as Research Chair for the dissertation) and a committee of faculty from special education and other disciplines. The doctoral dissertation is defended by the Doctoral Learner in a committee meeting open to the campus community. The program can be completed in 3-5 years, depending on enrollment status (full- or part-time) and professional goals.

In joint planning sessions, the doctoral learner and advisor, in consultation with the doctoral committee, should establish a tentative doctoral plan of study during the first and second semesters on campus. This plan should be based on past experience and training and on the student's interests and goals. The plan of study 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. Doctoral learners 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.

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.

For degree and program requirements, see:

Special Education Administration Licensure (p. 129) Special Education Ph.D. (p. 110) Special Education Doctoral Minor (p. 118)

School of Teacher Education

Director: Jingzi (Ginny) Huang, Ph.D.

Location: McKee 216 **Telephone:** 970.351.2908

Faculty: Frederick J. Bartelheim, Ed.D.; Margaret Berg, Ph.D.; James A. Erekson, Ph.D.; Gary Fertig, Ph.D.; Thomas A. Griggs, Ph.D.; Jenni L. Harding-DeKam, Ed.D.; Jody K. Lawrence, Ph.D.; Valerie Middleton, Ph.D.; Madeline Milian, Ed.D.; Kathleen O'Neil, Ph.D.; Michael F. Opitz, Ph.D.; Fredrick L. Silverman, Ed.D.; Susan A. Thompson, Ed.D.; Dana Walker, Ph.D.; Mia K. Williams, Ph.D.; Suzette Youngs, 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. (p. 99)

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 including Post Baccalaureate initial licensure, Curriculum Studies, Linguistically Diverse Education, and English Education. The latter three programs require one year of successful classroom teaching experience for graduation.

For degree and program requirements, see:

Education M.A.T. — Curriculum Studies Emphasis (p. 60) Education M.A.T. — Elementary Education with

Licensure Emphasis (p. 60)

Education M.A.T. — English Education Emphasis (p. 61)

Education M.A.T. — Linguistically Diverse Education Emphasis (p. 62)

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 mid-point 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. (p. 76)

Distance Opportunities for Interpreter Training (DO IT) Center

Director: Leilani J. Johnson, Ed.D.

Teaching ASL M.A. Program Coordinator: Greta

Knigga-Daugherty, Ph.D.

Location: Denver Center @ Lowry

Telephone: 303.365.7688 or 720.216.2662

The mission of the DO IT Center is to design and deliver quality instruction to a national audience that prepares both qualified ASL-English interpreters and ASL teachers. The master's program in Teaching ASL (TASL) is a unique hybrid program offered online with summer sessions in Greeley as an MA or an MA plus licensure track. The ASL-English Interpretation (ASLEI) program, offered online and in Denver at the Lowry site, is the only distance delivered program accredited by the Commission on Collegiate Interpreter Education. Other offerings include the Leadership and Supervision Certificate Program, the Legal Interpreter Training Program, the Colorado Educational Interpreter Professional Development Series, and ASL 1-4 coursework offered in Greeley, Denver Center at the Lowry site, and online.

DO IT Center faculty (hearing and Deaf) are selected from around the nation for their recognized expertise; having published in their respective areas, presented at professional conferences and contributed to the growth of the profession.

Teaching American Sign Language M.A.

The Teaching American Sign Language (TASL) Program is a distance delivered master's degree with required onsite summer sessions which prepares instructors to teach American Sign Language (ASL) in a number of settings including secondary and post-secondary settings. The focus of this program is on pedagogical coursework as applicable to teaching ASL as a foreign or as a modern language, not learning or mastering ASL. Therefore, all students must demonstrate ASL proficiency prior to acceptance into the program.

Check the program website for more information about the program and admission and application requirements.

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. He/she may contact the program coordinator and ask for permission to waive this requirement.
- International applicants must pass the TOEFL exam with a minimum score of 550 or 80 for the internet based exam.
- Please Note: The University of Northern Colorado at this time is unable to accept applications for **online** courses or programs from students residing in the following states: Arkansas, Kentucky, Massachusetts, North Carolina, and Tennessee.

Application requirements

- 1. Complete the online application for the UNC Graduate School and pay the graduate application fee.
- 2. Send all official transcripts to the UNC Graduate School.
- 3. Submit two letters of recommendation from supervisors/teachers who know the applicant's work to the UNC Graduate School.
- 4. Submit a 1-2 page statement of educational goals and philosophy to the UNC Graduate School.
- 5. All applicants will be required to demonstrate ASL proficiency prior to acceptance to the TASL Program.

Application Deadline: February 15th for the following summer. However, applications will be accepted until all positions have been filled. Applicants will be notified no later than April 15th whether they have been accepted into the program or not.

Demonstration of ASL Proficiency:

All applicants will be required to demonstrate ASL proficiency prior to the practicum courses, TASL 593 and TASL 594.

For degree and program requirements, see:

Teaching American Sign Language M.A. (p. 86)

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES (HSS)

University Programs

Graduate Programs (p. 52)

Office of the Dean

Acting Dean: Michelle Behr, Ph.D. Associate Dean: Vacant

Location: Candelaria 0215 Telephone: 970.351.2707

Introduction

The College of Humanities and Social Sciences offers a broad range of academic pursuits. Our major areas of study are organized in 15 units designated as schools, departments or programs. 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.

Scholars in the humanities study many aspects of human existence, such as written and non-written evidence of human progress and how human creativity both reflects the world around us and helps to shape it. The humanities consider how systems of thought and knowledge have developed over time and how they continue to 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. The humanities produced the first thinkers who formally examined how different cultures and ethnicities approach common needs and how they express commonly held aspirations in diverse ways. Some humanities disciplines demonstrate how language mirrors our identity 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. (p. 58)

Department of Criminal Justice

Chair:

Location: Candelaria Hall 2285 **Telephone:** 970.351.2186 **FAX:** 970.351.1527

Faculty: Alex Drayer, M.A.; Colleen Fitzpatrick, Ph.D.; Brittany Groot, ABD; Brian Iannacchione, Ph.D.; Brian

Smith, M.A., J.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. (p. 58)

Department of English

Chair: Joonok Huh, Ph.D.

Location: Ross 1284 **Telephone:** 970.351.2971

Faculty: Sarah Allen, Ph.D.; Kristin Bovaird -Abbo, Ph.D.; Crystal Brothe, M.A.; Nic Brown, M.F.A.; Kenneth Chan, Ph.D.; Joseph Chaves, Ph.D.; Joel F. Daehnke, Ph.D.; Molly Desjardins, 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.; April Dawn Miller, Ph.D.; Norman L. Peercy, Ph.D.; Stuart R. Rabinowitz, Ph.D.; Sonja Scullion, M.A.; Tracey A. Sedinger, Ph.D.; Teresa Sellmer, M.A.; Cody Shaffer, M.A.; Leo Ben Varner, 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. (p. 65) Education M.A.T.

Department of History

Chair: Joan L. Clinefelter, Ph.D.

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.; Jacob Melish, 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, Department of History, UNC, Greeley, CO 80639.

For additional resources: See "Financial Aid" (p. 15).

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:

History M.A. (p. 68)

Department of Hispanic Studies

Chair: Joy Landeira, Ph.D. Location: Candelaria Hall 0295 Telephone: 970.351.2811

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. — Spanish Teaching Emphasis (p. 65)

Department of Sociology

Chair: Kyle Anne Nelson, Ph.D., M.P.H.

Location: Candelaria 2285 **Telephone:** 970.351.2315

Faculty: Angela Henderson, Ph.D.; Sandra Harmon, M.A.; Jeffrey A. Houser, Ph.D.; Karen M. Jennison, Ph.D.; Melanie Moore, Ph.D.; David W. Musick, Ph.D.; Kyle Anne Nelson, Ph.D., M.P.H.; Harmony Newman, Ph.D.; Josh Packard, Ph.D.; Diane L. Schott, M.A.

Emeritus Faculty: John W. Fox, Ph.D.; Pamela Hewitt, Ph.D.; James P. Marshall, Ph.D.; Daniel F. O'Connor, Ph.D.; Phil Reichel, Ph.D.; Jacqueline Bloom Stanfied, Ph.D.; Richard Trahan, Ph.D.; John A. Vonk, Ph.D.

The UNC Department of Sociology is dedicated to the academic understanding and analysis of social, cultural and institutional aspects of human life. At its core, the sociological mission is rooted in social theory and the scientific method; we strive to empower students with the theoretical and analytical skills necessary to understand and evaluate an increasingly complex society, both globally and locally. We prepare students for work in both public and private sectors of the economy including the areas of education, health, government, social welfare, marketing, and research. In addition, our department is dedicated to building sociological knowledge and skills that are applicable to advanced academic and post-graduate degrees.

Sociology M.A.

The master's program in Sociology centers on the application of sociological theory and research methods to various social problems experienced by groups, communities, organizations, schools, and governmental bodies.

Applied Emphasis:

The applied emphasis program culminates in a professional research report based on the Research Internship experience.

Thesis Emphasis:

Students who are interested in conducting a thesis project must consult their advisor and apply for this option to the Sociology graduate faculty during their second semester of study. The thesis requires six SOC 699 credit hours to be taken in 3-credit increments. Completion of the thesis also requires oral defenses of the proposal and the final draft before a faculty committee.

Admission:

In addition to meeting the Graduate School requirements, the following materials should be submitted to the Graduate School:

- A letter of intent including research/teaching interests and specific career
- · Two letters of recommendation

Students are strongly encouraged to review the research areas of the Sociology faculty on our website and contact faculty in whose research they are interested. The student must meet with a graduate advisor during the second semester of the program to determine a course of study and pursuit of either the Thesis or Applied emphasis. Assistantships including stipends and partial tuition waivers are offered on a competitive basis each semester. Graduate application deadline to be considered for fall semester assistantships is April 1st.

For degree and program requirements, see:

Sociology M.A. — Applied Emphasis (p. 78)

Sociology M.A. — Thesis Emphasis (p. 78)

KENNETH W. MONFORT COLLEGE OF BUSINESS (MCB)

Office of the Dean

Location: Kepner 2053 **Telephone:** 970.351.2764

Acting Dean: Karen F. Turner, Ph.D., C.P.A.

The College of Business was established in the summer of 1968 as an autonomous degree-recommending unit, with a primary mission to provide education for business administration.

Recognized in 2000 by CCHE as a Colorado Program of Excellence, the College has become an integral part of the University and is committed to advancing the Mission, Goals and Values of UNC (as specified in earlier pages of this Catalog). The College's own mission statement has been developed to support that of the University.

Performance based standards for degree programs in the Kenneth W. Monfort College of Business are available online at www.mcb.unco.edu.

Introduction: Monfort College of Business

In the Monfort College of Business highly-qualified faculty teach in reasonable class sizes (average of 30) in a technology-rich environment. The program is complimented by state-of-the-art learning facilities, an executive professor program, and an approach to learning that links theory with practice. MCB remains as the only business program in U.S. history to receive the Malcolm Baldrige National Quality Award.

Mission Statement

To provide excellent primarily undergraduate and focused graduate business programs and related learning opportunities that prepare the individuals for successful careers and responsible citizenship in a global society. We accomplish this by focusing our efforts in teaching, research and service to benefit student learning.

AACSB Accreditation

The Monfort College holds AACSB-accredited status in business administration and accounting. AACSB International (The Association to Advance Collegiate Schools of Business) is the premier accrediting agency for business school quality in the U.S. According to a recent Business Week article, "Today, just having the degree isn't as important as where you get it...As corporations become savvier buyers of...talent, they are giving more weight to the AACSB seal...Accreditation shows that a business school cares about the quality of its program." The Monfort College's programs have been AACSB-accredited since 1992.

Master of Business Administration

The Master of Business Administration at University of Northern Colorado is designed to prepare the students for managerial positions in for profit, non-for-profit and government settings. The flexibility of the program allows for both part time and full time students to take advantage of the state of the art curriculum under supervision of experienced faculty whose academic and professional experience garnered the prestigious Malcom Baldrige award for the college.

Each course blends theoretical and practical aspect of decision making under varied business conditions enabling students to apply their academic and professional experiences in solving the challenging and ever-changing managerial problems. The program is intended to utilize an integrated approach across functional disciplines equipping students to approach their managerial roles and responsibilities holistically throughout their professional life. The program is intended to provide an opportunity to all qualified students to pursue their graduate business course of study regardless of their undergraduate major.

The program consists of foundation and core courses culminating with specialized tracks. Students may petition the program admission committee if they have completed some or all of the foundation requirements through their undergraduate degree programs or documented extensive professional experience.

MBA Program Learning Goals and Objectives

As part of the Monfort College of Business' continuous improvement efforts, it has developed the following learning goals and objectives. The outcomes related to these learning goals and objectives are measured and the results are reviewed by faculty. Corrective actions are taken as needed to ensure a superior learning experience for our students.

Learning Goals	Learning Objectives
Be proficient with key business fundamentals	Students will be able to integrate knowledge from all business disciplines applying current and emerging business knowledge and technology to make decisions in complex environments.
Demonstrate conceptual and	Students will analyze data and information to identify key

analytical skills

problems, generate and evaluate appropriate alternatives to make

effective decisions.

Demonstrate knowledge of how businesses operate in a global environment Students will demonstrate awareness and understanding of the international challenges that encompass cultural, financial, legal and other problems.

Demonstrate ethical awareness

Students will demonstrate ethical awareness by employing an ethical framework to identify possible ethical issues or problems and analyze the consequences for various

stakeholders.

Be effective communicators

Students will prepare and deliver professional quality presentations on a business topic. Students will prepare professional quality business documents.

Admissions to MBA Program

The MBA program is designed for individuals who have a bachelor degree from an accredited institution and are interested in obtaining a graduate degree that prepares them for managerial positions in their career. Prospective MBA students should be cognizant of competency requirement with business computer software applications in succeeding in the MBA program. This competency may be demonstrated through a college-level business computer software applications course within the past six years or significant work experience with such business computer software applications.

Students admitted to the program who have not completed a baccalaureate degree in a business related discipline can expect prerequisite and quantitative deficiency courses (MBA foundation courses) to be added to their plan of study. Deficiency course requirements will be determined by the program faculty.

As well as meeting minimum admissions criteria, the admission process into the MBA program in the Monfort College of Business at the University of Northern Colorado is subject to the approval of the MBA program coordinator and graduate faculty of the program in consultation with the Dean of the Monfort College of Business and the Dean of the Graduate School.

Criteria for Admissions into the MBA Program

The primary criteria in determining eligibility for admission the Monfort College of Business MBA Program are previous academic achievement and performance on

the Graduate Management Admission Test and other factors such as work experience and career progression.

Applicants must submit a completed application form and transcripts from each institution of higher education attended to the UNC Graduate School office. Each applicant is considered on an individual basis. For students with a non-business Bachelors' degree, additional course work completion (called "Foundation courses") will be required before enrolling in the core courses of the program.

Admission Requirements Checklist

- A non-refundable application fee
- Official transcripts (undergraduate and graduate). Undergraduate GPA of 3.0 and above is preferred.
- Demonstrated math proficiency at college level calculus or equivalent.
- GMAT or GRE scores sent directly to the University. Students may apply for probationary status if they receive a score less than 500 on the GMAT or 1000, a combination of verbal and quantitative on the GRE score. Students may take up to 8 hours of foundation courses prior to taking the GMAT. GMAT or GRE requirement may be waived for applicants who have received a graduate degree from an accredited institution.
- A current professional resume.
- Three letters of reference.
- A personal statement, single-spaced and maximum of than two pages (Arial or Times New Roman typeface, no smaller than 11-point type with no less than 1-inch margins), describing:
 - Reasons for pursuing the MBA
 - The impact it will have on both your short- and long-term career goals
 - What value you will bring to the classroom
- Evidence of two years of professional experience (encouraged).
- Applications will be considered when all documents have been received at the Office of Graduate Studies.

Additional Admission Requirements for International Students

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit a score from the Test of English as a Foreign Language (TOEFL).

A TOEFL score of:

- 550 paper based test;
- 215 computer based test;
- 90 internet based test or an Intensive English Test Score of 8.0

Department of Accounting and Computer Information Systems

Chair: Ronald O. Reed, Ph.D., C.P.A.

MAcc Coordinator: William Wilcox, Ph.D., C.P.A.

Location: Kepner 2090 **Telephone:** 970.351.2855

Faculty: J. Ryan Cahalan, J.D., LL.M.; Cris de la Torre, Ph.D., J.D.; Janel Greiman, M.T., C.P.A.; R. "Vish" Vishwanathan Iyer, Ph.D.; Milan D. Larson, Ph.D.; Michael W. Martin, J.D., LL.M.; Allen W. McConnell, M.S., C.P.A.; Richard I. Newmark, Ph.D.; Ronald O. Reed, Ph.D., C.P.A.; L. Pat Seaton, Ph.D., C.P.A.; Karen F. Turner, Ph.D., C.P.A.; William E. Wilcox, Ph.D., C.P.A.

Master of Accounting Advising

Location: Kepner 2090 **Telephone:** 970.351.2855

MAcc Coordinator & Advisor: William Wilcox, Ph.D. MAcc Advisor: Allen W. McConnell, M.S., C.P.A.

Accounting M.Acc. (MAcc Degree)

The Master of Accounting degree (MAcc) is designed to enhance the student's applied accounting research skills, communication skills, problem-solving capability, and other skills and knowledge required to be a successful professional accountant in public accounting, business, or government. The program is designed for students who desire to enter public or private accounting with plans to sit for the CPA exam with greater skills in applying accounting knowledge to various accounting and business situations. Students will be better qualified for higher level management positions as a result of the extra value of a graduate degree. Additionally, completion of this program will satisfy Colorado's and most other state's 150-hour requirement for licensing as a CPA.

The overall objectives for the program are:

- Expand the students' knowledge base and understanding of business in order to better prepare them for an entry-level position in accounting and industry,
- Prepare students for a successful career in accounting including more career opportunities and quicker advancement,
- Adequately prepare students to write the CPA Exam,

- Grant students the advanced graduate degree upon completing the program, and
- Give students the opportunity to become substantially equivalent in educational requirements with other states in order to make them more mobile with transferring their CPA licensure and practice capabilities.

The MAcc degree requires that students complete a written comprehensive examination or other approved equivalent.

As part of the Monfort College of Business' continuous improvement efforts, it has developed the following learning goals and objectives. The outcomes related to these learning goals and objectives are measured and the results are reviewed by faculty. Corrective actions are taken as needed to ensure a superior learning experience for our students.

Graduate Accounting Program Learning Goals and Objectives

Master's Program Learning Goals

On completion of the accounting masters program, graduates will he able to

- 1 Demonstrate conceptual and analytical skills.
- 2 Plan and conduct practice-oriented research to answer/solve accounting issues.
- 3 Communicate complex accounting issues orally and in writing.
- 4 Appropriately use technology to gain knowledge of complex accounting information and apply

Learning Objectives

To attain the Program Learning Goals, accounting master students will

Students will analyze accounting data/information to identify key accounting issues, generate and evaluate appropriate alternatives, and propose feasible accounting alternatives at a proficient level

Students will demonstrate proficiency in conducting practice-oriented research.

Students will demonstrate proficiency in preparing and delivering professional quality presentations on various accounting topics.

Students will demonstrate proficiency in preparing professional accounting documents.

Students will appropriately use the correct technology to solve complex accounting issues.

that knowledge to new contexts and situations.

5 Recognize and analyze ethical issues in accounting and business practice, and develop a defensible solution based on applicable codes of conduct. Students will proficiently identify the ethical issues or problems in an accounting case based on codes of professional conduct, analyze the consequences for various stakeholders and develop a justifiable resolution.

Admissions to MAcc Program

The MAcc program is mainly designed for individuals with an undergraduate degree in accounting. The MAcc program may also be useful to other business majors who have completed the required undergraduate courses or who are willing to complete these leveling courses. Students admitted to the program who have not completed a baccalaureate degree in accounting as described above can expect prerequisite deficiency courses to be added to their plan of study. Deficiency course requirements will be determined by the program coordinator.

A minimum GMAT score of 500 and an undergraduate GPA of 3.0 are required for admission to the program.

As well as meeting minimum admissions criteria, the admission process into the MAcc program in the Monfort College of Business at the University of Northern Colorado is subject to the approval of the MAcc program coordinator in consultation with the Chair of the Department of Accounting and Computer Information Systems and the Dean of the Monfort College of Business and the Dean of the Graduate School. Our program allows for up to nine hours of 500-level graduate work to be completed by a senior undergraduate accounting student before he or she is admitted into the MAcc program provided the student has a minimum cumulative GPA of 3.0.

Criteria for Admissions into the MAcc Program:

The primary criteria in determining eligibility for admission the Monfort College of Business MAcc Program are previous academic achievement and performance on the Graduate Management Admission Test. Other factors such as work experience and career progression may be taken into account.

Applicants must submit a completed application form and transcripts from each institution of higher education attended to the UNC Graduate School office. Each applicant is considered on an individual basis.

For students with a non-accounting Bachelors degree, additional undergraduate course work completion (called "leveling courses") will be required before applying to the

program. They must complete all of the required undergraduate coursework listed below to fulfill the course prerequisites for the graduate program.

Principles of Accounting I & II
Intermediate Accounting I & II
Cost & Managerial Accounting
Income Tax
Accounting Information Systems
Auditing
Information Systems
Legal Environment of Business
Business Finance
Management of Organizations
Marketing

Additional Admission Requirements for International Students

All international students and any applicant educated outside the U.S. must demonstrate proficiency in English. Those whose native language is not English, or whose language of instruction for their undergraduate degree was not English, will be required to submit a score from the Test of English as a Foreign Language (TOEFL).

Graduate - Master of Accounting:

A TOEFL score of:

- 550 paper based test;
- 215 computer based test;
- 90 internet based test or an Intensive English Test Score of 8.0.

For degree and program requirements, see:

Accounting M.Acc. (p. 52)

COLLEGE OF NATURAL AND HEALTH SCIENCES (NHS)

University Programs

Graduate Programs (p. 52)

Office of the Dean

Location: Gunter 1000 **Telephone:** 970.351.2877 **Fax:** 970.351.2176

Acting Dean: Ellen Meyer Gregg, Ph.D. Associate Dean: Robert P. Houser, 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.
- 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 six Schools and one Department:

- School of Biological Sciences
- Department 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: Susan M. Keenan, Ph.D.

Biological Sciences

Location: Ross Hall 2480 **Telephone:** 970.351.2921

Faculty: Rick Adams, Ph.D.; Lauryn Benedict, Ph.D.; Patrick Burns, Ph.D.; Sue Ellen DeChenne, Ph.D.; Gregory K. DeKrey, Ph.D.; Ginger Fisher, Ph.D.; Scott B. Franklin, Ph.D.; Seth Frietze, Ph.D.; Catherine S. Gardiner, Ph.D.; Susana K. Gomez, Ph.D.; James Haughian, Ph.D.; Ann Hawkinson, Ph.D.; Teresa M. Higgins, Ph.D.; Richard Robert Jurin, Ph.D.; Susan M. Keenan, Ph.D.; Judith Leatherman, Ph.D.; Stephen P. Mackessy, Ph.D.; Mitchell McGlaughlin, Ph.D.; Robert Reinsvold, Ph.D.; Tony Schountz, Ph.D.; Frank A. Skufca, M.S.; Mark P. Thomas, 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

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. (p. 54)

Biomedical Science M.B.S.

Admission. Before admission to the program, students must have completed a bachelor's degree with a minimum GPA of 3.0 (on a 4.0 scale) and have a strong background in the sciences.

The following application materials should be submitted to the Graduate School:

- Application form and fee
- Official transcripts
- A letter of intent
- Three letters of recommendation accompanied by recommendation forms
- General GRE scores or MCAT scores

Application deadline: April 15th.

The Master's in Biomedical Science program has been designed to provide academic enhancement within a one-year time-frame to improve or substantially expand a post-graduate student's overall scholastic credentials. The program will provide a foundation in basic biology that underlies and supports medicine and therefore provides a strong framework for professional school curricula. The MBS program is appropriate for students considering a future in medicine, dentistry, veterinary medicine or biomedically related Ph.D. programs. Students will be

required to pass a comprehensive examination covering material from core courses in order to graduate from the program.

For degree and program requirements see:

Biomedical Science M.B.S. (p. 55)

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

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. (p. 90)

Department of Chemistry and Biochemistry

Chair: Michael D. Mosher, Ph.D.

Chemistry and Biochemistry

Location: Ross Hall 3480 **Telephone:** 970.351.2559

Faculty: Jack Barbera, Ph.D.; Aichun Dong, Ph.D.; Robert Houser, Ph.D.; Richard M. Hyslop, Ph.D.; Peter Karnilaw, M.A.; Robin T. Macaluso, Ph.D.; Michael Mosher, 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.; James O. Schreck, Ph.D.; Gordon E. Tomasi, 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. — Education Emphasis (p. 56) Chemistry M.S. — Research Emphasis (p. 57)

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. (p. 91)

Department of Earth and Atmospheric Sciences

Chair: William H. Hoyt, Ph.D.

Earth Sciences

Location: Ross Hall 3235 **Telephone:** 970.351.2647 **FAX:** 970.351.4197

Faculty: Steven Anderson, Ph.D.; Graham B. Baird, Ph.D.; Joe T. Elkins, Ph.D.; Emmett Evanoff, Ph.D.; Wendilyn Flynn, Ph.D.; William H. Hoyt, Ph.D.; David G. Lerach, Ph.D.; Lucinda Shellito, Ph.D.; Byron M. Straw, M A

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. (p. 59)

School of Human Sciences

Acting Director: Elizabeth D. Gilbert, Ed.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.; Donald S. Finan, Ph.D.; Ellen Meyer Gregg, Ph.D.; Julie A. Hanks, Ed.D.; Derek Headley, Ph.D.; Deanna K. Meinke, Ph.D.; Kim A. Murza, Ph.D.; Tina M. Stoody, Ph.D.; Jennifer E. Weber, Au.D.

Emeritus Faculty: Donna J. Bottenberg, Ph.D.; Linda K. Cleeland, M.Ed.; Francis A. Griffith, 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 preprofessional 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
 - 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 limitedenrollment 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. (p. 82)

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; otolyrngology medical practices; rehabilitation centers; schools; industry; and private practice.

Admission: Students will be admitted to this limitedenrollment 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. (p. 89)

Community Health

Location: Gunter 1250 **Telephone:** 970.351.2997 **FAX:** 970.351.1255

Faculty: Danielle R. Brittain, Ph.D.; Mary K. Dinger, Ph.D.; Elizabeth A. Gilbert, Ed.D.; Teresa A. Sharp, 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 preventive 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.

Admission: Applications to the MPH program are accepted yearly for fall entry, with a deadline of December 15. Applicants should have a bachelors degree and submit the required application and materials as listed on http://www.ucdenver.edu/academics/colleges/PublicHealth/Apply/Admissions/Pages/MPHRegs.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. — Community Health Education Emphasis (p. 76)

Gerontology

Location: Gunter 1250 **Telephone:** 970.351.2403 **FAX:** 970.351.1255

Gerontology Faculty: Susan M. Collins, Ph.D.; Robbyn

R. Wacker, Ph.D.; Joyce Weil, 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 using the UNC Letter of Recommendation for Graduate School form.
- 2. Provide a current resume.
- 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. (p. 66) Gerontology Graduate Certificate Program (Non-Degree) (p. 120)

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.; 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 Technical Assistance and Continuing Education (TACE) Region 8 Center.

Rehabilitation Counseling M.A.

The *goal* of the Rehabilitation Counseling Master's Degree Program at the University of Northern Colorado is to provide graduate students with the knowledge, skills and experiences necessary to function as rehabilitation counseling professionals.

Therefore, the <u>mission</u> of this program is to educate master's students in the area of Rehabilitation Counseling to assist and support individuals with disabilities or chronic illnesses to achieve maximum potential, meaningful employment, and full community integration. In doing so, the program focuses on encouraging students to pursue a life-long commitment to learning, critical thinking skills,

creative problem solving, and an appreciation of the skills and abilities of individuals with disabilities.

Admission. The student must send **directly to the school:**

- 1. Two letters of recommendation using the UNC Letter of Recommendation for Graduate School form.
- 2. Provide a current resume.
- 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

- Students will develop an appreciation for cultural diversity and political values.
- Students will develop life-long habits of scholarship and service.
- 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. (p. 77)

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-intraining. 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:

- 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.
- 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.
- 5. Provide a current resume.

For degree and program requirements, see: Human Rehabilitation Ph.D. (p. 101)

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.; Nancy Geisendorfer, M.A.; Robert L. Heiny, Ph.D.; Gulden Karakok, Ph.D. Steven C. Leth, Ph.D.; Nathaniel G. Miller, Ph.D.; Katherine Morrison, Ph.D.; Jodie Dawn Novak, Ph.D.; Michael Oehrtman, 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) Steele, M.A.

Emeritus Faculty: William W. Bosch, Ph.D.; Donald D. Elliott, Ph.D.; Jeffrey D. Farmer, Ph.D.; Richard M. Grassl, Ph.D.; Samuel R. Houston, Ph.D.; William D. Popejoy, Ed.D.; Donald L. Schmidt, Ph.D.; Rex. R. Scorers, 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.

We offer the Mathematics M.A. with two emphases. The Liberal Arts Emphasis is a traditional, on-campus program intended for students who are planning to continue into our Ph.D. program in Educational Mathematics. The Teaching Emphasis is designed for current in-service secondary mathematics teachers, and combines online classes during the academic year with a mixture of online and face-to-face classes during the summer.

Generally, a Bachelor's degree in mathematics or mathematics education with strong mathematics courses is required for admission to these programs. Students without a Bachelor's degree in mathematics are advised to consult the school for a list of recommended undergraduate courses they should take before applying. Liberal Arts Emphasis

This program is intended for students who do not already possess a Master's degree and wish to continue into the Ph.D. program in Educational Mathematics. It is not intended as a stand alone program. Students who complete this program and are deemed to be making good progress are automatically admitted to continue with the Ph.D. program.

For degree and program requirements, see:

Mathematics M.A. — Liberal Arts Emphasis (p. 70) 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. — Teaching Emphasis (p. 70)

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. (p. 96)

School of Nursing

Co-Directors: Faye Hummel, Ph.D. and Janice Hayes 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.; Darcy A. Copeland, Ph.D.; Kathleen N. Dunemn, Ph.D.; Katrina S. Einhellig, Ph.D.; Melissa L. Henry, Ph.D.; Karen Hessler, Ph.D.; Thomas Hill III, Ph.D.; Katherine R. Johnson, M.S.N.; Alison S. Merrill, Ph.D.; Carlo G. Parker, Ph.D.; Shelia A. Postiglione, M.S.N.; Carol Roehrs, Ph.D.; Deborah E. Rojas, M.S.; Michaela Romero, DNP; Rhonda Squires, Ph.D.; Laurie Walker, M.S.; Vicki W. Wilson, Ph.D.

Emeritus Faculty: Sandra C. Baird, Ed.D.; Nancy Quinn Beardslee, Ed.D.; Agnes Biegel, M.S.N..; Adah Bossart, M.S.; Phyllis Drennan, Ph.D.; Priscilla Faulkner, M.S.; Joan T. Hurlock, M.S.; Jane E. Koeckeritz, Ph.D.; Virginia Kinnick, Ed.D..; Debra Leners, Ph.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 Doctor of Nursing Practice is the clinical degree for advanced practice nursing. Graduates are qualified to assume leadership roles in specialized nursing practice and scientific inquiry. MS to D.N.P part-time study only online. BS in Nursing to D.N.P is a hybrid of on-campus and online study. 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 two emphases available: Clinical Nurse Leader (CNL) and the Family Nurse Practitioner (FNP) emphasis. The CNL is a part-time hybrid program and the FNP program is part-time on campus program.

Nursing M.S.

Clinical Nurse Leader (CNL) Emphasis

The Master of Science degree in Nursing with an emphasis in CNL prepares the post-baccalaureate nursing student for a leadership role in the management of clinical outcomes and patient care environments. The graduate is eligible to apply for national certification from the Commission on Nurse Certification, an autonomous arm of the American Association of Colleges of Nursing. Part-time study. Health policies, OSHA requirements, CPR and criminal background check are required. Completion of a master's thesis is an option.

This program prepares the graduate to function as a leader in collaborative, outcomes-based practice. The CNL is an advanced generalist who provides lateral integration at the point of care, complex patient care, evaluation and improvement of patient and process outcomes, assessment and management of risks, and coordination of care. Implementation will vary across settings; this is not an advanced practice role.

For degree and program requirements, see:

Nursing M.S. — Clinical Nurse Leader (CNL) Emphasis (p. 75)

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. Completion of a master's thesis is an option.

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.

For degree and program requirements, see:

Nursing M.S. — Family Nurse Practitioner (FNP) Emphasis (p. 75)

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.

Nursing D.N.P.

The Doctor of Nursing Practice prepares expert clinicians for advanced practice roles in hospitals, primary care clinics, specialty settings such as long term care facilities, and virtually any area they wish to practice within the healthcare industry. These highly skilled practitioners will be the leaders in healthcare delivery and care management. The program has two entry options: Bachelor of Science in Nursing (B.S./B.S.N.) to D.N.P. or the traditional Master's to D.N.P. The speciality emphasis for the B.S./B.S.N. to D.N.P. is in family with a preparation to be a family nurse practitioner (F.N.P.).

Specific exceptions to the Graduate School requirements for doctoral degrees have been approved. Those exceptions relate to the dissertation proposal, dissertation, defense of dissertation, advancement to candidacy, doctoral committees, research course and credit hours. Because of the clinical focus of this degree, rigorous academic standards are maintained throughout the program rather than completion of a dissertation. Students will be required to complete a capstone project.

Admission Requirements

Post Bachelors in Nursing Pathway

- A bachelor's degree in nursing from NLN or CCNE accredited institutions.
- 2. A minimum grade point average of 3.0
- 3. Eligibility for Colorado licensure as a registered nurse.
- 4. One year minimum of clinical practice is preferred.
- 5. Three letters of reference from former faculty, supervisor, and/or professional colleagues.
- 6. Submission of a brief sample of professional writing (maximum of 10 pages). Examples:

- Describe a scholarly evidence based case study that best exemplifies your practice.
- Describe a current practice related concept including its scope and significance, the patient population and the clinical setting of interest. Discuss alternative approaches described in the literature and identify an approach that you might take in addressing the concept.
- 7. A resume or curriculum vitae.
- 8. Career goal statement articulating "why now" for your practice doctorate.
- 9. Description of practice experiences and settings.
- 10. A personal interview may be required.

Post Masters in Nursing Pathway

- 1. A master's degree in nursing from NLN or CCNE accredited institutions.
- 2. Preparation as Advanced Practice Nurse (APN) with documentation of national certification as an APN.
- 3. Minimum of 500 clinical practicum hours in the APN master's program.
- 4. A minimum grade point average of 3.0.
- 5. Eligibility for Colorado licensure as a registered nurse and APN.
- 6. Three letters of reference from former faculty, supervisor, and/or professional colleagues.
- 7. Submission of a brief sample of professional writing (maximum of 10 pages). Examples:
 - Describe a scholarly evidence based case study that best exemplifies your practice.
 - Describe a current practice related concept including its scope and significance, the patient population and the clinical setting of interest. Discuss alternative approaches described in the literature and identify an approach that you might take in addressing the concept.
- 8. A resume or curriculum vitae.
- 9. Career goal statement articulating "why now" for your practice doctorate.
- 10. Description of practice experiences and settings.
- 11. Graduate level inferential statistical methods course (SRM 602) or equivalent. Must be completed prior to beginning DNP coursework.
- 12. A personal interview may be required.

For degree and program requirements, see:

Nursing D.N.P. (p. 106)

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. (p. 107)

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.; Brian D. Dauenhauer, M.Ed.; Scott Douglas, Ph.D.; Dianna P. Gray, Ph.D.; J. Reid Hayward, Ph.D.;

Gary D. Heise, Ph.D.; David S. Hydock, Ph.D.; Jennifer M. Krause, Ph.D.; Jani Malkiewicz, M.A.; Linda A. Sharp, B.A., J.D.; Jeremy D. Smith, Ph.D.; Mark A. Smith, Ph.D.; Megan Babkes Stellino, Ed.D.; David K. Stotlar, Ed.D.; James V. Turk, M.S.

Emeritus Faculty: Mary A. Behling, Ph.D.; 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.; Nancy Hinrichs, 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.; Melissa A. Parker, Ph.D.; D. Allen Phillips, Ed.D.; Tim B. Ramsey, M.A.; Bobby H. Rollins, M.A.; George H. Sage, Ed.D.; Doris C. Steffy, M.A.; Jim Stiehl, Ph.D.; 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 that provide students with the necessary coursework and experience to serve as a foundation for careers in the professions of physical education, exercise science, sport psychology, and sport management. Specific graduate programs include:

Graduate programs:

- M.S. and Ph.D. in Sport and Exercise Science with emphasis areas in the following:
 - Sport Pedagogy
 - Sport Administration (M.S. also offered offcampus)
 - Exercise Science (within this emphasis students must choose a concentration area from the following)
 - Biomechanics
 - Exercise Physiology
 - Social Psychology of Sport and Physical Activity
 - M.A.T. in Physical Education (off-campus program only)
 - M.A. in Sports Coaching (online program only)

Graduate programs in sport and exercise science provide an opportunity to go into greater depth in the study of human movement, pedagogy, and sport administration. 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.

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 of sport and physical activity 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.

Applicants to the master's programs and graduate licensure program must apply to the University of Northern Colorado Graduate School before the program area reviews the applicant's request for admission. To apply, submit the following materials in a single packet along with the application fee. Failure to submit all required materials will delay the evaluation and screening of your application.

- A Bachelor's Degree from an accredited college or university
- Current Resume
- Written Statement of Career Goals applicable to the selected emphasis area
- \$50 non-refundable application fee; International Students: \$60 non-refundable application fee
- Completed Online Application
- Two Letters of Recommendation

 One copy of official transcripts from all accredited colleges or universities attended since completing high school. UNC Alumni need not submit transcripts.

Exercise Science Emphasis

The Master of Science in Sport and Exercise Science: Exercise Science is the integrated study of human movement, encompassing the physiological, mechanical, and behavioral of physical activity. Concentration areas within this discipline include biomechanics, exercise physiology, and social psychology of sport and physical activity. This degree program includes a broad base of content knowledge and provides opportunities for students to become involved in laboratory, clinical, and basic science research. Students in this program can choose between a Thesis Option or a Professional Research Project Option.

For degree and program requirements, see:

Sport and Exercise Science M.S. — Exercise Science Emphasis (p. 83)

Sport Administration Emphasis

The Master of Science in Sport and Exercise Science: Sport Administration Emphasis, 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

For degree and program requirements, see:

Sport and Exercise Science M.S. — Sport Administration Emphasis (p. 84)

Sport Pedagogy Emphasis

The Master of Science in Sport and Exercise Science: Sport Pedagogy Emphasis is designed for individuals who plan to provide leadership in school-related physical education and physical activity settings. Students in this program examine curriculum and instruction that successful teachers employ to inspire today's youth to enjoy the benefits of an active and healthy lifestyle. Your graduate-level course work is informed by the highest standards, including those of the National Association for Sport and Physical Education (NASPE).

For degree and program requirements, see:

Sport and Exercise Science M.S. — Sport Pedagogy Emphasis (p. 85)

Sports Coaching M.A.

This online Sports Coaching Master of Arts (M.A.) degree is designed to enhance coaching knowledge and expertise, and to advance existing coaching practices through evaluation and application of current research. One of very few online graduate coaching degrees in the country, this

innovative program combines academic knowledge with applied practice and the latest technology. The online sports coaching master's degree starts each Fall term.

For degree and program requirements, see:

Sports Coaching M.A. (p. 85)

Physical Education M.A.T.

The Master of Arts in Teaching degree is 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.

For degree and program requirements, see:

Physical Education M.A.T. (p. 76)

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.

Sport and Exercise Science Ph.D.

Admission Criteria:

Applicants must apply to the University of Northern Colorado Graduate School before the program area reviews the applicant's request for admission. To apply, submit the following materials in a single packet along with the application fee. Failure to submit all required materials will delay the evaluation and screening of your application.

- A Bachelor's Degree from an accredited college or university
- Current Resume
- Written Statement of Career Goals applicable to the selected emphasis area
- \$50 non-refundable application fee; International Students: \$60 non-refundable application fee
- Official copies of GRE scores (less than 5 years old) for doctoral applicants
- Completed Online Application
- · Two Letters of Recommendation
- One copy of official transcripts from all accredited colleges or universities attended since completing high school. UNC Alumni need not submit transcripts.

Exercise Science Emphasis

Students pursuing the Exercise Science emphasis select one concentration area:

1. Biomechanics

- 2. Exercise physiology
- 3. Social psychology of sport and physical activity

In the Doctor of Science in Sport and Exercise Science, students pursuing the Exercise Science emphasis select a concentration area in biomechanics, exercise physiology, or social psychology of sport and physical activity. Along with exercise science courses, doctoral students in the biomechanics concentration area pursue independent research projects associated with their interests and specialized coursework which exposes them to research tools and procedures in the laboratory. Experience in the classroom as a university-level instructor is also required of doctoral students because of the teacher-scholar emphasis at UNC.

Doctoral students in the exercise physiology concentration area will not only complete coursework in physiology, biochemistry, statistics, and research design, but they will also gain valuable classroom teaching experience, and be intimately involved with the basic science and clinical research conducted by exercise physiology faculty.

Students in social psychology of sport and physical activity will complete coursework in the social and psychological disciplines as they relate to contemporary professional and amateur sport as well as on social and psychological aspects of child development in sports and physical activity. Students will also conduct research in the area of children's physical activity behavior and social influences upon sport and exercise motivation.

For degree and program requirements, see:

Sport and Exercise Science Ph.D. — Exercise Science Emphasis (p. 111)

Sport Administration Emphasis

The Doctor of Science in Sport and Exercise Science: Sport Administration emphasis 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 coursework in careers in the management of sport in collegiate athletic programs, professional, Olympic, or commercial sport business.

For degree and program requirements, see:

Sport and Exercise Science Ph.D. — Sport Administration Emphasis (p. 112)

Sport Pedagogy Emphasis

The Doctor of Science in Sport and Exercise Science with a 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.

For degree and program requirements, see:

Sport and Exercise Science Ph.D. — Sport Pedagogy Emphasis (p. 114)

Other Programs in the College of Natural and Health Sciences

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.

For degree and program requirements, see:

Graduate Interdisciplinary Degree Program M.A. — Middle Level Mathematics Teaching Emphasis (p. 66)

Science Education Emphasis

The program is coordinated by the Mathematics and Science Teaching (MAST) Institute. The program provides practicing K-12 teachers with advanced study focusing on

the following themes: increased science content knowledge; increased pedagogical content knowledge for the science teaching setting; competency in the sciences; diversity and equity teaching practices; and the teacher as a researcher. Thesis and non-thesis options are available for this degree. Research experiences are molded around the teacher's interests. The majority of the courses are offered on line. The program combines science courses directed towards topics applicable to K-12 science teaching with courses in science education, pedagogy, and reflective practice.

Admission: Students will be admitted to the program on the basis of:

- 1. A bachelor's degree from an accredited college or university,
- 2. One year of teaching experience in K-12 educational setting,
- 3. Transcripts,
- 4. Graduate Record Examination scores,
- 5. At least two letters of recommendation from persons familiar with their academic and teaching performance,
- 6. Resume,
- 7. A 500 word letter of intent addressing interest in the program, their educational goals, areas of study, and topics of potential research interest.

All admission criteria as listed above are taken into consideration for acceptance into the Science Education Emphasis program. Admission to the Graduate School does not guarantee admission to the Science Education Emphasis graduate program.

For degree and program requirements, see:

Graduate Interdisciplinary Degree Program M.A. — Science Education Emphasis (p. 67)

COLLEGE OF PERFORMING AND VISUAL ARTS (PVA)

University Programs

Graduate Programs (p. 52)

Office of the Dean

Location: Guggenheim 204 Telephone: 970.351.2515 Dean: Leo Welch, D.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, 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.

School of Art and Design

Director: Andrew Liccardo, M.F.A.

Location: Guggenheim 103 **Telephone:** 970.351.2143

Faculty: 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.; Andrew Liccardo, M.F.A.; Kenneth Price, M.A; Kevin Slivka, Ph.D.; Thomas Stephens, M.F.A.; Connie Stewart, Ph.D.; Andrew Jay Svedlow, Ph.D.; John Tonai, M.F.A.; Anna Ursyn, Ph.D.

Accredited by the National Association of Schools of Art and Design (NASAD); 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 will have demonstrated ability to teach art effectively in grades K-12.

Art and 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.

Students may choose from two delivery options for the Master's program. The first is the traditional on-campus program and the second, a low residency option. The low residency option is a hybrid model consisting of two four-week summer residencies and coursework conducted online and in face-to-face meetings, as needed, during two fall and spring semesters. This is a two-year program. Both delivery options maintain the thirty-credit requirement. The on-campus program requires a written thesis. The final requirement for the low residency program is an Action Research project and report.

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 of 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. (p. 53)

School of Music

Director: TBA

Associate Director: Charles A. Hansen, D.M.A.

Location: Frasier Hall 108 **Telephone:** 970.351.2993

Graduate Coordinator: Robert Ehle, Ph.D.

Faculty: John Adler, D.M.A.; Euridice Alvarez, D.M.A.; Erik Applegate, M.M.; H. Gray Barrier, M.M.; Jonathan Bellman, D.M.A.; Diane Bolden–Taylor, D.M.A.; Jill Burleson Burgett, D.A.; Jason Byrnes, D.M.; Derek Chester, D.M.A.; Andrew Dahlke, D.M.A.; Galen Darrough, D.M.A.; Janice Dickensheets, D.A.; Robert Ehle, Ph.D.; Paul Elwood, Ph.D.; Gal Faganel, D.M.A; Nathan Fulks, D.M.A.; Socrates Garcia, D.A.; Nancy Glen, D.A.; Russell Guyver, D.M.A.; James Hall, D.M.A.; Charles A. Hansen, D.M.A.; Caleb Harris, M.M.; Marian K. Hesse, M.M.; Lauren Jacobson, M.M.; Deborah Kauffman, D.M.A.; Dana B. Landry, M.M.; Brian Clay Luedloff, M.F.A.; Christopher Luther, D.M.A.; Melissa Malde, D.M.A.; Richard G. Mayne, Ph.D.; Charlotte R. Mills, D.A.; Mark Montemayor, Ph.D.; Michael Oravitz, Ph.D.; Stephen Pierce, D.M.A.; Carissa Reddick, Ph.D.; Kenneth Singleton, D.M.A.; Lei Weng, M.M.;

James White, 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. Graduate students who do not pass the theory placement exam must enroll in MUS 401. Graduate students who do not pass the aural skills placement exam must enroll in MUS 402. All students must either pass the theory and aural skills exam OR pass MUS 401 and/or MUS 402 with a grade of C or better before they can enroll in graduate-level theory classes or graduate from their programs.

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

For degree and program requirements, see:

Music M.M. — Collaborative Piano Emphasis (p. 71)

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.

For degree and program requirements, see:

Music M.M. — Conducting Emphasis (p. 71)

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.

For degree and program requirements, see:

Music M.M. — Instrumental Performance Emphasis (p. 72)

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.

For degree and program requirements, see:

Music M.M. — Jazz Studies Emphasis (p. 73)

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.

For degree and program requirements, see:

Music M.M. — Music Education Emphasis (p. 73)

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.

For degree and program requirements, see:

Music M.M. — Music History and Literature Emphasis (p. 73)

Music Theory and Composition Emphasis

For degree and program requirements, see:

Music M.M. — Music Theory and Composition Emphasis (p. 74)

Vocal Performance Emphasis

For degree and program requirements, see:

Music M.M. — Vocal Performance Emphasis (p. 74)

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. Graduate students who do not pass the theory placement exam must enroll in MUS 401. Graduate students who do not pass the aural skills placement exam must enroll in MUS 402. All students must either pass the theory and aural skills exam OR pass MUS 401 and/or MUS 402 with a grade of C or better before they can enroll in graduate-level theory classes or graduate from their programs.

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.

For degree and program requirements, see:

Music D.A. (p. 102)

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. — Music Education Emphasis (p. 105)

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.; Jerald David Blatt, M.F.A.; David Gene Grapes II, M.F.A.; Nicholas Graves, 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.; 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.

Dance Education M.A.

Schedule:

The program will be delivered through both on line learning and on campus classes. The on line learning would take place during the fall and spring semesters, while the students would be on campus during the summers for face-to-face intensive classes. The summer classes would include three classes taught over a three week time period.

Admission:

Requirements beyond UNC's Minimum Requirements:

- Applicants must have a Bachelor's degree and a strong desire to obtain a Master of Arts degree in Dance Education.
- Those applying to the program would submit a sample of their scholarly writing for perusal. Scholarly writing could include writing describing curricula, lesson plans or research created or done by the applicant.
- Applicants would also need to describe in detail how they would plan to actively use what they have learned in this graduate program in their own teaching situation or prospective teaching situation.
- Students accepted to this program would be teachers or prospective teachers in Colorado and throughout the nation. There would, however, be an emphasis on accepting those who are already teaching in our state with the goal of improving dance education in Colorado schools. There is also the possibility of accepting international students in this program. (Dr. Sandra Minton is well-known as a dance educator in the U.S. and internationally and has been able, in the past, to attract Colorado, national and international teachers as students to her graduate level courses offered through UNC Extended Studies).
- Students accepted to this program would not need to have completed undergraduate work in dance, although a background in dance as a professional performer or in dance studio classes would be helpful. Having an undergraduate degree in dance would be a plus.
- If a student has had previous experience in the dance field, please briefly describe those experiences. Such dance experiences could include those from dance studios, public or private K-12 schools or university programs.

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.

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. (p. 86) Theatre Educator Intensive (p. 86)

GRADUATE COURSE DESCRIPTIONS

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. Theses 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 by 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

College of Humanities and Social Sciences

Department of Anthropology

- Contact (970) 351.2021
- www.unco.edu/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

College of Education and Behavioral Sciences

Department of Applied Psychology and Counselor Education

Department of School Pyschology

- Contact (970) 351.2731
- www.unco.edu/cebs/counspsych

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 - Diagnosis and Treatment Planning (3)

Majors only. Prerequisites: APCE 602 or APCE 650, and pre- or co-requisite APCE 607; or pre- or co-requisite APCE 701 and co-requisite APCE 707 for Counseling Psychology students. An introduction to diagnostic criteria, according to the DSM, for mental and emotional disorders. Students will learn about treatment planning based on causes, symptoms, characteristics, and classifications of abnormal behavior.

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 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)

Prerequisite: APCE 607. A comprehensive study of therapeutic approaches and techniques for children and adolescents. The course focuses on the therapeutic involvement of significant 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 558, APCE 607, APCE 602 or APCE 650, and PSY 530; co-requisitite APCE 657; and consent of coordinator. Majors only. Students will receive supervised experience in counseling, including use of audio and video tapes, client and supervision feedback, and seminar. This course must be taken at the site of admission. 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 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 or APCE 707 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. S/U graded. Repeatable, maximum of 10 credits.

APCE 619 - Practicum II in Individual Counseling (3)

Prerequisites: APCE 612, APCE 662 or APCE 606. Corequisites: APCE 616 and APCE 673. School Counseling additional prerequisites: APCE 603 and APCE 608. Clinical Mental Health Counseling child/adolescent placements additional prerequisite: APCE 603. Practicum II is a field-based experience, viewed as a transitionary experience to be completed after successful completion of Practicum I and prior to registering for and completing Internship hours. S/U graded. Repeatable, maximum of 6 credits.

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 625 - Applied Developmental Science (3)

Prerequisite: Undergraduate or graduate level course in developmental psychology. Addresses dynamic nature of individual and family functioning and the interaction of biology and environments. Emphasis on integration of theory and research in developing programs that foster healthy development.

APCE 638 - Human Behavior Analysis (3)

Overview of human behavior analysis, with a focus on school-based behavioral assessment and intervention.

APCE 640 - School-Based Psychological Consultation (3)

Addresses the practice of psychological consultation with school personnel and families. Includes coverage of major consultation theories, school culture, and how consultation is applied to service delivery systems in schools.

APCE 644 - Assessment I: Cognitive and Academic Functioning (5)

Prerequisites: APCE 670 and consent of instructor. Advanced supervised experience using a problem-solving approach to assess, plan, and monitor child, adolescent, and adult functioning in areas of cognitive processing and academic achievement in school and community settings.

APCE 645 - Social and Behavioral Assessment in the Schools (3)

Prerequisites: APCE 644 and APCE 670. 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 646 - Assessment II: Socio-emotional and Behavioral Functioning (5)

Prerequisites: APCE 644 and consent of instructor. Advanced supervised experience using a problem-solving approach to assess, plan, monitor child, adolescent, adult functioning in personality, behavior, social-emotional, and adaptive skills in school and community settings.

APCE 648 - Assessment III: Early Childhood (3)

Prerequisites: APCE 644 and APCE 646 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 650 - Orientation to Community 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 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 661 - Psychological Trauma and Intervention for Individuals, Families and Communities (3)

Prerequisites: APCE 558, APCE 607 and APCE 657. An overview of the impact of crises, disasters, and other trauma-causing events on individuals, families and communities. Students will be introduced to strategies and interventions for working with this population.

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)

Consent of instructor. Build research skills and knowledge serving under the mentorship (research apprentice) of a faculty member. Must complete four credit hours over four semesters, excluding summer. Repeatable, maximum of four times.

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 childcentered 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 - Principles of Psychometrics and Assessment (3)

Understanding psychological testing through an overview of measurement principles, the psychological assessment process, data management, test construction and development, and the use of test results in individual psychoeducational evaluations and intervention planning.

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)

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 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 Systems Consultation (3)

Prerequisite: APCE 640. 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 682 - Biological Bases of Behavior (3)

Presentation of the biological/neuroanatomical underpinnings of behavior and affect, including: function/structure of nervous system, neuropathy, physiology of psychopathology, psychopharmacology, sensation/perception, physiology of emotion, sleep, reproduction and motivation.

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 Clinical 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, and 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 Indvidual 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. Serve as an apprentice to a chosen faculty member and work on writing, research, and professional scientific and scholarly endeavors. Requires approximately 3-5 hours per week. S/U graded. Repeatable, maximum 3 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 746 - Advanced Seminar in Counselor Education and Supervision (3)

Prerequisite: APCE 703. Concentrated study, application, synthesis and evaluation of career development and theory, and professional identity for counselors, counselor educators and supervisors. Emphasis on application of leadership and advocacy skills.

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 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 - Supervision in School Psychology (3)

Prerequisites: APCE 644 and consent of instructor. Students gain knowledge of the theories and practice of supervision, with opportunities for application in an assessment course. This course also provides advanced practice in psychological assessment through the PSC. S/U graded.

APCE 776 - Externship in School Psychology (1)

Prerequisites: APCE 644, APCE 646, and consent of instructor. Supervised experience in clinical and/or school-based practice. Must successfully complete one credit in Psychological Services Clinic before eligible to complete a second credit in an approved site. S/U graded. Repeatable, no limitations.

APCE 777 - Applied Neuropsychology (3)

Prerequisites: APCE 612 or APCE 618 or APCE 702 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 or APCE 707, APCE 638, APCE 640, APCE 646, APCE 747, and consent of the instructor. Supervised experience in the provision of comprehensive psychological services to children/adolescents within a school setting. Must be repeated across two consecutive semesters (Fall/Spring).

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 of evaluating the effectivenes 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 APA training standards. Completed in 3-6 consecutive semesters after Ph.D. course work and approval of dissertation proposal (required before internship match day). Repeatable, maximum 18 credits. S/U graded.

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 preapproved 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 (3)

Prerequisites: APCE 702, APCE 712, and consent of practicum coordinator. Majors only. This course is an introduction to clinical administrative experiences, including conducting intakes, making treatment recommendations, engaging in campus/community outreach and providing therapeutic services. S/U graded.

APCE 794 - Psychological Services Clinic II (1)

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 795 - External Practicum in Counseling Psychology (3)

Prerequisites: APCE 702, APCE 712 and consent of practicum coordinator. Majors only. This course offers students the opportunity to refine their assessment skills with clients in various community based organizations. S/U graded. Repeatable, maximum of 15 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

College of Performing and Visual Arts

School of Art & Design

- Contact (970) 351.2143
- www.arts.unco.edu/artanddesign

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)

Prerequisite: ART 311 or equivalent. 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 - 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.

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 547 - Multimedia in the Arts - Concepts and Studio Strategies (3)

Majors/Minors only. Seniors of above. Consent of instructor. Students investigate thematic interpretation of ideas and express them in a variety of systems. Through conceptual thought & formatting, students will explore an integration of 2D/3D projects. Consent of the instructor required.

ART 551 - Collagraphs (3)

Prerequisite: ART 351. Majors/Minors only. Advanced investigation in collagraphs. A collagraph plate is made by cutting and pasting textural elements. This is printed in intaglio/ Relief method.

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 573 - Digital Photography Manipulation (3)

Prerequisite: ART 271. Study principles of localized manipulation and multiple image digital processing techniques. Students will also acquire a working knowledge of post processing and calibration equipment that will enable the student to be able understand both the hardware and software involved with digital post processing. Majors/minors only or by consent of instructor.

ART 576 - Advanced Black and White Photography (3)

Prerequisite: ART 274. Learn advanced concepts and practices of black and white film photography. Techniques also include controlling a large format camera, close-up/macro photography, processing sheet film, calibrating the film/paper system for the individual, printing on fiber based paper and toning prints. Majors/minors only or by consent of instructor.

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 578 - Alternative Photographic Expression (3)

Prerequisite: Art 271. Explore non-traditional methods of photographic techniques and processes. This class is designed to facilitate the use of alternative cameras/lenses, alternative/non-silver processes and creative presentation techniques. Majors/minors only or by consent of instructor.

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 625 - Fibers Studio (1 - 3)

Consent of instructor. Individualized or specialized study on specific topic in fibers. Repeatable, may be taken three 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 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 696 - Action Research in Art Education I (3)

Prerequisite: ART 600. Consent of instructor. Students enrolled in Low Residency Option for M.A. in Art Education take this course. They conduct action research plans developed and approved in Art 600: Research Methods in Art.

ART 697 - Action Research in Art Education II (3)

Prerequisite: ART 696. Consent of instructor. Students enrolled in Low Residency Option for M.A. in Art Education take this course. Complete action research projects by drawing conclusions and implications. They submit final reports to graduate committees.

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

College of Natural and Health Sciences

School of Human Sciences

- Contact (970) 351.2734
- www.unco.edu/nhs/asls

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 (2)

Masters only. Professional issues in speech-language pathology as they relate to the public schools, medical settings and private practice. Topics include the legislative issues, business practices, ethics, third party reimbursement procedures and laws.

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 567 - Diagnostic Procedures: Introduction (1 - 2)

Masters students only. Diagnostic principles, procedures, and materials used to assess individuals with communication disorders. Additional topics: case history, oral mechanism and interviewing techniques. Learners will perform speech/language screenings and diagnostic evaluations. Repeatable, maximum of 8 credits.

ASLS 568 - Diagnostic Procedures: Intermediate (1 - 2)

Masters students only. Diagnostic principles, procedures, and materials used in criterion-referenced assessment of individuals with communication disorders. Learners will perform speech and language screenings and diagnostic evaluations. Repeatable, maximum of 8 credits.

ASLS 569 - Diagnostic Procedures: Advanced (1 - 2)

Masters students only. Diagnostic principles, procedures, and materials used in assessment of individuals with communication disorders in a medical setting. Repeatable, maximum of four 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 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 individuals who are deaf or hard of hearing. Includes hearing aid and/or cochlear implant management. 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 (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 clinical skills and learn about issues related to clinical practice, including ethics, counseling, selfevaluation, treatment notes, efficacy, outcome measures, 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, professional liability, clinical fellowship year, leadership, and demonstrating clinical effectiveness.

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 fifteen credits.

ASLS 615 - Research in Audiology and Speech-Langauge Pathology (1 - 4)

Students will engage in systematic inquiry in audiology and speech-language pathology. This may include evaluating current research, posing research questions, formulating research designs, and developing formal research proposals. Repeatable, maximum of 8 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 & 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 (2)

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 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 and prelinguistic communication, infancy through preschool. Application of contemporary theory and legislative assessment/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 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 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 711 - Auditory Physiology (3)

Undergraduate anatomy and physiology required. Advanced physiology of the human auditory system, emphasizing electrical potentials; processes of pathophysiology.

ASLS 712 - Amplification I (3)

Advanced study of the theory and use of hearing aids, other amplification devices and assistive listening devices.

ASLS 715 - Applied Research in Audiology (1 - 4)

Prerequisite: ASLS 615, consent of instructor and successful completion of written comprehensive evaluation. 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 eight credits.

ASLS 720 - Supervised Teaching in Audiology (1)

Emphasis on teaching techniques and methods for college and university instruction. Repeatable, maximum of six credits. S/U graded.

ASLS 721 - Psychoacoustics (2)

Prerequisite: ASLS 711. Concepts of loudness, adaptation, auditory fatigue, masking and the critical band, pitch perception, localization, temporal order and perceptual organization.

ASLS 723 - Amplification II (3)

Prerequisite: ASLS 712. 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 724 - Differential Diagnosis of Auditory Disorders (3)

Prerequisite: ASLS 711. 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 731 - Auditory Processing Disorders (2)

Theoretical overview, biologic bases, audiologic assessment, and management of adults and children with auditory processing disorders (APD). Emphasis on application of theoretical knowledge to practical clinical audiology methods and techniques.

ASLS 741 - 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 742 - Advanced Diagnosis of Auditory Disorders (2)

Prerequisite: ASLS 724. Advanced study of auditory physiology, otoacoustic emissions, multi-frequency tympanometry and auditory evoked potentials.

ASLS 743 - Medical Aspects of Audiology (3)

Study of the medical correlates of hearing impairment including pathogenesis of auditory pathologies,

medical/surgical intervention, congenital/genetic syndromes, and related radiology/imaging/surgical techniques.

ASLS 744 - Vestibular Assessment and Management (2)

Advanced study of vestibular physiology, assessment and rehabilitation.

ASLS 751 - Otopharmacology (2)

Prerequisites: ASLS 555 and ASLS 743. Pharmacology and ototoxicity as applied to clinical audiology. Basic mechanisms of pharmacodynamics, pharmacokinetics and pharmacotherapeutics and classes of drugs relative to otologic disorders.

ASLS 772 - 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 774 - Professional Issues in Audiology (2)

Overview of professional responsibilities and intraprofessional 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 (4)

(3 lecture, 2 lab) Prerequisites: ASLS 711 and ASLS 742. Laboratory required. Theory and practice of electrophysiologic assessment of the auditory system. Lab addresses clinical assessment using auditory evoked potentials testing. Evaluation, interpretation, and reporting of results will be included.

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

College of Natural and Health Sciences

Department of Physics and Astronomy

- Contact (970) 351.2961
- www.unco.edu/nhs/physics

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.

BAAC - Accounting

Kenneth W. Monfort College of Business

Department of Accounting and Computer Information Systems

- Contact (970) 351.2855
- http://mcb.unco.edu/departments/Accounting.cfm

BAAC 521 - Contemporary Issues in Financial Reporting Topics (3)

Prerequisite: Graduate business standing or consent of instructor. A theoretical and activity-based course which evaluates the conceptual development and application of current authoritative pronouncements, as well as examines some emerging issues in financial reporting.

BAAC 523 - Cost and Managerial Accounting II (3)

Prerequisite: Graduate business standing or consent of instructor. Continuation of BAAC 323 - an activity course; includes capital budgeting decision models,; planning and control systems; and advanced topics in cost behavior, cost allocation and product costing. BAAC 523 for graduate credit will include a major research project and presentation.

BAAC 524 - Professional Accounting Research, Communications, and Ethics (3)

Prerequisites: Accounting master students only. This course emphasizes professional accounting research and the communication of the research findings to a variety of audiences. Students will use a variety of accounting research tools and databases. Research projects will be conducted in a variety of accounting situations. Also, the course is designed to raise students' level of awareness of

interpersonal and global communication skills. Additionally, the course will address the ethical issues related to accurately communicating accounting and business information.

BAAC 525 - Contemporary Issues in Auditing Topics (3)

Prerequisite: Graduate business standing or consent of instructor. This course builds on skills obtained in the beginning auditing (assurance) course. The primary goal is to further develop student ability to understand and apply audit planning, evidence gathering, and reporting procedures. Professional communication and research skills are emphasized. Topics vary, depending on issues, trends and developments in the area of study.

BAAC 527 - Governmental and Institutional Accounting (3)

Prerequisite: Graduate business standing or consent of instructor. This is an activity course involving the study of accounting processes and procedures used by state and local governmental units and other selected not-for-profit entities. This course addresses advanced topics of current interest in the evolving field of governmental and not-for-profit entities. This course will include a major research project and presentation.

BAAC 528 - Contemporary Issues in Accounting Information Systems (3)

Prerequisite: Graduate business standing or consent of instructor. Advanced topics in accounting systems within an enterprise-wide framework including conceptual modeling, database design and implementation, controls, and emerging issues. Topics vary depending on trends and developments in area.

BAAC 529 - Contemporary Issues in Tax (3)

Prerequisite: Graduate business standing or consent of instructor. This course examines current tax issues and integrates them in decision-making, asset prices, and the operational structure of firms. The course will integrate tax with financial accounting by emphasizing the differences and trade-offs between the taxation and financial reporting of a transaction. Topics vary, depending on issues, trends and developments in the area of study.

BAAC 592 - Internship in Accounting (1-3)

Prerequisite: Consent of Instructor. Graduate business standing. Practical work experience allowing the intern the opportunity to utilize the material learned in accounting courses. Credit for the internship is determined by the coordinator. S/U graded.

BAAC 595 - Special Topics in Accounting (1-3)

Prerequisites: Consent of instructor. Business majors only. Graduates only. This seminar course explores advanced topics in accounting. Special topics will be specified by the instructor. S/U or letter graded. Repeatable, under different subtitles.

BAAC 622 - Independent Research Directed Studies (1-3)

Prerequisite: Consent of instructor. Graduate standing. This course is designed to allow the student to perform and complete a research project as an independent project. The research topic will be mutually agreed upon by the student and faculty. The course is individually supervised by a graduate faculty member. Letter graded. Repeatable.

BACS - Computer Information System

Kenneth W. Monfort College of Business

Department of Accounting and Computer Information Systems

- Contact (970) 351.2855
- http://mcb.unco.edu/departments/CIS.cfm

BACS 500 - Information Technology for Accounting Controls and Information Security (3)

Prerequisites: BACS 300 and BAAC 328 with a minimum grade of "C-" or consent of instructor. Graduate business standing or consent of instructor. Examines networking, databases, information security foundations, internet and web based data transactions, and other technologies used to support management and accounting controls in all types of organizations.

BAMG - Management

Kenneth W. Monforth College of Business

Department of Management and Marketing

- Contact (970) 351.2088
- http://mcb.unco.edu/departments/Management.cfm

BAMG 554 - Managing and Developing People (3)

Prerequisite: Non-business graduates or MAcc students only. This course covers both organizational behavior and human resource topics focused on describing, predicting, and understanding how people behave in organizations. It provides the knowledge underlying management practices, particularly those focused on the management of human resources.

BIO - Biology

College of Natural and Health Sciences

School of Biological Sciences

- Contact (970) 351.2921
- www.unco.edu/nhs/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 502 - Biomedicine and Careers (1)

Prerequisite: Must be enrolled in the Masters in Biomedical Science program. This course will assist students in preparing for careers in biomedicine. Topics include biomedical ethics, interpersonal skill development, professionalism, the application process, interviewing skills and strategies to finance continued education.

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)

(3 lecture) Prerequisite: BIO 220. Examination of protein synthesis, DNA replication, gene expression, gene structure, and regulation of gene expression.

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 528 - Developmental Biology (3)

(3 lecture) Prerequisite: BIO 220 or consent of instructor. Exploration of animal development. Emphasis on the genetic basis of cell organization and identity during embryogenesis and differentiation. Topics include fertilization, gastrulation, axis specification, patterning, organogenesis, stem cells.

BIO 529 - Developmental Biology Laboratory (1)

(3 laboratory) Corequisite: BIO 528. Classic model organisms such as sea urchin, fruit fly, chick, zebrafish, flat worm, and mouse will be used to observe and manipulate the events of animal development in living organisms.

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 531 - Teaching College Biology (3)

(3 lecture) This course prepares students for everyday classroom teaching experiences in college biology including small and large classrooms and laboratory settings using a variety of best-practices teaching strategies.

BIO 532 - College Biology Course Development (3)

(3 lecture) This course prepares students to effectively design college biology course curriculum using backwards design to develop learning objectives, syllabi, student assessments, and evaluation of course effectiveness.

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 hostparasite 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 538 - Ornithology (4)

(3 lecture, 3 laboratory) Prerequisite: BIO 111. Study of the evolution, general biology, diversity, ecology and behaviors of birds. Laboratory emphasis will be on identification. Field trips required.

BIO 539 - Molecular Ecology (3)

(3 Lecture) Prerequisite: BIO 220. Co-requisite: BIO 539L (p. 196). Investigation of the usage of molecular data to answer ecological questions. Topics include: marker selection, genetic characteristics of organisms, population analyses, phylogenetics conservation genetics, and phylogeography.

BIO 539L - Molecular Ecology Lab (1)

(3 Laboratory) Prerequisite: BIO 220. Co-requisite: BIO 539. Laboratory to accompany BIO 539. Study of the techniques used to collect molecular data for ecological and evolutionary studies.

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 541 - Advanced Human Anatomy (3)

(1 lecture, 6 laboratory) Prerequisites: BIO 341 and BIO 350. An in depth regional study of the anatomical structures of the human body. Spatial relationships among structures are emphasized. Laboratory includes organ and virtual dissection.

BIO 542 - Molecular and Cellular Laboratory (2)

(2 Laboratory) Prerequisites: BIO 220 and concurrent or previous enrollment in either BIO 525 or BIO 550. Study of the theory and techniques currently used to investigate cells and molecules. Development of the laboratory and problem solving skills to successfully conduct experiments.

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)

Prequisites: BIO 351; BIO 381 recommended. 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)

Prequisites: BIO 351; BIO 381 recommended. Corequisite: BIO 545. 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 (3)

(3 Lecture) Prerequisite: BIO 220 and CHEM 331, recommended CHEM 481 or CHEM 381. 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 210 or BIO 345 and CHEM 381 or 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 210 or BIO 345 and CHEM 381 or 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. Repeatable, no limitations.

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 (3)

(3 lecture) Prerequisite: BIO 362. Study of the principles of behavioral ecology, including the evolutionary basis of behavior, economic models of behavior, interspecific interactions, and social behavior.

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 562 - Conservation Biology (3)

(3 Lecture) Prerequisite: BIO 111. Examination of the fundamental principles of conservation biology (biodiversity, habitat degradation, extinction, restoration, planning) with discussion of current topics (climate change, conservation genetics, landscape vs. ecosystem conservation, sustainable development).

BIO 563 - Animal Communication (3)

(3 lecture) Prerequisite: BIO 362. Study of the principles of animal communication, including signal modalities, signal design and signal evolution.

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 experiements.

BIO 565 - Current Topics in Ecology and Evolutionary Research (2)

(2 lecture) Prerequisites: BIO 111, BIO 360 and BIO 465. Examine current topics in ecology and evolutionary biology research. Focus on speciation, microevolution, range shifts, species interactions, and ecosystems. Topics will include both applied and basic studies. Repeatable, maximum of 6 credits.

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, insects 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 (3)

(3 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 573 - Animal Communication Laboratory (1)

Prerequisite: BIO 362. Co-requisite: BIO 563. Laboratory to accompany BIO 563 Animal Communication. Study and application of research techniques in the field of Animal Communication. Students will plan and conduct research.

BIO 574 - Behavioral Ecology Laboratory (1)

Prerequisite: BIO 362. Co-requisite: BIO 560. Laboratory to accompany BIO 560 Behavioral Ecology. Study and application of research techniques in the field of Behavioral Ecology. Students will plan and conduct research.

BIO 576 - Pharmacology (3)

Prerequisite: BIO 246, BIO 350, BIO 552, BIO 553. 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 582 - Cancer Biology (3)

(3 lecture) Prerequisite: BIO 220. Study the principles of cancer biology including the mechanisms involved in its progression; the roles of DNA damage, heredity, and the environment; and treatment and prevention.

BIO 584 - Current Topics in Biological Education Research (2)

Examine current topics in biological education research. Focus on teaching, learning, and assessment of biology as well as school policy and curriculum development. Repeatable, maximum of 6 credits.

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 cuttingedge topics in the Biological Sciences taken from peerreviewed 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 596 - Foundations of Clinical Research (2)

Masters only. Required for students completing a Master's in Biomedical Science degree. This course examines the components of clinical research including design, conduct, analysis of trials, and dissemination of results.

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 693 - Review of Biological Literature (3)

Majors/Minors only. Master students only. This course teaches students how to conduct a thorough review of scientific literature on a focused biological topic and prepare a written comprehensive report following standard scientific format and style.

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

College of Natural and Health Sciences

School of Human Sciences

- Contact (970) 351.2755
- www.unco.edu/nhs/publichealth

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 - Behavior Change Theories (3)

Review theories of behavior and behavior change as they relate to current health issues. Health behavior change models will be examined and applied.

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 520 - Foundations in Public Health (2)

Examines the historical and conceptual basis, key issues, advancements and the core functions of the public health system. This course is offered through CSPH as PUBH 6600

CH 525 - Contemporary Issues in School Health (3)

This course examines the relationship between child/adolescent health and their school experience. The course will be organized around the eight components of the Coordinated School Health Program Model. Current issues and approaches to school health will also be presented.

CH 530 - Strategies for Community Health Promotion (3)

This course examines the effectiveness of a wide range of community strategies used in health promotion/disease prevention programs.

CH 532 - Physical Activity and Public Health (3)

An examination of physical activity and the public health implications of physical inactivity. Emphasis will be placed on epidemiologic evidence of physical activity benefits and chronic disease prevention.

CH 533 - Physical Activity Interventions in the Community (3)

This course is designed to acquaint students with theorybased interventions to increase participation in physical activity. Interventions discussed will include evidencebased approaches targeting various sub-populations and settings within the community.

CH 535 - Effective Community Health Engagement (3)

Prerequisite: CH 530 or consent of instructor. This course will identify and apply strategies needed to effectively engage in communities.

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 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 575 - Public Health Issues in Reproductive Health (3)

An extensive comprehensive elective designed to expose graduate students to the importance of reproductive health and the impact it has on public health issues.

CH 610 - Program Planning and Evaluation (3)

Prerequisite: CH 509 or consent of instructor. Theories and practices of program planning and evaluation including needs assessment, planning approaches, election of strategies, data collection and analysis, evaluation design, program implementation and utilization of evaluation data.

CH 615 - Methods in Public Health Research and Evaluation (3)

Prerequisite: SRM 617. Public health research methods, qualitative/quantitative research designs, data collection/analysis and program evaluation. Students will conduct an evaluation project with a local public health agency.

CH 620 - Epidemiology (3)

Prerequisite: SRM 617 or consent of instructor. 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)

Prerequisite: 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.

CH 635 - Policy, Advocacy, Leadership & Management in Community Health (3)

Prerequisite: PUBH 6600 or consent of instructor. Health policy, advocacy, leadership and management is a multidisciplinary field of public health practice that is concerned with the delivery, quality and costs of public health services.

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 693 - MPH Practicum (2)

Prerequisites: CH 610 and consent of instructor. Theory and skills applied in a public health setting. Students must complete a minimum of 150 practicum field hours incorporating core competencies.

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 - Chemistry

College of Natural and Health Sciences

Department of Chemistry and Biochemistry

- Contact (970) 351.2559
- www.unco.edu/nhs/chemistry

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 541 - Solid State Chemistry (3)

Prerequisite: CHEM 442 or equivalent. Bonding and crystal structure, crystallography, synthesis and characterization techniques, and structure-property relationships unique to solid-state materials.

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. Corequisites, 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 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 - 9)

Develop, complete, and defend master's level research project in chemistry. S/U graded. Repeatable, no limitations.

CHEM 695 - Thesis Proposal (1)

The student will develop a committee approved research proposal based on current literature.

CHEM 699 - Thesis (1 - 6)

Required of candidates in the MS programs in chemistry that are completing theses. Repeatable, maximum of 6 credits.

CHEM 755 - Supervised Practicum in College Teaching (1 - 4)

Supervised practice in college teaching for doctoral candidates with observation used as a basis for analysis of learning experiences. Repeatable, maximum of four credits.

CHEM 793 - Doctoral Research Practicum-Chemistry (1 - 9)

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, no limitations.

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

College of Humanities and Social Sciences

School of Communication Studies

- Contact (970) 351.2405
- http://hss.unco.edu/communication

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 101. 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.

CRJ - Criminal Justice

College of Humanities and Social Sciences

Department of Criminal Justice

- Contact (970) 351.2186
- www.unco.edu/criminaljustice

CRJ 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.

CRJ 510 - Criminal Justice System (3)

Detailed overview and critical analysis of the three main components of the criminal justice system: police, courts, and corrections. Both historical development of the system and contemporary issues are discussed.

CRJ 512 - Drugs and Drug Policy (3)

Overview of the threats and risks of drugs, patterns of use, treatment and prevention, and drug policy in the U.S. Also investigates U.S. influence on policies in some foreign countries.

CRJ 523 - Problem Oriented Policing & 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 alaw enforcement perspective.

CRJ 532 - Problem Solving Courts (3)

A critical evaluation of court innovations linked to the larger problem-solving justice philosophy, which emphasizes enhanced information and information sharing, community engagement, collaboration, individualized justice, offender accountability, and outcomes. Consent of Instructor.

CRJ 542 - Prisoner Re-Entry (3)

As the number of individuals leaving prison increased dramatically, "prisoner re-entry" became a focus for practitioners and policy makers. This course will critically evaluate strategies designed to improve re-entry outcomes.

CRJ 550 - Organization and Management of Criminal Justice (3)

Prerequisite: CRJ 510. 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 - Crime Theories (3)

Co-requisite: 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 562 - Environmental Criminology (3)

Departing from the sociological or psychological explanations for criminal behavior, this course focuses on the opportunity constructs surrounding crime and identifies ways to constrain or eliminate the mechanisms for crime. Consent of Instructor.

CRJ 565 - Transnational Crime (3)

Overview of transnational crimes with specific examples such as sea piracy, human trafficking, and terrorism. Addresses problems in defining these crimes, understanding their occurrence, and determining ways to combat them.

CRJ 570 - Issues of Diversity in Criminal Justice (3)

Prerequisite: CRJ 510. Provides an in-depth analysis of diversity issues in the criminal justice system, specifically focusing on the role race/ethnicity, gender, and social class play in the various arenas of criminal justice.

CRJ 580 - Advanced Research Methods for Criminal Justice (3)

Prerequisite: CRJ 510. 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 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 3 credits.

CRJ 697 - Capstone Project (1 - 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. S/U graded. Repeatable Once.

CRJ 699 - Thesis (1 - 6)

Option to CRJ 697 on recommendations 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, no limitations.

DNCE - Dance

College of Performing and Visual Arts

School of Theatre Arts and Dance

- Contact (970) 351.2991
- www.arts.unco.edu/theatredance

DNCE 550 - Dance History - Tribal Cultures to Current Times (3)

Masters only. Students learn to recognize links between early dance forms and those which are a part of the current cultural scene. Emphasis is placed on connections between dance forms and the accompanying culture, place and events found within a specific time frame along with developments in the other arts. Students will be expected to analyze historical dance forms.

DNCE 560 - Dance Movement Skills & Pedagogical Approaches (3)

Masters only. Class involves the study of the technique and performance qualities of Modern and Jazz Dance. The focus is on an in-depth discovery of the methods of pedagogy for dance technique classes.

DNCE 565 - Interdisciplinary Teaching and Advocacy in Dance (3)

Masters only. Class involves learning how to use creative movement and dance to teach non-dance concepts and ideas, including using movement and dance to teach multicultural content. Techniques for dance education advocacy will also be presented.

DNCE 570 - Doing, Teaching & Appreciating Choreography & Creative Dance I (3)

Masters only. Students learn about presenting creative movement/dance lessons for elementary age children and improvisation/choreography classes for older students. Techniques for appreciating choreography are also presented along with active participation in creative movement, improvisation, and dance making based on basic choreographic principles and forms.

DNCE 575 - Dance Lesson, Curriculum and Assessment Design (3)

Masters only. Class includes learning to give differentiated feedback to students in movement skills classes; designing various types of dance-based lessons and curricula (modern, jazz, creative dance, choreography & improvisation); and structuring dance assessment instruments and rubrics.

DNCE 600 - Movement and Dance - Framing a Research Question (3)

Masters only. Students learn how to frame a research question and effective research strategies for use in dance

education contexts. In addition, students produce a protocol, requiring detailed preparatory research, testing of ideas, and presentation of theories and concepts in practice. Students work under faculty supervision and prepare a documented written report.

DNCE 690 - Thesis I (3)

Masters only. Course builds on the initial research class by helping students refine a thesis topic and determine appropriate research methods. The course also includes work to define the purpose of the thesis, its significance, and possible sources for the review of literature. In addition, students describe a potential population of students for their project, along with the steps to be taken to complete their project. Possible thesis projects are: a research-based dance performance, research-based dance curriculum, or qualitative study exploring a dance education question.

DNCE 693 - Popular Dance Forms (3)

Masters only. Students learn movements from a number of popular dance forms—salsa, ballroom, hip hop, krump, steppin, 'Bollywood, & country western line dancing & basic movements from yoga. Work on teaching progressions, pedagogical tips & lesson planning are also included.

DNCE 695 - Doing, Teaching and Appreciating Choreography II (3)

Masters only. Class is an investigation of dance improvisation and choreography as it relates to dance pedagogy and philosophy. More advanced techniques for appreciating choreography are presented along with active participation in improvisation and dance making based on intermediate choreographic principles and forms. Learning to design choreographic experiences for students of different ages and ability levels is also part of this class.

DNCE 697 - Dance Production Techniques (3)

Masters only. Course covers dance production techniques to give students an overview and practical experience in all aspects of producing a dance concert or dance performance for primary level through college age students.

DNCE 699 - Thesis II (3-6)

Masters only. Course involves step-by-step process of writing and defending candidate's thesis project.

ECLD - Culturally & Linguistically Diverse Education

ECLD 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.

ECLD 593 - Language, School and Society (3)

Designed for educators who are preparing to teach, or are already teaching, culturally and linguistically diverse learners. Primary focus is on the interactions and interrelationships between and among society, language, and institutions of schooling.

ECLD 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.

ECLD 596 - Effective Instruction in Culturally and Linguistically Diverse Education (3)

This course examines methods of instruction and assessment that target systematic integration of language and content in specific curriculum content areas. Course readings and projects strengthen teachers' theoretical foundation while providing hands-on experience in implementing effective instruction and assessment that address the new Colorado English Language Proficiency Standards (WIDA) to enhance student learning. Topics include selection and effective use of resources and materials, instructional and assessment strategies, program planning and improvement, communicating results of assessments to stakeholders, emphasizing culturally and linguistically responsive pedagogies.

ECLD 600 - Literacy and Content Area Instruction in Spanish Bilingual Classrooms (3)

Prerequisite: Fluency in Spanish as indicated by the Spanish Oral Proficiency Exam. This course is designed for educators who are preparing to teach students who are learning content area information in Spanish. The primary focus of this course is to enhance teachers' knowledge of literacy and content area knowledge to be used in the bilingual classroom.

ECLD 602 - Teaching Culturally & Linguistically Diverse Learners (3)

This course will introduce future teachers to the theoretical, practical, and legal aspects of the education of culturally and linguistically diverse learners.

ECLD 603 - Methods and Assessment in Culturally & Linguistically Diverse Education (3)

Prepares teachers to apply research-based methods and assessments for culturally and linguistically diverse learners

ECLD 604 - Field Experience in Culturally & Linguistically Diverse Education (3)

Prerequisites: ECLD 602 and ECLD 603. Provides teachers with the opportunity to observe and participate in

instructional strategies for culturally and linguistically diverse learners.

ECLD 605 - Seminar in Multilingual Teaching and Learning I (3)

Prerequisites: 21 credits in the Culturally and Linguistically Diverse Education program, and SRM 600. This course discusses research and practice topics relevant to the education of culturally and linguistically diverse students. It requires the design of a research project on one of the course areas.

ECLD 606 - Culturally and Linguistically Diverse Learners in the U.S. Educational System (3)

This course will introduce students to the history of major language minority groups attending school in the United States and will explore the influences of language and culture on schooling.

ECLD 607 - Seminar in Multilingual Teaching and Learning II (3)

Prerequisites: 21 credit hours in the MAT Culturally and Linguistically Diverse Education program to include SRM 600 and ECLD 605. Students will synthesize and integrate what has been learned in the content, pedagogy, and research methods coursework, with classroom teaching and other work-related experiences. Must complete a culminating research project.

ECLD 610 - Practices in ESL/EFL Instruction and Assessment (4)

Prerequisites: ECLD 592 and ECLD 594. Focusing on effective classroom instructional and assessment strategies, the course prepares ESL/EFL instructors to work with adult ESL learners in English speaking countries or EFL learners in various international settings.

EDEC - Early Childhood Education

College of Education and Behavioral Sciences

School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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 sociodrama, 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

College of Education and Behavioral Sciences

School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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 544 - Elementary Student Teaching and Capstone Seminar (8)

Prerequisites: Full admittance to PTEP required. Meets student teaching requirement for certification. S/U graded.

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.

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 (2)

Prerequisites: EDFE 125 and 3.00 GPA required. This practicum immerses students in the elementary school classroom. Opportunities for teacher candidates to inquire, analyze and reflect on classroom routines and practices.

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)

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 - Foundations of Education

College of Education and Behavioral Sciences

School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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 618 - Internship in Cultural Studies and Equity (1)

Prerequisites: EDF 619 and EDLD 606. This course is designed to assist students in the completion of their internship for the Cultural Studies and Equity Graduate Certificate. The course will guide students in applying theoretical and empirical understandings of cultural diversity and equity in their selected field placement.

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 and 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 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 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 700 - Implementation and 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 773 - Literacy as Social Practice (3)

Exploration of concepts of literacy as social construction; includes aspects of influence on status, power, and mobility within society.

EDF 775 - History of Education Reform and Change (3)

Analysis of research on the history of American education with respect to implications for contemporary educational curriculum, reform, and innovation.

EDF 777 - Social Justice in Education Reform (3)

Analysis of research and social justice leadership and reform in schools (past, present, future). Critical reflection of teaching and learning that define, support, or hinder social justice in education.

EDF 778 - Social Theories of Learning and Organizational Change (3)

Examination of individual and collective learning as developmental transformation within and across social organizations, such as schools. Explores concepts of identity, power, meaning, boundaries and interaction between individuals and systems.

EDF 781 - Perspectives on Curriculum (3)

Exploration of curriculum theory and practice. The course addresses current orientations and applications of curriculum and its community of scholars and practitioners.

EDF 787 - Technology, Innovation, and Education (3)

Analysis of theory and practice-based research relevant to thoughtful design, implementation, and assessment of educational media and technology initiatives.

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 795 - Comprehensive Seminar (3)

Prerequisite: Students have completed all or are concurrently enrolled in their last program courses. Doctoral students only. Application of education knowledge and research methods. Students independently write a research paper suitable for publication in an education research journal. S/U Graded.

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)

Candidates must earn a minimum of 12 credit hours for the dissertation in partial fulfillment of the requirements for the degree

EDFE - Educational Field Experiences

College of Education and Behavioral Sciences

School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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 (3)

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

College of Education and Behavioral Sciences

School of Special Education

- Contact (970) 351.2691
- www.unco.edu/cebs/sped

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

College of Education and Behavioral Sciences

School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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 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

College of Education and Behavioral Sciences

School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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 nuture 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.

EDS - Education of Diverse Students

EDS 581 - Basic Principles of CLD & SPED Education (3)

This course is designed to provide the political, historical and legal foundations of special education and the education of culturally and linguistically diverse populations, and addresses the educational implications for the teacher and children with unique learning needs.

EDS 582 - Assessment: Special Education and Culturally and Linguistically Diverse Students (3)

Students gain knowledge and skills to select, adapt, and conduct assessments, develop Individualized Educational Programs, and use data from assessment to plan instruction within a continuum of service delivery models for diverse children and youth.

EDS 600 - Field Based Experience - SPED (1)

Prerequisites: EDS 581, EDS 582, ECLD 594, and EDSE 597. This course is designed for the SPED/CLD graduate student to be provided with opportunities to observe in a variety of special education settings, reflect on the observations and develop teaching related artifacts suitable for use in the specified field experience settings. S/U graded.

EDS 601 - Field Based Experience - CLD (1)

Prerequisites: EDS 581, EDS 582, ECLD 594, EDSE 597. Prerequisite or concurrent: ECLD 596. This course is designed so that the SPED/CLD graduate student is provided with opportunities to observe in a variety of second language settings, reflect on the observations and develop teaching related artifacts suitable for use when teaching culturally and linguistically diverse learners who are in the process of learning English. S/U graded.

EDSE - Special Education

College of Education and Behavioral Sciences School of Special Education

- Contact (970) 351.2691
- www.unco.edu/cebs/sped

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 (3)

The special education teacher candidate will be provided opportunities to observe, analyze and reflect on issues including diversity, professionalism, best practices in teaching, rights and responsibilities, and instruction in a K-12 special education setting. EDSE 507 is a self-paced, module-based course, delivered through Blackboard. Assignments for EDSE 507 are described within eight modules. In addition to the eight modules, observations (70 hours) are required.

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 educators of students with exceptionalities.

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 517 - Alternate Field Based Experience (3)

The special education teacher candidate will be provided opportunities to observe, analyze and compare/contrast special education programming in the United States to that of the teacher candidate's home country. The teacher candidate will reflect on issues including diversity, professionalism, best practices in teaching, students' rights and responsibilities, and instruction as related to K-12 special education settings. EDSE 517 is a self-paced, module-based course. Classroom observation hours are required. Individual assistance is provided as needed.

EDSE 528 - Linguistically Diverse Students with Low Incidence Disabilities (2)

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 - Family/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 patters 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 - 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 text. 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 537 - Practicum in EC/ESCE: Infants and Toddlers (2)

Prerequisites: Pass ECSE PLACE or PRAXIS II, Pass Elem Content PLACE or PRAXIS II or documented Elem Ed License, Completion of PTEP courses (if any), Instructor consent. Students build on knowledge and competencies gained throughout their master's program to synthesize their knowledge and apply recommended practices in EC/ECSE settings for children birth to 3 years of age. Repeatable, maximum of six hours.

EDSE 538 - Practicum in EC/ECSE: 3-5 years (2)

Prerequisites: Pass ECSE PLACE or PRAXIS II, Pass Elem Content PLACE or PRAXIS II or documented Elem Ed License, Completion of PTEP courses (if any), Instructor consent. Students build on knowledge and competencies gained throughout their master's program to synthesize their knowledge and apply recommended practices in EC/ECSE settings for children 3-5 years of age. Repeatable, maximum of 6 credits.

EDSE 539 - Practicum in EC/ECSE: 5-8 years (2)

Prerequisites: Pass ECSE PLACE or PRAXIS II, Pass Elem Content PLACE or PRAXIS II or documented Elem Ed License, Completion of PTEP courses (if any), Instructor consent. Students build on knowledge and competencies gained throughout their master's program to synthesize their knowledge and apply recommended practices in EC/ECSE settings for children 5-8 years of age. Repeatable, maximum of 6 credits.

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)

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 597 - Effective Instruction in Special Education (3)

This course addresses how to provide curriculum access and effectively teach skills in literacy, math, and general education content areas for students with exceptionalities. Emphasis is placed on evidence-based practices for targeted and embedded instruction of discrete skills in reading and math, and evidence-based strategies for adapting lesson plan formats and delivery modes to assure content access and student progress.

EDSE 613 - Applied Assessment (3)

Prerequisites: 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 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 125. This course provides scientifically based literacy interventions for learners with exceptional needs including 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 125. This course prepares 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 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 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 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 624 - Communication, Sensory, and Social Skills Strategies for Working with Students with Autism (3)

This course provides strategies for assessing and planning for instruction in communication, assistive technology, sensory needs and social skills for students on the autism spectrum including service delivery options, developing and implementing communication skills using evidencebased practices settings.

EDSE 625 - Applied Behavior Analysis for Teachers (3)

Course content focuses on applied behavior analysis, target behaviors, functional behavior assessment and analysis procedures, recording behavior, interpreting and creating graphic displays, behavioral interventions, reinforcement schedules, self-management, and generalization and maintenance of behavioral change.

EDSE 626 - Instructional and Behavioral Interventions for Students on the Autism Spectrum (3)

This course will focus on evaluating current instructional and behavioral interventions for children who are on the autism spectrum. Content will also be designed to provide learners with thorough background knowledge about interventions that are "effective" and "ineffective" as evidenced by their outcome data.

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 - Applied 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 (3 - 9)

Prerequisites: EDFE 120 or EDFE 125 or certification at undergraduate level required. Orientation and Mobility Endorsement students only. 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. Repeatable, maximum of 9 credits.

EDSE 651 - Collaboration: Deaf/Hard of Hearing (3)

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 672 - Leadership in the School Community (3)

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)

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 675 - Issues in Special Education Assessment (3)

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)

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)

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 - Strategies for Students with Autism/Significant Needs (3)

This course provides a historical perspective and an overview of assessment, planning and instructional strategies for working with students on the autism spectrum as well as students with significant support needs in K-12 settings.

EDSE 679 - Interventions for Students with Cultural and Linguistic Differences (3)

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 EDFE 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 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 696 - Practicum in Instructional Coaching (1-9)

Prerequisites: Course is available to graduate students enrolled in the Intervention Specialist graduate degree program, and other graduate students as approved individually by their University program advisor. Supervised program of orientation, observation, and participation in an assigned placement to develop instructional coaching roles and responsibilities. 45 contact hours of supervised professional coaching and related experiences in a local school district or agency setting for each semester hour completed. Repeatable, maximum of 9 credits

EDSE 697 - Externship in Special Education: Administration (1 - 12)

Instructor consent. Supervised program of orientation, observation, and participation designed to provide linkages between theory and practice in leadership and management of special education. Director of Special Education endorsement (post-Masters) only. Repeatable, maximum of 12 credits.

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 prograwm. S/U graded.

EDSE 702 - Law of Exceptionalities (3)

Doctoral level course that includes the analysis and interpretation of 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 - Theories of Exceptionality (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 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)

Explores purposes, protocols, and processes for professional writing; critical review of student writing by students and faculty. Focus on research reports, practitioner articles, research.

EDSE 730 - Externship in Exceptionalities (1 - 3)

Prerequisites: Consent of instructor and 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 732 - Research in Exceptionalities (3)

Examines research design 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 tocourse development, and mentoring and evaluating personnel.

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 745 - Advanced Doctoral Seminar (3)

Prerequisites: EDSE 702 and EDSE 732. Designed for third-year students, this course explores contemporary issues in exceptionality education and identifies strategies to address, ameliorate, and/or accommodate these issues within the greater context of education and society.

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

College of Humanities and Social Sciences

Department of English

- Contact (970) 351.2971
- www.unco.edu/english

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 for Teaching Composition in Secondary Schools (3)

Prerequisites: Enrollment as post baccalaureate student or a graduate student. Content covers the writing process, composition theory, language and writing development in grades 7-12, with an emphasis on the teaching of writing

EED 610 - Interventions in Literacy (3)

This course will help individuals effectively select and implement research-based literacy interventions as they relate to students' strengths and needs at individual student, classroom, and school-wide levels.

ELPS - Educational Leadership and Policy Studies

College of Education and Behavioral Sciences

Department of Leadership, Policy and Development: Higher Education and P-12 Education

- Contact (970) 351.2861
- www.unco.edu/cebs/elps

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 Principalship: 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 site. 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. Teamtaught 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

College of Humanities and Social Sciences

Department of English

- Contact (970) 351.2971
- www.unco.edu/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, no limitations.

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 Department 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 nonfiction 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, nonfiction, 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, nonfiction, and poetry. Emphasis on Newand Old-World cultures and the contribution of writing in the creation of cultures.

ENG 631 - Studies in American Literature Civil War to WW1 (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 WW1 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 espistemic, 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 specifc 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

University College

- Contact (970) 351.2220
- www.unco.edu/environmental/location.html

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 Science

College of Natural and Health Sciences

Department of Earth and Atmospheric Sciences

- Contact (970) 351.2647
- esci.unco.edu

ESCI 574 - Principles of Hydrology (3)

Consent of instructor required. Students will explore, quantify and model the movement of water within the hydrologic cycle, focusing on the surface water component. The course will consist of field projects, lectures, and presentations.

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 oncampus 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 692 - Earth Science Internship (1-15)

Consent of instructor required. Graduates only. Internship in a public agency or private firm to provide professional experience under the supervision of an area specialist. S/U graded. Repeatable, maximum of 15 credits.

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

College of Education and Behavioral Sciences

Department of Educational Technology

- Contact (970) 351.2816
- www.unco.edu/cebs/edtech

ET 500 - Introduction to Instructional Design and Technology (3)

An examination of the field of instructional design and technology in various environments such as K-12, higher education, and business. The focus is on the application of theory and research to practice.

ET 501 - Introduction to Applications of Educational Technology in PK-12 Education (3)

An application of technology tools in teaching practices to promote technology integration that is seamless and adds significant value to student learning of K-12 curriculum. An investigation of theoretical and practical issues and methods.

ET 502 - Instructional Design (3)

Covers a design process for determining instructional content and creating effective, efficient, and appealing instruction.

ET 503 - Instructional Materials Design I (3)

An introduction to technologies and theories used in the creation of various instructional materials. An emphasis is placed on skill development.

ET 504 - Instructional Materials Design II (3)

Prerequisite: ET 503. A continuation of ET 503 with advanced work in technologies and theories used in the creation of various instructional materials. A greater emphasis is placed on effective uses of instructional materials.

ET 524 - Design of Computer-Assisted Instruction (3)

Prerequisite: ET 503. A study of the design and development of computer-assisted instruction. The primary goal is to introduce students to the established standards of technology-based, self-paced, individualized learning.

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 and Utilization of Library Materials and Cataloging (3)

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)

An introduction to project management principles within the framework of educational projects. The focus is on planning the design and development of instructional materials.

ET 602 - Performance Technology for Instructional Environments (3)

Prerequisite: ET 502. An examination of barriers to effective workplace performance and possible interventions. Topics include motivation, information and educational design, organizational issues, ethical behavior, etc.

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 - Teaching in an Online Environment (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 webbased 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)

An examination of advanced topics in online education. The focus is on the design, development, and implementation of interactive educational systems within a client/server framework.

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 and use of multimedia in educational and training environments. Current tools and related concepts are also examined.

ET 650 - Case Studies in Performance and Instructional Technology (3)

This course uses a case study approach to the analysis, design, and evaluation of performance and educational environments. A background in the study of human performance technology is also provided.

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 502. An advanced examination of instructional design theories and methods. Both directive and guided learning architectures are discussed.

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)

Permission of research advisor required. Selection of an appropriate research topic in the field of instructional design and technology. Summarize related literature, identify a researchable problem within that topic, and develop appropriate methodology. Develop an approved research proposal. S/U graded. Repeatable, maximum of four credits.

ET 799 - Doctoral Dissertation (1 - 12)

Permission of research advisor required. After receiving approval for the proposal, the doctoral candidate must register for dissertation hours while conducting the research and writing the final report in the form of a dissertation. Doctoral candidates must earn 12 hours of dissertation credit towards the doctoral degree. Repeatable.

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 Language

College of Humanities and Social Sciences

Department of Modern Languages

- Contact (970) 351.2685
- http://www.unco.edu/foreignlang

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.

FL 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

FND - Food Nutrition Dietetics

College of Natural and Health Sciences

School of Human Sciences

- Contact (970) 351.2755
- www.unco.edu/nhs/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 foodservice administration.

FND 512 - Medical Nutrition Therapy Skills (2)

An overview with case practice of medical nutrition therapy for dietetic interns. Sevearl 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)

Consent of Instructor. 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 245 or FND 250 or FND 357. Consent of instructor. 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

College of Humanities and Social Sciences

Department of Geography & GIS

- Contact (970) 351.2715
- http://www.unco.edu/geography

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

College of Natural and Health Sciences

Department of Earth and Atmospheric Sciences

- Contact (970) 351.2647
- esci.unco.edu

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 515 - Ore Geology (3)

Prerequisite: GEOL 202. Overview of what ore is and how it is formed, techniques of finding and extracting ore,

plus environmental impacts of extracting ore. Case studies of well known mines.

GEOL 521 - Igneous and Metamorphic Petrology (4)

(3 lecture, 3 laboratory) Prerequisite: GEOL 320. Description and classification of igneous and metamorphic rocks in hand sample and in thin section. Includes a study of the genesis of igneous and metamorphic rocks via phase diagrams and chemical reactions.

GEOL 540 - Paleontology (4)

(3 lecture, 3 laboratory) Prerequisite: GEOL 202. Study of fossils including taxonomy, systematics, taphonomy, functional morphology, paleoecology, biostratigraphy, extinction, evolutionary trends and major events in the history of life. Labs review major fossil groups. Field trips required.

GEOL 545 - Vertebrate Paleontology (3)

Prerequisite: 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 202. 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 450, GEOL 470. Techniques of obtaining and recording geological data in the field and constructing geological maps. Includes use of Brunton compass, topographic maps, aerial photographs, geographic information systems, 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

College of Humanities and Social Sciences

Department of Modern Languages

- Contact (970) 351.2685
- http://www.unco.edu/foreignlang

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

College of Natural and Health Sciences

School of Human Sciences

- Contact (970) 351.2403
- www.unco.edu/nhs/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 Older Adults (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 policymaking 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 nonprofits. 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 - 3)

Make application to the department before registration. Repeatable, maximum of six 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 - High Education and Student Affairs Leadership

College of Education and Behavioral Sciences

Department of Leadership, Policy and Development: Higher Education and P-12 Education

- Contact (970) 351.2861
- www.unco.edu/cebs/hesal

HESA 508 - Workshop (1 - 3)

A variety of workshops on special topics within the disciplline. Goals and objectives will emphasize the acquisition of general knowledge and skills in the discipline. Repeatable, under different subtitles.

HESA 601 - Introduction to Higher Education & Student Affairs (3)

Introduction to the higher education and student affairs profession. Examined through organizational lenses, ethics, social values, historical documents, and social justice. Emphasis on theory to practice, philosophy, and diversity.

HESA 611 - Organization and Administration (3)

Develop an understanding of contemporary post-secondary education organizational and administrative theories. Emphasis on theories related to power, multicultural work environments, and other pluralistic models.

HESA 612 - Higher Education Assessment and Evaluation (3)

Introduction to the philosophy and evolution of social program evaluation and assessment specific to higher education environments. Students will consider political, social, and ethical contexts of evaluation and assessment processes with emphasis on equity and social justice. Substantive emphasis on research design, data collection and analysis techniques, and report writing.

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 (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 - Helping Skills for Practitioners (3)

Exploration of intervention models and helping relationships for professionals working with diverse college students including: student needs assessment, intervention strategies, conflict coaching, restorative models of accountability.

HESA 660 - Women in Higher Education and Student Affairs (3)

An overview of women and women's issues in higher education and student affairs in the U.S.. Topics include: feminist theories; the division of labor for women faculty and administration; identity and experiences of undergraduate and graduate women; intersectionality of race, class, and gender.

HESA 661 - Practicum in College Teaching for Student Development (3)

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 665 - International Higher Education and Student Affairs (3)

An overview of international higher education and student affairs by global regions. The globalization and internationalization of higher education in the U.S. International students, student affairs, faculty, including study abroad.

HESA 668 - College Students: Culture, Characteristics, Campus Life (3)

Investigates diverse college student cultures, subcultures, student development, and student engagement. Considers effect on students' progress and success, social media, parental involvement, and ethnic, socio-economic, gender, sexual identity of students.

HESA 669 - Culturally Responsive Aspects of Transformative Learning (3)

Develop understanding of learner centered approaches examining theories of culturally responsive pedagogy and transformative learning.

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 Student Affairs (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 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 761 - Scholarly Writing for Scholar/Leaders (3)

Seminar focusing on scholarly writing skills and examination of the macro perspective of leadership.

HESA 765 - Advanced Multiculturalism (3)

This course focuses on system of privilege, pluralism, and advanced multiculturalism in higher education and student affairs.

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 781 - Collaborative Inquiry for Scholar/Leaders (3)

Prerequisites: HESA 761. 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 Ed (3)

Prerequisites: HESA 761, 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 Human Sciences

College of Natural and Heath Sciences

- Contact (970) 351.2877
- www.unco.edu/nhs

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 Serivces 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.

HIST - History

College of Humanities and Social Sciences

Department of History

- Contact (970) 351.2905
- http://www.unco.edu/history

HIST 510 - Seminar in Chinese History (3)

Masters only. An analysis of the topics in Chinese history from earliest times to the present. Repeatable, maximum of six credits, under different subtitles.

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 postindependence 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 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 - Historiography (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

College of Natural and Health Sciences

School of Human Sciences

- Contact (970) 351.2403
- www.unco.edu/nhs/rehabilitation

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

University College

- Contact (970) 351.2647
- www.unco.edu/universitycollege

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

College of Education and Behavioral Sciences

DO IT Center

- Contact (303) 367.3078
- www.unco.edu/doit

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 Legal Interpreting in the American Legal System (4)

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)

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)

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: Skill Development for Legal Interpreters (4)

This course provides the student with a firm foundation in the tasks of interpreting legal texts and guides the practicum experience.

LIB - Libraries University

University Libraries

- Contact (970) 351.2671
- library.unco.edu

LIB 550 - Library Research in Criminal Justice (1)

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

College of Humanities and Social Sciences

Department of Hispanic Studies

- Contact (970) 351.2811
- http://www.unco.edu/hispstds

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

College of Natural and Health Sciences

School of Mathematical Sciences

- Contact (970) 351.2820
- www.unco.edu/NHS/mathsci

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 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 (3)

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 (3)

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 599 - Mathematics Action Research Project Seminar (3)

Graduates only. Students research a mathematical problem relevant to their own teaching and write an expository paper on that topic. Repeatable without limitation.

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 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 709 - Abstract Algebra I (3)

Prerequisite MATH 523 or equivalent. Groups and rings and their structure. Sylow theorems. Modules. History and applications.

MATH 723 - Abstract Algebra II (3)

Prerequisite MATH 709. Polynomial Noetherian rings and ideals. Fields and Galois theory. Structure of fields. History and applications.

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 778. 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 732 - Complex Variables (3)

Prerequisite: A course in complex analysis. Analytic and meromorphic functions in the complex plane. Integration, conformal mapping and advanced topics.

MATH 733 - 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 735 - Real Analysis (3)

Abstract spaces, Lebesque measure, continuity, integration and differentiation theorems, Baire category.

MATH 736 - Real Analysis II (3)

Prerequisite: MATH 735. Topics from real and functional analysis such as: measure theory, distributions, metric spaces and other topics of the instructor's choice.

MATH 744 - 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 764 - Difference Equations and Chaos (3)

Applications of difference equations in problem solving and modeling, especially in the area of chaos.

MATH 778 - 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 791 - Number Theory (3)

Prerequisite: MATH 732. 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 795 - 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 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 graded. Repeatable, no limitations.

MBA - Master of Business Administration

MBA 510 - Financial & Managerial Accounting Concepts (2)

Graduates only. A concept course introducing accounting as the language of business. Topics include the environment, methods and uses of accounting information, financial statement development and analysis, and cost information development and analysis.

MBA 550 - Foundations of Economic Analysis (2)

Graduates only. This course describes the basic principles of market economics and also introduces the students to macroeconomic analysis.

MBA 565 - Business Statistics (2)

Graduates only. The course deals with the most commonly used statistical techniques in finance, marketing, human resources management and other functional areas of business. These techniques are explained by discussing and solving word problems in class.

MBA 570 - Fundamentals of Business Finance (2)

Prerequisites: MBA 510 and MBA 565. Graduates only. Provide the necessary foundations to understand risk principles used in valuation analysis, along with essential financial management techniques such as capital structure and capital budgeting and working capital management.

MBA 610 - Managerial Accounting (3)

Prerequisite: MBA 510. Graduates only. This course examines the concepts, applications, and uses of managerial accounting in managerial decision-making for managers and other internal users.

MBA 622 - Directed Studies (1-3)

Prerequisite: Instructor consent. Graduates only. Individualized investigation under the direct supervision of a faculty member. (Minimum of 37.5 clock hours required per credit hour.) Letter graded. Repeatable, maximum concurrent enrollment is two times.

MBA 625 - Information Technology Strategies for Managers (3)

Graduates only. This course informs students how IT transforms organizations. Focus is on the analysis, modeling, and technologies that managers can use to analyze and utilize data to derive business value.

MBA 632 - Business Law (3)

Graduates only. Provides an understanding of the law of business transactions as part of the decision-making process. Topics will include the law of agency, contracts, bankruptcy (debtor/creditor relationships), formation of business entities, secured transactions, negotiable instruments, and the regulation of the accounting

profession. The course will utilize topical analysis and a case study approach focusing on analysis, synthesis, and evaluation of complex legal problems.

MBA 650 - Economics of Managerial Decisions (3)

Prerequisite: MBA 550. Graduates only. Examines application of microeconomic analysis used in managerial decision-making. Topics include demand analysis, cost and production functions, and behavior of competitive and non-competitive markets with applications to various business decisions.

MBA 654 - Leadership and Organizational Behavior (3)

Graduates only. Examines organizational behavior topics such as motivation, team dynamics, perception, power, politics, conflict, and culture, as well as an in-depth view of leadership.

MBA 656 - Strategic Management (3)

Prerequisites: MBA 632, MBA 650, MBA 654, MBA 660 and MBA 670. Graduates only. This course provides a capstone experience through techniques and tools needed for effective strategy. Students integrate concepts, theories, and tools to develop comprehensive strategies in a variety of business environments.

MBA 660 - Marketing Management (3)

Graduates only. This seminar course involves the analysis of the marketing concepts, functions and principles involved in planning, implementing and evaluating the total marketing programs of various organizations. Elements of the marketing process, including environmental impacts, building and managing brands and analyzing marketing strategies in delivering the best customer value will be the focus in this course.

MBA 665 - Business Quantitative Methods (3)

Prerequisite: MBA 565. Graduates only. Acquaints the business student with techniques to analyze business and economic data and develop models for forecasting, and variable screening. Topics include linear models, regression, time series analysis, multivariate and univariate ANOVA and Non-parametric analysis. Focus will be on applying these techniques to interesting business and policy questions.

MBA 670 - Advanced Financial Management (3)

Prerequisites: BAFN 370 or MBA 570. Graduates only. Course topics include time value of money, risk and return, capital budgeting, financial analysis and modeling, capital structure, working capital management, and international corporate finance. Advanced topics make use of case studies and/or simulation.

MBA 671 - Current Issues in Healthcare Policy & Management (2)

Graduates only. This course provides a broad overview for understanding national health reform policy, management issues and current topics.

MBA 672 - Managing Healthcare Organizations (2)

Graduates only. This course will provide students with an overview of the various healthcare delivery services across the full continuum of care as explained by operational executives from each of these services.

MBA 673 - Managing Healthcare Quality and Compliance (2)

Graduates only. This course will provide students with the ability to apply performance improvement techniques and tools in order to improve patient care quality, safety, efficiency and regulatory compliance.

MBA 674 - Healthcare Managerial Accounting & Reimbursement (3)

Prerequisites: MBA 510. Graduates only. The goal of this course is to provide non-financial healthcare managers with the practical knowledge of healthcare finance, budgeting and reimbursement models and how to utilize this information in executive decision-making.

MBA 681 - Talent Management (2)

Graduates only. Focuses on the creation of a competitive advantage through strategic human resources planning and staffing. Topics include job analysis, recruiting, assessment, succession planning, and retention. Also covers laws and regulations relative to the recruiting process.

MBA 682 - Training and Organization Development (2)

Graduates only. Examines key principles of an effective training and development strategy. Topics include the role of training, adult learning theory, needs assessment, training methodologies, and effective evaluation methods for training.

MBA 683 - Compensation, Rewards, and Performance Management (2)

Graduates only. Focuses on the effective design of an organization's compensation, total rewards, and performance management systems. Topics include total compensation systems that attract and retain talent, employee benefits and performance management.

MBA 684 - Managing Organizational Change (2)

Graduates only. Introduces students to the major approaches used for managing both planned and unplanned organizational change. Reviews diagnostic techniques for identifying organizational problems and examines how

strategic organizational change can achieve increased quality, productivity, and employee engagement.

MBA 685 - Strategic Human Resources Management (1)

Graduates only. This course focuses on the strategic human resource practices that help organizations achieve a competitive advantage using their human capital effectively. The topics covered include: the strategic impact of employee turnover, employee engagement, performance management, and the successful use of HR metrics.

MBA 699 - Thesis (1-6)

Prerequisites: SRM 600 and instructor consent. Graduates only. The thesis must be approved by the supervising committee and meet all requirements of the Graduate School. S/U graded. Repeatable, no limitations.

MED - Mathematics Education

College of Natural and Health Sciences School of Mathematical Sciences

- Contact (970) 351.2820
- www.unco.edu/NHS/mathsci

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 is 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 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 rearch on instruction in algegra/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 555 - Teaching Secondary Math for Understanding (3)

Graduates only. This course explores the knowledge and skills to elicit, understand, build on, and respond to student thinking. It provides expertise to support student learning and teach secondary mathematics for understanding.

MED 560 - Culture in the Math Classroom (3)

Graduates only. This course examines ways to integrate knowledge of the role of culture in mathematics teaching and learning into mathematics instruction with the goal of developing students' internal motivation.

MED 565 - Quantitative Reasoning in Secondary Mathematics (3)

Graduates only. We will analyze the mathematical and conceptual structure of quantities and relationships between quantities in secondary mathematics courses and explore pedagogy for teaching quantitative reasoning.

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 Seminar (1-3)

Graduates only. Students research a current problem in secondary mathematics education relevant to their teaching situation, developing goals, reviewing relevant literature and planning the project as they progress through the program. Repeatable, no limit.

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 645 - Interventions in Mathematics (3)

Students will develop knowledge and skills needed to be effective in providing interventions in mathematics for students with learning disabilities and in helping other teachers and paraprofessionals do the same.

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 680 - Teaching Math for Understanding I (3)

Prerequisite: Consent of instructor. Must be an in-service math teacher or math teacher leader. Classroom and teacher leadership issues related to 1) variation in beliefs and practices underlying teaching math for understanding and 2) motivation, status, and affect in the mathematics classroom.

MED 681 - Teaching Math for Understanding II (3)

Prerequisite: Consent of instructor. Must be an in-service math teacher or math teacher leader. Classroom and teacher leadership issues related to 1) using assessment to support teaching math for understanding and 2) providing all students with the opportunity to learn mathematics with understanding.

MED 682 - Implementing Mathematics Curriculum (3)

Graduates only. Consent of instructor. A course for developing the knowledge and skills needed to be an effective mathematics teacher leader with an emphasis on implementing a high-quality mathematics curriculum.

MED 683 - Seminar in Equity and Diversity Issues in Mathematics Education (1 - 3)

Consent of instructor. Addresses cultural issues related to generating equity in K-12 mathematics. Each seminar focuses on a particular cultural issue, such as gender, ethnicity, race, and class. S/U graded. Repeatable under different subtitles.

MED 684 - Mathematics Coaching (3)

Approval of instructor. Must be an in-service teacher or math teacher leader. Develop the knowledge and skills needed to be an effective mathematics coach.

MED 685 - Math Teacher Leadership I (2)

Prerequisites: Graduates only. Must be an in-service math teacher or math teacher leader. Knowledge and skills for mathematics teacher leadership including: leading change initiatives, managing conflict, designing math professional development, supporting cultural responsible teaching, and deepening pedagogical content knowledge for teaching mathematics.

MED 686 - Math Teacher Leadership II (2)

Prerequisites: MED 685. Graduates only. Must be an inservice math teacher or teacher leader. This course focuses on the knowledge and skills to be an effective mathematics teacher leader by building and expanding on the content of MED 685.

MED 687 - Math Teacher Leadership III (2)

Graduates only. Consent of instructor. Knowledge and skills for mathematics teacher leadership including: exploring general leadership, working with teachers, analyzing the interactions among culture, mathematics, teaching and learning, and deepening mathematics knowledge for teaching.

MED 688 - Math Teacher Leadership IV (2)

Prerequisite: MED 687 and instructor consent. Graduates only. This course focuses on the knowledge and skills to be an effective mathematics teacher leader by building on the content of MED 687.

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 - Quantitative Research in Mathematics Education (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

College of Natural and Health Sciences

Department of Earth and Atmospheric Sciences

- Contact (970) 351.2647
- esci.unco.edu

MET 501 - Dynamic Meteorology I (3)

Prerequisites: MET 215, MET 320, MATH 233. The physical laws governing planetary and synoptic-scale atmospheric motions are developed mathematically based on conversion 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, quasigeostrophic 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, 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 Teachers College of Natural and Health Sciences School of Mathematical Sciences

- Contact (970) 351.2820
- www.unco.edu/NHS/mathsci

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), problemsolving, 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 518 - Proportional Reasoning for Middle Level Mathematics Teachers (3)

Prerequisite: Graduates only. Students must be professional teachers who have taught either elementary or secondary school mathematics. Combined mathematics/mathematics education course for current middle school teachers. Content includes proportional reasoning; conceptual understanding of fractions, ratios, percents; structure of real numbers; pedagogical content knowledge for teaching these topics.

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.

MFT 540 - Mathematical Modeling and Problem Solving In Middle Level Mathematics Teaching (3)

Mathematics content course for current middle school teachers focusing on using mathematics to model real world problems using algebra content from the middle grades and technology.

MUS - Music

College of Performing and Visual Arts

School of Music

- Contact (970) 351.2993
- www.arts.unco.edu/music

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 invention, 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 fourvoice 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 - 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, 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 526 - Jazz Rhythm Section Workshop (1)

A listening workshop in jazz and commercial music for all instrumentalists. Topics will include important players, group communication, performance styles and classic rhythm sections.

MUS 527 - Advanced Jazz Theory (2)

Advanced harmonic concepts in jazz including nonfunctional harmony, multi-tonic systems, advanced modal concepts, chord-scale relationships, and other aspects of contemporary harmonic practice in jazz music. Course Fee Required.

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 indepth 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 - Piano Pedagogy I (2)

A one semester course concentrating on beginning piano and elementary musicianship. The course will provide a thorough introduction to methods, materials, resources, and techniques for teaching at the elementary level. Students will also survey a substantial amount of elementary to early intermediate piano repertoire.

MUS 553 - Piano Pedagogy II (2)

Prerequisite: MUS 352/MUS 552 or consent of instructor. A one semester course focusing on the intermediate to early advanced piano student curriculum. The course will provide a thorough overview of the technical and musical requirements needed to develop students at the intermediate to early advanced level. Students will also survey a substantial amount of intermediate to early advanced piano repertoire.

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 555 - Seminar in Jazz Composition (2)

Prerequisite: Consent of Instructor. Examination of compositional techniques in jazz styles. Analysis of works by important representative songwriters and composers.

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. Repeatable, No Limitations.

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)

Auditions 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 tenors, 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 626 - Orchestral Excerpts (1)

Consent of instructor. Emphasis is on professional level performance of standard orchestral literature at the graduate level. Repeatable, no limitations.

MUS 628 - UNC Early Music Ensemble (1)

Consent of Instructor. UNC Early Music Ensemble performs pre-Classical Era music in a historically informed style, on period instruments whenever possible. 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 634 - UNC Tablet-Laptop Band (1)

UNC Tablet and Laptop Band composes, rehearses, and performs music on electronic devices including tablets and laptops. 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. Repeatable, No limitations.

MUS 637 - Individual Instruction in Jazz Composition (2 - 4)

Consent of Instructor. Individual instruction in jazz composition. Repeatable, No limitations.

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 654 - UNC Alternative Styles Ensemble (1)

Consent of Instructor. The UNC Alternative Styles Ensemble will explore non-classical styles and performance techniques through regular rehearsals and performances. Repeatable, no limitations.

MUS 656 - UNC European Summer Opera Program (1 - 6)

Audition Required. Practical experience in the production and performance of a complete operatic works in professional productions in Europe. Techniques of acting, singing, character analysis and stage direction will be studied. Repeatable, No limitations.

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. Indepth study of teaching material and techniques related to the flute, clarinet, saxophone, oboe and bassoon.

MUS 663 - Trumpet Literature and Pedagogy (2)

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. Indepth study of repertoire and refinement of skills for the collaborative pianist. Repeatable, no limitations.

MUS 666 - Chamber Choir (1)

Audition Required. The UNC Chamber Choir is a highly select auditioned vocal ensemble typically comprised of 16 to 32 performers. The group performs a wide variety of choral chamber works in concerts throughout the year and may tour regularly. 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)

No audition required. The University Singers is open to the university community and performs a wide variety of choral 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

College of Natural and Health Sciences

School of Nursing

- Contact (970) 351.2293
- www.unco.edu/nhs/nursing

NURS 504 - Quality and Safety in Health Care Systems (3)

Majors Only. Application of quality of care and patient safety standards, performance measures, improvement methods and tools, and culture of safety principles within a healthcare organization/system.

NURS 507 - Policy, Leadership, and Nursing Issues (3)

Majors Only. Comprehensive investigation and analysis of health care issues and policy, organizational 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 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 521 - Clinical Instruction and Precepting in Nursing (3)

Prerequisite: Consent of School of Nursing. Development of theoretical and practical knowledge to support successful transition from a clinical expert role to that of a clinical instructor / preceptor.

NURS 601 - Theoretical Foundations for Advanced Nursing (3)

Majors Only. Introduction to interdisciplinary theoretical foundations for advanced nursing practice. Emphasis on the development, application, and critique of theories from nursing, social science, business and health care.

NURS 606 - Research and Evidence-based Practice in Nursing (3)

Majors only. Development of knowledge and skills for reviewing and ethically generating evidence as a basis for evidence-based clinical practice, nursing research, and quality improvement.

NURS 610 - Health Assessment (3)

(2 lecture, 3 practicum) Forty-five hours applied practicum arranged. Emphasis in health history taking, physical assessment and interviewing of individuals across the life span.

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, symptomology 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 616 - Measurement of Clinical Outcomes for Advanced Nursing Practice (3)

Nursing M.S. – CNL majors only. Introduction to the measurement, interpretation and presentation of healthcare outcomes with focus on quality, effectiveness, and organizational performance. Integrates the application and integration of statistical tools to identify relevant outcomes.

NURS 618 - Epidemiology in Advanced Nursing Practice (3)

Majors only. Principles of epidemiology and understanding of biostatistics will be applied to population management of disease and intervention strategies.

NURS 620 - Clinical Nurse Leader: Managing Clinical Outcome (3)

Majors only. Development and practice of CNL roles for management and improvement of clinical outcomes for individuals, families and populations within the care delivery system. 45 practicum hours required.

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 624 - Health Promotion and Disease Prevention in Advanced Practice of Nursing (3)

Majors Only. Prepares the APN student to plan and implement health promotion and disease prevention strategies to assist in maintaining and improving the health of patients, families and communities.

NURS 625 - Clinical Nurse Leader: Managing the Care Environment (3)

Majors only. Development and practice of CNL roles for management and improvement of care environment for individuals, families and populations within the care delivery system. 45 practicum hours required.

NURS 628 - Information Technology in Health Care (3)

Majors only. Use and application of computerized systems to clinical decision strategies for advanced practice nurses in the areas of quality management.

NURS 631 - Teaching Strategies for Practice and Academic Settings (3)

Prerequisite: Consent of School of Nursing. Development of knowledge about teaching students, staff and clients in academic and practice settings.

NURS 635 - Clinical Nurse Leader: Developing Leadership Roles (4)

(3 lecture, 3 practicum) Forty-five practicum hours. Majors only. Prerequisites: All CNL program courses except final practicum. Development and practice of CNL leadership roles for management and improvement of client outcomes at the point of care and across the healthcare system.

NURS 638 - Concepts in Advanced Evidence-Based Practice (3)

(3 Lecture) Majors only. Emphasis is on the systematic evaluation and use of current best evidence to make decisions about clinical practice and health care systems.

NURS 640 - Health Care of Families I (4)

(2 lecture, 6 practicum) Ninety Hours Practicum Majors only. Application of theoretical and research based developmental approaches to primary health care of families with particular emphasis on care of obstetrical patients and families through childhood/adolescence.

NURS 645 - Health Care of Families II (4)

(2 lecture, 6 practicum) Ninety hours applied practicum arranged. Majors only. Application of theoretical and research based developmental approaches to primary health care of families with particular emphasis on women's health and adult episodic care.

NURS 650 - Health Care of Families III (4)

(2 lecture, 6 practicum) Ninety hours applied practicum arranged. Majors only. Application of theoretical and research based developmental approaches to primary health care of families with particular emphasis on chronically ill and older adults and psychosocial adjustment disorders.

NURS 658 - Applied Nursing Genomics (3)

Majors only. A genomics focus on concepts of prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness for individuals and aggregates within cultural and ethical care contexts.

NURS 661 - Planning and Evaluating Education in Practice and Academic Settings (3)

Prerequisite: Consent of School of Nursing. Focus on development of education programs in health care settings and academic nursing. Includes evaluation of teaching and learning.

NURS 668 - Population Centered Health Care (3)

(3 Lecture) Majors Only. Examines perspectives of population based health care across the life span from a community and global perspective.

NURS 670 - Special Topics in Nursing (1)

Prerequisite: Permission of course faculty. This seminar course explores advanced topics in nursing. Special topics will be listed by the instructor. Repeatable, under different subtitles.

NURS 678 - Professional Practice and Healthcare Finance Seminar (3)

(2 lecture, 3 practicum) Forty-five hours applied practicum arranged. Majors only. Comprehensive economic

investigation of health planning, organization, personnel, payment systems and care cost effectiveness in health care delivery systems.

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 681 - Advanced Role Practicum for Clinical Nurse Leaders (1-7)

(3-21 Practicum) Three Hundred and Fifteen total required contact hours. Majors only. Final clinical experience provides students the opportunity to practice Clinical Nurse Leader roles. If divided, must be taken in consecutive semesters. S/U graded. Repeatable, maximum of seven hours.

NURS 685 - DNP Practicum (1 - 7)

Applied practicum arranged (45 hours=1 credit). Majors only. Practicum in hospital, community, and primary care settings focusing on clinical prevention and population based health care. S/U graded. Repeatable, no limitations.

NURS 688 - Advanced Nursing Leadership in Health Care Systems (3)

(2 lecture, 3 practicum) Forty-five hours applied practicum arranged. Majors only. Analyzes the structure and organization of health care delivery systems including population-based, acute and ambulatory health care. The roles of the DNP in organizational and systems policy are addressed.

NURS 690 - Advanced Professional Role (2)

Majors only. Advanced practice role development in health maintenance and illness management is examined from several perspectives.

NURS 695 - Advanced Academic Nursing Roles (3)

Prerequisite: Consent of School of Nursing. Focuses on developing knowledge about faculty, leader and administrator roles in academic nursing education.

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 703 - Philosophical Underpinnings of Nursing Science (3)

(3 Lecture) Majors only. This course provides a history of philosophical and scientific thinking and its impact on the discipline of nursing, knowledge development in nursing and nursing science.

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 711 - Advanced Theory and Knowledge Development in Nursing (3)

(3 Lecture) Majors only. This course explores theoretical elements and their impact on nursing knowledge development and the translation of nursing research to pedagogy and practice.

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, sociol-cultural, 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 795 - DNP Capstone Project Proposal Seminar (2)

Majors only. The Capstone project reflects synthesis and application of evidence-based practice in advanced nursing practice and health care. The course facilitates the development of the Capstone and launches the project.

NURS 796 - DNP Capstone Project (1-4)

(2-8 Practicum) For a total of One Hundred and Twenty contact hours. Majors Only. Successful completion or concurrent completion of all courses in curriculum. The Capstone project reflects synthesis and application of evidence-based practice in advanced nursing practice and health care. The Capstone project must be completed, defended and approved by the capstone committee.

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

College of Natural and Health Sciences

Department of Earth and Atmospheric Sciences

- Contact (970) 351.2647
- · esci.unco.edu

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 concurrent enrollment is two times.

PHYS - Physics

College of Natural and Health Sciences

Department of Physics and Astronomy

- Contact (970) 351.2961
- www.unco.edu/nhs/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

College of Education and Behavioral Sciences

School of Psychological Sciences

- Contact (970) 351.2957
- www.unco.edu/cebs/psychsci

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 pyschomotor 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)

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 581 - Brain and Education (3)

Prerequisites: Graduate status or junior or senior with a cumulative GPA over 3.0. This course offers an overview of neuroscience research targeted at educators. Topics covered will include background on brain structure and function, neural communication and drug effects, attention, emotion, motivation, learning, language. Disorders commonly found in the classroom will be highlighted throughout.

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 585 - Psychology of Addiction (3)

Prerequisite: Graduate status; undergraduates must be Junior or Senior with GPA of 3.0 or above. This course is designed to conduct an in-depth introduction into the scientific literature across a range of contemporary subtopics in the field of addiction. It is intended to give students a broad, yet comprehensive, overview of the research and theoretical perspectives on drug and alcohol addiction. Students will have an opportunity to learn about the diagnostic criteria used to classify substance disorders, and will apply this information to journal article readings and projects. The course is taught as a seminar, with interactive dialogue, presentations, mini-lectures, and videos.

PSY 587 - Social Cognitive Neuroscience (3)

Prerequisite: Graduate Status; Junior or Senior with GPA of 3.0 or above. Social cognitive neuroscience (SCN) studies the implicit and explicit cognitive and emotional processes and their underlying brain mechanisms that contribute to our understanding of others' mental states (and our own as well). This course will examine a set of core Social Cognitive Neuroscience subtopics in order to gain a graduate level introduction to this burgeoning field.

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)

Prerequisite: 3.0 GPA or higher. 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: PSY 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 640 - Cultural Issues in Educational Psychology (3)

Prerequisite: PSY 500 or PSY 540 or PSY 681. This course covers research and theory on culture and its relationships with and applications to areas of educational psychology including development, cognition, assessment and school achievement, motivation, and individual differences.

PSY 644 - Motivation in Education (3)

Students will investigate what it means to be properly motivated, why individuals often develop problematic motivational patterns, and how proper motivation can be fostered.

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.

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: PSY 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: PSY 681 or PSY 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: PSY 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: PSY 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

College of Natural and Health Sciences

School of Biological Sciences

- Contact (970) 351.2921
- www.unco.edu/nhs/biology

Department of Chemistry and Biochemistry

- Contact (970) 351.2559
- www.unco.edu/nhs/chemistry

School of Earth Sciences and Physics

- Contact (970) 351.2961
- www.unco.edu/nhs/esp

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 521 - Physics in Modern Medicine (3)

Apply and use physics concepts and laws to understand modern medical techniques. Develop lessons to integrate physics, as it relates to medicine, into other courses.

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 531 - Teaching Chemistry for the Future (3)

Graduates only. Understanding of general chemistry is highly recommended. Examination of chemistry topics with real-world applications. Methods for the use of skills and themes in chemistry to encourage higher-level thinking in students in the high-school setting.

SCED 535 - Context-based Conceptual Chemistry (3)

(3 lecture, 2 laboratory) Prerequisite: CHEM 111 & 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)

Co-requisite: EDFE 554. 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 561 - Using Controversial Biological Topics to Teach Nature of Science (3)

Prerequisite: BIO 110. Explores use of scientific "controversies" as a teaching strategy to understand the nature of science. Empirical evidences supporting major biological concepts are integrated with pedagogical strategies.

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 565 - Teaching 21st Century Biology: Ecology and Evolution (3)

Prerequisite: BIO 100 or BIO 110 or consent of instructor. Masters only. Teachers understand evidence that supports ecology and evolution as unifying concepts in biology. Biological concepts are integrated with pedagogical strategies appropriate for teaching at secondary level.

SCED 566 - Genetics (3)

Designed for teachers. Study laws of heredity, molecular structure and function of genes, and emerging genetic technologies. Genetic concepts are integrated with pedagogical strategies appropriate for teaching genetic principles.

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 581 - Earth Systems: WATER (3)

An online course focusing on Colorado water resources and environmental issues in an Earth Systems context. Applications to societal issues and inquiry learning are emphasized.

SCED 600 - Science Education Research for K-12 Teachers (3)

This course will provide practicing teachers an introduction to science education research with a focus on research design development, qualitative and quantitative research and data analysis techniques.

SCED 605 - Global Change (3)

Prerequisite: 8 credit hours of graduate science coursework. Graduates only. 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.

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 695 - Action Research in Science Education I (1)

(Research) Prerequisite: SCED 600. Research a problem in K-12 science education relevant to students' teaching situations. Develop goals, review literature, and plan an action research project. This course is the first of three courses.

SCED 696 - Action Research in Science Education II (1)

(Research) Prerequisite: SCED 695. Conduct the action research plan developed and approved in SCED 695. An approved Action Research Plan Project is required to take this course. Second of a three course series.

SCED 697 - Action Research in Science Education III (1)

(Research) Prerequisite: SCED 696. Complete the action research project by developing a summary and discussion. The final project must be presented to the action research committee. Final of a three course series.

SCED 699 - Thesis (1 - 6)

Prerequisite: SCED 600 or equivalent. For majors in the Graduate Interdisciplinary Degree Program M.A. Science Education Emphasis who wish to complete a thesis. S/U Graded. Repeatable, maximum of 6 credits.

SCI - Science

College of Natural and Health Sciences

School of Biological Sciences

- Contact (970) 351.2921
- www.unco.edu/nhs/biology

Department of Chemistry and Biochemistry

- Contact (970) 351.2559
- www.unco.edu/nhs/chemistry

School of Earth Sciences and Physics

- Contact (970) 351.2961
- www.unco.edu/nhs/esp

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.

SES - Sport Exercise Science

College of Natural and Health Sciences

School of Sport and Exercise Science

- Contact (970) 351.2535
- www.unco.edu/nhs/ses

Courses numbered SES 100 to SES 195 are: Repeatable, no limitations.

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 503 - Teaching Fitness Concepts (3)

Study of research and advanced techniques in teaching health-related fitness concepts to children and adolescents.

SES 505 - Exercise Programming for Cancer Patients (3)

Prerequisite: SES 322 or equivalent. Majors only. This course will prepare individuals to design and conduct exercise intervention programs for cancer patients.

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 - Electrocardiography (3)

Graduates only. Study basic electrocardiography and ECG interpretation. Emphasis is placed on interpretation of resting and exercise ECG's along with monitoring procedures, interpretation of abnormalities and drugs that may affect ECG interpretation.

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 expereince 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)

SES: Sport Administration graduate students only. 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)

SES: Sport Administration graduate students only. Develop an understanding of theories and principles involved in managing a program in the sport industry.

SES 576 - Sport Promotion and Marketing (3)

SES: Sport Administration graduate students only. 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 582 - Psychology for Sports Coaches (3)

Understanding and applying psychological principles as they relate to sports coaching and athletic performance.

SES 583 - International Perspectives of Sports Coaching (3)

Examine international perspectives of sport and sports coaching. Emphasis is placed on developing and enhancing students' knowledge and understanding of international coaching perspectives.

SES 584 - Sport Administration for Sports Coaches (3)

Develop an understanding of theories and principles involved in the management of sport and athletics from a coaching perspective.

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 586 - Training and Conditioning Principles for Sports Coaches (3)

Application of the physiological principles of human movement as they relate to the response to exercise training, training for sport performance, sport nutrition, and ergogenic aids.

SES 587 - Sports Coaching Principles and Perspectives (3)

Provide a comprehensive introduction to the coaching profession. Emphasis is placed on developing and enhancing students' knowledge and understanding of concepts, principles and techniques of coaching.

SES 588 - Evaluation of Coaching using Technology (3)

Emphasis is placed on the use of technology to evaluate skill, tactics, and technical components of coaching. Evaluation of effective coaching in game and practice settings are incorporated.

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 and Coach Action Research (3)

Provides introduction to self-inquiry and pedagogical reflection through action research. Focuses on historical background, purpose, instruction and guidance for teachers and coaches 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)

Prerequisite: 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)

Graduates only. Advanced study of the influence of developmental and aging processes upon movement across the lifespan. Advanced study of the influence of developmental and aging processes upon movement across the lifespan.

SES 625 - Laboratory Techniques in Exercise Science Research (3)

Consent of instructor. Titles: Laboratory Techniques in Biomechanics; Techniques in Exercise Physiology; and Laboratory Techniques in Social Psychology of Sport and Physical Activity. Repeatable, under different subtitles.

SES 626 - Metabolism (3)

Advanced study of energy metabolism and exercise nutrition involved with human movement.

SES 627 - Muscle Physiology (3)

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 632 - Cardiovascular Physiology (3)

Advanced study of the cardiovascular system as it relates to human movement.

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 643 - Instructional Strategies for K-12 Physical Education (3)

Prerequisites: SES 614. Exploration, participation, and analysis of a broad-based variety of physical activities, appropriate curriculum, and teaching skills that contribute to quality K-12 physical education.

SES 645 - Supervision in K-12 Physical Education (3)

To provide a functional understanding and critique of the nature and scope of teacher supervision in physical education.

SES 650 - Financial Management for Sport Organizations (3)

SES: Sport Administration graduate students only. Develop an understanding of and skill in financial resource management for the operation of programs in sport, physical education, fitness, athletics and recreation.

SES 655 - The Olympic Games (3)

An overview of the nature and significance of the modern Olympic Games from historical, sociological and business perspectives.

SES 656 - Sponsorship Management (3)

Develop advanced understanding and skill in management of sport sponsorships. Emphasis will be on the application of marketing principles and exchange theory relating to managing sport sponsorship in specific scenarios.

SES 660 - Sport Personnel Management (3)

SES: Sport Administration graduate students only. 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)

SES: Sport Administration graduate students only. 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)

SES: Sport Administration graduate students only. 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)

SES: Sport Administration graduate students only. 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)

SES: Sport Administration graduate students only. 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)

SES: Sport Administration graduate students only. 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 & 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 (3)

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

College of Humanities and Social Sciences

Department of Sociology

- Contact (970) 351.2315
- www.unco.edu/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 514 - Masculinities (3)

A sociological analysis not just of men, but of masculinities. We will address debates about meanings of masculinity, historical variations, and how these definitions involve both male and female bodies.

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)

Epistemological foundations of qualitative research: field observation, ethnography, interviews, focus groups; project design, research ethics, site selection, interviewing and observation techniques, coding and analysis, and interpretation/presentation of findings.

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 574 - Sociology of Sport (3)

Seminar on the theoretical analysis of the sociological study of sport. Focusing on sports as social and cultural phenomena, we will critically examine the impact of sports on social institutions.

SOC 579 - The Community (3)

Juniors or above with 3.0 GPA or higher. Focuses on local, national and international communities. Major theories and empirical evidence guide understanding of how communities work, their impact on individuals, and how they are constructed. Students are required to develop a theoretically grounded, empirical analysis of a community as part of the course.

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. Must be taken the first available semester after being admitted to the graduate program. Repeatable. S/U graded.

SOC 593 - Practicum in College Teaching in Sociology (3)

Prerequisites: Seniors and above. Majors only. Students contact the Sociology department and fill out an application to take the course. As part of the coursework, student is assigned to assist a professor and will receive experience in observation and supervised practice in a lower division course. A-F Graded. Application required. Audition Required.

SOC 595 - Special Topics in Inequality (3)

Students will examine a specific topic developed by the faculty member teaching the course. This course will examine inequality and its implications for various contemporary issues. Students will apply research methods training and theoretical analysis to a research project culminating in a written paper and presentation. Repeatable under different subtitles, maximum 3 times.

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)

Students will learn the basics of sociological study design and data collection techniques and employ the applied sociological approach toward development of an approved research project.

SOC 691 - Research Internship (1 - 9)

Prerequisites: Nine hours of graduate credit in sociology, a g.p.a. of 3.0 and consent of the instructor. Put classroom learning into practice with research in an organizational setting. Repeatable, maximum of 9 credits. S/U graded.

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

College of Humanities and Social Sciences

Program of Social Sciences

- Contact (970) 351.2929
- www.unco.edu/social sciences

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

College of Humanities and Social Sciences

Department of Hispanic Studies

- Contact (970) 351.2811
- http://www.unco.edu/hispstds

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 acculturation 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 in 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 College of Education and Behavioral Sciences Department of Applied Statistics and Research Methods

- Contact (970) 351.2807
- www.unco.edu/cebs/asrm

SRM 502 - Applied Statistics (4)

Hypothesis formulation and testing; estimation and confidence limits; oneand two-sample tests; and statistical decision theory. Study inferences arising from distribution functions: t, F, chisquare, binomial, normal.

SRM 519 - Qualitative Analysis Software (1)

An overview and basic understanding of qualitative analysis software including preparation of data files, managing text and images, creating codes, memos, queries models and reports.

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 522 - Introduction to R (1)

The R programming language is an important and current research tool for statisticians. Students will receive an introduction to data manipulation, graphical techniques, model building, and some programming using R.

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 chisquare 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 nonsampling 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 PSY 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 629 - Structural Equation Modeling (3)

Prerequisites: SRM 610 and SRM 625 or equivalent or permission of instructor. Applications of and issues related to covariance structure modeling. Students will gain skills needed for designing, conducting, and interpreting studies involving confirmatory factor analysis and latent variable path modeling.

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 636 - Applied Bayesian Statistics (3)

Prerequisites: SRM 502 and consent of instructor. This course provides an introduction to Bayesian statistical methods for inference. Topics include prior, likelihood, posterior, and predictive distributions, Bayesian analysis of single parameter models and simple multi-parameter models using conjugate, non-informative and informative priors, hierarchical modeling, and simulation of posterior distributions and posterior summaries using statistical packages.

SRM 637 - Applied Time Series Analysis (3)

Prerequisites: SRM 606 or SRM 625 and consent of instructor. Covers, the principles of analyzing time series data; descriptive techniques, time series models; ARIMA,

SARIMA, fitting time series models in time domain, forecasting, model selection and diagnostic checking.

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 nonproduct 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 660 - Mixed Methods Research (3)

Topics will include the historical background, 'paradigm wars', design, theory, advantages/disadvantages, writing and defending proposals, validity/reliability and data analysis of mixed methods or complimentary research.

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 684 - Research Ethics (1)

Study of ethics in human research including history, theory, disciplines' codes, IRB, distinctive respondents. Students receive an IRB training certificate, learn to prepare IRB application, and develop an ethical stance.

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. Indepth 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. Indepth study of narrative research including life history, oral history, biography, and auto-ethnoraphy. 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 oncampus 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 PSY 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.

TASL - Teaching American Sign Language

College of Education and Behavioral Sciences DO IT Center

- Contact (720) 216.2662
- www.unco.edu/tasl

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)

This 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 instructional 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 education 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.

TED - Teacher Education

College of Education and Behavioral Sciences School of Teacher Education

- Contact (970) 351.2908
- www.unco.edu/cebs/teachered

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.

THEA - Theatre Arts

College of Performing and Visual Arts

School of Theatre Arts and Dance

- Contact (970) 351.2991
- www.arts.unco.edu/theatredance

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

College of Performing and Visual Arts

School of Theatre and Dance

- Contact (970) 351.2991
- www.arts.unco.edu/theatredance/theatreedu.html

THED 530 - Theatrical Production I (3)

Prerequisites: THED 600 and THED 670. Students will gain a solid working overview in design, including but not limited to the following: costuming, stage make-up, scenery, sound, and lighting.

THED 531 - Theatrical Production II (3)

Prerequisites: THED 600, THED 670, THED 530, THED 540, THED 560, THED 680, and THED 690. This course is a continuation of the ideals and concepts offered in THED 530 with emphasis placed upon those areas not addressed in Technical Production I.

THED 540 - Directing/Acting: Realism and Non-Realism/Period Styles (3)

Prerequisites: THED 600 and THED 670. Masters only. This course will include advanced studies in the approaches and techniques of directing and acting in realism, as well as explore the styles and theatrical periods of non-realism.

THED 541 - Directing/Acting: Musical Theatre (3)

Prerequisites: THED 600, THED 670, THED 530, THED 540, THED 560, THED 680, and THED 690. This course will explore the tasks of acting in, directing, choreographing, and mounting a musical theatre production.

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 696 - Action Research I (3)

Prerequisites: THED 530, THED 540, THED 560, THED 600, THED 670, and THED 680. In this course, students will begin an action research plan developed and approved in THED 680: Theatre Education Curriculum Development.

THED 697 - Action Research II (3)

Prerequisites: THED 530, THED 531, THED 540, THED 541, THED 560, THED 561, THED 600, THED 670, THED 680, and THED 690. In this course, students will complete an action research project begun in THED 696 by drawing conclusions and discussing implications. They will submit final reports to graduate committees.

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 dramaturgial protocol and promptbook for their Master's thesis project and produce the show that accompanies them both.

ADMINISTRATION AND FACULTY

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President and General Administration

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

Robbyn R. Wacker, Ph.D.

(1990), Provost and Senior Vice President — B.A., B.S., M.S., University of Northern Colorado; Ph.D., Iowa State University

Michelle F. Quinn, M.A., C.P.A.

(2001), Senior Vice President for Finance & Administration and Chief Financial Officer — B.S., George Mason University; M.A., West Virginia University

Daniel R. Satriana, Jr., J.D.

(2010), Vice President and General Counsel — A.B., Lafayette College; J.D., Villanova University School of Law

Charles W. Leonhardt

(2008), Vice President for University Relations — B.S., Utah State University

Victoria L. Gorrell, M.A.

(2010), Vice President for Development and Alumni Relations — B.A., Allegheny College; M.A., Ohio State University

Assistant Vice Presidents

Teresa M. McDevitt, Ph.D.

(1985), Acting Assistant Vice President for Research—B.A., University of California; M.A., Ed.S., Ph.D., Stanford University.

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

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

Jeanette Van Galder

(1980), Assistant Vice President for Information Management & Technology

Kirk Leichliter, B.S.

(1990), Assistant Vice President Facilities Management — B.S., University of Wyoming

Katrina Rodriguez, Ph.D.

(2004), Assistant Vice President for Student Engagement and Dean of Students—B.A., M.A., Northern Arizona University; Ph.D., University of Northern Colorado

Susan L. Simmers, M.B.A.

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Internal Auditor

Bradley A. Hoffner, B.A.

(1995), Internal Auditor — B.A., University of Northern Colorado

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)

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College of Humanities and Social Sciences

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Kenneth W. Monfort College of Business

Karen F. Turner, Ph.D., C.P.A., Acting Dean (2005), B.S., M.A., Texas A & M University; M.B.A., Ph.D., University of Texas at Arlington

College of Natural and Health Sciences

Ellen Meyer Gregg, Ph.D., Acting Dean (1987), B.S., M.A., Northwestern University; Ph.D., University of Colorado

Robert P. Houser, Ph.D., Associate Dean (2012), B.S., Colorado State University; Ph.D., University of Minnesota

College of Performing and Visual Arts

Leo Welch, D.M., Dean

(2013), B.M., Potsdam State University; M.M., D.M., Florida State University

Graduate School

Linda Black, Ed.D.

(2000), Dean of the Graduate School and International Admissions — B.A., B.S., University of Iowa; M.A., Lesley College; Ed.D., University of Northern Colorado

University College

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University Libraries

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UNC FACULTY

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(2008), Assistant Professor of English — B.A., Baker University; M.A., Ph.D., University of Kansas

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James K. Bowen, Ed.D.

(1994), Professor Emeritus of College Student Personnel Administration — B.S., M.S., Ed.D.; Appointed 1966

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(1997), Associate Professor of Special Education — B.S., M.A., Utah State University; Ph.D., University of Arizona (G, DR)

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Travis D. Boyce, Ph.D.

(2009), Assistant Professor of Africana Studies and Social Sciences — B.A., Claflin University, M.A., Ph.D., Ohio University

Robin D. Brewer, Ed.D.

(2000), Associate Professor of Special Education — B.S., University of Oklahoma; M.A., Ed.D., University of Northern Colorado (G, DR)

Kathryn E. Bright, Ph.D.

(1991), Professor of Audiology and Speech-Language Sciences — B.A., Michigan State University; M.S., Florida State University; Ph.D., University of Arizona (G)

Danielle R. Brittain, Ph.D.

(2011), Assistant Professor of Community Health - B.S., Montana Tech of the University of Montana; M.S., Kansas State University; Ph.D., Kansas State University

Bruce W. Broderius, Ed.D.

(1995), Professor Emeritus of Elementary Education and Reading — B.S., M.A., Ed.D.; Appointed 1966

Susan P. Bromley, Psy.D.

(2002), Associate Professor Emerita of Psychology — B.A., M.A., Psy.D.; Appointed 1985

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(2012), Assistant Professor of History — B.A., Connecticut College; M.A., University of Delaware; Ph.D., University of Texas at Austin

Crystal Brothe, M.A.

(2005), Lecturer of English — B.A., M.A., University of Northern Colorado

Robert Brunswig, Ph.D.

(2012), Professor Emeritus of Anthropology — B.A., M.A., Ph.D., Appointed in 1999

Robert J. Brustad, Ph.D.

(1992), Professor of Sport and Exercise Science — B.A., University of California-San Diego; M.A., Ph.D., University of Oregon (G, DR)

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(2009), Assistant Professor of Music — B.M., Heidelberg College; M.M., D.A., Ball State University

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(1983), Associate Professor Emeritus of Education — B.A., M.A., Ed.D.; Appointed 1965

Patrick Burns, Ph.D.

(2004), Assistant Professor of Biological Sciences — B.S., West Virginia University; M.S., Ph.D., Clemson University (G, DR)

Arnold Burron, Ed.D.

(1998), Professor Emeritus of Elementary Education and Reading — B.S., M.A., Ed.D.; Appointed 1969

Warren R. Buss, Ph.D.

(1967), Professor Emeritus of Botany — B.S., Brigham Young University; Ph.D., Iowa State University

Linda J. Button, Ed.D.

(1999), Associate Professor of Elementary Education — A.B., Colorado State College (UNC); M.A., Ed.D., University of Northern Colorado (G, DR)

Jason Byrnes, D.M.

(2003), Associate Professor of Music — B.M., Tennessee Technological University; M.M., Pennsylvania State University; D.M., Indiana University (G)

C

Edward P. Caffarella, Ph.D.

(2003), Professor Emeritus of Educational Technology — B.S., M.Ed., Ph.D.; Appointed 1990

H. David Caffey, M.M.

(2005), Professor of Music — B.M., M.M, University of Texas at Austin

David Caldwell, Ph.D.

(1983), Professor of German — B.A., University of Texas; M.A., Ph.D., Ohio State University (G)

Ryan Cahalan, J.D., LL.M., M.B.A

(2013) Assistant Professor of Accounting — B.A., Florida Southern College; J.D., Stetson University College of Law; M.B.A., Stetson University; LL.M. in Taxation, University of Washington

Colleen Callahan, M.A.

(2001), Assistant Professor Emerita of Social Studies and Master Teacher in the Laboratory School — B.A., M.A.; Appointed 1972

Genevieve Canales, Ph.D.

(1995), Professor of Hispanic Studies — B.S., Incarnate Word College; M.S., Ph.D., Washington State University (G)

Vilma (Betty) Cardona, Ph.D.

(2008), Associate Professor of Counselor Education — B.A., University de San Carlos of Guatemala; M.S., University Mariano Galvez of Guatemala; Ph.D., University of Wyoming

Cynthia Carlisle, Ed.D.

(2002), Professor Emerita of Physical Education — B.A., M.E., Ed.D.; Appointed 1972

Jan L. Chaloupka, Ph.D.

(2009), Associate Professor of Physics — B.S., University of Washington; M.A., Ph.D., University of Rochester

Kenneth Chan, Ph.D.

(2008), Associate Professor of English — B.A., Bob Jones University; M.A., Clemson University; Ph.D., University of Florida

Joseph Chaves, Ph.D.

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(2007), Associate Professor of Nutrition and Dietetics — B.A., Concordia College; M.P.H., University of Minnesota; Ph.D., Colorado State University

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(2004), Assistant Professor of Psychological Sciences — B.A., University of Colorado; M.S., Ph.D., Colorado State University

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(2003), Associate Professor Emerita of Communication Disorders — B.S., M.a., M.Ed.; Appointed 1976

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