UNIVERSITY *of* NORTHERN COLORADO

Ph.D. IN educational MATHEMATICS

The Educational Mathematics program at UNC combines graduate mathematics preparation with advanced course work and research in mathematics education. This innovative Ph.D. program prepares scholars who can: perform research in K-16 mathematics education, teach college level mathematics, prepare and work with K-16 mathematics teachers.

Connect Theory and Practice

Collectively, the faculty have over 50 years of K-12 teaching experience. Graduate students and faculty work regularly with pre- and in-service school teachers on professional development and grant-funded research projects. Research and development in collegiate mathematics education is another strength of the program.

Be Part of an Active, Cooperative, Department and Program

Faculty and graduate students are active in UNC's field-experience-based, nationally recognized teacher preparation program. We teach and conduct research in model classrooms with up to date technology. Within the department, faculty in mathematics and mathematics education work together to provide a rich environment for the scholarship of teaching and learning.

Prepare to be an Innovator in Mathematics Education

Our Ph.D. students develop a deep knowledge of mathematics education research, theory, and practice along with profound understanding of collegiate mathematics. Our students collaborate with faculty to conduct and publish research early in their program. Graduates of the department have gone on to be:

- Professors in mathematics and education at varied universities
- Teacher-Leaders in schools
- School district consultants
- Professional researchers in mathematics education

Stretch Yourself in Mathematics and in Education

Research core coursework is in mathematics education, cognition, experimental design, qualitative and quantitative research design. Mathematics core content courses are in real and complex analysis and abstract algebra with electives such as differential geometry, logic, and combinatorics.

Additional courses include technology in mathematics education, mathematical problem-solving, history and philosophy of mathematics education, and the teaching and learning of mathematics at K-8, 9-12, and post-secondary levels.

Financial Support

The primary means of financial support is as a Graduate Teaching Assistant (GTA). GTAs are the instructors of record for the courses they teach (usually 12 credit hours per year) and are partners with faculty in the work of the department. GTAs teach, write their own syllabi, create and grade assignments, and meet with mentor faculty. GTAs participate fully in developing, implementing, evaluating, and analyzing curricular innovations.

To be considered for a GTA submit a complete application to the Graduate School by February 15 (for Fall decision) or October 15 (for Spring). Later applications may be considered if positions are available. Applications by those not seeking financial aid are accepted year-round.

Apply If You Have...

- MA or MS in Mathematics and interest in mathematics education.
- MA or MS in Mathematics Education with interest in advanced mathematics.
- MA in Teaching and are eager to expand your abilities in mathematics and education.

Don't have a Master's degree? One with a B.S. or strong B.A. in mathematics should apply to our master's degree program first.

Admission

Submit materials to the Graduate School (*www.unco.edu/grad*).
Application materials:

- Completed application form (with $50 US resident fee or $60 International student fee);
- Official transcripts from all accredited colleges/universities attended;
- GRE (Graduate Records Examination) scores.
- An essay explaining reasons for applying, career goals, and commitment to mathematics education.
- Three letters of recommendation that address the applicant's (1) potential for conducting research in, and commitment to, mathematics education,(2) potential for successful graduate course work in mathematics,(3) experience in teaching mathematics.