Instructor: Bill Blubaugh, Ph.D.  
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Office: 2239D Ross Hall  
Math office: 351 - 2820  
Office hrs: 11:00 – 12:00 M,W,F  
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Others by Appointment

Course Description
This course will focus on instruction in discrete mathematics, issues related to appropriate topics at middle school and high school grades, and its integration into a mathematics curriculum. The course will also address approaches to the teaching and learning of discrete mathematical topics from conceptual and problem solving points of view, and will look at the state and national standards related to discrete mathematics. This course is an elective course of our Master of Arts in Mathematics: Teaching Emphasis degree program. The program consists of 30 semester hours of graduate courses.

Course Objectives
1. Study appropriate content, as well as instructional and assessment techniques in the area of discrete mathematics for middle school and high school teachers.
2. Study discrete mathematical concepts, such as those contained in the NCTM and Colorado’s Content Standards in Mathematics, into the course.
3. Look at the role of computers and graphics calculators as tools for teaching and learning discrete mathematics.
4. Provide both content and pedagogical content so that participating teachers are able to not only learn new content but are able to use appropriate tools and instructional methods in their classrooms.
5. Provide opportunities to develop curriculum materials of discrete mathematics for your classes.
6. Become familiar with Colorado and national standards that relate to discrete mathematics.
Required Text

General Policies
We will hold one group Chat Room session per Unit. We will meet online every third Sunday from 8:00 to 8:30, beginning on Sunday, January 23. We will use the first 15 minutes or so for office-hour type questions, such as project questions and course information updates. After that we will discuss the assigned reading or the assigned discrete problem(s) for that particular Chat session.
At any time feel free to email me (bill.blubaugh@unco.edu) on any question, concern, or thought you would like to share with me regarding course content or course organization.
Threaded Discussions will be used for entering your reactions and thoughts to assigned readings, or for entering your work on assigned discrete mathematics problems. Feel free to react to each other's Threaded entries.

Course Assessment
A letter grade will be assigned based on the following:

1. Discussion Board entries on assigned readings and problems (quality and quantity) - 40% of course grade.
2. Chat Room entries on assigned readings and problems (quality and quantity) - 25% of course grade.
3. One Individual or Group Project - 30% of course grade.
4. Online presentation (abstract) of Individual or Group Project - 5% of course grade.

Course Evaluation
A letter grade will be assigned based on the following:
A: 90 - 100%  B: 80 - 89%  C: 70 - 79%