

Fall 2017

Discrete Applied Mathematics

APPM 3170  
ECEN 2703

Silva Chang

Lecture: MWF 10:00–10:50, FLMG 104

Office Hours: ECCR 241, MWF 1:00-2:00 or by appt

[silva.chang@colorado.edu](mailto:silva.chang@colorado.edu)

---

**Course Goals:** The main purpose of this course is to expose you to a wide variety of topics in discrete mathematics including logic, set theory, complexity of algorithms, number theory, combinatorics, induction, recursion, and graph theory. Mathematical writing style, problem solving, and proofs will be emphasized. (Prerequisite: Calculus 2)

**Text:** *Discrete Mathematics and Its Applications*, 7<sup>th</sup> ed, by K. H. Rosen.

**Exams:** There will be midterm exams given on **Wednesday, October 4**, 5:00-6:30 pm, and **Wednesday, November 8**, 5:00-6:30 pm, and a cumulative final exam on **Saturday, December 16**, 4:30 to 6:00 pm. Please turn in 4 bluebooks by the second week of class. Note that there will be no make-up exams. If you are sick for an exam, you must bring a note from your doctor verifying your illness. Your course grade then will be determined based on your remaining course work.

**Homework:** Homework will be due every week. Problems will be posted to D2L ([learn.colorado.edu](http://learn.colorado.edu)). A few of the homework problems will require Mathematica programming. You must show all work; correct solutions without adequate justification will receive no credit. Late homework will not be accepted. At the end of the semester your two lowest written homework scores will be dropped.

**Corrections Policy:** It is your responsibility to review homework and exams within one week after they have been returned, and to verify that grades have been posted correctly in D2L. After one week, we will assume that grades in D2L have been correctly recorded and no further changes will be made.

**Grade Determination:** There will be a total of 425 points for this course. The points will be distributed over two exams (100 points each), homework (100 points), and a cumulative final exam (125 points). Approximate grade lines will be

A-  $\geq 90\%$       B-  $\geq 80\%$       C-  $\geq 65\%$       D  $\geq 60\%$

You must earn an average of 55% or better on your exams (midterms and final) in order to earn a D or better in the course. After the final exam, if your exam scores average to less than 55%, it will not be possible to earn a D or better in the class. If your exam scores average to 55% or better, then your homework points will be factored in to determine your course grade. (Note: It is possible to have a 55% average on the exams and still earn a D or F in the course if your homework scores are low.)

**Special Accommodations:** Students who qualify for special accommodations must submit appropriate paperwork during the first two weeks of class.

**Dropping the course:** Advice from your academic advisor is recommended before dropping any course. After Nov. 3, dropping the course will be possible only with a petition approved by the Dean's office.

**Academic Honesty:** Students are encouraged to work in groups, however **all work turned in must be your own**. A violation of the CU Student Honor Code, including unauthorized copying, will result in an automatic final grade of F in the course. ([www.colorado.edu/policies/student-honor-code-policy](http://www.colorado.edu/policies/student-honor-code-policy))