

CMPS/MATH 2170

Discrete Mathematics

Professor Zizhan Zheng

Fall 2018

- Discrete mathematics is the branch of mathematics that studies discrete objects
 - Discrete objects can often be described by **integers**
 - Continuous objects require **real numbers**
- Discrete mathematics is the mathematical language of computer science

Topics

- Propositional and predicate logic
- Set theory
- Mathematical induction and recursion
- Number theory
- Counting
- Discrete probability
- ...

Overview

- Course Webpage

<http://www.cs.tulane.edu/~zzheng3/teaching/cms2170/fall18>

- used to post all the course materials: syllabus, class schedule, lecture slides, and homework, etc.

- Time & Place

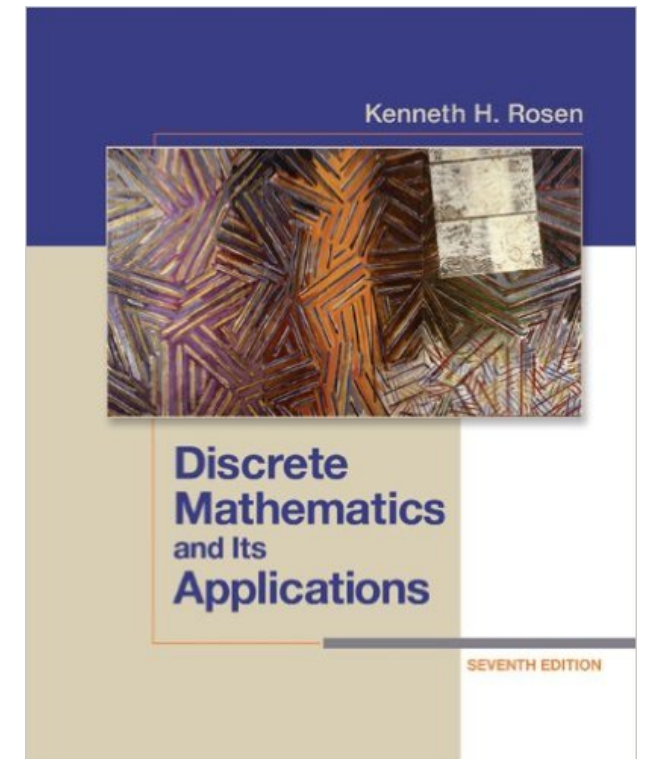
- Lectures: MWF 2:00 - 2:50 pm in Stanley Thomas 302
- Labs: R 5:00 - 6:15 pm in Gibson Hall 126

Course Staff

- Instructor: Prof. Zizhan Zheng
 - Office: Stanley Thomas 307B
 - Office hours: **MW 11:00 - 12:00 pm**
 - Email: zzheng3@tulane.edu
 - Research Interests: machine learning, networks, cloud computing, security
- Teaching Assistant: **TBD**

Textbook

- [Kenneth H. Rosen, *Discrete Mathematics and Its Applications*, 7th edition, McGraw-Hill, 2012](#)
- Older editions of the book contain most of the covered material, but not all. Students are responsible for identifying the differences.



Grading

- Homework - 30%
- Quizzes - 15%
- Midterm - 20%
- Final Exam - 30%
- Class attendance - 5%
- Class participation - 5% (**extra credit**)

- All grades will be posted on Canvas.

A \geq 90% B \geq 80% C \geq 70%

D \geq 60% F < 60%

+/- grades will be given for borderline cases.

Homework (30%)

- ~10 homework assignments
 - Posted to the course webpage
 - Typically given on Thursdays and due on the following Thursdays in labs (exceptions will be announced)
 - HW1 will be given on [Sep 6](#)
- No late homework allowed.
- Requests for a homework extension (with a valid reason) must be given to the instructor **before the homework is due.**

Labs and Quizzes (15%)

- Attendance in the labs is required.
- There will be **short quizzes** in most of the labs (~12 in total).
- No make-up quizzes will be allowed, but the **two lowest quiz scores** will be dropped.

Exams

- One midterm exam (20%) and one final exam (30%)
 - closed-book and closed-notes
 - a cheat sheet allowed: one letter page single-sided
 - final exam is comprehensive
- Dates
 - Midterm: Thursday, **Oct 18, 5:00-6:15 pm (tentative)** in **GI 126**
 - Final Exam: Sunday, **Dec 10, 10am-Noon** in **ST 302**
- Missing an exam will result in a grade of zero. A request for a make-up exam must be given to the instructor **prior to the exam date** (documentation may be required).

Class Attendance and Participation

- Class attendance (5%)
 - Class attendance will be taken on **randomly selected days**
 - Students are responsible for notifying instructors about absences that result from serious illnesses, injuries, or critical personal problems
- Class participation (5% - **extra credit**)
 - Raising and answering questions
 - Presenting solutions to homework problems on the white board

Academy Integrity

- You are required to adhere to Tulane's [Code of Academic Conduct](#).
- You may discuss homework problems with your classmates. However, what you turn in must be your own. You may not read another classmate's solutions or copy a solution from the web.
- Every cheating will be reported to the Associate Dean of Newcomb-Tulane College. If two people are caught sharing solutions then **both** the copier and copiee will be held equally responsible. Cheating on an exam will result in failing the course.

- Course Webpage

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