

MATH 270A - MATHEMATICAL STRUCTURES I
SECTION 4, SCHEDULE #18008
FALL 2019

Course Times: TuTh 10:00am-11:15am

Course Location: MH-438

Instructor: Mr. Hall

Phone: 657-278-8519

Email: nhall@fullerton.edu

Office: MH-187A

Office Hours: MW 9:00-11:00am

Text: *Discrete Structures* by CSUF Department of Mathematics. This text will be posted as a .pdf file to Titanium. The text consists of sections from:

SWDM: *A Spiral Workbook for Discrete Mathematics*, by Harris Kwong

DMOI: *Discrete Mathematics: An Open Introduction*, by Oscar Levin

MFCS: *Mathematics for Computer Science*, by MIT OpenCourseware

Course Description: This course is part of a two-course series (with Math 270B). These courses are designed to provide a background in discrete mathematics for the computer science major. Math 270A explores mathematical logic and proof, relations and functions, combinatorics, recurrence, graph theory, and probability.

Learning Goals

By the end of this course, you will . . .

- have a deep understanding of logic and be able to prove theorems.
- be able to work with functions, relations, sequences and series.
- have an understanding of combinatorics, graphs, probability, and recurrence relations.

These skills and ways of thinking will be very valuable to you in your future computer science classes and in your career.

Assignments and Exams:

Homework (10%): Homework will be announced in class and posted on Titanium.

Quizzes (15%): Quizzes will be given as noted in the class calendar. No make-up quizzes will be given. The lowest quiz score will be dropped.

Midterm Exams (25% each): There will be two midterm exams, scheduled for Thursday, October 10 and Thursday, December 5. No make-up exams will be given. In the event of a verified emergency (resulting in one missed exam), one exam score can be replaced with the grade received on that portion of the final exam. The instructor must be notified by email (by the student or their agent) within 24 hours of the missed exam and appropriate verification must be supplied when the student returns to class.

Final Exam (25%): The final exam for this course will be comprehensive. The final exam is scheduled for Tuesday, December 17 from 9:00am-10:50am.

Calculators: A standard or scientific calculator may be used. Graphing calculators will NOT be allowed during quizzes or exams.

Evaluation: Final course grades will be based upon the percentage of total points earned throughout the course. Grades will be distributed according to the following (after rounding to the nearest percent):

A+	A	A-	B+	B	B-	C+	C	D	F
97-100%	92-96%	90-91%	87-89%	82-86%	80-81%	77-79%	70-76%	60-69%	0-59%

Attendance Policy: Tardiness is a distraction to everyone, so make sure you are in class on time. Leave yourself plenty of time to deal with parking and other possible delays. No additional time will be given for quizzes or exams if you arrive late.

Email/Phone Policy: Email is my preferred method of communication. Emails will usually be answered by the next weekday. Emails must contain the words “Math 270A” *in the subject line*. All emails must contain your name and section number.

Classroom Policies: Students are expected not to distract or disrupt their fellow classmates. All mobile phones, pagers, or other noise-making devices must be turned off and put away *before* the beginning of class. If you need to leave the classroom during class for any reason, please do so quietly without disturbing your classmates. You are encouraged to participate in classroom discussion, however, any other talking is not permitted during class, even if you are whispering. Any questions during class should be directed to the instructor.

Important Dates:

- September 10 (Tuesday): Last day for students to ADD with a permit. All permits expire at midnight on September 10.
- September 10 (Tuesday): Last day for students to DROP without a grade of “W”. Students drop using Titan Online.
- October 4 (Friday): Last day the Math Department will be flexible on the approval of late withdrawal requests. Beginning Monday, October 7, students must have a serious and compelling reason for withdrawing (e.g. medical reason) and must provide supporting documentation for their reason.
- November 14 (Thursday): Last day to withdraw with a truly serious and compelling reason that is clearly beyond the student’s control. Students must document their reason. See Math Department for more info.

IMPORTANT UNIVERSITY INFORMATION AND STUDENT POLICIES

Use the link above for important information on

- Students with Special Needs
- Academic Dishonesty Policy
- Emergency Preparedness
- Library Support
- Final Exams Schedule
- University Learning Goals (Undergraduate, Graduate, and General Education)
- Degree Program Learning Outcomes

Class Calendar (May be modified at the instructor's discretion)

Week 1: SWDM 2.1-2.4

Week 2: SWDM 2.5-2.6 (**Quiz 1**) 9/5

Week 3: SWDM 3.2-3.3

Week 4: SWDM 3.4 (3.5 optional), 4.2-4.4 (**Quiz 2**) 9/19

Week 5: SWDM 6.2-6.4

Week 6: SWDM 6.6-6.7, 7.1-7.3 (**Quiz 3**) 10/3

Week 7: SWDM 7.3 (**Exam 1**) 10/10

Week 8: DMOI 1.1-1.4, MFCS 11.10

Week 9: MFCS 10.1, DMOI 2.2, 2.4, MFCS 10.3.1 (**Quiz 4**) 10/24

Week 10: MFCS 5.1, 5.6

Week 11: MFCS 5.7.1-5.7.4, 6.1 (**Quiz 5**) 11/7

Week 12: MFCS 14.1-14.5

Week 13: MFCS 15.1-15.2, 16.1-16.3 (**Quiz 6**) 11/21

Week 14: MFCS 17.1.1-17.1.2 (**Exam 2**) 12/5

Week 15: MFCS 17.1.2