

MATH 2220
DISCRETE MATHEMATICS

TEXTBOOK Electronic Textbook *Discrete Mathematics* with Maple Software.

CHAPTERS
COVERED

Chapter 1	Sets
Chapter 2	Logic
Chapter 3	Functions and Algorithms
Chapter 4	Relations and Digraphs
Chapter 5	Induction and Recursion
Chapter 6	Graphs and Trees

INSTRUCTIONAL This class will be conducted on the web-centric base. Readings and online practices
INFORMATION will be daily activities and participations. Class materials and assignments can be
found on the Canvas course shell. Overall schedule on Canvas will offer you
opportunities to practice your daily tasks in advance if possible and organize your
schedule at your own convenience.
No math typesetting skills required for taking the course. Some free download mobile
apps will need to be installed for purposes of communications, interactions, and task
submissions.
The Teaching Assistant will be available to answer any question that you have over
online practices and homework assignments throughout the semester.

EXPECTATIONS It is expected that each member of the class will

- keep up with reading and practice assignments on the daily basis,
- turn in homework and show up to take quizzes and exams on time,
- submit and organize homework assignments as instructed,
- participate in online discussions when required in a creative but responsible way,
- and, contact your Professor or TA for help immediately if you confront any difficulty.

The quality of your experience in this course depends on everyone striving to meet these above expectations.

ONLINE PRACTICES & HOMEWORK Online practices are arranged on each reading section. Written homework will be assigned at the end of each reading period. There will be 7 sets of written homework assignments collected.

QUIZZES

- Quiz 1 will be given at the end of chapter 1 readings and practices.
- Quiz 2 will be given at the end of chapter 4 readings and practices.
- Quiz 3 will be given at the end of chapter 5 readings and practices.

EXAMS

- Exam 1 will cover chapters 1 and 2.
- Exam 2 will cover chapters 3, 4, and 5.

FINAL PROJECT There will be a project due by the end of the semester. The project description and instruction will be posted by the mid of the semester.

GRADE	Online practices	10%
	Homework assignments	20%
	Quizzes	20%
	Exams	40%
	Final Project	<u>10%</u>
	Total	100%

ASSIGNMENTS

Section 1.1	# 2, 4, 5, 10, 11, 16, 22, and 28
Section 1.2	# 6a, d, g, 8b, e, f, 11, 12, 23, and 26
Section 1.3	# 8, 9, 10, 14, 17, 18, 20, 21, and 22
Section 1.4	# 3, 7, 9, and 33
Section 1.5	# 2, 3, 5, 9, 12, 25, 30, and 31
Quiz 1	
Section 2.1	# 1, 2, 4, 7, 8, 10, 14, and 28
Section 2.2	# 2, 3, 4, 8, 10, 12, 14, 15, and 22
Section 2.3	# 2, 5, 11, 14, 15, and 24
Section 2.4	# 1, 4, 5, 6, and 10
Section 2.6	# 1, 3, and 7
Exam 1	

Section 4.1	# 5, 6, 9, 10, 12, 22, 23, and 24
Section 4.2	# 3, 4, 6, 8, 12, 13, 22, 23, 25, 27, and 29
Section 4.4	# 2, 4, 6, 7, 11, 12, 14, 17, and 37
Maple Project	
Section 4.5	# 3, 6, 10, and 15
Section 4.7	# 1, 2, 5, 6, 7, 9, 11, and 21
Section 4.8	# 5, 9, and 13
Quiz 2	
Section 5.1	# 2, 4, 6, 7, 10, 15, 22, and 24
Section 5.2	# 2, 3, 5, 12, 29, 30, and 31
Section 5.3	# 15 and 20
Quiz 3	
Section 6.1	# 2, 5, 7, 9, 11, 13, 15, 17, 20, and 29
Section 6.2	# 2, 4, 9, 12, 25, and 26
Section 6.3	# 3, 8, 13, 19, 21, and 25
Exam 2	
Section 6.4	# 1, 3, 5, 7, and 9
Section 6.5	# 1, 3, and 5
Final Project	