

Math Methods (COSC 030) Summer 2019

PROFESSOR:

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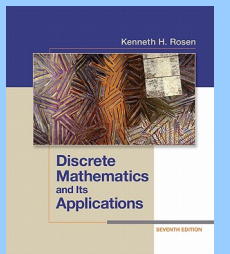
OFFICE HOURS:

M-R: 2.00 - 3.00 PM or by appointment.

TEACHING ASSISTANTS:

Name	Office Hours	Location	Email
XXXX X	XXXXX	XXXXX	XXXXX

TEXT:

	Discrete Mathematics and its Applications	Kenneth H. Rosen (7th Ed) (required)
	Publisher	McGraw Hill
	ISBN:	978-0-07-338309-5

SYNOPSIS:

This course, designed to be taken concurrently with COSC 052, covers mathematical tools and principles that are valuable to the computer scientist. Topics are generally in the domain of discrete, rather than continuous, mathematics, and include, propositional and predicate logic; mathematical proofs, including induction; counting and basic probability theory; logarithmic and exponential functions; elementary graph theory; and "Big-O" notation and asymptotics, Trees and Graphs.

Notes:

Notes will be available here after each class.

COURSE REQUIREMENTS:

Home Work:	60% of your final grade
Mid-Term 1:	15% of your final grade
Finals:	25% of your final grade

IMPORTANT DATES:

Midterm1:	June 17
Final:	July 3.

COURSE SCHEDULE:

Lec	Topic	Reading
1	Logic and Proofs	Chap 1
2	Sets and Functions	Chap 2
3	Algorithms	Chap 3
4	Number Theory	Chap 4
5	Induction and Recursion	Chap 5
6	Induction and Recursion	Chap 5
7	Counting	Chap 6
8	Probability	Chap 7
9	Recurrence Relations	Chap 8
10	Relations	Chap 9
11	Graphs	Chap 10
12	Trees	Chap 11
13	Boolean Algebra	Chap 12
14	Boolean Algebra	Chap 12
15	Modeling and Computation	Chap 13

Home Work:

Home Work	Given	Due	Points	Problems	Solution
1	6-3	6-4	20		
2	6-4	6-5	20		
3	6-5	6-6	20		
4	6-6	6-10	20		
5	6-10	6-11	20		
6	6-11	6-12	20		
7	6-12	6-13	20		
8	6-17	6-18	20		
9	6-18	6-19	20		
10	6-19	6-20	20		
11	6-20	6-24	20		
12	6-24	6-25	20		
13	6-25	6-26	20		
14	6-26	6-26	27		
15	6-27	7-01	40		
16	7-01	7-02	40		

COURSE POLICY:

1. All *Home works* should be turned in at the beginning of the class. Keep the graded home works until the semester is over.

2. Late Home work will NOT be accepted.

If you cannot make it to class to turn in your home work its your responsibility to turn it in prior to the due date.

3. Makeups and extensions will be given only for medical reasons.

COURSE ETHICS:

You can discuss the questions with your classmates, but do not copy the solutions.