Math Methods

(COSC 030) Summer 2018

PROFESSOR:

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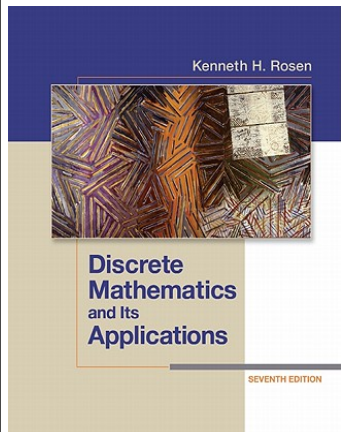
OFFICE HOURS:

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

TEACHING ASSISTANTS:

Name	Office Hours	Location	Email
TBA	TBA	St. Mary's 330	TBA

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.

Notes:

Notes will be available here after each class.

OURSE REQUIREMENTS:

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

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 Mid-Term 1:    June 21 (R)
 Finals:        July 5 (R)
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COURSE SCHEDULE:

Lec	Topic	Reading
1	Logic and Proofs	Chap 1
2	Sets and Fuctions	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	Recurence 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	6-4	6-5	20		SOL >
2	6-5	6-6	20		SOL
3	6-6	6-7	20		SOL
4	6-7	6-11	20		SOL
5	6-11	6-12	20		SOL
6	6-12	6-13	20		SOL
7	6-13	6-14	20		SOL
8	6-14	6-18	20		SOL
9	6-18	6-19	20		SOL
10	6-19	6-20	20		SOL
11	6-21	6-25	20		SOL
12	6-25	6-26	20		SOL
13	6-26	6-27	20		SOL
14	6-27	6-28	20		SOL
15	6-28	7-02	20		SOL
16	7-02	7-03	40		SOL

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.