

CourseCS/CE/TE 2305.001Course TitleDiscrete Mathematics for Computing IInstructorAshkan YousefpourTermSpring 2018Monday, WednesdayMonday, WednesdayMeetings11:30am-12:45pm
ECSS 2.203

Instructor's Information

Office Location	ECSS 4.623 (during office hours)
Email Address	ashkan@utdallas.edu
Office Hours	MW 1:30pm-2:30pm, or by appointment

TA's Information

Name	Nikita Kothari
Office Location	ECSS 2.103B1
Email Address	nikita.kothari@utdallas.edu
Office Hours	Wednesday 4:00PM-6:00PM, or by appointment

General Course Information

Pre-requisites, Co- requisites, & other restrictions	Score of at least 75% in ALEKS or MATH 2312 with a grade of C or better
Other Information	UTD email address must be used for communicating with the instructor or TA.
Course Description	<u>CS 2305 - Discrete Mathematics for Computing I</u> (3 semester credit hours) Principles of counting. Boolean operations. Logic and proof methods. Recurrence relations. Sets, relations, functions. Elementary graph theory. Elementary number theory.
Learning Outcomes	 Ability to use and apply basic definitions and properties of logic Ability to recognize and construct valid proofs including proofs by induction Ability to understand what an algorithm is, use algorithms, use Big-O notation and algorithmic complexity Ability to use basic counting techniques Ability to use and apply basic definitions and properties of sets, relations, functions
Required Texts & Materials	Text: "Discrete Mathematics and its Applications" by Kenneth H. Rosen, McGraw-Hill, 2012. ISBN:978-0-07-338309-5
Suggested Texts, Readings, & Materials	Feel free to utilize the publisher website: <u>www.mhhe.com/rosen</u> . There are free materials for students.

Computer Science Mentor Center (CSMC)

All students are encouraged to visit the Computer Science Mentor Center
frequently during the semester. The Center is staffed by student mentors who can
provide help on homework and other items related to our class. You may visit the
center to study for tests, to do your homework, to work on exercises, to
participate in study and review sessions, and to get one-on-one coaching on
Discrete Math concepts. Please visit csmc.utdallas.edu for center hours, location
and to sign up for scheduled sessions.

Extra Credit: We have seen steady progress in the grades of students who have utilized CSMC before. Students who visit the CSMC more than 5 times, will get an extra 5% on their final score (will be graded out of 105%). Exam Reworks don't count towards extra credit.

Assignments & Academic Calendar (Tentative. Will probably go faster)

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Week	Date	Topic	Assignment Posted, Exam
Number			
1	January 8, 10	Chapter 1.1, 1.2	
2	January 17	Chapter 1.3	HW1
3	January 22, 24	Chapter 1.3, 1.4, 1.5	
4	January 29, 31	Chapter 1.6	HW2
5	February 5, 7	Chapter 1.7, 1.8	
6	February 12, 14	Chapter 2.1, 2.2	Exam 1
7	February 19, 21	Chapter 2.3	HW3
8	February 26, 28	Chapter 2.4, 3.1	
9	March 5, 7	Chapter 3.2, Appendix 2, 3.3	HW4
10	No class	-	
11	March 19, 21	Chapter 4.1	Exam 2
12	March 26, 28	Chapter 4.2	HW5
13	April 2, 4	Chapter 5.1	
14	April 9, 11	Chapter 5.2, 6.1	HW6
15	April 16, 18	Chapter 6.3	
16	April 23, 25	Chapter 6.4	

Exam Exam 1: Feb. 12 **Times** Exam 2: Mar. 19 Exam 3: May 4

Course Policies

Grading Criteria	Exam 1 20%	Exam 2 30	% Exam3	30%	Assignments	20%	
	a - 100 i			0 C 00 0 D			
	97-100, A+	92-96.9, A	89-91.9, A-	86-88.9, B+			
	82-85.9, B	80-81.9, B-	77-79.9, C+	73-76.9, C	1 2		
	70-72.9, C-	66-69.9, D+	62-65.9, D	60-61.9, D)		
	0-59.9 🛞						
Make-up Exams	No make-up exams						
Extra Credit	Extra credits will be awarded for active class participation, and utilizing CSMC						
Late Work	Homework submitted after the due date will be penalized at the rate of 20% for						
	every day by which it is late (at most 3 days late).						
Class Attendance	Class attendance is highly recommended. There will be material presented in the						
	class that are not in the provided slides.						
	Individual work is assumed on all grading components. Academic dishonesty will be						
Grading rule	subject to the university rules.						
	Instructor highly appreciates honest work.						

Instructor appreciates students who	a. Are on time to lectures.b. Are attentive to lectures.c. Are respectful of others' need to avoid distractions.d. Perform their own work unless directed to participate in a group activity.e. Avoid the use of any premade works of answers (the use of which constitutes cheating).
Comet Creed	This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same: "As a Comet, I pledge honesty, integrity, and service in all that I do."
UT Dallas Syllabus Policies and Procedures	The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <u>http://go.utdallas.edu/syllabus-policies</u> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.