

CS 2305 – Discrete Math for Computer Science

Course Information

CS 2305 Discrete Mathematics for Computing I
Fall 2016, sections 003, 501

Professor Contact Information

Dr. James Willson
jkw053000@utdallas.edu
Office Hours: Th 1:30 – 3:30, and by appointment; ECSS 4.608

Teaching Assistant TBA

Course Pre-requisites, Co-requisites, and/or Other Restrictions

Score of at least 75% in ALEKS or MATH 2312 with a grade of C or better

Course Description

Discrete Mathematics for Computing I (3 semester hours) Principles of counting. Logic and proof methods, including induction. Basic recurrence relations. Basics of algorithm complexity. Sets, relations, functions. Elementary number theory.

Student Learning Objectives/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 Textbooks and Materials

Text: “Discrete Mathematics and its Applications”, Seventh Edition, Kenneth H. Rosen, McGraw Hill, 2012

Assignments & Academic Calendar

We will cover selected topics from chapters 1, 2, 3, 5, and 6 from the textbook

There will be an in-class quiz most Thursdays.

There will be a final exam during finals week, as scheduled by the registrar.

Grading Policy

Homework: 10%

Quizzes and Final Exam: 90%

(The final exam has the weight of two quizzes)

Grading will be on a curve, and will not be decided until all grades are in.

Course & Instructor Policies

Class attendance is mandatory. Three consecutive unexcused absences will result in a one letter drop of the course grade. Four consecutive unexcused absences will result in a grade of F for the course. Excused absences must be coordinated with the instructor prior to the absence, except for emergencies. A student who misses a class is still responsible for any handouts, announcements, reading material and contents of the missed class.

All make-up exams are scheduled and given at the discretion of the instructor.

Make-up exams are only given to those students who coordinate the missing of an exam prior to the originally scheduled exam date and time, or for an emergency.

All assignments must be submitted online via eLearning. Unless otherwise specified in the assignment, the submission must be a single pdf file. This is the only acceptable method of submission. All submissions can be revised before the deadline. Late work will be accepted until the date noted on the assignment.

You are encouraged to discuss the assignments with your classmates. You are especially encouraged to seek help with the assignments at the computer science mentor center. You may not, however, simply copy each other's assignments.

No extra credit will be given.

Discrete Math Mentor Center

All students are encouraged to visit the CS Department Discrete Math 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.

The main walk-in tutoring room is ECSS 4.415, and is open:

M-Th: 11:30 AM – 10:00 PM

F: 11:30 AM – 6:00 PM

Sa: Noon – 6:00 PM

Su: Noon – 8:00 PM

The center website is csmc.utdallas.edu, and can only be accessed from the campus network.

Supplemental Instruction

Supplemental Instruction (SI) is offered for this course. SI sessions are free group study opportunities, scheduled three times per week. Sessions are facilitated by an SI Leader, who has recently taken the course and received a high final grade. Attendance is voluntary. For information about the days, times, and locations for SI sessions, refer to www.utdallas.edu/studentsuccess/leaders/si.html.

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 <http://go.utdallas.edu/syllabus-policies> for these policies.

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