CS 2305 – Discrete Math for Computer Science

Course Information

CS 2305 Discrete Mathematics for Computing I
Spring 2017, sections 502, 503

Professor Contact Information

Dr. James Willson
jkw053000@utdallas.edu
Office Hours: Tu 4:30 – 6:30, 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

Tentative test dates:
Exam 1: Wednesday, February 8
Exam 2: Wednesday, March 22
Exam 3: Wednesday, April 26

Grading Policy

Homework: 10%
Exams: 90%

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

No extra credit will be given.

Computer Science Mentor Center

All students are encouraged to visit the CS Department 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.

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.

Attendance Policies

Class attendance is mandatory. In accordance with department policy, three consecutive unexcused absences will result in a one letter drop of the course grade, and four consecutive unexcused absences will result in a grade of F for the course. (If there are excused absences or examinations in the middle of three unexcused absences, that's still three unexcused absences.) (Multiple runs of three unexcused absences will result in multiple letter drops.) Additionally, absence from more than half of the classes (excluding examinations and excused 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.

Assignment Policies

All assignments must be submitted online via eLearning. Unless otherwise specified in the assignment, the submission must be a single file of a format which can be displayed in the elearning grading system. This includes pdf files and Microsoft Word documents. File types which do *not* work include image files (jpg, gif, png, and others), compressed archives (zip, and others), and many others. 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, with a small penalty. You are responsible for ensuring your assignment is completed and submitted before the deadline. After submitting, please check to make sure the submission worked and that you submitted the right thing. Broken submissions will not be given credit.

You may discuss the assignments with your classmates, but the work you submit should be your own.

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.