Course Information

CS 2305 Discrete Mathematics for Computing I Fall 2015

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 these chapters of the textbook: 1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 5.1, 5.2, 6.1, 6.2, 6.3

Tentative test dates: Exam 1: Thursday, September 24 Exam 2: Thursday, October 22 Exam 3: Thursday, November 20 Mini-Exam: Tuesday, December 8

Grading Policy

Homework: 10% Exam 1: 27% Exam 2: 27% Exam 3: 27% Final Mini-Exam: 9%

A curve is expected for the final letter grade.

Course & Instructor Policies

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. This is the only acceptable method of submission. It is your responsibility to make sure your assignments are uploaded properly before they are due. Late assignments will be accepted without penalty for 36 hours. No assignments will be accepted after that time.

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.

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.