

CMPE 16

Applied Discrete Mathematics

Summer Session 2006: June 26 – August 16

Description:

An introduction to applications of discrete mathematical systems. Topics include sets, functions, relations, graphs, trees, Boolean algebra, propositional logic, predicate calculus, mathematical induction, permutations, combinations, summation, and recurrences. Examples are drawn from computer science and computer engineering.

Prerequisites:

Eligibility to enroll in Mathematics 19A (completion of MATH 2B or 3 or mathematics placement exam score of 40 or higher) or completion of either Mathematics 19A or 11A.

Time and Place: MW 10:00 – 12:25 E2 194

Class Webpage: <http://www.soe.ucsc.edu/classes/cmpe016/Summer06/>

Class Webforum: TBA

Instructor: Patrick Tantalo (<http://www.soe.ucsc.edu/~ptantalo/>)

Email: ptantalo@soe.ucsc.edu

Office: E2 157

Office Hours: T 10:00 – 12:00 & 1:00 – 3:00

Phone: 831-459-3898

Required Text: *Discrete Mathematics and its Applications* by Kenneth H. Rosen, 5th edition, published by McGraw-Hill (2003). We will cover sections 1.1-1.8, 2.4, 3.1-3.4, 4.1-4.5, 5.1, 6.1-6.2, 6.5, 10.1-10.4. If time permits, we may also cover selected topics from sections 2.6, 5.2, 6.4, 6.5, 7.1, 7.3, 7.5, and 7.6.

Coursework and Evaluation:

Homework will consist of written assignments taken from the exercises at the end of each section. Written homework will be graded only as to its completeness, not correctness. Its purpose is to prepare students for quizzes and the final exam. The first of six **Quizzes** will be held on **Wednesday July 5**, then every Wednesday thereafter. A complete schedule of quizzes and quiz solutions will be found on the webpage. The **Final Exam** will be held on the last day of class **Wednesday August 16, 10:00am - 1:00pm**. Please make arrangements now to be available at that time.

Coursework will be weighted as follows:

Homework	5%
Quizzes	60%
Final Exam	35%

The grading scale for the class will be approximately: A+::97%-100%, A::93%-96%, A-::90%-92%, B+::87%-89%, B::83%-86%, B-::80%-82%, C+::76%-79%, C::70%-75%, D::60%-69%, F::0%-59%. Letter grade boundaries may be lowered at my discretion in order to eliminate some borderline cases.

Academic Honesty:

In recent years, there has been an increased number of cheating incidents in many UC campuses, and unfortunately, UCSC is no exception. The Baskin School of Engineering has a zero tolerance policy for any incident of academic dishonesty. If cheating occurs, consequences within the context of the course may range from getting zero on a particular assignment, to failing the course. In addition, every case of academic dishonesty is referred to the students' college Provost, who sets in motion an official disciplinary process. Cheating in any part of the course may lead to failing the course, suspension or dismissal from the Baskin School of Engineering, or from UCSC.

What is cheating? In short, it is presenting someone else's work as your own. Examples would include copying another student's written homework assignment, or allowing your own work to be copied. Although you may discuss problems with fellow students, your collaboration must be at the level of *ideas* only. Legitimate collaboration ends when you "lend", "borrow", or "trade" *written solutions* to problems, or in *any way* share in the act of *writing* your answers. If you do collaborate (legitimately) or receive help from anyone, you must credit them by placing their name(s) at the top of your paper.

Please go to http://www.ucsc.edu/academics/academic_integrity/ to see the full text of the University's policy on Academic Integrity.