CE16 – Discrete Mathematics

General Information and Syllabus
September 29, 1995

Instructor:	Richard Hughey	TA:	Christian Barrett
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e-mail:	rph@ce.ucsc.edu		cbarrett@cats.ucsc.edu
	rph@cats.ucsc.edu	Sessions:	Wednesday 3:30–4:40pm (tentative)
Phone:	459-2939		Thursday 12:00–1:40pm (tentative)
Office hours:	Wednesday 11:00–12:00am	Office Hour:	Tuesday 12:00–1:00pm (tentative)
	Friday 10:00–11:00am		Friday 11:00–12:00 noon (tentative)

Meeting Times

Mondays, Wednesdays, and Fridays, 2:00–3:10pm, Kresge 327.
November 24 is a holiday. The final is December 12 4:00pm–7:00pm.

Readings

Discrete Mathematics and its Applications, Kenneth H. Rosen. The course text.

The Nuts and Bolts of Proofs, Antonella Cupillari. Optional.

Course Work

The major evaluation criteria are homework (25%), quizzes (35%), and a final (40%).

Quizzes on the previous week's homework and lectures will be given at the end of class each Wednesday (the first one is October 4). Missed quizzes cannot be made up, but the lowest scoring quiz grade will be dropped to allow for any unforeseen circumstances.

Homework will be assigned and due (at the **start** of class) on Fridays. Credit will not be given for late homework. Neatness, readablilty, and explanation of all steps will aid your homework grade. It will not be possible to pass the course with more than two missed assignments.

Homework should first be attempted alone. After some on the homework yourself, feel free to discuss the problems with classmates, me, or the TA. Your writeups, however, must be your own work and reflect your own understanding of the problem. Work which does not pass this test will be treated as missed.

On cheating, if the TA, readers, or I find any evidence of cheating on a quiz or exam, you will fail that quiz or exam, have the incident mentioned in your narrative, and have

a letter sent to your college provost. Copying on homework assignments can also result in a letter to your college provost.

The TA will lead several discussion sections weekly. In addition to addressing questions from attendees, he will go over the weekly quizzes and previous homework, and may expand upon the lectures.

Future assignments and other messages will be distributed online in the ucsc.class.cmpe16 newsgroup. Use a program like 'rn' or 'xrn' to read messages in the newsgroup, and your newsreader or 'Pnews' to post messages to the group. You will need a CATS account if you do not already have one.

Homework 1

Due Friday, October 6.
Read 1.1–1.5 of Rosen. **Hand in solutions to the following problems:**

- Section 1.1: 6, 8, 12, 14, 18.
- Section 1.2: 4, 8, 14, 16, 24, 26. (Do 14 and 16 twice, using truth tables and then using logical equivalences.)
- Section 1.3: 2, 10.

Approximate Syllabus

Week of	Topics	Text
9/30	Introduction, Logic	1.1
10/2	Logic & Sets	1.2–1.4
10/9	Functions, Sequences, & Summations	1.5–1.7
10/16	Integers & Introduction to Proofs	2.3, 3.1
10/23	Induction & Recursion	3.2–3.3
10/30	Counting	4.1-4.3
11/13	Probability	4.4–4.6
11/6	Boolean Functions	9.1–9.3
11/20	Recurrences	5.1-5.2
11/27	Relations	6.1–6.4
12/4	Equivalence Relations, Partial Orders & Review	6.5–6.6
12/12	Final	