21-228 Discrete Mathematics

Fall 2001

1 Introduction

This course will cover counting problems (such as, given a set of n elements, how many ways can we choose k elements from that set), or number of ways of arranging sets. We will then move on to discussing recurrence relations, including generating functions. We will then discuss graph theory. These topics all have use in fields such as computer science, electrical engineering, computer engineering, and so forth. (This is one reason that the term "discrete" is appropriate)

2 Who are we?

A good question. Here we are:

- Instructor (me): Venk Natarajan

  - Office: Wean 6207
  - Office Phone: x8-3187
  - Cell Phone: 505-710-7830 (Subject to Change). Please leave a voice mail if I do not answer.

- – e-mail: vn@andrew.cmu.edu
  - – Monday 4:30-7:30, Wednesday 4:30-6:30

- TA: Ksenija Simic

  - – Office: Physical Plant Bldg. 342
  - – Office Phone: x8-1447
  - – e-mail: ksimic@andrew.cmu.edu
  - – Office Hours: TBA

- Grader: TBA

Course web-page: http://www.andrew.cmu.edu/user/vn/discrete

3 Grading

Homework will count for 40% of the grade for this course. There will be three in-class exams, and each will count for 10% of the grade. There will also be an in-class final, which will count for the remaining 30%. Your average will be rounded to the nearest whole number. If you turn in all of the homeworks over the course of the semester, and earn at least 50% on each, I will then add an additional 3% to your overall grade.

The cutoffs for letter grades are then calculated as follows:

- A:85-100

- B:70-84

- C:60-69

- D:50-59

- R:0-49

3.1 Homework Policy

Homeworks will be assigned most weeks, and will generally be due Tuesdays by 5PM. You may turn in your HW during recitation or into either my mailbox or Ksenija's mailbox in the main math office, which is Wean 6113. Be sure you clearly indicate your recitation section on your homework.

3.1.1 Late Homework

Late homeworks will only be accepted if there are extenuating circumstances. Only the instructor can grant such extensions.

3.2 Test Administrivia

Make-up tests will only be given in the event of a valid and unavoidable conflict (examples: illness, university-sponsored event) with documentation. If you're sick enough to miss an exam, then you *should*, for your own health's sake, go to some medical care professional and get it checked out. If you must miss an exam, you should let either Ksenija or me know as soon as possible.

If you have special needs (eg. extra time), you must inform me at least 72 hours before the exam so that I can make the necessary arrangements.

3.3 Grading Concerns

If you have concerns/questions/complaints about the way a homework or exam was graded, please bring them to me rather than the course grader or Ksenija.

3.4 Ground Rules

Collaboration on the homeworks is allowed and in fact encouraged. But copying or attempting to exhibit someone else's work as your own is forbidden. See the statement on Academic Integrity in the student handbook for more information. You should do all homework problems without the use of a calculator – calculators (and all other electronic devices) will *not* be permitted on exams.