22C : 153 Design and Analysis of Algorithms
Spring 2002

Class Schedule

10.55 – 12.10, TTh at 205 Maclean Hall

Instructor

Kasturi Varadarajan: 101E Maclean Hall, 353-2541, kvaradar@cs.uiowa.edu
Office hours: TTh 3.30–5.00 pm

Course Web Page

`www.cs.uiowa.edu/~kvaradar/sp2002/algos.html`

Departmental Information

Department of Computer Science, 14 Maclean Hall

Teaching Assistant

To be Announced

Textbook

Introduction to Algorithms, by Cormen, Leiserson, Rivest, and Stein

Prerequisites

The equivalent of 22c:034 and 22c:044. If you do not have this background, please let me know.

Grading

Grading will be based on five homework assignments, an in-class midterm exam, and an in-class endterm exam. The homeworks will account for 40 percent, the mid-term for 20 percent, and the endterm for 40 percent of the grade. One or two homework assigments will involve programming. No late homework submissions will be accepted. The midterm will be held during class hours (10.55–12.10, 205 MLH) on 14th March. The endterm will be as scheduled at 9.45am on thursday, 16th May.

Students with disabilities

I need to hear from anyone who has a disability which may require some modification of seating, testing or other class requirements so that appropriate arrangements may be made. Please see me after class or during my office hours.

Topics to be covered

- Median and sorting algorithms
- Data structures: priority queues, binary search trees, structures for disjoint sets
- Algorithm design techniques: greedy method, dynamic programming
- Graph algos: MST, shortest paths, network flow
- Polynomials, FFT, Matrix multiplication
- NP-completeness and approximation algorithms
- Computational geometry
- Further selected topics