22C:021 Computer Science II, Data Structures Fall 2009

Class Schedule

2.30–3.20 pm Monday, Wednesday, and Friday at 112 MH

Instructor

Kasturi Varadarajan: 101E MacLean Hall, 353-2541, kvaradar@cs.uiowa.edu Office hours: 4.00–5.00 Mon, 1.30–2.30 Tue, 4.00–5.00 Wed, or by appointment.

Course Web Page

www.cs.uiowa.edu/~kvaradar/fall2009/ds.html

Departmental Information

Department of Computer Science, 14 Maclean Hall. The office of the DEO, Prof. James Cremer, is located here.

Content

In brief, the course will be about problem solving using data structures, with Java as the language for expressing our ideas.

Here is an "official" course description: The second course required for computer science majors and minors emphasizes the design, implementation, and analysis of common data structures and algorithms. The goal is to teach how data structures provide the necessary data abstraction for the development of large software systems and their central role in software engineering. Data structures covered include sets, linked lists, stacks, queues, hash tables, trees, heaps, and graphs. Students are introduced to algorithms for searching, sorting, and data structure manipulation and learn the techniques to analyze program efficiency. Programming using recursion and dynamic data structures are covered. The programming language is Java.

For our textbook, we will use *Data Structures and Algorithm Analysis in Java 2/E* by Weiss, ISBN 0321370139. After the first couple of weeks of lectures and discussion sections, this book will become quite readable.

Prerequisites

Computer Science I (22C:016). Discrete Structures (22C:019) is a corequisite if not taken as a prerequisite.

Grading

The grading will be based on several homeworks (50 percent), of which there will be nine or ten, one midterm (20 points) and one final (30 points). Most of the homeworks will involve programming in Java.

Exam Dates

I will post the schedule for the exams soon at the course web site.

Teaching Assistants and Discussion Sections

Each of the students in the class is registered for a discussion section that he/she is expected to attend. The TA for this class is Marcus Ernster. He will lead discussions according to the following schedule:

- [Sec A01] 8:30-9:20 Th, 205 MLH
- [Sec A02] 3:30-4:20 Th, 116 MLH

Office hours for the TA will be posted at the course website soon.

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.

Required Legalese

This course is run by the College of Liberal Arts and Sciences. This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Liberal Arts and Sciences. Students wishing to add or drop this course after the official deadline must receive the approval of the Dean of the College of Liberal Arts and Sciences.

Academic Dishonesty

Academic dishonesty will not be tolerated. Under no circumstances should you pass off someone else's work as your own. This also applies to code or other material that you might find on the internet. Note that we will routinely use available software systems for detecting software plagiarism, to test any suspicions we might have. If you are unclear about what constitutes academic dishonesty contact your professor or consult the printed policy in the Schedule of Courses and the CLAS Bulletin. We do want students to talk to each other about concepts and ideas that relate to the class. However, it is important to ensure that these discussions do not lead to the actual exchange of written material.