Class Schedule
10.55 – 12.10, TTh at 210 Maclean Hall

Instructor
Kasturi Varadarajan: 101E Maclean Hall, 353-2541, kvaradar@cs.uiowa.edu
Office hours: MW 2.00–3.00 pm

Course Web Page
www.cs.uiowa.edu/~kvaradar/sp2004/geom.html

Departmental Information
Department of Computer Science, 14 Maclean Hall

Textbook

Prerequisites
The equivalent of graduate algorithms 22C:153.

Grading
Grading will be based on four homework assignments plus a survey or programming project. There will be no exams. You are expected to do the homework assignments on your own without consulting human and non-human sources (like the web, books other than the textbook) for the solutions. You are welcome to discuss the homeworks with your classmates, but you are not allowed to take away from the discussion any written record, electronic or otherwise, of the discussion.

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 (in no particular order)

Convex hulls, Voronoi diagrams, linear programming; data structures for proximity queries, range queries, and intersection queries; techniques such as plane-sweep, random sampling, randomized incremental construction, randomized divide-and-conquer; combinatorial objects such as arrangements, Davenport-Schinzel sequences, triangulations; approximation algorithms for geometric optimization problems.