This is a graduate breadth course on databases. The course will cover advanced material on indexing, query processing and transaction control. A central theme of the class is to focus on next generation database concepts with particular attention on database support for multimedia, spatial and biological databases.

Office Hours: TBD (to be determined) and by appointments set up by email.

Email address: miranker@cs.utexas.edu

Required Text:

- “Database Systems: The Complete Book”, Garcia-Molina, Ullman, Widom, Prentice Hall.; If it is not in the Co-op you’ll have to buy it online.

Grading:

There will be a midterm, a final, and a project. The grade will be determined as follows, 20% midterm, 30% final, 25% project, 25% homework.

Project: TBD

Past projects

1. Implement an index structure and compare performance on different workloads.
2. Implement an OLAP application.
3. Implement a small application specific data federation and web-portal (e.g. a product information comparison site for digital cameras)