

Database and Transaction Systems

CS 318
Spring 2002

- Instructor:** Thomas P. Kelliher
Hoffberger 140
Office phone: 337-6189
Home phone: 931-2946
kelliher@bluebird.goucher.edu
<http://phoenix.goucher.edu/~kelliher>
Office hours: MWF 10:30–11:20am. Th 1:00–3:00pm. Other times available by appointment.
- Class:** Hoffberger 149, MWF 12:30–1:20pm.
Class home page: <http://phoenix.goucher.edu/~kelliher/s2002/cs318/>
- Objectives:** This course will be a study of the underpinnings of modern database design, at the application level, with application to the implementation of a web-based transaction processing system semester project. We will also examine deeper issues which are essential to effective design at the application level: relational algebra, tuple calculus, data organization and indexing strategies, and query processing and optimization.
- Expectations:** I expect that you will be able to become proficient in basic HTML, PHP (a scripting language), and Unix usage after brief introductions. I expect that you have retained your knowledge of first order predicate logic from MA 115 and MA 125. I expect that you will have completed the assigned readings before class and understood the basic points.
- Textbook:** P. M. Lewis, A. Bernstein, and M. Kifer, *Databases and Transaction Processing*. Addison Wesley. 2002. Required.
- Grading:** **Grade Distribution**
A = [92–100], A- = [90–92), B+ = [88–90), B = [82–88), B- = [80–82), etc.
Course Point Distribution
The following is tentative.
1. Assignments — There will be approximately five written assignments. 10% of the maximum grade will be deducted per day from late assignments (the weekend counts as one day). Assignments over three days late will not be accepted.
Online toolbox: You will be expected to carefully conduct a recurring concepts study of this course, using the standard template, and properly link it in with your online toolbox. This will count as one of the written assignments.
Assignments will constitute 20% of your final grade.

2. Midterm exam — There will be one midterm worth 20% of your final grade. Tentatively, the midterm will be March 13. If you need to re-schedule an exam, it is your responsibility to let me know a few days beforehand.
3. Group term project — The group term project will be worth 35% of your final grade.
4. Final exam — There will be a cumulative final, scheduled by SAS. The final will be worth 25% of your final grade.

Course Handouts:

Course handouts will be made available once in class. After that, they may be obtained from the class home page.

Attendance:

Attendance of classes is expected. It is your responsibility to catch up on missed class work.

Electronic Communication:

From time-to-time, I will need to send e-mail messages to the class. These messages will be addressed to your official Goucher e-mail addresses. You are responsible for checking your e-mail on a timely basis.

Distractions:

Cell phones must be turned off or set to “silent” during class. If you must enter late, do so as unobtrusively as possible. Likewise if you must leave early. Please use sign language if you must hold a personal conference during class.

Integrity:

Academic dishonesty will not be tolerated. We are all bound by the Academic Honor Code.