CS/550 Database Concepts

SYLLABUS Spring 2004

Instructor: Irwin Levinstein. Office: 249-3 education bldg. Phone: 683-3915, please leave message. Email: cs450web@cs.odu.edu. Since this is a somewhat internet based course, much of our communication will be by email or message board. You can use email to arrange an appointment if you wish to see me in person. US Mail: Irwin Levinstein, Computer Science Department, Old Dominion University, Norfolk VA 23529.


While the course includes some instruction in the languages SQL and PL/SQL, students are basically expected to master the material on their own in the course of programming assignments. It is recommended that students find congenial books on the languages to supplement the information provided in the textbook, in course lectures, and on the web. Nilesh Shah, Database Systems Using Oracle, Prentice Hall has been ordered by the bookstore but you may prefer others. Two that you might consider are Alex Morrison and Alice Rischert Oracle SQL: interactive workbook and Benjamin Rosenzweig and Elena Silvestrova, Oracle PL/SQL: interactive workbook. Students have also found Scott Urman, Oracle8 PL/SQL Programming, 2nd Edition, useful. Whatever book you choose for SQL should be oriented to Oracle SQL which has features differing from standard SQL and provide information on the SQL*PLUS interface for entering SQL commands.

Goals: If you get an A in this course, you will be able to explain the basic concepts of database architecture, data storage, and the relational database model. You will be able to express queries in relational algebra, SQL, and ordinary English, and be able to embed SQL queries in a PL/SQL program. You will be able to design a relational database. You will be able to understand and apply the concepts and techniques of concurrency control and database recovery. If you get less than an A you will have some deficiencies in the above-mentioned areas.

Schedule: The official course schedule is available on the web at http://www.cs.odu.edu/~ibl/450/spr04/schedule.html.

Cheating: Students may form groups of up to size 2 to work on SQL, PL/SQL and ESQL programming assignments and groups of up to size 4 for the graduate student assignment but must work individually on all other assignments unless announced in class and/or on the course web page.

If you are part of a group, you may discuss anything to do with that assignment ONLY with another group member or the instructor or the TA for the class. If you are NOT part of a group, you may NOT discuss any aspect of the assignment with anyone except the instructor or TA. Such unauthorized discussion will be considered cheating and referred to the honor council for action. Review questions are to be answered without
assistance from others.

You are expected to **protect your work**. If two students who are not part of a group submit similar work, both will suffer penalties for cheating. Two ways to protect your work are 1) do not put your work in your public_html directory tree and 2) put the following statement in your unix .cshrc file: `umask 27`.

**Communications:** It is your responsibility to actively seek out course information. You should visit the course web page at least three times a week. You should read your email at your ODU CS account at least four times a week. You are responsible for knowing about all course related matters announced on the web page or via email.

- **email:** Please direct email concerning course matters to cs450web@cs.odu.edu
- **web page:** [http://www.cs.odu.edu/~ibl/450/spr04](http://www.cs.odu.edu/~ibl/450/spr04)

To encourage you to read your mail and to visit the web page, requests will be made from time to time for you to respond to certain announcements within a given time. The announcements will be made via email or via the web page. If you fail to respond as requested you may lose points from your total course score.

**Grades:** Your grade will be based on **positive points** earned from review questions, several assignments and two examinations and **negative points** earned by failing to complete self-assessments and failing to respond to email and web page requests for a response. The review questions altogether will count as one assignment. The assignments will count 60% of your grade. The examinations will count 40% of your grade. Both exams will be curved. Some assignments may possibly be curved. The final score will not be curved. Grading scale: [0-60): F; [60-68.5): D; [68.5-70): D+; [70-78.5): C; [78.5-80): C+; [80-88.5): B; [88.5-90): B+; [90-100): A.

Since the graduate student grade scale does not include any D grade, a D or D+ for a graduate student will be reported as an F.

**Review Questions:** Review Questions have been assigned for most chapters (see schedule). The answers are due by the dates in the schedule. Answers must be submitted via the web forms provided for that purpose.

You are not to collaborate with others on the review questions. It is a violation of the honor code to do so.

It is important that you answer the review questions in your own words and within the length limits. Answers copied from the book will lose credit. Answers which exceed the allowed length will not be accepted. **Do not answer by copying from the book. Use your own words and summarize.**

**Self Assessments:** Many self-assessments are provided on line to aid in understanding the concepts of the course. They are designed so that you can retake them as often as you like. It is your responsibility to complete these self-assessments. You get credited with completing one when you earn a score of 100% and submit it. **If you complete fewer than 90% of the self-assessments, you may have up to one assignment’s worth of points deducted from your course score.** From time to time, self assessments are added to those initially announced in the schedule. These will be announced on the course web page. **It is your responsibility to know about them.**

**Presentations:** Most of the material which is presented in class lectures in the form of PowerPoint™ presentations is available for you in the form of PDF files. You will need a PDF viewer such as Adobe Acrobat Reader™ to view the presentations. The files will be downloadable from the course web page. You will need an unzipping utility such as WinZip™ to retrieve them once they are downloaded.

**Assignments:** Students in CS450 will have 4 assignments in addition to review questions. The CS450 students’ assignment average will be computed by adding their best
assignment grade to their total assignment grade before dividing by 5 (best grade
counts twice). This benefit is not available to graduate students in CS550. CS550 stu-
dents will have 5 assignments. The level of design and programming in the fifth assign-
ment will go beyond that required of CS450 students. The assignments are briefly
described in the schedule. Total value of the assignments, including review questions:
60% of your average.

Tests: There will be two tests, one at mid-term and one at the end of the semester. The
two tests will count equally. Total value of the tests: 40% of your average. Tests will be
given at proctored locations. You must take the tests when and where scheduled.
CS550 students will have examination questions which are not required of CS450 stu-
dents.

Honor Code: If you don't know what this is, find out! You signed it. I enforce it. Strictly.

Late Material: No late work will be accepted or graded without prior agreement or
extenuating circumstances (as defined by the instructor).

Attendance: Attendance in class is optional except for examinations. You are respon-
sible for knowing everything announced or presented in class whether you were present
or not. If you miss a class, it is your responsibility to find out what you missed. You
should find out from someone other than the instructor.

I have read this syllabus to this point and have read carefully the paragraphs
marked with boxes. I have initialled each box to indicate that I have read
and understood the paragraph next to it.

Signed ______________________________

Name (print): __________________________

Computer Science Email: ___________________