CS4/550 Database Concepts
SYLLABUS Fall 2017

Instructor: Irwin Levinstein.
Office: 3108 E & CS Bldg.
Phone: 683-7720, please leave message.
Email: all of your email to me for this course should be initiated at web page http://webspace.cs.odu.edu/~cs450/cgi-bin/email450att.cgi in order to avoid ending up in a spam folder. 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 outside office hours.

Office Hours: are announced on my web page: http://webspace.cs.odu.edu/~ibl.
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 2e has been ordered by the bookstore but you may prefer others. Two introductory level books that you might consider are Alice Rischert, Oracle SQL By Example and Benjamin Rosenzweig and Elena Silvestrova Rakhimov, Oracle PL/SQL By Example. Students have also found Michael McLaughlin, Oracle Database 11g PL/SQL Programming, useful, but it does not cover SQL. 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.

Books for the course are available at the campus bookstore. When the course is offered via Distant Learning, books are also supposed to be available at http://www.odudlbooks.com. CS course books are generally available from many sources online.

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 PL/SQL and PHP programs. 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 and be less prepared for those courses for which this course is a prerequisite.

Schedule: The official course schedule is available on the web at http://webspace.cs.odu.edu/~cs450/450/fall17/sched/schedule.xml.

Cheating: Students may form groups of up to size 2 to work on Relational Algebra, SQL, PL/SQL and PHP programming assignments as well as the functional dependency assignment and groups of up to size 4 for the graduate student assignment but must work individually on all other assignments and homework unless announced in class and/or on the course web page. Graduate students and undergraduate students may not be members of the same group.

If you are part of a group, you may discuss, or get help on, 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 or get help on any aspect of the assignment with anyone except the instructor or TA. Review questions are to be answered without assistance from others. In no case may you use materials from other students in previous semesters in the preparation of any work to be submitted. All work to be submitted must be entirely produced by you or your group. Collaborating with others, whether students or not, outside these limits is a violation of the course rules. Possession of solutions from earlier semesters is also a violation.

You are expected to protect your work. If two students or two groups 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. From time to time I will attempt to read assignments for this course in your Unix (Z Drive) account. If I am able to read them, that demonstrates that you are making your work available to others to copy. You will be warned and thereafter penalized if I find that you have not corrected the problem.

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: to avoid spam filters please initiate all course email at http://webspace.cs.odu.edu/~cs450/cgi_bin/email450att.cgi (there is a link at the top of the course web page).
- web page: http://webspace.cs.odu.edu/~cs450/450/fall17 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 or both. 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, failing to respond to email and web page requests for a response to a survey, or failing to protect your work as described above. The review questions altogether will count as one assignment. The assignments will count 60% of the positive points of your grade. The examinations will count 40% of the positive points 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 may be reported as an F. Note: [x-y) means the interval from and including x to but not including y.

Review Questions: Review Questions have been assigned for most chapters. They are accessed via the course [Schedule]. The answers are due by the dates in the schedule. Answers must be submitted via
the web page provided for that purpose. Together the review question sets count as much as one
assignment.

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

**Surveys.** From time to time you will be notified by email, to your ODU account, or by the course web
page, that a survey is available. Each survey will be available for several days. You must respond to
75% of the surveys offered or suffer a deduction form your course grade.

**Self-Assessments:** Many self-assessments are provided on line to aid in understanding the concepts of
the course. The self-assessments are accessed via the course [Schedule]. 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
ever less 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.** Self-assessments have two deadlines. The first is found on the on the course
[Schedule] page on a per-module basis. The second is the date of the first exam (midterm or final) that
follows the per-module due date. If you submit after the first deadline but by the second, you will receive
90% credit.

**Presentations:** Most of the material which is presented in video 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.

**Videos:** High quality videos of virtually the entire lecture portion of the course may be accessed via the
course [Schedule]. You are expected to watch all the videos during the first week of each module.

**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 students will have 5 assignments.** The level of design and programming in
the fifth assignment as well as the first three assignments will go beyond that required of CS450 students.
If the assignment grades are ‘curved’ the curve will be more generous for CS450 students than for CS550
students. The assignments are briefly described in the schedule. Total value of the assignments,
including review questions: 60% of the positive points of your grade.

**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 students.** If the test grades are ‘curved’ the curve will be more
generous for CS450 students than for CS550 students. The tests are likely to be delivered via Blackboard
outside normal class meeting times.

**Honor Code:** By registering for classes at ODU you have agreed to the following Honor Pledge **I pledge
to support the honor system of Old Dominion University. I will refrain from any form of academic
dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic
community, it is my responsibility to turn in all suspected violators of the honor system. I will report to
Honor Council hearings if summoned.**

**Classroom Behavior:** As this is an online course, the only times we may meet as a class are when
midterm or final exams are offered at a campus location. In that case the following apply: cell phones off
or on vibrate and not to be used; students to be timely to the test; no conversation during the test; no offensive language, gestures and the like. Violations are considered to be violations of the Code of Student Conduct.

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

**Attendance:** As this is a distant learning web-based class, there are no class meetings. However you are expected to keep up with the work assigned and to meet all deadlines. You are responsible for knowing everything announced on the course web sites whether you saw it or not. Examinations must be completed on the dates assigned.

*I have read this syllabus in its entirety and have read carefully the paragraphs marked with boxes. I have initialed each box to indicate that I have read and understood the paragraph next to it. By signing I acknowledge that I agree to abide by the course requirements and the ODU Honor Code.*

Signed ________________________________

Typing your name above constitutes signing this document and acknowledging that you have read all the parts thereof.