CS 1555/2055: Database Management Systems (Spring 2014)

Department of Computer Science, University of Pittsburgh

When: Monday & Wednesday, 3:00 pm – 4:15 pm Where: Room 5129, Sennott Square Building

Instructor: Prof. Alexandros Labrinidis

Email: labrinid@cs.pitt.edu Office hours: Mondays 4:30pm - 5:30pm

Web: http://labrinidis.cs.pitt.edu/ Wednesdays 4:30pm - 5:30pm

Office: 6105 Sennott Square and by appointment

Phone: 412-624-8843

Recitations: Friday 2:00pm – 2:50pm @ 6110 Sennott Square (first one on January 17, 2014)

Friday 4:00pm – 4:50pm @ 6110 Sennott Square (first one on January 17, 2014)

Graduate Teaching Assistant: Nick Katsipoulakis

Email: cs1555-staff@cs.pitt.edu Office hours: Tuesdays 2:00pm - 4:00pm

Office: 6804 Sennott Square

Thursdays 2:00pm - 4:00pm
Fridays 3:00pm - 4:00pm

Phone: TBD

Fridays 5:00pm - 4:00pm

Fridays 5:00pm - 6:00pm

Course Description: There are two principle objectives for this course. First, to introduce the fundamental concepts necessary for the design and use of a database. Second, to provide practical experience in applying these concepts using commercial database management systems.

Prerequisites: A grade of C or better in CS 0441 and CS 0445 is required. Working knowledge of Java and familiarity with Unix are assumed.

Class Web Page: http://db.cs.pitt.edu/courses/cs1555/spring2014

All handouts and class notes will be published on the class web page. You are expected to check this page

frequently (at least twice a week).

Google+ Page: We will use Google+ as an authentication mechanism for posting photos of the whiteboard from every class. You will need to provide a valid Gmail account to have access to the photos.

Textbook: Fundamentals of Database Systems, 6th Edition. Fundamentals of Database Systems, 6th Edition Ramez Elmasri and Shamkant B. Navathe, Addison-Wesley (c) 2011 (ISBN-10: 0-13-608620-9; ISBN-13: 978-0-13-608620-8)

Reference: *Learning SQL*, Alan Beaulieu, O'Reilly 2005 (Available online from campus computers through Safari Bookshelf – link at web site).

Course Grading:

Assignments	25%	up to 1 (practice) + 8 (real) assignments
Term project	15%	
Class participation	5%	For both lecture and recitations, including in-class quizzes.
Midterm Exam	25%	Wednesday, February 26th, 3:00pm – 4:15pm (SENSQ 5129)
Final Exam	30%	Saturday, April 26th, 8:00am – 9:50am (SENSQ 5129)

Class Mailing List: All students must subscribe to the class mailing list, so that they receive time-sensitive information from the instructor and TAs. You will be automatically added to the mailing list.

Note on Email Communication: You should send all email regarding class matters to cs1555-staff@cs.pitt.edu. Your email will go to the instructor, and the TA. If you have a confidential matter, then please email the

instructor directly, but make sure to include the keyword cs1555 in the subject line of your email. We will make every effort to respond to all email requests within one business day at the latest. **Due to spam filtering, you should always use your pitt email address when sending email and include your full name.**

Grading Policy: Unless explicitly noted otherwise, the work in this course is to be done independently. Discussions with other students on the assignments should be limited to understanding the statement of the problems (except when assignments are to be done in groups in which case it is expected of members of the same group to work together). **Cheating in any way, including giving your work to someone else, will result in an F for the course and a report to the appropriate University authority.** Submissions that are alike in a substantive way will be considered to be cheating by ALL involved parties. Please protect yourselves by only storing your files in private directories, and by retrieving all printouts promptly.

Students are expected to abide by the Dietrich School of Arts and Sciences' Academic Integrity code of conduct, posted at http://www.as.pitt.edu/faculty/policy/integrity.html

All assignments must be submitted electronically. Grades can be appealed up to two weeks after they have been posted; no appeals will be considered after that time.

Late Policy: A late assignment will receive a deduction of 5 points if it is up to one day past the deadline and 15 points if it is up to two days past the deadline. Assignments that are past two days late will not be accepted.

Make-up Policy: Students are expected to be present for all exams and quizzes. Make-up exams will only be given in the event of an emergency, and only if the instructor is informed **in advance**. Failure to notify the instructor prior to missing an exam will result in a zero for the exam.

Students with Disabilities:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services, 216 William Pitt Union, 412-648-7890 or 412-383-7355 (TTY) as early as possible in the term. DRS will verify your disability and determine reasonable accommodations for this course. Their web site is http://www.drs.pitt.edu.

Religious Observances:

In order to accommodate the observance of religious holidays, students should inform the instructor (by email) of any such days that conflict with scheduled class activities within the first two weeks of the term.

- **Audio/Video Recording:** To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.
- **Cell Phone Use:** Answering a cell phone or texting is disruptive and hence any use of a cell phone is not permitted in the class or recitation. Cell phones must be switched to silent mode and if you have a phone call which cannot wait until the end of the class, you need to step out of the class and then answer it.
- **Copyrighted Material** All material provided through this web site is subject to copyright. This applies to class/recitation notes, slides, assignments, solutions, project descriptions, etc. You are allowed (and expected!) to use all the provided material for personal use. However, you are strictly prohibited from sharing the material with others in general and from posting the material on the Web or other file sharing venues in particular.

Outline: A detailed reading guide will be published on the web page, along with the class notes.

- 1. Relational/Object-Relational Data Model, Relational Databases SQL, QBE
- 2. Database Design Relational Normal Forms & Entity-Relationship Data Model
- 3. Storage and File Organizations, Access Methods
- 4. Transactions, Concurrency, Recovery & New Trends

[Last updated on January 6, 2014 at 2:19pm EST]