

CMPSC 431W: Database Management Systems

Fall 2015

Course Site:	ANGEL & http://www.cse.psu.edu/~yul189/cmpsc431w		
Class	Monday, Wednesday, Friday at 8:00 – 8:50 a.m.		
Meetings:	Room 102 Leonhard		
Instructor:	Yu-San Lin	TA:	YanJun Gao
Office:	337 IST	Office:	338E IST
Office Hours:	Monday, Wednesday, 9:00 – 10:00 a.m.	Office Hours:	Tuesday 3:00 – 4:00 p.m., Thursday 12:00 – 1:00 p.m.
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Midterm Exam Schedule

- Midterm I: September 29, 2015 (Tuesday evening) 6:30-7:45 p.m.
- Midterm II: November 10, 2015 (Tuesday evening) 6:30-7:45 p.m.

Course Objectives

- Introduce the students to the design, use, and application of database management systems
- Obtain broad knowledge in concepts of database management systems

Intended Audience

This course is designed to be beneficial to students in Computer Science and Computer Engineering majors, as well as others interested in studying the development of software applications with large data management requirements.

Recommended Background

- CSE 465 or equivalent knowledge is desired, but not required.
- Fundamental concepts of Computer Science including data structures, analysis of algorithms, trees, graphs, sorting, etc.
- Programming experience will be necessary for the course (Python, JAVA, C or C++).
- ENGL 202 GWS – Effective Writing: Technical Writing is required.

Textbook

- R. Ramakrishnan and J. Gehrke, *Database Management Systems*, Third Edition, McGraw-Hill Publisher.

Lecture Format

Before every lecture, I'll have the slides printed out. Some parts/keywords in the printed slides will be blank which are meant for you to fill out during the lectures. The electronic slides uploaded will not include those filled out areas. You are encouraged to take these notes on your laptop or tablet so please inform us anytime you decide to go paperless, and we will reduce the copies we print.

Grading Policy

Final grades will be computed based on 100 points:

- **Exams (3) 40%:** Two midterms (13% each) and a final exam (14%)
- **Team project 35%:** Phase 1 (5%), phase 2 (10%), and phase 3 (20%).
- **Homework assignments (6) 15%:** Must be handed in by/on due date. At the end of the semester, only five out of six assignments' grades will be counted.
- **Quizzes (10) 10%:** Unannounced to be taken in class; there will be no make-ups.
- **Extra Credit:** Extra points can be earned by submitting bonus problems.

Grading Scale:

F	D	C	C+	B-	B	B+	A-	A
0	60	70	77	80	83	87	90	93

Graded exams and homework assignments will be returned back to you within a week from the submission date. If you see any mistakes in the grading, let us know within a week of receiving your graded deliverable back. You are encouraged to track your grades on ANGEL as the semester progresses to get a better sense of your class grade.

Homework

Several homework assignments will be given throughout the course. Homework is meant to be individual work, but discussion with classmates is encouraged. Homework should be turned in as a hard copy at the beginning of the lecture. The hardcopies can be handwritten or printed out, strictly on letter-sized papers and stapled on the top left corner; student ID (e.g. xyz123) and student name should be on the top right corner.

Exams

There will be two midterms and one final exam. You can bring a double-sided handwritten set of notes. The exams will test your understanding of the basic ideas and objectives of the class as covered in the course textbook and the lectures. Make-up exams are not allowed unless a student has conflicts with other courses or unavoidable severe situations (if so, please inform at least one week in advance or as soon as possible in the case of a serious medical or family situation).

Project

You will be performing a three-phase project as a team of 4-5 members. The goal of this project is for you to gain in-depth knowledge and hands-on experiences on certain issues of database design and implementation. Teams will make presentations and write project reports of each phase. Please make sure your project reports are properly bound when turned in.

Presentation and Review Dates

- Project Presentation – Part 1: September 18, 2015 (Fri)
- Project Presentation – Part 2: October 15, 2015 (Thu)
- Project Progress Demonstration: the week of October 26, 2015
- Project Final Demonstration/Review: the week of November 30, 2015
- Project Presentation – Final Presentation: December 10, 2015

Writing

This course satisfies the “Writing Across the Curriculum” course requirement. Accordingly, the quality of technical writing in your project reports and individual writing assignments (i.e., homework assignments) will constitute a significant portion of your overall course grade. You are expected to create high quality documents.

Participation

You will be permitted two excused absences provided you have given notification if emailed to both the instructor and the TA by 5:00 p.m. the evening before the missed day. If a quiz and/or attendance survey is given on one of these two days, then you are excused. This also means you will be given credit for attendance or allowed to make up the quiz. However, if you did not notify us properly in advance or these assignments fell on a day beyond your second missed day, you will receive a zero (0) for the assignment.

Late Policy

You should turn in any assignments on time. All written homework and project reports should be turned in at the beginning of class or before presentations. Any electronic submissions should be uploaded to ANGEL dropboxes before the deadline. No late assignments will be accepted unless an unavoidable circumstance arises. If so, please email both the instructor and TA by 5:00 p.m. the evening before deadline for approval.

Communication

To prevent your emails from going directly into our SPAM folder when contacting the instructor and TA, please write emails using the ANGEL communication function. Any forms of communication other than this will not be accepted (i.e., Facebook, Twitter, or texts) unless the ANGEL system is down. Also, if meeting the instructor or TA outside class time and office hours is desired, please make an appointment first.

Lecture Videos

All the lectures throughout the semester will be recorded and uploaded to our YouTube channel. Therefore, please note that your voice in class will be recorded in the videos. Please inform me if you would like to avoid being included into the videos.

Academic Integrity

Unless explicitly noted, all work is to be done on an individual basis. Any violation of the PSU's guidelines for academic integrity will result in no credit for the course and referral to the Student Affairs Office for disciplinary action.

Disabilities

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services' Website at <http://equity.psu.edu/ods/>. In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at <http://equity.psu.edu/ods/guidelines/documentation-guidelines>). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.