

CMPSC 431W: Database Management Systems

Fall 2016

Course Site:	Canvas & http://www.cse.psu.edu/~yul189/cmpsc431w		
Class	Monday, Wednesday, Friday at 8:00 – 8:50 a.m.		
Meetings:	Room 073 Willard		
Instructor:	Yu-San Lin	TA:	Weiling Li
Office:	337 IST	Office:	346D IST
Office Hours:	Monday, Friday, 10:30 – 11:30 a.m.	Office Hours:	Tuesday, Wednesday, 9:00 – 10:00 a.m.
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Midterm Exam Schedule

- Midterm I: 09/28/16
- Midterm II: 11/9/16
- Final: TBA

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

- CMPSC 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. At the end of the semester, eight out of ten quizzes' grades will be counted.
- **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

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 electronically to ANGEL's dropbox before deadline. For late homework, every late day takes 10% off, until there is no more point to take off.

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 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.

Phase Timeline

- Phase 1: 9/16
- Phase 2: 10/28
- Phase 3: 12/7 & 12/9

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. You have three late days in total in the semester to apply on the submissions if you need them. Once run out, late submissions will not be accepted.

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.

Academic Integrity

The University defines academic integrity as the pursuit of scholarly activity in an open, honest and responsible manner. All students should act with personal integrity, respect

other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts (refer to Senate Policy 49-20). Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students who are found to be dishonest will receive academic sanctions and will be reported to the University's Office of Student Conduct for possible further disciplinary sanctions (refer to Senate Policy G-9).

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.