CS 5513 - ADVANCED DATABASE MANAGEMENT
SPRING 2024
SECTION 1: 3:00 PM - 4:15 PM (Mon, Wed) in Room Carson Engineering Center (CEC) 438

Instructor:
Dr. Le Gruenwald
Office and Email: 233 DEH, ggruenwald@ou.edu
Office Hours: 4:30 PM-5:30 PM (Mon, Wed) via Zoom
(The Zoom meeting credentials for the office hours are posted on the course website)

Textbooks:
Reading Lists on Current Topics in Databases (provided by the instructor)

Prerequisite:
CS 4513 (Database Management) or Equivalent

Software:
Oracle and open-source database systems

Course Website:
http://canvas.ou.edu

Course Coverage:
This course will examine current applied and theoretical subjects in database systems. The topics to be covered in this course include:
Distributed Databases
Object-Oriented and Object-Relational Databases
Web Databases
Cloud Computing, Big Data Management, and NoSQL Systems
Data Warehousing and Mining
AI-Enabled Databases
Quantum Databases

Grading:

Group Project and Presentation	50%
Individual Homework	50%
Bonus Credit In-Class Participation	10%

BONUS CREDIT IN-CLASS PARTICIPATION: We will set up poll questions at appropriate time points during the lectures for you to take to get BONUS CREDIT. The poll questions given in a particular class are based on the materials discussed in that class and the class prior to that class only. The total number of bonus points of all the questions is 100 points, which is 10% of the total grade. All questions will be scored equally. If you answer a question correctly, you will get the full score for that question. If you answer a question wrongly, you will get 1/3 of the full score for that question. If you do not answer a question, you will get a zero score for that question regardless of the reasons.

ACADEMIC INTEGRITY: Individual Homework and Bonus Credit Poll Questions are individual work; they must be done by you only – no collaboration with anyone is allowed. Group Project and Presentation is group work; they must be done by you and your assigned group

members only – no collaboration with other groups or anyone else is allowed. The use of generative AI tools is not allowed in all homework assignments, group project components, and bonus credit poll questions unless explicitly stated otherwise in the requirements of a specific homework assignment or a specific project component. These tools include ChatGPT, Bard, Bing Chat, and other AI writing and coding assistants. Violations of these rules will be considered academic misconduct and will result in action as specified in the Academic Integrity Code at OU: http://www.ou.edu/integrity. Consult also the following web page for a Student's Guide to Academic Integrity at OU: http://www.ou.edu/integrity/students.

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RELIGIOUS OBSERVANCE: It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays without penalty.

ADJUSTMENTS FOR PREGNANCY/CHILDBIRTH RELATED ISSUES: Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact me as soon as possible to discuss. Generally, modifications will be made where medically necessary and similar in scope to accommodations based on temporary disability. Please see www.ou.edu/content/eoo/faqs/pregnancy-faqs.html for commonly asked questions.

TITLE IX RESOURCES: For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on-call 24.7, counseling services, mutual no contact orders, scheduling adjustments and disciplinary sanctions against the perpetrator. Please contact the Sexual Misconduct Office 405-325-2215 (8-5, M-F) or OU Advocates 405-615-0013 (24.7) to learn more or to report an incident.