# CS 5513 - ADVANCED DATABASE MANAGEMENT SPRING 2022

# SECTION 1: 3:00 PM - 4:15 PM (Mon, Wed) in Room Sarkeys Energy Center P0201

### **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

**Blockchain Databases** 

AI-Enabled Databases

**Quantum Databases** 

## **Grading:**

Project and Presentation 45% Final Exam 25% Homework 30%

# **University Policies:**

<u>Copyright Policy:</u> Sessions of this course may be recorded or live-streamed by the individual faculty member. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class, or upload them to any other online environment.

<u>Academic Integrity:</u> Homework and Exam are individual work; they must be done by you only. Project and Presentation are group work; they must be done by you and your assigned group members only. Cheating will result in action as specified in the Academic Integrity Code at OU:

http://www.ou.edu/content/dam/integrity/docs/Academic Misconduct Code.pdf. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students\_guide.html.

<u>Religious Observance</u>: 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.

**Reasonable Accommodation Policy:** Students requiring academic accommodation should contact the Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please see the Disability Resource Center website <a href="http://www.ou.edu/drc/home.html">http://www.ou.edu/drc/home.html</a>. Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible, so that we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.

Adjustment 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 temporary disability. Please see <a href="http://www.ou.edu/eoo/faqs/pregnancy-faqs.html">http://www.ou.edu/eoo/faqs/pregnancy-faqs.html</a> for commonly asked questions.

<u>Title IX Resources and Reporting Requirement</u>: 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.

<u>Final Exam Preparation Period</u>: Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU's Final Exam Preparation Period policy (<a href="https://apps.hr.ou.edu/FacultyHandbook#4.10">https://apps.hr.ou.edu/FacultyHandbook#4.10</a>).

**Emergency Protocol:** During an emergency, there are official university <u>procedures</u> that will maximize your safety.

**Severe Weather:** If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather 1. LOOK for severe weather refuge location maps located inside most OU buildings near the entrances 2. SEEK refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building. 3. GO to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows. 4. GET IN, GET DOWN, COVER UP. 5. WAIT for official notice to resume normal activities. Link to Severe Weather Refuge Areas, Severe Weather Preparedness - Video

Armed Subject/Campus Intruder: If you receive an OU Alert to shelter-in-place due to an active shooter or armed intruder situation or you hear what you perceive to be gunshots: 1. GET OUT: If you believe you can get out of the area WITHOUT encountering the armed individual, move quickly towards the nearest building exit, move away from the building, and call 911. 2. HIDE OUT: If you cannot flee, move to an area that can be locked or barricaded, turn off lights, silence devices, spread out, and formulate a plan of attack if the shooter enters the room. 3. TAKE OUT: As a last resort fight to defend yourself. For more information, visit <a href="http://www.ou.edu/emergencypreparedness.htmlShots Fired on Campus Procedure - Video">http://www.ou.edu/emergencypreparedness.htmlShots Fired on Campus Procedure - Video</a>

**Fire Alarm/General Emergency:** If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates: *1. LEAVE* the building. Do not use the elevators. *2. KNOW* at least two building exits *3. ASSIST* those that may need help *4. PROCEED* to the emergency assembly area *5 ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues. <i>6. .WAIT* for official notice before attempting to re-enter the building. *OU Fire Safety on Campus*