

Western Kentucky University
School of Engineering and Applied Sciences

CS351 - Database Management Systems I
Spring 2023

Instructor : Dr. Rong Yang
E-mail: Rong.Yang@wku.edu
Office : COHH 2111
Phone : (270)745-2940
Office hours: 10:15am–11:20am MWF, and by appointment

Credit Hours: 3.0

Prerequisites:

CS 221 or CS 290 with a grade of C or better

Course Description: An introduction to relational database management systems and their applications. Topics include relational model, relational algebra, SQL, indexes, security, integrity rules, effective database design methods, and database applications.

Course Outcomes:

- Understand the role of a database management system in an organization.
- Understand basic database concepts, including the structure and operation of the relational data model.
- Understand and apply basic database design principles, including E-R diagrams..
- Construct database queries using Structured Query Language (SQL).
- Apply database programming techniques in problem solving.
- Understand the principles of information integrity, security and confidentiality
- Implement administration policies for users

Major Topics to be covered in the Course:

- Fundamental concepts in databases and information systems
- Entity-relationship models (E-R) and modeling
- Relational data models and constraints
- Mapping ER models to relational models

- Database language SQL and associated programming techniques
- Client/server environment and web database programming
- Information security fundamentals related to database administration and applications

Course website:

<https://wku.blackboard.com> (WKU Blackboard)

Textbook:

zyBook CS 351: Database Management Systems I

Login to wku.blackboard.com, go to “Content” menu (on the left) of our course and click “zyBooks” link (on the right), you will be directed to zyBooks site. If you do not have an account with zyBooks, you will be asked to create an account first following the step by step instructions.

Attendance policy: Students are expected to attend class and to be prepared to contribute to the class discussion and to be on time for each class. Excessive non-excused absences may result in an *F* in the course. Cell phones should be turned off for the entire class period and computer usage during class time is allowed only for class related activities. Each class meeting some new and important material will be discussed. Naturally, there is a high correlation between regular attendance and good grades. Students who miss a class are responsible for all the material covered.

Internet Access and E-Mail: All students must obtain access to the Internet and an e-mail account (a Western email account is required. For more information about your western email account, please visit [WKU Account and Login](#)). If you have any questions about the course or need assistance, please contact your instructor by e-mail at any time.

Grade determination: Your final grade will be determined by using the usual 90-80-70-60 scale. A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, etc.

Assignments	45%
Midterm Exam	25%
Final Exam	25%
Participation	5%

No late assignments will be accepted unless you have a **documented medical reason**.

No make-up exams will be given unless you have a **documented medical reason**.

Cheating policy: All work handed in for credit by a student is to be the work of that student alone unless it is specified as a group project. It is your responsibility to not cheat and to protect your own work from being copied by others. Any deviation from this standard may result in an **F** in the course (for **EVERYONE** involved) in accordance with established University policy.

WKU Covid-19 Vaccine Statement:

All students are strongly encouraged to get the COVID-19 vaccine. Out of respect for the health and safety of the WKU community and in adherence with CDC guidelines and practices of all public universities and colleges in Kentucky, the University requires that a cloth face covering (reusable or disposable) that covers both the nose and mouth must be worn at all times when in public areas within all buildings. Students must properly wear face coverings while in class regardless of the room size or the nature of the classroom activities. Students who fail to wear a face covering as required will be in violation of the WKU Student Code of Conduct and will be asked to comply or will face disciplinary action, including possible dismissal from the University. Accommodations can be requested in special cases through the Student Accessibility and Resource Center (SARC): 270-745-5004 (voice), 270-745-3030 (TTY), or 270-288-0597 (video).

All students must immediately report a positive Covid-19 test result or close contact with a person who has tested positive to the Covid-19 Assistance Line at 270-745-2019. The assistance line is available to answer questions regarding any Covid-19 related issue. This guidance is subject to change based on requirements set forth by public health agencies or the office of the governor. Please refer to the Healthy on the Hill website for the most current information. www.wku.edu/healthyonthehill

Title IX Misconduct/Assault Statement:

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at

<https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf> and

Discrimination and Harassment Policy (#0.2040) at

https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf.

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

Ogden Student Course Attendance Statement

The faculty and staff of Ogden College of Science and Engineering are committed to providing you with learning experiences and opportunities. You must assume ownership of your education and be an active participant in the classroom and laboratory to take advantage of these opportunities. Active participation requires you to attend. Scientific studies have shown that attendance during scheduled classroom and laboratory meetings is directly correlated to your performance on assignments and exams and the potential to earn higher grades. Additionally, if you do not regularly attend class, you are missing important information about course topics, due dates, and assignment details that are crucial to your success in the course. Therefore, as a student enrolled in an Ogden course, you are expected to attend every class meeting and to inform your instructor regarding the reasons for any absences as soon as practical. Your instructor may incorporate class attendance/participation as part of the grading criteria.

ADA Accommodation Statement

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at sarc.connect@wku.edu. Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.