



**MIS 310 KO1: Database Management
Systems**

Spring 2024 Course Syllabus

Monday/Wednesday 10:30 AM - 11:45 AM

Instructor: Heung Gweon Sin

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Office Hours: Tuesday 3:30 PM to 4:30 PM

Course Description:

Introduces design, implementation, and querying relational databases with a focus on business requirements. Theoretical database concepts are accompanied with hands-on experience. Term project includes requirements analysis, design, and implementation of a substantial business database application.

Course Objectives:

Successful students will be able to:

- Describe the components of a database management system.
- Introduce the relational model and define key relational database terms.
- Apply the Structured Query Language (SQL).
- Design practical databases using Microsoft Access.

ISOM Learning Goals:

- Apply knowledge of information technology, operations, and business functions to assess, design, and improve business processes.
- Develop data organization, storage, and processing solutions to support organizational needs for information management. Also, develop skills in the area of business intelligence.
- Use knowledge of computer networks as part of IT solutions for improving business processes.

Course Format:

The course consists of a combination of lectures, discussions, and hands-on practice sessions. Please see the attached course outline for a tentative list of topics. There will be individual assignments, quizzes, a project, and exams.

Computer/Software/Email:

Access to the internet and a computer is required. Many of the course material will be online in our Blackboard course. Communication will be via Blackboard and/or your GMU e-mail only. Emails will be responded to within a 24-48-hour time period, excluding weekends.

- PC versions of Microsoft Access 2016 will be used in this class.
- School of Business requires every student to own a laptop. The sessions that require a laptop have also been specified in the tentative class schedule.

- George Mason University provides Microsoft Office 365 ProPlus to students at no cost via the Microsoft Student Advantage program. Office 365 ProPlus for PC users includes both Excel and Access 2013 or 2016. Please visit <https://its.gmu.edu/knowledge-base/how-to-install-microsoft-365-apps-for-enterprise-on-your-computer/> for more information. Please follow the tutorial to have the software ready on your laptop.
- For MAC users: During this class due to time and resources constraints, we are unable to provide advice and support for the use of Mac computers and other versions of this software. If you insist on using a Mac laptop during the class, you will have to install a virtual Windows on your Mac and then install the software on your virtual windows. Again, please remember that I will only demonstrate using Windows in class and I may not be able to help you during the class if you have problems with Mac (or other versions of software) due to time constraints, even though you are welcome to ask me for help after the class. It is your responsibility to make sure your assignments meet the required PC standards.

Required Texts and Learning Materials:

- Database Concepts, 9th Edition, by Kroenke and Auer, Prentice Hall, ISBN-13: 9780135188149.
- Additional material as determined by the instructor

Computer/Software/Email:

Access to the internet and a computer is required. Many of the course material will be online in our Blackboard course. Communication will be via Blackboard and/or your GMU e-mail only.

Grading Criteria:

Your final letter grade will be determined based on the weighted average of your scores, as stated below.

- Participation: 10%
- Assignments: 25%
- Project: 15%
- Quizzes: 10%
- Midterm Exam: 20%
- Final Exam: 20%

Grading Distribution:

COURSE AVERAGE	COURSE GRADE	COURSE AVERAGE	COURSE GRADE
97.00 and higher	A+	80.00 to 82.99	B-
93.00 to 96.99	A	77.00 to 79.99	C+
90.00 to 92.99	A-	70.00 to 76.99	C
87.00 to 89.99	B+	60.00 to 69.99	D
83.00 to 86.99	B	0 to 59.99	F

EXAMS:

No make-up exams will be given except in Documented Emergency.

Assignments and Quizzes:

Assignment due dates will be on the Blackboard course website. **You should check the Blackboard course website at least twice a week. The student is responsible for all assignments even if missed due to absence. Late assignments will not be accepted.** No make-up quizzes will be given except in Documented Emergency.

CELL PHONES SHOULD BE TURNED OFF IN CLASS

Honor Code Policy:

Honor System and Code: The Honor System and Code adopted by George Mason University will be enforced for this class:

<http://oai.gmu.edu/the-mason-honor-code/>

In your work on all written assignments, keep in mind that you may not present as your own the words, the work, or the opinions of someone else without proper acknowledgment. You also may not borrow the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgment. Please note: Faculty are obligated to submit any Honor Code violations or suspected violations to the Honor Committee without exception.

“To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this:

Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to their academic work. Please see the document on the next page for details on violations.

School of Business Recommendations for Honor Code Violations <i>Approved November 2021</i>	
UG: Non-Freshman Students (including transfer students)	
Type of Violation	Sanction
Plagiarism <ol style="list-style-type: none"> 1. Failure to cite/attribute sources 2. Representing someone else's work as the student's own (e.g., copying and pasting) 	An F in the class; referral to Writing Center; and relevant Academic Integrity seminar/training completion
Cheating <ol style="list-style-type: none"> 1. On a minor assignment (e.g., homework, quizzes) 2. Cheating on a major assignment or exam, submitting coursework from another course as original work 	<p>An F in the class; and relevant Academic Integrity seminar/training completion</p> <p>An F in the class; and relevant Academic Integrity seminar/training completion, and at least one semester suspension</p>
Lying (e.g., providing fraudulent excuse documents, falsifying data)	An F in the class; and relevant Academic Integrity seminar/training completion, and at least one semester suspension
Egregious Violation (e.g., stealing an exam; submitting coursework from an- other class as original work across multiple courses; lying to an employer about academic performance, false identification, or posing as another, in person or online)	An F in the class, relevant Academic Integrity seminar/training completion; and at least one-year suspension

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TENTATIVE COURSE SCHEDULE: THIS SCHEDULE MAY CHANGE.

Date	Topics	Notes
2/19-2/21	Course Introduction & Ch. 1: Database Fundamentals	
2/26-2/28	Ch. 1: Database Fundamentals Introduction to Microsoft Access	
3/4 - 3/6	Chapter 1: Database Fundamentals Introduction to Microsoft Access	
3/11-3/13	Ch. 2: The Relational Model Ch. 2: The Relational Model (Normalization)	
3/18-3/20	Quiz #1 Ch. 3: Structured Query Language (SQL)	
3/25-3/27	Ch. 3: Structured Query Language (SQL)	
4/1-4/3	Ch. 3: Structured Query Language (SQL) Midterm Exam	
4/15-4/17	Ch. 4: Data Modeling	
4/22-4/24	Ch. 4: Data Modeling	
4/29, 5/8	Ch. 5: Database Design Quiz #2	
5/13 5/20-5/22	Ch. 5: Database Design	
5/27-5/29	Ch. 5: Database Design Quiz #3	
6/3	Ch. 7: Data Warehouses, Business Intelligence Systems, and Big Data	
	Final Exam Please refer to the masonkorea website for the exam date/time	

Anti-Racism Statement

As a member of the George Mason University community, the **School of Business/ISOM** plays an integral role in building an educational environment that is committed to anti-racism and inclusive excellence. An anti-racist approach to higher education acknowledges the ways that individual, interpersonal, institutional, and structural manifestations of racism against Black individuals and other people of color contribute to inequality and injustice in our classrooms, on our campuses, and in our communities, and it strives to provide our community members with resources to interrupt cycles of racism so as to cultivate a more equitable, inclusive, and just environment for all of our students, staff, faculty, alumni, and friends, regardless of racial background.

To be anti-racist means:

- To make constant, conscious decisions to interrupt racism and cultivate equity, inclusion, and justice for people of all racial backgrounds, and in particular those from Black communities and other communities of color, who are most likely to bear the direct and indirect costs of systems of white supremacy;
- To interrogate histories of white supremacy and white-dominant culture, and to examine the ways in which these histories have impacted our individual beliefs, our interpersonal relationships, our institutional and structural policies and processes, and our entire society;
- To make a commitment to being responsible for our own relationships to, and actions within, systems of white supremacy; and
- To cultivate a practice of self-awareness and self-reflection that allows us to critically evaluate our own role in upholding white supremacy and identify the ways we can interrupt cycles of racism at the individual, interpersonal, institutional, and structural levels.

We believe that the work of anti-racism starts with each individual, and that in cultivating an anti-racist approach to research, scholarship, and practice, our students will build a skillset rooted in principles of equity, inclusion, and justice that they will carry with them throughout their lives.

For more information on how to continuously cultivate the practice of anti-racism, see this guide from the National Museum of African American History and Culture on how to be anti-racist:

<https://nmaahc.si.edu/learn/talking-about-race/topics/being-antiracist>.

[This anti-racism statement was prepared by Dr. Charles Chavis, Assistant Professor in the Rosalyn Carter School of Peace and Conflict Resolution.]