

Course Information

Semester & Year:	Spring 2025
Course Title:	SQL Server Database
Course Prefix & Number:	CIS 276DB
Section Number:	29123
Credit Hours:	3.0
Start Date:	January 30, 2025
End Date:	May 1, 2025
Room Number:	CM 447
Meeting Days:	Thursdays
Meeting Times:	6:00 PM – 8:30 PM

Course Format

The course format for this course is **Hybrid**. We meet weekly on Thursdays and attendance is **required**.

A hybrid class consist of **both** in person meetings and online coursework. In-person meetings will **not** be recorded or streamed live.

Students are strongly encouraged to take advantage of the study lab and office hours for questions and homework help.

Instructor Information

Instructor:	Dr. Sean Geraghty
Email: Phone:	Canvas Message (preferred) or <u>sean.geraghty@scottsdalecc.edu</u> 480-423-6257 (CIS Department)
Office Location:	CM Building, Office CM-408 Online: <u>Sean Geraghty's Virtual Room – CIS276DB</u>
Office Hours:	Mon 3:00 pm – 5:00 pm; Tue, We, Thu 9:00 am – 10:00 am
CIS Study Lab: Lab Hours: Lab Schedule:	CM Building, Room CM-446 Mon 12:00 pm – 1:00 pm; Tue, Thu 2:00 pm – 3:00 pm https://cisatscc.com/CISStudyLabSchedule.pdf

Course Description

A broad overview of the MySQL database. Includes Structured Query Language (SQL) instruction for data definition, data manipulation, and data retrieval. Develops knowledge and skills required to model and create new databases, manage users, authentication, create stored procedures, and develop backup/restore strategies.

Prerequisites

CIS105 or CIS117DM or permission of instructor

Course Competencies

The objective of this course is to introduce the fundamental concepts, terminology, and major application of relational database systems.

- 1. Demonstrate an understanding of data analysis involved in relational databases. (I)
- 2. Develop an Entity Relationship Diagram (ERD) to optimize a database's design (I)
- 3. Demonstrate an understanding of database server installation and configuration (III)
- 4. Demonstrate the ability to use SQL and the client interface tools. (III, IV, V)
- 5. Use server-side scripting languages to access a relational database for dynamic content presentation. (III, IV, V)
- 6. Demonstrate the ability to add/manage users and authentication. (IV)
- 7. Create database objects. (V)
- 8. Create a new SQL database. (VI)
- 9. Implement a backup/restore strategy. (VI)

Texts and Course Materials

Murach's SQL Server 2022 for Developers, Bryan Syverson and Joel Murach, 2023. ISBN-13 978-1-943873-06-7. You can acquire either the paperback or an eBook (or both).

Course Technologies

View the <u>Accessibility Statements & Privacy Policies</u> of technologies used in this course.

Maricopa Systems

This course uses key Maricopa systems for course management and communication.

- Canvas Learning Management System
- Student Maricopa Gmail Account

Synchronous Communication Tools

This course will occasionally make use of web conferencing and/or other synchronous course tools.

- Big Blue Button (virtual office)
- Google Meet

Streaming Media/Audio/Video Tools

This course uses webcasting, lecture capture systems, YouTube, and/or other streaming media services.

• YouTube

Student Assignment Tools

This course requires students to participate in or submit assignments using desktop or cloud-based applications.

- Google products
- VMWare

Course Policies

The following are policies specific to this course. Students are also responsible for the college policies included on the <u>Student Regulations</u> page of the Maricopa Community College District website.

- All assignments **MUST** be submitted by the published **DUE DATES**.
- You MUST complete this class by the course end date of May 1, 2024.

Generative Artificial Intelligence (AI) Policy

Opening Statement Regarding Generative Artificial Intelligence (AI)

The World Economic Forum defines generative AI as "a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more."

Some examples of generative AI tools include but are not limited to: ChatGPT, Google Bard, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

No Generative Artificial Intelligence (AI) Allowed

In this class, all work submitted must be your own. The use of generative AI tools will be considered academic misconduct (see Administrative Regulation 2.3.11 1.B(b)) and will be treated as such. If you are unsure if the tool or website you are using is a generative AI tool, please contact the instructor for further clarification before using the tool or website.

Grading Standards & Practices

Assignments

Assignment Name	Percent of Grade
Assignments	40%
Quizzes	30%
Midterm Exam	10%
Final Exam & Project	20%
TOTAL:	100%

Final grades are based on the following scale:

Grade Scale

Letter Grade	Percentage Range
Α	90 – 100%
В	80 - 89%
С	70 – 79%
D	60 - 69%
F	0 – 59%

Weekly Communications

Each academic week I will post a Canvas announcement that will contain important information regarding the material covered that week and important exam notifications.

Late Assignments

- Every assignment and quiz will have a due date, and each assignment builds upon the last.
- Assignments and quizzes turned in beyond that time frame will receive a 0.
- The midterm and final exams must be turned in by the due date.
- Late submissions will not be accepted.

Grading Feedback and Response Time

- Students are encouraged to ask questions, via Canvas message or e-mail (your Maricopa Gmail account) as they work through assignments.
- Students can expect an e-mail/Canvas message response in 24 to 48 hours, Monday through Saturday.
- It is your responsibility to monitor your grades in Canvas. All assignments will be submitted through Canvas. Your grade and feedback can be reviewed in Canvas.
- Students can expect assignments to be graded within 1 week of the due date.

Academic Conduct and Honesty

In addition to the general college Academic Honesty policy stated in the Canvas course under the Course and College Policies section, the following additional polices apply to this course:

The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the College or other sanctions as specified in the Scottsdale Community College Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism or facilitating such activities. Specific examples of academic misconduct relating to this course include:

- Copying another student's work and turning it in as one's own.
- Submitting another student's file as your own.
- Working jointly on an assignment, with each student turning in a copy of the joint product, creating the impression that each student completed the work independently.

Each student must complete his/her own work on his/her own computer with his/her own data files. If you are caught turning in another student's work, **both students will** receive a zero and may be withdrawn for academic misconduct from the class with a grade of 'Y'. Cheating on an exam will result in immediate withdrawal for academic misconduct from the course with a grade of 'Y'.

Attendance Policy

Attendance is required. In accordance with state law, attendance will be taken during each class. If you are absent, arrive late for class, or leave early, you are responsible for ALL material covered during that class meeting.

In addition to the general college Withdraw policy, the following additional withdraw polices apply to this course:

- Students must participate in this course within the **first three (3) days** of the start date or they will be withdrawn.
- After **3 absences** (excused or unexcused), or lack of participation for **2 consecutive** weeks, you may be withdrawn from the class.
- Participation is defined as follows:
 - Submitting homework on or before due dates
 - o Participating in discussions/critiques over the course of a due date

- Completing exams/quizzes on or before due dates
- Just logging into the Canvas course does **NOT** count as participation
- If you decide to drop this class, you must submit a Withdrawal Form to officially withdraw.
- The official date of withdrawal is the last date of attendance as determined by the student's withdrawal or as reported by the instructor. The official date of withdrawal will determine the degree of refund, if any. See Refund Policy in the <u>2024-2025</u> <u>College Catalog</u>.
- The last date to request a withdrawal from your instructor in this course is: Thursday, April 24, 2025

Instructional Contact Hours (Seat Time)

This is a three (3) credit-hour course. Plan to spend at least three hours on course content or seat time (direct instruction) and six hours on homework weekly.

CIS Study Lab

We urge CIS students to utilize the **CIS Study Lab in CM 446**. This lab is used for hands-on classwork and is staffed with CIS instructors. Any SCC student currently enrolled in a CIS course may use this lab. A detailed lab schedule with instructor-assigned times and locations is posted in your Canvas course.

For **Spring 2025**, the CIS Study Lab provides both in-person and virtual hours. Please check the <u>current schedule</u> for times and locations.

Online Tutoring

NOTE: It is highly recommended that you utilize our CIS Study Lab (see above section) because SCC CIS instructors are more familiar with your coursework, instructor expectations, and assignments.

However, if you need to work with a tutor outside regular hours, online and hybrid students now have access to a 24/7 online tutoring service called Brainfuse. Brainfuse provides online tutoring in a variety of academic subjects. Each student may utilize up to 6 hours of online tutoring through Brainfuse per semester, and has the option of requesting additional time if needed.

To access Brainfuse and begin working with a tutor:

- 1. Visit the <u>SCC Online Tutoring Services Through Brainfuse</u> page (https://www.scottsdalecc.edu/students/tutoring/online-tutoring)
- 2. Click the Visit a tutor online button
- 3. Enter your MEID and password
- 4. Choose your topic and subject
- 5. Click the **Connect** button

Please use your time effectively and be prepared with your questions before you connect to a tutor. Tutors and students communicate in real-time so whatever you type, draw, or share on the screen, the tutor sees, and vice versa. You may also want to have screenshots ready if applicable. All Brainfuse sessions are recorded for review later.

Learning Tools and Your Privacy and Security

SCC utilizes a variety of software applications and web-based tools operated by third party vendors to support student learning. To allow student access to the application, site or tool, certain identifiable information may be required to establish a user name or password, and submit work and/or download information from these tools. Inherent with all internet-based tools, there is a risk that individuals assume when electing to use these tools, as they may place information at risk of disclosure.

To use learning tools responsibly, please observe all laws and the Maricopa Community College District <u>Student Conduct Code</u>, such as copyright infringement, plagiarism, harassment or interference with the underlying technical code of the software. As a student using a learning tool, you have certain rights. Any original work that you produce belongs to you as a matter of copyright law. You also have a right to the privacy of your educational records. Your contributions to learning tools constitute an educational record. By using the tool, and not taking other options available to you in this course equivalent to this assignment that would not be posted publicly on the internet, you consent to the collaborative use of this material as well as to the disclosure of it in this course and potentially for the use of future courses.

SCC Land Acknowledgement

Scottsdale Community College (SCC) credits the diverse Indigenous people still connected to the land on which we gather. Our college resides on the tribal territory of the Salt River Pima-Maricopa Indian Community (SRP-MIC). SRP-MIC is a federally recognized nation - one of 22 Arizona Indigenous nations and one of 574 across the United States. Attached to this physical space is a painful history of forced removal and the resulting intentional genocide of its Indigenous people. We remain appreciative of

our ability to teach, learn and serve in a space of such importance and reverence. SCC acknowledges the land on which we are situated today as the traditional land and home, established by Executive Order on June 14, 1879, of two distinct tribal nations: the Onk Akimel O'odham (Pima) and the Xalychidom Piipaash (Maricopa) people. We take this opportunity to thank the original caretakers of this land. We offer our respect to their Elders and to all O'odham and Piipaash people of the past, present and future.

Week #	Date	Topic(s)
1	Jan 30	Class Preparation, Intro to SQL
2	Feb 06	Using the SELECT, WHERE, and ORDER BY Clauses
3	Feb 13	Table Joins and Summary Scripts
4	Feb 20	Action Scripts and Subqueries
5	Feb 27	Using Scaler Functions
6	Mar 06	Database Design
7	Mar 13	NO Class – Spring Break
8	Mar 20	Table Scripting / Scripting Views
9	Mar 27	Programming Basics
10	Apr 03	Stored Procedures and User-Defined Functions
11	Apr 10	Triggers and Events
12	Apr 17	Database Administration
13	Apr 24	MySQL and PHP
14	May 01	Semester Project Presentations

CIS 276DB, Section 29123 – Spring 2025 Course Outline

Students are responsible for the information contained in this syllabus, the Syllabus page in your Canvas course and the **College Policies & Student Services** page found in the First Steps module of your Canvas course. Students will be notified by the instructor of any changes in course requirements or policies.