

# Course Syllabus

CISC 401

Database Management and Design  
For Healthcare Professionals

## Instructor

**name:**

Dan Sullivan

**email:**

dsullivan@sdccd.edu

**zoom:**

[zoom link](#)

**office hours:**

Drop into my Zoom Conference Wednesday afternoons between 12:00P & 2:00P (PST).

I am also available after class on Wednesdays, usually for at least 30 minutes.

These are open office hours and you're welcome to drop in and bring your question or just visit.

I can also schedule other times for one-on-one discussions if this time is inconvenient.

**discord:**

join the discussion

- [Discord link](#)

I am not online on Discord all the time, but I do check in here often and there are usually other students to share ideas there too.

***more about me***

[link](#)

## Schedule

**course number:**

CISC 401

**term:**

Fall 2024

**section:**

72064

**schedule:**

weekly: Wed 5:00 PM - 8:00 PM

term: 19 Aug 2024 - 16 Dec 2024

**location:**

Mesa S-304

**total units:**

4 Units

## About

### Database Management and Design for Healthcare Professionals

**catalog description:**

This course discusses advanced topics in database management and design. The concepts covered in this course include programming language, current database structures utilized in healthcare, effective communication with end users and key stakeholders, identifying goals and requirements in database projects, performing end user analysis, and creating data models for performance improvement. Students explore all aspects of the data lifecycle from capture to storage and utilization to destruction.

*This course is designed for health information management majors.*

**limitations:**

Must be admitted to the Health Information Management program

**advisory:**

Computer and Information Sciences 181 with a grade of "C" or better, or equivalent.

## Outcomes

### Course Learning Outcomes

Upon successful completion of the course the student will be able to:

1. Conduct requirement analysis of healthcare information systems.
2. Use SQL to create databases, create tables, insert data into tables, and select data from tables for sample healthcare databases.
3. Use SQL to create primary keys, foreign keys, and referential integrity constraints for sample healthcare databases.

### Program Alignment

#### Health Information Management Program Learning Outcomes

- Apply the laws of patient record confidentiality, privacy and compliance.
- Use and design data, databases and healthcare systems.
- Demonstrate and apply knowledge of the principles of personnel management.
- Develop a financial plan for a health information department.
- Demonstrate mastery of the principles of health information management.
- Analyze healthcare data, assimilate data and information.

## Textbook(s) & Tools

### Textbook(s)

California Community Colleges (CCC) has a shared goal supported by the Zero-Textbook-Cost (ZTC) program to "reduce the overall cost of education for students and decrease the time it takes students to complete degree programs offered by community colleges."

There are many excellent references and textbooks available to help students learn this subject, and this course will require some study and research initiative, but the study materials required and recommended for the class will rely on publicly available and open source resources.

These are examples.

### **Database Design - 2nd Edition**

Adrienne Watt, City University

2014

BCcampus

[link](#)

### **Transact-SQL: The Building Blocks to SQL Server Programming**

Gregory A. Larsen

2024

redgate

[link](#)

### **Learning SQL eBook (PDF)**

*various*

RIP Tutorial

[link](#)

### **Essential SQL**

Krzysztof Kowalczyk

Essential Programming Books

[link](#)

## **Software Tools**

We will be demonstrating and exercising database ecosystems including SQLite (open source) and Microsoft SQL Server and exploring various access mechanisms. All of these tools are either public domain or licensed at no cost for student use.

In most cases, classroom computers will be configured with all relevant software and tools. Where applicable, installation of any or all of these to student-provided personal computers is allowed and will be discussed and described in class. Installation of these prior to class is not required or suggested.

### **Microsoft SQL Server 2022, Developer Edition**

This server product is easily installed on Windows PCs, and can be used in a Docker image on MacOS.

### **SQLite**

file-based database for small applications and proof-of-concept

### **Microsoft Azure Data Studio**

A modern open-source, cross-platform hybrid data analytics tool designed to simplify the data landscape.

## **Policies**

### **Administrative**

[All students should be aware of the Student Rights and Responsibilities Policy\\_\(5500\).](#)

#### **Attendance.**

Per district policy:

When absences exceed twice the number of hours that a class meets in one week for full semester-length classes, the instructor may institute an excessive absence drop. For short-term classes, the number of acceptable absences is proportionately shorter. Failure to attend the first class meeting may result in the student being dropped from the class.

It is the student's responsibility to officially withdraw from any classes not attended and to discuss anticipated absences with the instructor.

*what does this mean?*

I will record attendance, but students will not earn points for *just showing up*.

If you have missing assignments and/or Canvas metrics indicate no- or low participation with the course materials, You may be dropped from the class for *excessive absences*.

I will make an effort to contact you through email before taking such action.

Keep up with your assignments, and this won't be an issue.

## Grading

### Grades

#### Assignments and Grading Policy

Assignments and exams are to be completed and turned in on the due date. Grading is based on accumulated points for the following assignments:

#### Points

assignment	points	percent
Discussions (6)	300	21%
Exercises (6)	600	43%
Quizzes (5)	500	36%

score

#### Grades

Final letter grades are earned based on the following point/percentage scale below. Everybody is expected to take an active part in the class and complete the assigned work. Students do not earn points for *attendance*.

Percent	Grade
90 - 100%	A
88 - 89%	B+
80 - 87%	B
78 - 79%	C+
70 - 77%	C
60 - 79%	D
< 60%	F

letter grades

## ***Plagiarism***

Plagiarism hurts your personal & professional reputation, the personal & professional reputation of others, and the reputation of the college. Unless specified otherwise, all assignments in this class are to be completed and turned in on an individual basis. Even in the software industry, where most projects are done in a team environment, team members are expected to contribute substantial original effort to their assigned portion(s) of a project. Information technology professionals are expected to work to a high professional and ethical standard.

The bottom line: You will not gain any benefit from this course if someone else is doing all the work and thinking for you. Plagiarism will not help get you ahead in future classes that build upon this one nor will it help you get ahead in the workplace!

You are encouraged to share ideas and help each other but outright copying another's work (source code, documentation, etc.) will result in a zero score for all parties involved. Repeated offenses may result in referral for disciplinary action pursuant to the College guidelines for discipline in plagiarism matters. If you use the campus lab computers, make sure you take your personal storage media with you when you leave and don't leave hard copy source code/documentation lying around the lab or store your files in publicly accessible network folders.

<b>Acceptable</b>	<b>NOT Acceptable</b>
Assisting a classmate with a problem. That is, helping them find and correct an error in their lab or project code.	Allowing another student to outright copy your lab or project code.
Allowing another person in the class to "sanity check" your application design and/or review lab/project documentation for typos, logic flaws, missing details, etc.	Allowing others to outright copy your design work and documentation.

**Acceptable**

Quizzing each other prior to an exam, discussing the textbook chapter.

Using a block of code from a textbook, magazine or website and adding comments to cite where you found it.

If you use the campus lab computers, before leaving the lab, check the printer for any print jobs that are yours. Check your workstation to make sure files are saved to your removable media (i.e., USB storage device). Your removable media is removed/disconnected from the computer and is in your possession. You are logged out and your workstation is shut down.

**NOT Acceptable**

Copying another student's answers or providing other students assistance during a quiz or exam.

Copying and pasting blocks of code from a web site or CD without citing the source.

Leaving printouts, files and/or storage media out in the open where somebody can plagiarize your work.

examples

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