

CSI-300 Database Management Systems

Instructor: Vikas Thammanna Gowda

• **Division:** Information Technology & Sciences

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• Office Location: West Hall 100

Office Hours: M/T 1:30 PM to 3:30 PM
 Classroom Location: Joyce, Room 201

■ Classroom Day/Time: CSI-300-01: T/F 10:00 AM – 11:15 AM

CSI-300-02: T/F 11:30 AM – 12:45 PM

Prerequisite: CSI-270 or CSI-281

How to use this syllabus

This syllabus provides you with information specific to this course. This document should be viewed as a course overview; it is not a contract and is subject to change as the semester evolves.

*** Changes will be announced via CANVAS and during lectures ***

Academic Integrity

In addition to skills and knowledge, Champlain College aims to teach students appropriate Ethical and Professional Standards of Conduct. The Academic Honesty Policy exists to inform students and Faculty of their obligations in upholding the highest standards of professional and ethical integrity. All student work is subject to the Academic Honesty Policy. Professional and Academic practice provides guidance about how to properly cite, reference, and attribute the intellectual property of others. Any attempt to deceive a faculty member or to help another student to do so will be considered a violation of this standard.

The student's work must match the instructor's intended purpose for an assignment. While the instructor will establish the intent of an assignment, each student must clarify outstanding questions of that intent for a given assignment. The full text of the Academic Honesty Policy is in the *Student Handbook*.

I have zero tolerance for academic dishonesty. This means that a first offense results in an F for the course and the student shall be reported.





Course Description

This course will introduce students to database design, Structured Query Language (SQL), normalization, and relational database theory. Traditional relational databases will be contrasted with NoSQL paradigm databases including document-oriented, key-value store, and graph. Students will gain hands-on experience writing database applications.

Measurable Student Learning Outcomes

After passing this course, students will be able to:

- 1. Understand relational database design theories
- 2. Able to design Entity/Relationship (E/R) data models
- 3. Able to convert the data model into relation schemas and make them normalized based on the real-world situation
- 4. Understand SQL syntax and able to construct SQL queries
- 5. Able to implement a database given a schema design
- 6. Able to develop client programs to access the database

Topics Covered and Tentative Schedule

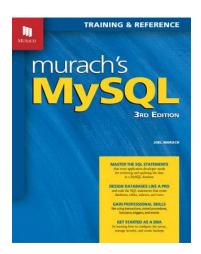
https://docs.google.com/document/d/1UnplBNQHtYaQFTL5GEHYoLkmnx8Y3Xh4UrO j6wb2as/edit?usp=sharing

Textbooks









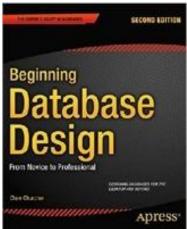
Murach's MySQL

Author: Joel Murach

Publisher: Murach, 2019

Edition: 3rd

ISBN: 978-1-943872-36-7

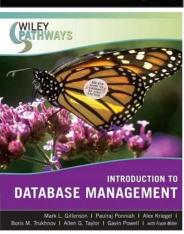


Beginning Database Design

DO NOT PURCHASE!

Author: Clare Churcher Publisher: Apress, 2012 ISBN: 978-1430242093

This book is available through Safari Books and the Library. The first module on Canvas has a link to the book. You will need to use your Champlain College login to access the book.



Introduction to Database Management THIS BOOK IS OPTIONAL

Author: Gillenson et al.

Publisher: Wiley, 2008

ISBN-13: 978-0-470-10186-5

Book Resources: Click Here



Other Equipment

Students are required to have complete access to a functioning laptop or PC with internet capabilities.

• MySQL Community Server 8.0.40:

There is no cost to install and run this server. You can download the client version it by following the instructions provided in class. This is the most current release of the MySQL Community Edition server. Note that MySQL provides community edition servers for many operating systems. Be sure to choose the one that works on your system. See below for a link to download the server and its components.

To download the server, please <u>use this link</u>.

• MySQL Workbench 8.0.40:

This is the standard tool Database Developers use to build and maintain a MySQL database. It allows developers to design databases, create code, manage databases and perform database administration functions. Use the link below to download the server and its components. This course uses the most current of version of Workbench. To download the software, use the link provided above. The MySQL Community Server installer includes Workbench.

Attendance: Regular class attendance is essential for your success in this course. Many classes will include discussions and/or activities that are critical to your learning experience. If you miss a class, it is your responsibility to:

- 1. **Meet with the Instructor**: Schedule a meeting with the instructor to discuss what you missed and how to make up for it.
- 2. **Consult Your Peers**: Reach out to your classmates to gather any notes, solutions, or insights from the missed session.



Grading Policy

Your letter grade will be based on the following components:

Quizzes: 25%

Final Exam: 15%

Projects: 60%

Grading Scale

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>= 93.00 A 73.00 - 76.99 C
90.00 - 92.99 A-
87.00 - 89.99 B+
83.00 - 86.99 B 63.00 - 66.99 D
80.00 - 82.99 B-
60.00 - 62.99 D-
77.00 - 79.99 C+
= 59.99 F
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Note: The grades will be curved only if the average attendance of the entire class is 90% or higher throughout the semester.

Quizzes: You will have 5-6 quizzes. They will be a closed-book quiz.

Note: Quizzes will be held at the beginning of the class, and no additional time will be given to latecomers.

Final exam: Held during the final exam's week. It will be a closed-book exam.

Project: To find out more information about the semester projects, please log into Canvas and access this course. All of the requirements, particulars and all deliverables are contained in this section of the course in Canvas. You are totally and completely responsible for meeting all project requirements. Failure to meet these requirements will lead you to earn an "F" for the project. This will negatively impact your grade in this course. Feel free to discuss any aspects of the project with your instructor.

Note: A requirement of this course is that All SQL code you submit is in a .sql file. Failure to do this will lead to a failing grade on any project.



Contact Policy

Feel free to email me any questions or concerns following these guidelines:

- Always use the course name in the subject line of the email.
- Remember to sign your name.
- Always email me from your Champlain College email address. Email sent from personal email servers like Gmail, Yahoo, etc., tend to end up in my spam folder, and I never see them.

Response Time

No more than 2 days. After 2 days, assume something happened and reach out again.

Missed Assignments and Exam

Normally, assignments/exams cannot be made up. If an emergency arises, it can be handled on a case-by-case basis.

<u>IMPORTANT</u>: Notify your instructor as early as reasonably possible. It is always much easier to come to an agreement if the instructor has prior knowledge or is made aware as early as reasonably possible.

Students with Disabilities

If you believe that you have a disability requiring accommodation in this class, please contact the Coordinator of Services for Students with Disabilities as soon as possible. You will be able to schedule a meeting with either Skip Harris or Maggie Riley and have your documentation reviewed. During that meeting Skip or Maggie will provide you with letters for your faculty, which will detail your needed accommodation. It is the student's responsibility to seek and secure accommodation prior to the start of an exam or project.

