

HUDSON COUNTY COMMUNITY COLLEGE

Database Design and Concepts – CSC 226

Credits: 3

Prerequisite: CSC 111 or CSC 115 or CSC 117 or CSC 118

Instructor:

Office Location:

Office Hours:

Phone:

E-mail:

Required Text

Database Processing: Fundamentals, Design and Implementation, 15th Edition, by David M. Kroenke

Course Description

This course provides both the basis for a solid education in the fundamentals of database technology and introductory coverage of SQL. The topics covered include database management systems, relational database systems, query languages, and application development systems.

Course Objectives

- Learn fundamental data modeling principles
- Apply relational modeling in database design
- Identify possible problems in database systems and discuss how they may be alleviated or overcome
- Design and build a relational database for a small business application for user requirements.
- Use suitable query languages to interrogate a relational database

Attendance

Regular attendance is vital. If you miss one day’s lecture, it will be very difficult for you to understand the following lecture because each lecture is based on the previous one. A student who is absent more than two times will lose an entire grade (for example, if you currently have an A, you will now have an A-). Each subsequent absence will cause you to lose an additional grade. It is **your** responsibility to make up any missed work. If you must miss a class, you must provide me with either a doctor’s excuse, a note from the counselor, etc.

Evaluation Criteria

Your final grade will be based on the following criteria:

<u>Item</u>	<u>Weight</u>
Four Exams	80%
Project	20%

Makeup Exams

Makeup exams will be given only in extenuating circumstances. It is your responsibility to let me know that you missed an exam. All makeup exams are more difficult than the original.

ACADEMIC INTEGRITY

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students *earn* college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test.
- Submitting the same project in more than one course, without discussing this first with instructors.
- Submitting *plagiarized* work. *Plagiarism* is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Disability Support Services

Students with disabilities who believe that they might need accommodations in this class are encouraged to contact the Disability Support Services at 201-360-4157 as soon as possible to better ensure that such assistance can be implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a physician, licensed learning disability teacher (LDTC), psychologist, psychiatric nurse, licensed social worker or licensed professional counselor, who is qualified to assess the disability that the student claims to have and note recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student, and the individual student.

Classroom Recording Policy

Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The complete classroom recording policy is listed in the student handbook.

Diversity, Equity, & Inclusion Statement

Hudson County Community College (HCCC) fosters a welcoming environment that celebrates and encourages culturally responsive curricula, respects diverse viewpoints, and values discussions without censure or hostility. Our classrooms are strengthened by embracing all student voices and identities. The President's Advisory Council on Diversity, Equity, and Inclusion (PACDEI) encourages students to review DEI resources and initiatives at the following link:
<https://www.hccc.edu/abouthccc/dei/pacdei.html>

Email Policy

Mandatory Use of HCCC Email Address: Members of the HCCC community are required to check their official HCCC email address to stay current with college and course communications. All college business communication between faculty, students, and staff must be sent via an official HCCC email address. If an employee or student elects to forward or link his/her HCCC email to a separate and private account, that individual remains responsible for all material transmitted to that account. Employees of HCCC shall not be responsible for any material that remains undelivered, due to defects in the private non-HCCC accounts. Failure in the operations of private email accounts shall not be cause for excuse from communications between the student and the HCCC employee. Students that encounter difficulty with HCCC email should view the FAQ's section on the Website.

Emergency Notifications

In case Hudson County Community College is closed due to unforeseen circumstances such as inclement weather, loss of power, etc., students are to call or check the college website and check email accounts for instructions and updates, when possible. HCCC main# (201) 714-7100 or <http://www.hccc.edu>. Alternatively, please check Canvas and your college email for important posts regarding classes and the College.

Financial Aid & Attendance Statement

Federal regulations require that students earn their financial aid funds by attending class. Professors collect and report attendance information to verify financial aid eligibility. Failure to begin attending a course may negatively impact the student's financial aid enrollment level and eligibility. If you have any questions, please contact the Financial Aid office at financial_aid@hccc.edu or 201-360-4200.

COVID-19 Syllabus Statement

HCCC strongly recommends that all members of the college community get the COVID-19 vaccine and booster. Additionally, N95 masks are available at building entrance security desks for anyone who would prefer to wear one. Everyone should continue to monitor themselves for symptoms and stay home if they are sick. Please refer to the Return to Campus webpage: (www.hccc.edu/community/returntocampus/index.html), the Return to Campus FAQs: (www.hccc.edu/community/returntocampus/faq.html), and all Return to Campus email communications for more information and updates.

Weekly Calendar

Week 1

Introduction (Chapter 1)

Week 2

Introduction to Structured Query Language (Chapter 2)

Week 3

Chapter 2 continued.

Week 4

The Relational Model and Normalization (Chapter 3)

Test 2

Week 5

Chapter 3 Continued

Week 6

Database Design Using Normalization (Chapter 4)

Week 7

Chapter 4 Continues

Week 8

Test 2

Week 9

Data Modeling with Entity Relationship Model (Chapter 5)

Week 10

Chapter 5 Continues

Week 11

Transforming Data Models into Database Design, Chapter 6

Week 12

Test 3

Week 13

Creating Tables in SQL , Chapter 7
Week 14

Review

Week 15

Test 4