

Database Design & Management - COMP-1200-SD1

3 Credits – Spring 2023 – ONLINE

Instructor: Mr. Michael Kelly

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<u>Emailing</u>: My email address is kelly@ccri.edu. If you put <u>my.ccri.edu</u>, you will be sending an email to a student at CCRI and not to me. Any time you want to email me for this class, you **must** have **COMP-1200-SD1** in the subject. If you do not do this, I may not give you a response within 24 hours.

<u>Course Description</u>: This course is an introduction to database theory and database design. Emphasis on database terminology and the roots of database theory will prepare students to utilize data modeling techniques including Entity Relationship Design and Normalization to create a database environment. Structured Query Language (SQL) is used to illustrate techniques for maintaining and working with a database. Finally, the concept of Concurrency Control will be introduced to discuss the management of a database in a distributed/multi-user environment.

<u>Course delivery mode</u>: The course is broken into two sections: lecture and hands-on assignments. We will be using Blackboard for course materials assessments, and testing.

<u>Course expectations</u>: Students are to following rules as stated in the Student Handbook (http://www.ccri.edu/advising/student_services/handbook.html).

Student Learning Outcomes:

As a result of this course, a student will be able to:

- Become familiar with database language and terminology
- Explore the different database models
- Understand the fundamentals of the Relational model
- Become familiar with the Entity Relationship model and construct E-R Diagrams
- Understand the concept of Normalization and normalize database tables
- Develop a database application utilizing the course concepts and techniques

Required Textbook and Material:



Database Systems – Design Implementation & Management 12 edition* Microsoft Access 2019, Comprehensive*

* Wait to purchase your access code until you receive an email about different price options

If you need help signing into MindTap, please call Cengage Help Support at: 1-800-354-9706

Course content draws upon material in the Database Systems book. The Access book is a supplemental reference to those unfamiliar with Microsoft Access; I will provide PowerPoint supplements as an alternate reference for the Access content as an alternative to the Access text.

Meeting Schedule:

All Access assignments can be found in Blackboard and contain the data files needed.

The Access book is *not required* for the Access assignments.

Week of	Topic/Discussion	<u>Chapter</u>	<u>Assign Due</u>
3/5	Class Introduction /		
	General Database Discussion	1	
	Database Systems	1	
3/12	Data models	_	
	Getting Started with Access	2	
3/19	The Relational Database Model	3	Access Assignment 1
	Relationships in Access		(submitted in Blackboard)
	Exam Review		
3/26	Exam #1 (Chapters 1, 2, & 3)		Access Assignment 2
			(submitted in Blackboard)
4/2	Entity Relationship (E-R) Modeling	4	
	Introduce Normalization Assignment		
4/9	Normalization of Database Tables	6	Access Assignment 3
	Work on Normalization Assignment		(submitted in Blackboard)
4/16	Review Normalization Assignment	7	Access Assignment 4
	Introduction to SQL		(submitted in Blackboard)
	Introduce SQL Assignment		
4/23	Review SQL		Normalization Assignment
	Introduce Take Home Project		(submitted in Blackboard)
	Exam Review		
4/30	Exam #2 (Chapters 4, 6, & 7)		SQL Assignment
			(submitted in Blackboard)
5/7	Work on Take Home Project		
5/14	Final Project Due Week of 5/14		Take-Home Project
			(submitted in Blackboard)

Grading Scale:

Grading Scare.	
Percentage	Letter Grade
94% - 100%	A
90% - less than 94%	A-
87% - less than 90%	B+
84% - less than 87%	В
80% - less than 84%	B-
77% - less than 80%	C+
70% - less than 77%	С
67% - less than 70%	D+
60% - less than 67%	D
Below 60%	F

Grading Policy:

Grading Category	Percentage
Textbook Exams	45%
Introduce Assignments	10%
Access Labs	15%
Home Project	30%

Verification of Enrollment:

Per federal financial aid regulations, CCRI is required to verify student enrollment. All faculty members are required to complete a verification of enrollment per the dates in the <u>College Calendar</u>. Students can confirm enrollment through attendance at any academically related activity such as: signing into MindTap and doing the prerequisite labs or by emailing me explaining why you have not done the labs in the first week.

Incomplete Grade:

This temporary grade designation is awarded at the end of a course. It is awarded only when a student is PASSING, has completed at least 75 percent of the course and is unable to complete the course due to extenuating circumstances (e.g., illness, death, unforeseeable accident, unavoidable circumstance).

Late Assignments:

Since this course would meet 4-hours in person and have 8-hours of homework, you are expected to be putting in 12-hours on this course per college policy. You have minimum of a week to do each module. Any assignments that are not submitted by the posted due date, will become a zero.

<u>Services for Students with Disabilities</u>: Any student with a documented disability may arrange reasonable accommodations if it does not affect the course grading policy. As part of this process, students are encouraged to contact the office of Disability Services for Students as early in the semester as possible (http://www.ccri.edu/dss/index.shtml).

Netiquette Policy:

- Respect others and their opinions. In online learning, students from various backgrounds come
 together to learn. It is important to respect their feelings and opinions though they may differ from
 your own.
- Tone down your language. Given the absence of face-to-face clues, written text can easily be misinterpreted. Avoid the use of strong or offensive language and the excessive use of exclamation points. Review before posting to remove any strong language.
- Keep personal discussions off the class discussion board.
- Do not type all capitals, which is difficult to read, and has come to be considered the electronic version of "shouting."
- Do be courteous, even when you disagree, with your instructors as well as your classmates, and always provide clear, logical support for your views.
- Avoid inappropriate material.
- Be forgiving. If someone states something that you find offensive, mention this directly to the instructor. Remember that the person contributing to the discussion might be new to this form of communication. What you find offensive may quite possibly have been unintended and can best be cleared up by the instructor.
- Think before you hit the send button. Think carefully about the content of your message before contributing it. Once sent to the group there is no taking it back. Grammar and spelling errors reflect on you and your audience might not be able to decode misspelled words or poorly constructed sentences. It can also adversely affect your grade.
- Escalate your issues privately via email versus discussion forums. Should you have a disagreement with an instructor or classmate it is best to send an individual email to that individual. Do not argue your case in the discussion forum.
- Brevity is best. Be as concise as possible when contributing to a discussion. Your points might be missed if hidden in a flood of text.

Avoid disciplinary action. Any type of online behavior that is perceived as disrespectful to a fellow student or instructor, or anything that has the potential to be perceived as less than courteous is unacceptable and can be subject to disciplinary action by the Chair of the department. Repetition of such behavior can result in expulsion from the class.

Technical Requirements:

Blackboard:

Learning requires certain technical requirements to participate actively and be successful. At the minimum, students must have access to a computer and stable Internet connection. Many courses at CCRI require certain technical requirements to participate actively and be successful. View <u>Set Up Your Tech</u> to learn more about technical requirements.

Cengage MindTap:

Students need a stable Internet connection. Chrome, Firefox, or Edge web browsers can be used. However, before signing into MindTap, you must clear your web browser cache, which is found in the settings of the web browser. If you do not do this, some of your labs will not work correctly. Also, at the beginning of some labs before you click start, read the information as passwords may be included here. Chromebooks will not work for your labs. You must have a computer/laptop running Windows 10 or better or MAC.

CCRI Computer Labs:

The academic computer lab is available for CCRI students and allows access to computers with required software. Information regarding CCRI's academic computer labs is available at the following link: <u>Academic Computer Labs</u>.

MS Office 365:

Microsoft Office 365 is available for all **CCRI students** to download. This version of Office will be accessible as long as you are actively **enrolled** at CCRI. It is recommended that students <u>download MS 365</u> to their computers for access to MS Word, PowerPoint, and Excel offline. If you use other programs, I may not be able to open the files.

MS OneDrive:

OneDrive is a clouded-based storage system that lets CCRI students store, share and organize files, photos and favorites on Windows servers, and access them from any computer with an Internet connection. You will need and know how to use a computer or mobile device with Internet access. You will also need one of the following web browsers: Edge, Firefox, Chrome, or Safari (Mac only). However, if you put something into OneDrive, you must give me permission to access the file. Once I click on allow, you will get an email that you give permission again before I can view the data.

Academic Integrity:

Academic integrity is vital to an institution of higher education. The integrity of your work – that it represents your independent thought and effort and that it properly acknowledges the work of others – is essential to the awarding of credit and to the development of your academic potential. As such, instances of academic dishonesty – cheating, plagiarism, etc., – are extremely serious academic offenses that should not be overlooked. Students should be aware and regularly cautioned that violations of academic integrity may result in suspension or expulsion from the college. For more information, go to the CCRI's Policy on Academic Integrity.

Managing Life Crisis and Finding Support:

Should you encounter an unexpected crisis during the semester (i.e., securing food or housing, addressing mental health concerns, personal safety, managing a financial crisis, and/or dealing with a family emergency, etc.), please reach out to the office of Community and Social Resources. If you are uncomfortable doing so on your own, please know that I can submit a referral on your behalf—just email me or schedule a meeting with me during my office hours.

Veteran Services:

<u>CCRI Veteran Services Office</u> is committed to being a resource to all VA education beneficiaries. Our mission is to assist veterans, service members, and dependents in the pursuit of their educational goals by maintaining up-to-date information on current programs and resources. Through a combination of experience with the educational system and contacts within the VA, we can help you with any aspect of your higher education.

Mental Health Services:

CCRI is committed to advancing the mental health and wellbeing of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available.

CCRI has partnered with MySSP (My Student Support Service) to provide 24/7 mental health and well-being support to students, including real-time and scheduled access to professional counselors. All services are confidential and 100% FREE to CCRI students!

In addition to **MySSP**, the Advising and Counseling Center provides one-on-one and group counseling for a variety of problems ranging from typical difficulties students experience (e.g., adjustment to the college setting) to problems associated with acute or long-standing psychological disturbances. For a listing of mental health services on and off campus, visit Mental Health Services.

Student Success Center:

The Student Success Center provides academic assistance through tutoring services; coordinate information and referrals to college resources; seek ways to improve student satisfaction and retention; and help students achieve their goals. Student Success Center staff members help students understand their individual learning needs, develop better study habits and behaviors, and create plans to achieve their goals. For more information about our services, email successcenter@ccri.edu or visit the website. Watch this video, to learn how to book Free CCRI tutoring appointments through Starfish.

Writing Center:

The Writing Center offers a variety of free services, including online and in-person help with prewriting, organization, thesis statements, topic sentences, research papers, revision/editing, and answers to questions. Online help at Writing Center includes:

- Zoom links for Writing Center Virtual Drop-in Tutoring Sessions
- Virtual Zoom appointments
- Email responses to questions and help with papers
- Website content, such as handouts, practice quizzes, literature analysis, PowerPoint presentations, reading resources, and information about research papers (MLA, APA, and Chicago systems)

In-person appointments can be made by contacting <u>writingcenter@ccri.edu</u>. The Writing Center is available at three of our four campuses to assist CCRI students, faculty, and staff members with different kinds of writing and revision tasks.

Religious & Cultural Observance:

Persons who have religious or cultural observances that coincide with this class should let me know in an email during the first two weeks of the semester. However, if I do not hear from you by the end of the second week of school, I will assume you plan on doing the work for the week.

Explicit Content:

If you are aware of cognitive or emotional triggers that could disrupt your intellectual or mental health, please let me know so that I can be aware in terms of course content.

Title IX and Gender Pronouns:

This course affirms equality and respect for all gendered identities and expressions. Please don't hesitate to correct me regarding your preferred gender pronoun and/or name if different from what is indicated on the official class roster. Likewise, I am committed to nurturing an environment free from discrimination and harassment. Consistent with Title IX policy, please be aware that I, as a responsible employee, am obligated to report information that you provide to me about a situation involving sexual harassment or assault.

This syllabus is subject to change at any time at the discretion of the instructor. Students are responsible for keeping current with changes made to this syllabus.