

DATABASE DESIGN AND MANAGEMENT COMP-1200

Mr. Michael Kelly

Semester: Spring 2018

Contact Information

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TEXT(s)

DATABASE SYSTEMS (Required)

Design Implementation, & Management (11th Edition)

By: Coronel / Morris, Cengage

Microsoft Access 2016, Comprehensive (Optional)

By: Shellman / Vodnik, Cengage

Course content draws upon material in the Database Systems book. The Access book is required for the completion of the Access assignments and for reference to those unfamiliar with Microsoft Access. A copy of the Access book is available in the Academic Computer Lab on the Warwick campus.

Premium Web Content (Optional)

Some versions of the text contain an access code that gives you the ability to work with the publisher's website and utilize the content available. The site provides sample data, PowerPoint presentations, video illustrations and sample quizzes by chapter.

COURSE DESCRIPTION

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.

Learning Goals

- 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

Grading

Textbook Theory Examinations (2 for a total of 150 points)

Theory Assignments (2 for a total of 40 points)

Access Take-Home Exam (100 points)

Access Tutorials (5 @ 10 points)

Meeting Schedule

(dates highlighted in yellow indicate Hybrid Weeks)

All Access assignments refer to **Case #3, Diane's Community Center**

<u>Date(s)</u>	<u>Topic/Discussion</u>	<u>Chapter</u>	<u>Assign Due</u>
1/22	Class Introduction / General Database Discussion		
1/29	Database Systems	1	
2/5	Getting Started With Access / Data models	2	Access #1 (Module 1, Case #3) Pages AC 48 – AC 49
2/12	Data Models (continued) The Relational Database Model	2 3	Access #2 (Module 2, Case #3) Pages AC 111 – AC 113
2/19	The Relational Database Model Exam Review	3	
2/26	Exam #1 (Chapters 1, 2, & 3)		
3/5	Entity Relationship (E-R) Modeling Introduce Assignment #1	4	
3/12	Spring Break – No Class		
3/19	Work on Assignment #1		Access #3 (Module 3, Case #3) Pages AC 175 – AC 176
3/26	Normalization of Database Tables Assignment #1 Coverage	6	Access #4 (Module 4, Case #3) Pages AC 229 – AC 230
4/2	Review of Normalization Assignment Introduction to SQL	7	
4/9	Exam Review		<u>Assignment #1</u> (Normalization)
4/16	Exam #2 (Chapters 4, 6, & 7)		<u>Assignment #2</u> (SQL)
4/23	Introduce Take Home Project	Finalex.xls	
4/30	Discuss Take Home Exam		Access #5 (Module 5, Case #3) Pages AC 297 – AC 298
5/7	Final Project Due		Take-Home Project

Assignments

All assignments **MUST** be submitted via Blackboard. When submitting Access assignments upload the entire database.

Required files for the Access assignments are located in Blackboard and on my website

<http://facultywp.ccri.edu/kelly/>

All assignments must be completed **independently**. Failure to do so will result in a zero! Cheating of any kind will **NOT** be tolerated.

Important Information

The Access assignments are preceded by Tutorials designed to expose you to the steps involved in illustrating basic database concepts in a step-by-step format. Time spent in reviewing these Tutorials will make the Case Problem assignments much clearer and will certainly save you time and frustration.

Students are responsible to see the instructor about any work missed due to an absence **AND** you must contact me before or at the time of the absence and explain the reason.

Students who miss a test must have a valid reason (example = illness, family emergency, etc.) to be given a make up exam and will be allowed ***ONLY ONE*** makeup exam per semester. Makeup exams will be scheduled with instructor. Makeup exams **WILL** be more difficult.

Students are expected to uphold a ***standard of conduct*** as set forth in the Student Handbook (http://www.ccri.edu/advising/student_services/handbook.html) and College Catalog (<http://www.ccri.edu/catalog/>) relating to academic honesty. Students assume responsibility for the content and integrity of the work they submit. You may be guilty of violating the honor code if you:

1. Represent the work of others as your own
2. Give unauthorized assistance to other students
3. Misrepresent the content of submitted work
4. Use or obtain unauthorized assistance in your academic work

Services for Students with Disabilities

Any student with a documented disability may arrange reasonable accommodations. 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>).