

Instructor

Dr. Linda Seiter

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Google Hangout Office Hours:

Mon, Tue, Wed, Thu 7-9pm.

Purpose and Content

You will learn how to design and implement database systems. Topics include:

- Database systems concepts and architectures
- Structure Query Language (SQL)
- Entity Relationship (ER) modeling
- Relational database design
- Functional dependencies and normalization

Textbook:

Database Processing, Fundamentals, Design and Implementation by David Kroenke and David Auer, 13th edition. ISBN-13: 978-0-13-305844-4.

You may purchase the CourseSmart ETextbook version.

Textbook Data Files and Student Resources

http://wps.prenhall.com/bp_kroenke_database_13/239/61367/15709993.cw/index.html

Software You Will Need:

- Microsoft Access 2010 or 2013.
- MYSQL Community Server and Workbench (Free download). Installation instructions will be available on blackboard.

Core requirement:

Required for B.S. in Computer Information Systems and B.S. In Computer Science.

Evaluation:

Your grade will be determined based on your performance on homework assignments and tests. Your final grade will be calculated as follows:

Homework	Tests
50%	50%

Homework

Assignments will be posted on blackboard and must be submitted electronically to Blackboard before the due date and time. Late assignments will not be accepted.

Homework assignments are to be done *individually*. If you are having difficulty with an assignment, contact the instructor. A discussion with a classmate about the examples presented in the textbook or video lectures is acceptable but, there must be no copying or collaboration on homework. Do not show your homework solution to any other student. Do not ask your colleague to show you how they solved the assignment. Collaborating on assignments will result in a grade of 0 to all parties involved and other actions may be taken.

Tests

There will be 4 online tests. Tests will be available on blackboard on the specified test date and time. Tests are to be done **individually**. You may not communicate with other students or individuals during the test. There are no makeup tests unless you have a valid medical emergency. If you miss a test, written verification from a doctor or a note from the dean must be provided.

Tentative Schedule, Subject to Change

Note: You will find a video for each daily lecture on the blackboard website.

Week	Date	Lecture Topic	Assignment
M	6/16	Syllabus, Chapter 1 Overview. Appendix A. Introduction to Microsoft Access.	Start a google hangout and invite lseiter@jcu.edu during office hours 7pm-9pm.
T	6/17	Ch 2 Intro to SQL. Select statement, sorting, Compound where clauses, ranges, wildcards.	
W	6/18	Ch 2 Functions, expressions, grouping.	HW1 due 6pm.
R	6/19	Ch2 Subqueries.	
M	6/23	Ch 2 Joins.	HW2 due 6pm.
T	6/24	Case Study Examples.	
W	6/25	Ch 3 Functional Dependencies, Keys, Modification Anomalies, Normal Forms.	HW3 due 6pm.
R	6/26	Online Test 7pm-9pm. Covers HW 1 and 2.	
M	6/30	Ch 3 Normalization.	HW4 due 6pm.
T	7/1	Ch 7 MYSQL Data Definition Language, Data Manipulation Language.	
W	7/2	Ch 7 Data Manipulation Language, Views.	HW5 due 6pm.
R	7/3	Online Test 7pm-9pm. Covers HW 3 and 4.	
M	7/7	Ch 5 Data Modeling. Entity Relationship Model Appendix E. MYSQL ER Model.	HW6 due 6 pm.
T	7/8	Ch6 Transforming Data Models into Database Designs.	
W	7/9	Ch6 Transforming Data Models into Database Designs.	
R	7/10	Online Test 7pm-9pm. Covers HW 5 and 6.	HW7 due 6pm.
M	7/14	Ch 4 Database Design Using Normalization. Ch 8 Database Redesign.	
T	7/15	Ch 8 Database Redesign.	
W	7/16	Case Study	HW 8 due 6pm.
R	7/17	Online Test 7pm-9pm. Covers HW 7 and 8.	

Students with Disabilities

In accordance with federal law, if you have a documented disability (Learning, Psychological, Sensory, Physical, or Medical) you may be eligible to request accommodations from the Office of Services for Students with Disabilities (SSD). Please contact the Director, Allison West at (216) 397-4967 or come to the office located in room 7A, in the Garden Level of the Administration Building. Please keep in mind that accommodations are not retroactive so it is best to register at

the beginning of each semester. Only accommodations approved by SSD will be recognized in the classroom. Please contact SSD if you have further questions.

Campus Community and Inclusiveness

At John Carroll University, we are committed to fostering a respectful and inclusive campus community. Incidents of bias which are intentional or unintentional actions against someone on the basis of an actual or perceived aspect of their identity, including actions that occur in classrooms, can and should be reported on the Bias Incident Reporting Form, accessible at <http://sites.jcu.edu/bias/>. Questions about bias can be directed to members of the Bias Response Team: Lauren Bowen, Associate Academic Vice President (bowen@jcu.edu), Bud Stuppy, Director of Human Resources (cstuppy@jcu.edu) or Danielle Carter, Director of the Center for Student Diversity and Inclusion (dcarter@jcu.edu).

How to Succeed in this Class

- View each video on or before the date shown on the schedule.
- Start each assignment several days before it is due. Assignments tend to take **much** longer than expected.
- Don't be afraid to ask for help from the instructor. However, first ask yourself, "Is this something that I can answer by reading the textbook or reviewing the videos?"
- Before turning in your homework or test, double-check that you have done everything you were asked to do. Use exactly the names and formats that I specify. Make sure your submission includes all problems.