

CIS 210-06 – Database Management System Design

Spring 2010 – R 6:30-9:20PM – SCI 301

Catalog Description: An introduction to database structures and design concepts. Includes hands-on experience setting up a data dictionary, designing screens and using a query language.

Course Summary: An introduction to database design, theory, administration, and applications. The core of the course is centered on learning how to properly design tables, create indexes, and write queries in SQL, a type of programming languages specific to databases. Though SQL is unlike typical programming because its power is leveraged in a different way, having some programming experience is thus required to help smooth the learning curve. MySQL and Microsoft SQL will be the two environments used to learn these concepts. Depending on time, advanced topics such as stored procedures or database-driven web pages may be discussed.

Instructor: Alex Kuhl

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Textbook: *Database Systems: Design, Implementation, and Management 8th ed.* by Rob and Cronel, ISBN: 978-1-4239-0201-0

Learning Outcomes – Being an introductory course, you should exit this class with a solid base of knowledge of database fundamentals.

- Understand how to design databases according to normalization standards
- Be able to compare and contrast different database models
- Write standard queries in the SQL language
- Analyze tables and implement appropriate indexes
- Gain proficiency in both MySQL and Microsoft SQL environments
- Understand database administration

Assessment – The grading for this course is based on the scale to the right. The graded parts of the course are as follows:

- Exercises/Labs 20%
- Projects 30%
- Tests (2) 20%
- Final 30%

Letter Grade	%
A	90-100
B	80-89
C	70-79
D	60-69
F	< 60

Attendance – Participation in the class and interaction with the instructor and between fellow students is encouraged in this course. Thus, participation and attendance will be kept and may be a factor in final grades. Misses tests may only be made up if approval is given by me **before** the test date and/or with proper documentation.

Other Information

- The class should be fun and interactive so please contribute thoughts, opinions, and questions during lecture.
- I reserve the right to modify this syllabus as I deem necessary.
- Seeking help from other students during labs is encouraged, but graded assignments should be all individual work unless otherwise specified. Submitting anything not your own work is considered academic dishonesty and can result in an F for the course. If you get stuck don't be afraid to ask for help!

Schedule – The topics covered in this course will mostly follow along with the textbook at roughly one or two chapters per week depending on our pace. Instruction that is specific to MySQL and MS SQL environments will be added as needed. This is an *extremely* tentative listing of the topics we will cover.

Week	Topic(s)
1	Introductions, Ch. 1
2	Ch. 2
3	Ch. 3 & 4
4	Ch. 4 & 6
5	Ch. 5
6	Ch. 7
7	Test 1? - Weeks 1-5
8	Ch. 8
9	Ch. 9
10	Ch. 10 & 11
11	Test 2? - Weeks 6-9
12	Ch 12 & 13
13	Intro to Web Programming
14	Ch 14
15	Ch 15
16	Review