

COP 4710 – Database Systems Fall 2004 - Syllabus

Course Prerequisites: COP 3530

Class Meets: Monday & Wednesday from 3:00 pm - 4:10 pm in ENG2 105

Instructor: Dr. Mark Llewellyn

Office: CCI 211 **Office Hours:** Monday & Wednesday: 12:00 – 2:00pm
Tuesday & Thursday: 9:00 – 10:00am

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Course Web Site: www.cs.ucf.edu/courses/cop4710/spr2004

Course Objectives:

The general objective is to provide students with a broad background in database design, database languages, and database system implementation. The emphasis on the fundamental concepts of database management should provide you with the ability to accommodate to a variety of database technology. The topics covered should also provide a firm foundation for further studying, designing, implementing, and effectively using database systems.

Text: The following text is required:

Fundamentals of Database Systems, 4e, Elmasri and Navathe, Addison-Wesley, 2003, ISBN: 0-321-12226-7.

The text will be supplemented with notes that I will provide for you via the course web site.

Term Project:

Details of the term project will be provided later. This will be a group project in which you will design a database and implement it using Access or Oracle.

Late Assignments: No late assignments will be accepted by default.

Academic Dishonesty

Cheating on examinations or other serious forms of academic dishonesty will result in a grade of "F" (and a required report to University officials). Persons "borrowing" someone else's work on an assignment will receive a zero on that assignment if it is the first offense. A second offense will be considered a serious form of academic dishonesty. (Borrowing is equally subject to penalties.) You are not expected to work in isolation on assignments. Significant learning frequently takes place in the interchange of ideas with one another. In the final analysis, however, your response to an assignment must be your own, not someone else's.

Grading:

Two exams will be given, a mid-term exam and a final exam. Exams are given once – be there as there are no dropped test scores.

Term project	20%
Mid-term Exam (on or about February 23 rd)	30%
Final Exam (Wednesday April 21 st - 1:00-3:50pm)	30%
Assignments (total)	20%

Grading Scale:

90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, <60 = F

Plus/minus grading will not be used in this course.

Some Important Dates:

No class: Monday January 19th – Martin Luther King Day
 Monday March 8th or Wednesday March 10th – Spring Break
Last Day to Withdraw: Friday February 27th
Final Exam: Wednesday April 21st - 1:00pm-3:50pm

Topics To Be Covered:

- General Introduction and basic concepts
- Conceptual Design, Entity-Relationship (ER) and extended ER Modeling
- Relational Model
- ER to relational mapping
- Relational Query Languages
- Structured Query Language (SQL)
- Relational Database Design
- Storage & File Structures
- Indexing & Hashing
- Query Processing and Optimization
- Security and Integrity
- Distributed Database Systems
- Data Mining and Data Warehousing
- Advanced Database Systems (time permitting)