

ITM 520: Enterprise Application Development
University at Albany, State University of New York
Fall 2005 Syllabus

Instructor Information

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Office Hours: M 12:30pm - 2:00pm or by appointment

Class Information

Time: MW 9:00-10:20am (Section 1) / 10:30-11:50am (Section 2)
Location: BA 227
Dates: October 17 – November 16, 2005
Credit(s): 3
Call #: 7859 (Section 1) / 7860 (Section 2)
Available Lab(s): MIS (to the right of BA 233) and HRIS (to the left of BA 234) Labs

Course Listserv: MBA2007@listserv.albany.edu

Instructions: Sign up by sending an email with a **blank subject** to listserv@listserv.albany.edu

The text should be: **subscribe MBA2007 YourFirstName YourLastName**

Course Website: <http://www.albany.edu/~goel/classes/fall2005/itm520/>

The course website should be your main source of course material and contains all relevant course information including details on grading, projects, assignments, course schedule, etc. In addition, this should provide a “living syllabus” a will reflect any changes made to this document.

Text & Reference Books

Text: David M. Kroenke, Database Concepts, 2nd edition ISBN: 0131451413

Course Overview

This is an introductory course in database modeling, design, and implementation of business applications. It teaches the basic principles of relational database theory and use of query languages. The students learn to write queries in SQL and design a database using Microsoft Access. The role of database systems in the management of information and procedures for modeling the data resource to support managerial/executive needs are presented in the course

Learning Objectives

The objective of the class is to teach the students how to abstract business problems into databases. Students will:

1. Learn skills for creation of entity relationship diagrams
2. Learn how to normalize databases
3. Learn how to write queries to access databases
4. Become familiar with both data definition language and data manipulation language
5. Develop specific skills for MS Access databases, which is the reference database for the class
6. Learn both the point & click interface as well as the SQL Interface

Grading

All students are expected to follow University at Albany guidelines on academic integrity (see the Academic Integrity section of the course site for more detail). Whenever you come to me with a

special request, think about whether your request is unfair to the other students. I am willing to do anything to help as long as I am fair to all students in my classes.

Assignments- 25%

Assignments given in any week are due at the beginning of the class next week. There will be a penalty of 10% per day for late assignments unless there is a very pressing reason for the delay. Assignments should be done in groups of two and if students prefer to work individually that is also acceptable. Assignments are typically 5-10 points each and will consist of exercises relevant to the material discussed in class. Please see the Assignments section of the course site for further details and guidelines.

Project- 35%

Projects should be done in groups of four. A different project is offered every year and incorporates creating an entity-relationship diagram, normalization, development of a Microsoft Access database, propagation of data for testing, formulation of relevant queries, generation of forms/reports, and the creation of a written project report. For more details and guidelines, please see the Projects/Papers section of the course site.

Exam- 30%

The exam will consist of multiple sections (essay-style) in which you will have to apply a majority of what has been learned during the semester in order to assess individual performance. This can include E-R Diagram, normalization into first, second, third, fourth or boyce-codd normal form and rationalization, creation of a data definition table, development of SQL queries based on a needs based sentence of DML, DDL, and advanced SQL queries. A sample exam and solution set will be provided for review. Students may use the recommended texts, class notes, and PowerPoint presentations. No use of electronic devices (laptops, cellphones, PDA's, etc.) is allowed during testing. A previous exam and sample solution set will be provided for review.

Course Schedule

Date	Topics	Assignments
October 17	Relational Database Design	Sign up to the Class Listserv
October 19	Data Modeling: ER Diagrams	Homework 1
October 24	Normalization, Part I	
October 26	Normalization, Part II	Homework 2
October 31	SQL - Data Definition Language	Homework 3
November 2	Microsoft Access	
November 7	SQL - Data Manipulation Language	
November 9	SQL - Advanced Queries	
November 14	Microsoft Access	
November 16	Final Exam	
November 28	"Rain Date"	