Course Description

Prerequisite: COSC 1337. This course covers information systems design and implementation within a database management system environment. Students will design and construct a system using database software to implement the logical design.

Class Time

Tues/Thurs 3:30-4:50pm - COB 211

Instructor Information

Dr. Robert P. Schumaker
Professor, Computer Science Dept.
rschumaker@uttyler.edu

Office Hours

DM through Slack (preferred), Zoom, email

If your inquiry is grade-related, please make a Zoom or physical appointment

Textbook Information

Database Design for Mere Mortals (Hernandez)
ISBN: 978-0-13-678804-1

Course Objective

This course is designed with the following goals:

- Learn and apply a systematic process for information system development
- Develop the ability to use the latest tools and techniques to develop information systems
- Create appropriate documents for requirements, functional design, implementation and user training
- Develop an understanding of the current state of the art by preparing and presenting a term paper on a current topic in information systems
- Develop an ability to work cooperatively to develop a high quality information system

Computer Account Access

Students will need a Patriot account and password for computer access. This information can be found at `https://www.uttyler.edu/ccs`

Course Documents and Slides

This class will use Canvas for course documents, slides, quizzes and other class-related materials. Students are encouraged to check the website frequently during the course of the semester to keep up to date about course activity.

Course Grading

Course evaluation will be based on the following:

Quizzes and In-Class Exercises	45
Semester Project	40
Lifelong Learning	5
Class Participation	10
Total Points	100

Grading Scale

A 90.0 points or more
B 80.0 to 89.999 points
C 70.0 to 79.999 points
D 60.0 to 69.999 points
F 59.999 points or less

Course Policies

1. Quizzes – Quizzes will be administered on topics previously presented and can include lectures, cases, or assigned readings. They are designed to measure the student's mastery of the material as well as their ability to use those skills in an efficient manner. Quiz questions may come in many different formats.

2. In-Class Exercises – Student's will be presented with database design questions and will be expected to demonstrate their mastery to solve them.

3. Semester Project – Student groups (of about 4-6 students per group) will focus on building a real-world database solution. More information can be found in the "Semester Project Description" document.

4. Lifelong Learning – It is imperative for successful individuals to continue learning throughout their lifetime. Professional organizations are a wonderful opportunity to reinvent, retool and build connections with industry leaders. Students that attend a professional technology organization meeting (and bring proof of attendance) will receive five points. Upcoming meetings and events can be found on Canvas.

5. Class Participation – Class Participation points are broken up into three parts; Attendance, tech stories (Tech) and operating the teaching workstation (Workstation). Attendance will be taken for each class and unexcused absences will be counted against the student's Participation.Attendance score. Participation.Tech will be scored by the quantity of quality discussion a student contributes regarding relevant technology-related articles. Participation.Workstation will be scored as to whether the student voluntarily operates the teaching workstation. The exact formula of Class Participation points will not be revealed until the end of the semester and the maximum points that can be earned is ten.

6. Missed Classes, Tests/Quizzes an Assignments – Students who miss class are responsible for getting missed materials and lecture information on their own time from their peers. Any tests/quizzes

and/or assignments due during the student's documented absence will be due by 5pm of the day of their return with no penalty.

7. Time Outside of Class – This course is a computer application course that requires students to complete computer application exercises and projects. It is the responsibility of the student to make a backup of all assignments or application projects. If your work is not saved and accessible by the instructor, then it cannot be evaluated and a score of zero will be given for that particular project or assignment. Backups of projects and tests are imperative in order to avoid lost or damaged data.

8. Classroom Lab Rules –
   - Please do not surf the Web during class unless instructed to access the Internet.
   - Do not access inappropriate Web sites during class. This will lead to dismissal from the class.
   - Please do not work on other computer assignments during class.
   - Please do not talk to your neighbor during class.
   - Please do not bring food or an uncovered drink into the computer classroom lab.
   - Please do not order food to be delivered to the classroom
   - Do not use your phone during class.

Tentative Course Schedule

Date	Concept
Jan 14	Introduction to Database
Jan 16	Ch 1 - The Relational Database
Jan 21	Ch 2 - Design Objectives
Jan 23	Ch 3 - Terminology
Jan 28	mySQL Navigation
Jan 30	Ch 4 - Conceptual Overview
Feb 4	mySQL Querying Data
Feb 6	Ch 5 - Starting the Process
Feb 11	Ch 6 - Analyzing the Current Database
Feb 13	mySQL Datatypes and Structures
Feb 18	Ch 7 - Establishing Table Structure
Feb 20	mySQL Creating Tables
Feb 25	Ch 8 - Keys
Feb 27	mySQL Alter, Modify, and Keys
Mar 4	Ch 9 - Field Specifications
Mar 6	Creating Data Dictionaries
Mar 11	Ch 10 - Table Relationships
Mar 13	Ch 11 - Business Rules
Mar 18	No Classes - Spring Break
Mar 20	No Classes - Spring Break
Mar 25	mySQL Joining Tables
Mar 27	mySQL Joining More Tables
Apr 1	mySQL Types of Joins
Apr 3	mySQL Update
Apr 8	mySQL Delete
Apr 10	mySQL Where
Apr 15	mySQL Group By
Apr 17	mySQL Having
Apr 22	mySQL Order By and Limit
Apr 24	mySQL Database Administration