

**COMS B34 - SQL/DATABASE SYSTEMS DESIGN**  
**BAKERSFIELD COLLEGE – FALL 2010**  
Business Education 2, M 5:30 – 8:40 p.m. (CRN: 71143)

Instructor: Phil Whitney  
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Office: Business 15 (B15)  
Phone: 395-4042 - Phil's Office  
Office Hours: M 10:30am – 11:00am, 12:35pm – 1:35pm, 4:30pm – 5:30pm  
W 10:30am – 11:30am  
T,R 11:00am – Noon, 4:30pm – 5:30pm thru 11/2

**Course Description:**

This course emphasizes “best practices” for relational database design (modeling) and the use of Structured Query Language (SQL) for database manipulation. Normalization, data diagramming, concurrency and other key database concepts will be discussed. The use of Microsoft Access, MySQL, Microsoft SQL Server, and other database management systems will be used to demonstrate concepts. Upon successful completion of this course, students will be able to design real world databases and manipulate them using SQL.

**Recommended:**

At least one programming language or application that uses formatted data files (COMS B5, B10, B12, B14, B16, B25, B32, B36, B68a)

**Course Materials Needed:**

- Pratt and Adamski, Concepts of Database Management 6<sup>th</sup> edition, Thomson – Course Technology, ISBN-10: 1423901479 ISBN-13: 978142390147
- A Flashdrive is recommended, especially if you will be using the campus computer labs for assignments
- Four (4) green 100-answer test scan sheets (FORM NO. 882-ES). Keep these in pristine condition!

**Course Tasks:**

Your grade will be based on the following tests and assignments.

5 assignments @ 20 points each	100
1 Final Project	75
4+ Pop quizzes @ 10 points each	40+
4 Exams @ 50 points each	200

Follow these policies on assignments or points will be deducted:

- Clearly list on your assignment your name, and the assignment name
- Do not use paper that has torn edges; i.e., from a spiral notebook
- On multi-page assignments, neatly put the pages in order and staple the pages in the upper left corner. Do not fold pages or use paper clips to combine pages. I WILL NOT BRING A STAPLER TO CLASS!!!
- Do not use a cover page for your assignments or put them in a folder or binder
- Up to 20% will be deducted from your score if you do not follow these policies

PowerPoint slides of the lectures presented in class and all assignments and handouts will be distributed through the Private Page web address listed at the top of this syllabus. The slides will usually be available for downloading at least 12 hours before class. It is recommended that you print them and bring them to class and make YOUR notes on them. (I suggest printing them at 4 or 6 slides per page to conserve paper.) The slides by themselves convey little information and will be of minimal assistance in your exam preparations. Your notes add meaning to them and WILL help you prepare for the exam.

#### Grading:

Grades will be based on the percentage of total semester points earned, computed as follows:

- Raw Percent = Total points earned / Total points possible \* 100
- Final Grade Percent = (Total points earned – (Low Quiz + Low Assignment + Low Exam)) / (Total Points possible – 80) \* 100
- 90%+ = A, 80-89.99% = B, 70-79.99% = C, 60-69.99% = D, below 60% = F. (I do not curve grades)
- Borderline Grades will be determined by class participation!!! Participation that adds quality to the class discussions will improve your grade.

YOU should keep track of your grade throughout the semester. Keep all assignments as proof of grades received in the RARE case of bookkeeping errors on my part.

#### Student Learning Outcomes (Top 5 representing focus of the course and the expectations of the instructor)

- The student will design fully normalized databases.
- The student will compare and contrast traditional flat-file data systems with modern relational database management systems.
- The student will issue SQL commands and manipulate databases. Both DDL and DML commands will be used.
- The student will demonstrate the benefits gained from client/server systems by using MySQL, Microsoft SQL Server and other DBMSs.
- The student will apply database design principals by creating a real world database system that automates a traditional manual system. The system must include user documentation including a user manual.

### Academic Dishonesty:

Unfortunately, the subject of academic dishonesty must be discussed for those who are inclined toward such activities. The campus's policy is listed in the campus catalog. Please review it for specifics. There is no need to engage in any unethical behavior in this class! If you need help, my door is always open. For those who need some explanation of what academic dishonesty is...

Academic dishonesty involves acts that may subvert or compromise the integrity of the educational process. Included is any act by which a student gains or attempts to gain an academic advantage for him/herself, or another, by misrepresenting his/her, or another's work or by interfering with the completion, submission, or evaluation of work. These include, but are not limited to, accomplishing or attempting any of the following acts:

- Using any materials that are not authorized by the instructor for use during an examination
- Copying from another student's paper during an examination
- Collaborating (i.e., talking, passing notes and/or signals, etc.) during an examination with any other person by giving or receiving information without specific permission of the instructor
- Stealing, buying or otherwise obtaining information about a course's graded material
- Substituting for another person or permitting any other person to substitute for oneself to take an examination
- Submitting another person's work as yours either in its original or altered form
- Giving someone else your work to fulfill his/her assignment
- Plagiarizing

### Late assignments, Make-up Exams/Quizzes, and time allowed for Exams/Quizzes:

MAKE-UP EXAMS OR QUIZZES WILL NOT BE GIVEN AND LATE ASSIGNMENTS WILL NOT BE ACCEPTED. NO EXCEPTIONS. DO NOT ASK. You will, however, be allowed to drop your lowest exam score, your lowest quiz score and your lowest assignment score (except for the final project ... it CANNOT be dropped or turned in late).

Assignments are due at the BEGINNING of the class session. I will announce, "Last call", and after that announcement assignments will not be accepted. NO e-mailed or faxed assignments will be accepted. You may always arrange to turn in assignments or take exams in advance of the scheduled times.

The exam and quizzes will be timed. Quizzes will be given at random times. You will not be given extra time to complete the exam or quiz if you start late.

### Extra Credit:

There will be NO opportunity to earn extra credit.

### Attendance policy:

Attendance is MANDATORY. The attendance policy as outlined in the campus catalog will be enforced. Students must notify me in the event of class absences. Any student that is absent for more than two weeks without prior instructor notification may be dropped from the course. Verification of this is the STUDENT'S responsibility.

## Classroom Etiquette

The basic rule underlying classroom etiquette is having consideration for others. The following list of guidelines has been assembled to help you understand what this means.

- Leave pagers/cell phones at home, or turn them to vibrate/silent mode and respond to them AFTER class ends. Do not leave class to answer the phone and do not text message (it is just as distracting to others as talking). A student may receive a 10-point grade reduction each time their ringer/buzzer/tune-player goes off in class.
- On the rare occasion that you cannot arrange childcare, well-behaved children are welcome in class. Bring them something quiet to occupy their time and please sit in the back of the classroom.
- If you need to leave or enter the classroom while class is in session, please do so in a non-disruptive manner. This includes (but is not limited to) walking in front of the class, letting the door slam, and making noises that prevent others from listening. If you need to leave class early, please notify me of your early exit before class and sit near the exit.
- Do not conduct personal conversations during class. Even though you may be speaking in a very low tone, your voice will carry and disturb others around you. Please conduct your conversations outside of the classroom.
- No eating in the classroom.
- Sleeping is not allowed. If you are tired, please rest outside of the classroom. You will be asked to leave if you sleep during class.

## Special Considerations

Students with disabilities who believe they may need accommodations in this class are encouraged to contact Disabled Student Programs & Services located at Student Services Building, 1st Floor, Counseling Center (661-395-4334), as soon as possible to better ensure such accommodations are implemented in a timely fashion.

NOTE: This syllabus is TENTATIVE and subject to change.

## COMS B34 - READING AND CLASS SCHEDULE

<u>Date</u>	<u>Reading</u>	<u>Topic(s) and Items of Interest</u>
M 8/23	Ch. 1	Orientation & Introduction to Database Management
M 8/30	Ch. 2	The Relational Model 1: Introduction, QBE, and Relational Algebra Microsoft Access Overview
M 9/6	No Class	Labor Day Holiday
M 9/13	Ch. 3	The Relational Model 2: SQL Assignment #1 Due
M 9/20	Ch. 3, cont.	The Relational Model 2: SQL Assignment #2 Due
M 9/20		*** Last day to withdraw without receiving a W ***
M 9/27	Ch. 3, cont.	The Relational Model 2: SQL Assignment #3 Due Exam #1
M 10/4	Ch. 3, cont.	The Relational Model 2: SQL Enhanced form techniques with Microsoft Access
M 10/11	Ch. 4	The Relational Model 3: Advanced Topics Assignment #4 Due
M 10/18	Ch. 5	Database Design 1: Normalization
M 10/25	Ch. 5, Ch. 6	Database Design 1: Normalization, Database Design 2: Design Method Exam #2
M 11/1	Ch. 5, Ch. 6	Database Design 1: Normalization, Database Design 2: Design Method Assignment #5 Due
M 11/1		** Last day to withdraw from classes and receive a W ***
M 11/8	Ch. 7	DBMS Functions
M 11/16	Ch. 8, Ch. 9	Database Administration, Database Management Approaches Exam #3
M 11/23	Client/Server	Client/Server concepts (Middleware, ColdFusion, MySQL, SQL Server)
M 11/30	Client/Server, cont.	Client/Server concepts (Middleware, ColdFusion, MySQL, SQL Server) Final Projects Due
M 12/6	6 – 7:50 pm	Exam #4 – Comprehensive

\*\*\* READ THE MATERIAL TO BE COVERED IN CLASS BEFORE THE CLASS