

# CSIS 276-2646 Fall 2009

## Introduction to SQL

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**Office Hours:** Subject to change during the semester - take note of any emails sent regarding these. I will be in my office on campus on Mondays from 12:30 – 2 p.m. and by appointment. Online office hours will normally be each weekday morning from 9:15 to 10 a.m. but may be changed for the convenience of students. You may request that I change those hours occasionally and I will do my best to be available online at the time requested. I will post changes to the normal times on BlackBoard. I am not available from Friday evening until Monday mornings.

### Required

3 hours lecture per week

### Times

Tuesday 7 - 9:50 p.m., Room 531

### Recommended Preparation

A “C” or “CR” grade or higher in CSIS 110 and CSIS 174 or equivalent.

For additional help with your work the CSIS department offers several open labs. There is a student tutor available to help answer questions. Times for these labs are posted after the first week of classes. They are found on the department website and outside each of the CSIS labs (rooms 530 to 534).

Other options for additional help are given in the following recommendation:

"Students are referred to enroll in the following supervised tutoring courses if the service indicated will assist them in achieving or reinforcing the learning objectives of this course:

- IDS 198, Supervised Tutoring to receive tutoring in general computer applications in the Tech Mall;
- English 198W, Supervised Tutoring for assistance in the English Writing Center (Room 70-119); and/or
- IDS 198T, Supervised Tutoring to receive one-on-one tutoring in academic subjects in the Tutoring Center (Room 70-229, 644-7387).

To add any of these courses, students may obtain Add Codes at the Information/Registration Desk in the Tech Mall. All Supervised Tutoring courses are non-credit/non-fee. However, when a student registers for a supervised tutoring course, and has no other classes, the student will be charged the usual health fee."

### Units

This course is worth 3 units.

### Brief Description

This is an introductory course in SQL programming intended for persons with basic computer literacy skills. The course is designed to teach students the fundamentals of good relational database design and how to use and maintain a database using the industry-standard data query and manipulation language SQL (Structured Query Language). Students will use SQL to create tables, keys and indexes, handle security in the database and perform simple and complex queries. The database management system utilized on campus for this course is Microsoft SQL Server and for home use a trial version of the Sybase DBMS is provided with the text. Many

students choose to download the trial version of SQL Server 2005 from Microsoft and use that at home.

### **Goals/Objectives**

1. Discuss and describe SQL and its history and use with relational databases.
2. Understand and be able to build and design a relational database structure.
3. Understand and describe table and data relationships.
4. Write Structured Query Language (SQL) statements and queries.

Upon completion of the course you will be able to:

Use Structured Query Language to create, populate, and maintain a normalized and optimized database using a professional level relational database.

Use SQL to manipulate data in a relational database by sorting and grouping the data and extract and/or view the data using complex queries involving joins, sub-queries and views.

### **Texts**

*The Practical SQL Handbook: Using SQL variants*, by Bowman, Emerson & Darnovsky, published by Addison-Wesley, New York, latest edition (4). Includes required CD  
ISBN: 0-201-70309-2

### **ACADEMIC HONESTY**

Cheating (copying, allowing your work to be copied, violating software copyright laws, other actions) **will not be accepted**. This particularly applies to copying computer files. **YOU MUST DO YOUR OWN WORK! NO SHARING WITH A FRIEND!** Allowing others to copy your work or doing their work for them is cheating, just as much as using someone else's work. You **MUST** do your own work and only your own work. **YOU MUST NOT WORK TOGETHER ON ASSIGNMENTS**. In particular this means that if you are working on the same computer as someone else in the class, you must do your work at different times and using completely separate files, making certain that you do not leave your work on the hard disk for others to access. The first incident will earn a score of zero on the item involved. A second incident will also earn zero points and will also be referred to the appropriate college office so that this is put on your student record. No one who is caught cheating will be allowed to do the optional assignment. Also, if you are caught cheating and you have missed 3 times (including any two day suspension), you will immediately be dropped from the class regardless of any agreement you may have previously made to remain over the normal three absences.

The assignments are designed to be done by a single person and are graded as if a single person did 100% of the work. If I allowed you to work with one friend (which I do NOT) then either you would be entitled to only half of the grade or I would make the assignment twice as hard and if I allowed you to work with two friends (which I do NOT) then the grade would be divided by three or the work made three times as hard etc..

I understand that this policy may be new and different for some students and if it is not what you have been accustomed to in the past then **you must change** to accept it.

**TO REPEAT: DO NOT ALLOW ANY ONE ELSE TO SEE YOUR WORK.  
DO NOT GIVE YOUR FILES TO ANYONE ELSE.**

DO NOT TAKE THE WHOLE OR ANY PART OF AN ASSIGNMENT  
FROM ANYONE ELSE.  
DO YOUR WORK ALONE.

### **Disks/Storage**

Your work may be saved on the CSIS SQL server, but you may not be able to access that server from home. Therefore you must take your work home on a portable storage medium. You can save your work onto a USB drive, a portable hard disk, or an online storage area. Label all disks/drives with your name and class before you begin using them. Please remember to take your disk/drive with you when you leave the lab. Some of the USB drives are expensive and may not be handed in if they are left in the computer. Students may also save their work and email it to themselves, but there have been several cases where the files do not download correctly. I will provide an area in BlackBoard that you may use to store your files.

**NEVER TRUST THAT YOUR STORAGE METHOD WILL WORK - ALWAYS  
HAVE A SECOND (BACKUP) COPY!**

**IT IS ESSENTIAL THAT YOU HAVE A BACKUP COPY OF ALL YOUR  
WORK. A BACKUP COPY IS A SECOND COPY OF YOUR WORK THAT CAN  
BE USED IF YOUR FIRST DISK GOES BAD. THIS OFTEN HAPPENS. NO  
ALLOWANCES CAN BE MADE FOR LOST OR DAMAGED DISKS IF YOU DO  
NOT HAVE A SECOND COPY.**

**I CANNOT STRESS THIS STRONGLY ENOUGH!!! USB DRIVES ARE SO  
SMALL THEY GET LOST EASILY AND WE HAVE EVEN HAD USB DRIVES  
GO BAD OR BREAK.**

**EMAIL ATTACHMENTS MAY NOT OPEN CORRECTLY OR THE INTERNET  
MAY GO DOWN AT ANY TIME. YOU SHOULD ALWAYS BE PREPARED  
FOR THESE EVENTS.**

**YOU WILL ALSO BE SAVING YOUR WORK ON THE CSIS SERVER, BUT  
THE CSIS DEPARTMENT IS NOT RESPONSIBLE FOR BACKING UP WORK  
SAVED ON THIS MACHINE.**

The web management system for this class is BlackBoard at <http://bb.gcccd.net/>. It is used to manage the class including obtaining and handing in assignments and exams. Inside BlackBoard is a messaging function that will be used instead of email for ALL messages relating to the class. Once you have your logon to BlackBoard you should use only this internal messaging system so that I can keep mail for the class in a single location. I will not read or reply to email sent to my Grossmont College email unless there is a problem with BlackBoard. Think of these messages as the equivalent of office hours. There is a bulletin board inside BlackBoard that we will use for threaded discussions related to the class content. See the file "*FA09 Using BlackBoard in Professor Mayne-Stafford's CSIS 276 class*" for details of how to use the bulletin board and for the type of discussions allowed. I highly recommend going to the GCCCD Online Classes webpage at <http://www.gcccd.edu/online/> for information about using online tools.

IF YOU HAVE A PROBLEM WITH BLACKBOARD YOU **MUST INCLUDE YOUR PASSWORD IN YOUR MESSAGE TO ME.** I MAY NEED TO LOG ON AS YOU IN ORDER TO DETERMINE THE PROBLEM.

### **Lecture**

Lectures are designed to highlight essential ideas, to explain difficult concepts in more detail, and to add interesting or different material. They are not detailed repetitions of the text. In-class discussions will be held about questions/topics of importance. Examples shown in the text should be completed to reinforce the readings.

### **Exams**

Three In-class exams:

These will allow you to demonstrate your understanding of the material. Exams will consist of multiple-choice and/or true/false questions and a practical section. All exams are open-book. Each will be 1 hour long.

Final Exam:

The final exam is a part of the class and MUST be taken at the time specified in the schedule. Changes to this time are allowed only in documented cases of emergency or illness. Documentation must be provided from a disinterested party and includes doctors' notes, police reports, tow truck receipts etc. See the college catalog for details of the college policy regarding missed final exams. The final will be comprehensive, covering the full semesters work, and will follow the same format as the in-class exams. It is designed to take 1hr 50min.

All exams will have a set time limit. At the end of that time all exams will be collected. If you come in late you will not be allowed to stay late so you will have less time to complete the exam.

You are allowed one (1) missed exam due to a documented illness or an emergency providing that a time for a makeup can be arranged that is convenient for both the student and the instructor. The missed exam must be made up **before** the next class so you must call or email the instructor **immediately** to arrange a makeup before the next class. Do not call on the day of the next class and expect that the instructor can find time on that day to give the makeup exam. Missed exams will be subject to a 10% lateness penalty. Unless authorized in advance, exams missed in excess of that one may not be taken

### **Assignments**

The assignments are designed to introduce you to practical examples of the use of SQL. Points will be deducted for not following the instructions. Assignments must be turned in on time. Late material may be accepted at the discretion of the instructor if it is handed in BEFORE the end of the next class, but will have a 10% deduction taken. I will not grade any assignment that is handed in after that time, nor any assignment that does not have both a hardcopy and softcopy of the assignment handed in.

Normally, late work will not be accepted after that time although exceptions may be made at the discretion of the instructor in cases of emergency or other situations that have been discussed with the instructor in advance of the assignment due date. If an exception is made there will be a 10% deduction taken for each meeting that the work is late. **The most frequent reason for students not doing well in this class is missing or poor assignments.**  
**The final project must be handed in on time, without exception.**

### **Homework**

Be prepared to spend about 2 hours for every 1 hour in the classroom. If you are a slow typist or reader this may be longer. Because there are 3 hours a week of class time, this means you can

spend up to 6 hours a week doing work outside class. Some students will have more background in the subject matter than others and will spend less time. This is standard for any community college course and follows the Carnegie unit guidelines. (See Title V, Part 6 §55002 of the California Code of Regulations).

- Read the assigned chapters. (BEFORE the class covering that chapter)
- Complete the assigned additional exercises.
- Finish all practical assignments.

**YOU MUST RETAIN ALL GRADED ASSIGNMENTS FOR FUTURE REFERENCE. DO NOT DISCARD ANY WORK BEFORE YOU HAVE RECEIVED YOUR GRADE. YOU MUST PICK UP ALL OF YOUR HOMEWORK. UNCOLLECTED HOMEWORK WILL BE DISCARDED BY THE INSTRUCTOR AT THE END OF THE SEMESTER.**

### Grades

The points given will be as follows:

Type of Work	# Labs	Total Points	Percentage
Exams	3	150 (50 each)	30
Final	1	100	20
Assignments	8	160 (20 each)	32
Final Project	1	090	18
TOTAL		500	100

Grading is on an absolute scale as follows:

#### Grade Percentage

A	90 - 100%
B	80 - 89.9%
C	70 - 79.9%
D	60 - 69.9%
F	< 60%

### Attendance

Attendance is mandatory. The instructor may, at her discretion, drop a student for poor attendance (2 or more absences, not necessarily consecutive) at any time during the class. No advance notice will be given. It is the students' responsibility to keep track of their own absences and lateness and to consult with the instructor if it looks as if there may be excessive absences. If you fail to attend class and are not dropped by the instructor you may be given a failing grade. Attendance will be taken at the beginning of each class. Two instances of lateness will count as one absence. If you do come in late it is your responsibility to see the instructor after class and have your attendance record updated. Remember that with only 16 classes during the semester, each class is worth 6.25% of the class, so missing even one class is significant. However if you are able to inform me ahead of time that you will be absent, then I will work with you to keep you up to date with the class work.

### Adding the class, Credit/No Credit, Withdrawal/Drops etc.

Any administrative functions are your responsibility. It is YOUR responsibility to enroll in and withdraw from class. You are also responsible for payment for classes and may find that you cannot access the class BlackBoard site if fees are not paid. You must be actively enrolled and in good standing to access the class. See the class schedule for details of student withdrawal and grade responsibility, prerequisites, grading and class attendance etc. See the class schedule also for details of drop and withdrawal, dates and procedures. See the appropriate office for detailed, accurate information. **Students are responsible for attending to these matters.** Questions

regarding admission, registration, payment etc. should be addressed to the appropriate college department.

It is not the policy of this instructor to assign "Incomplete" grades. Grossmont College has an Incomplete grade Policy that is fairly restrictive, so usually I could not assign an Incomplete, even if I wanted to do so.

### **In-Class Behavior**

#### **IN-CLASS CONDUCT**

This class is offered in the Career Technical Education/Workforce Development Division, helping to prepare you for a job in the computer field and thus many of the class processes and rules are those that an employer will expect. Students are expected to behave in a professional manner, showing due consideration for others in the class.

All disruptive behavior will be reported to the office of Student Affairs and appropriate action will be taken. See the catalog and "Student Discipline Procedures" handbook for details of the Student Code of Conduct. Usually I will give a reprimand and warning for the first offense, but if there is a second instance then I will give a two day suspension from the class that covers the next two participatory events as described in the class attendance policy.

In a college class it is the responsibility of both the instructor AND the students to ensure a well-regulated learning environment. I cannot deal with a problem unless I know about it so you must inform me of the problem so that I can deal with it, so if for example another student is sending you private email that is disturbing, it is your responsibility to let me know.

In the labs, all lab rules must be followed. The lab rules are posted in each lab and it is your responsibility to be familiar with them. In lecture no eating is allowed during class and students are expected to behave in a professional manner, showing due consideration for others in the class. It is important that each student recognizes that other students may need a quiet environment for learning and shows consideration for others in the class. Please turn cell phones off or onto silent mode during the class and put them out of sight. I do not allow cell phones to be visible during class at any time. Please do not talk to each other while I am lecturing and try not to come in late because it can disrupt a fellow students' concentration

Online professional behavior translates into how you behave on the bulletin board and when using email/messaging. I expect you to be respectful of others in the class, remembering that for some people writing everything out is not easy. I especially do not want you to use the text-messaging type of shorthand or any form of slang. It is much easier for those of us who have learned American English as a second language to understand correct grammar and punctuation.

Also, and very importantly, it should be noted that this is a COLLEGE class and every student in the class is treated as an adult and expected to behave as an adult regardless of their chronological age. All work done and grades assigned are PRIVATE, between the instructor and the student. I may occasionally need to email you at the email address you specify in WebAdvisor so please make sure that email address is your own.

**Students with Disabilities**

Students with disabilities who may need accommodations in this class are encouraged to notify the instructor and contact Disabled Students Programs and Services (DSP&S) early in the semester so that reasonable accommodations may be implemented as soon as possible. Students may contact DSP&S in person in room 110 or by phone at (619) 644-7112 (voice or (619) 644-7119 (TTY for deaf). I cannot make any accommodations until I have official confirmation of your status from DSP&S.

**Career Information**

The CSIS department web page has information on careers in the computer field and the further courses you should take in the CSIS department to prepare you for those careers. The web page is at <http://www.grossmont.net/csis>

**Note that this syllabus may be changed as necessary during the semester. I do not intend or expect to do this unless there is an emergency situation. You may also need it to refer back to this syllabus frequently. Please review it before asking me any questions that I may have already answered here.**

**CSIS 276 Section 2646 Fall 2009 Calendar of Activities**

<b>Wk</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Assignment</b>	<b>Due</b>
1	8/25	Orientation to class - What jobs are out there?		
		Introduction to SQL (pages xxiii - xxxvi) & SQLAnywhere		
2	9/1	Chapter 1: SQL & Relational Database Management	#1 – Chaps 1 & 2	9/15
3	9/8	Chapter 2: Designing Databases	Final Project Part 1	9/29
4	9/15	Chapter 3: Creating & Filling a Database	#2 – Chap 3	9/22
5	9/22	Chapter 4: Selecting data from the Database	#3 – Chap 4	9/29
6	9/29	Project Ideas Review & Review Chap 4 & Exam 1 (Ch 1-4)	Final Project Part 2	10/27
7	10/6	Review Exam 1 Chapter 5 Sorting Data & Selection Techniques	#4 – Chap 5	10/13
8	10/13	Chapter 6: Grouping Data & Reporting from it	#5 – Chap 6	10/27
9	10/20	Chapter 7: Joining Tables for Comprehensive Data Analysis	#6 – Chap 7	11/3
10	10/27	Review Chap 7 & Project Part 2 presentations	Final Project	12/8
11	11/3	Project Part 2 & Exam 2 (Ch 1-7, concentrating on Ch 5 -7)		
12	11/10	Review Exam 2 & Chapter 8: Structuring Queries with Subqueries	#7 – Chap 8	11/17
13	11/17	Chapter 9: Creating & Using Views	#8 – Chap 9	11/24
14	11/24	Chapter 10: Security, Transactions, Performance & Integrity		
15	12/1	Review Chap 9 & Exam 3 (Ch 1-10, concentrating on Ch 8-10)		
16	12/8	Review Exam 3 & Project updates		
		Finish and hand in Projects		
	12/15	Final Exam 8 – 9:50 p.m.		