CS 155A: MySQL Databases

Course Information

Course Number/Term: CS 155A (34912) - Spring 2016
Instructor: Hanan Ibrahim
Email: hibrahim@ccsf.edu
Course Dates/Times: TBA
Office Hours: Mondays, 1:10 PM – 2:10 PM or by appointment
Office: Batmale 424 (Ocean/Phelan campus)
Course URL: https://insight.ccsf.edu/login/index.php

Course Description

A course in the use of the MySQL database management system to create, query, and update database tables. The course covers both the syntax and the logic of the major features of the MySQL language. The course includes a brief introduction to the programming aspects of MySQL.

Course Prerequisites

There are no prerequisites for this course.

Student Learning Outcomes

Upon completion of this course, students will be able to:

- Describe the basic concepts of databases, tables, relationships, and normalization.
- Analyze business requirements; design and implement queries that satisfy those requirements using all of the major components of the SQL language for accessing data, including inner and outer joins, aggregate queries and subqueries and a variety of the intrinsic functions supplied by MySQL.
- Manipulate a MySQL database using client software to create and modify database objects such as tables, constraints, relationships, and views following a database design and design and implement simple user-defined functions.
- Create queries that will manipulate data in the database using Data Manipulation Language statements.

Course Topics

This course includes the following major topics:

- Overview of relational database systems
- Relational database logical design
- Using clients to work with MySQL data
- Implementation of database objects with SQL create statements
- Analysis of business requirements
- Accessing data via queries using the SQL Select statement
- Modification of the table data
- Introduction to creating stored routines
Course Website

There is a CCSF website for this class ([https://insight.ccsf.edu/login/index.php](https://insight.ccsf.edu/login/index.php)) which will be used for turning in assignments, posting grades, and participating in forums. To use this web page, you must login using your Foothill student ID and you must be enrolled in this class. Learning materials, such as lessons and notes, will be available online every Monday morning at 8 AM.

Textbook:

**Required Textbook:**
Murach's MySQL (2nd Edition) by Joel Murach
ISBN 978-1-890774-82-0

I post additional notes for this class.

Software

We will use the freely-available MySQL Database Server to work on exercises and programming assignments. Please install the software on to your computer. You need to be able to use the command line interface to MySQL and you may want to also use a graphical interface. You can download them through the link below:


Reading Assignments

Weekly reading assignments will be posted on Insight. Typically, you should set aside 3-4 hours to complete each reading assignment.

SQL Assignments

There will be weekly SQL assignments throughout the semester. The SQL assignment due dates are generally on Wednesday at 11:55 PM unless told otherwise. Assignments should be submitted through the Insight website and I will return assignment grading reports to the same website. Assignments are listed under "assignments" in Insight.

Late programming assignments will be accepted up to **four days** past the due date, but only for partial credit - a 10% penalty will be applied. All assignments must be individually and independently completed. I will provide feedback and post assignment grades within a week of the due date.

If you do not turn in your assignment after four (**4**) days of the due date, your grade becomes a zero.

Turning in assignments

Your assignment will generally be in the form of a SQL script. Scripts should be text only with the .sql extension. You will need to label your assignments with your first initial, last name, and the name of the assignment. Example: *hibrahim_assignment1* and zip the file to upload to Insight (*hibrahim_assignment1.zip*).
Homework Exercises

There will be biweekly homework exercises throughout the semester and will be listed under "quizzes" in Insight. Homework exercises will consist of multiple-choice and short-answer questions. Homework Assignments are always due on Wednesdays at 11:55 pm. **Homework is not accepted late.** These exercises will reinforce knowledge of SQL commands and relational database systems.

Final Project

This is a comprehensive project that will require and integrate all of the skills you have learned in this course. This project will focus on relational databases and SQL. You will use the MySQL system for this project. The student will design, create, and populate a working database from description requirements provided by the instructor.

Grades

This course allows Pass/No Pass grading. Check the official calendar for the deadline to make this choice. Your final grade is determined by points you earn in the following areas:

<table>
<thead>
<tr>
<th>Submission</th>
<th>Total Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQL Assignments &amp; Homework Exercises</td>
<td>400</td>
<td>40%</td>
</tr>
<tr>
<td>Final Project</td>
<td>100</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>200</td>
<td>20%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>300</td>
<td>30%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1000</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Grading Scale:**

<table>
<thead>
<tr>
<th>% of Points</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 – 100</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89</td>
<td>B</td>
</tr>
<tr>
<td>70- 79</td>
<td>C</td>
</tr>
<tr>
<td>60 – 60</td>
<td>D</td>
</tr>
<tr>
<td>&lt; 60</td>
<td>F</td>
</tr>
<tr>
<td>Fail/Withdraw</td>
<td>FW</td>
</tr>
</tbody>
</table>

An “F” grade indicates that a student attended, participated and completed the course but failed to master the course curriculum.

An “FW” grade indicates the student stopped attending a course after the “last day to withdraw” deadline and subsequently did not submit any work or participated in any exams.

Grades for assignments and exams will be posted one week after the due/exam date on Insight.
Exams

There will be two exams during the semester, a midterm exam covering the recent material and a cumulative final exam.

Exams are open-notes and open-book. You will have two hours to complete each exam. You may see true/false, multiple-choice, short-answer, and programming questions.

Exam Schedule:

Midterm exam: Wednesday March 16, 5:10-7:30, Batmale Hall, Room 301.
Final exam: Wednesday May 25, 5:10-7:30, Batmale Hall, Room 301.

Make-up Exam Policy: If you know in advance that you are unable to make an exam for a valid and unavoidable reason then you must notify the instructor at least one week before the scheduled exam date to make arrangements for a make-up, and bring documentation with you when you take the make-up. Failure to follow either of these policies will result in a zero.

Communication Policy

When I need to communicate with the entire class, I will post a message in the Announcements Forum. The Announcements Forum messages will also be emailed to you directly to ensure effective communication occurs throughout your learning experience.

Emails: I will typically respond to your email within 24 hours during the work week. If you are sending me an email, your email should have a subject line that includes the class number.

Discussion Forum Posts

Since this is an online course that utilizes discussion forums, it is important for all students to actively participate in the course in a timely manner. The Insight Forum is the main place for our class discussion. You can ask questions regarding course materials, assignments and exams on the forum.

Please consider the following general participation expectations:

- Login regularly and actively participate in the course activities.
- Post discussion forums and other assignments on time as indicated each week.
- Complete the assigned reading before posting your question(s) — answers to most questions can be found in the reading assignments.
- No code sharing is allowed on the forums.

Think of these forums as our online classroom. The forums on the website are a great way to interact with other students, exchange thoughts, ask and answer questions as well as take part in public discussion.

I will check the weekly forums on a daily basis and will answer questions as needed. I also highly encourage students to read and respond to posts from fellow peers. You must also post an introduction within the first week to avoid being dropped as a no-show.

Please be sure to adhere to the following policies. Don't post full code answers. Search the forum to see if your question might have been addressed already before you post. And if you have any questions, be as specific as possible.
Academic Accommodations

Students with disabilities who need accommodations are encouraged to contact the instructor. Disabled Students Programs and Services (DSPS) is available to facilitate the reasonable accommodation process. The DSPS office is located in the Rosenberg Library, Room 323 and can be reached at (415) 452-5481.

Withdrawals and Drops

It is your responsibility to drop or withdraw from a class by the final deadlines given in your course schedule. Use the Web4 system or contact the Office of Admissions and Records to be withdrawn from a class. You may drop the class yourself until the last day drop is available. (Check the final drop date for the semester listed in the CCSF calendars.)

I may withdraw you from the class under the following conditions:

1. You have not completed the first week's assignments by the end of week 2 OR
2. You miss the midterm exam and have not submitted any assignments by the date of the midterm exam OR
3. You are not logging in to Insight for more than two weeks

If your name is on the roll at the end of the semester and you have stopped attending class, you will be assigned an F as a final grade.

Drop and Withdrawals Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 2</td>
<td>Last day to officially drop or reduce full-term coursework units in order to qualify for a 100% tuition and enrollment fee refund</td>
</tr>
<tr>
<td>Feb 11</td>
<td>Last day to drop full-term coursework units without a “W” appearing on a student’s permanent record.</td>
</tr>
<tr>
<td>Apr 14</td>
<td>Last day for withdrawals (a “W” will appear on your permanent record)</td>
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</tbody>
</table>

Academic Integrity

Plagiarism and cheating are serious offenses and may be punished by failure on exam, paper or project as well as failure in course and/or expulsion from the college.

No form of cheating (academic dishonesty) is tolerated in this course. Each student must complete each assignment and exams individually.

Examples of cheating may include (but are not limited to):

- using materials during a test that are not specifically allowed by the instructor
- sharing or discussing questions and/or answers on a test or assignment
- allowing another student to copy one or more answers on a test or assignment