Course Syllabus

✎ **Edit**

What Is This Class All About?

Introduction to database design and use of database management systems for applications. Topics include database architecture, comparison to file-based systems, historical data models, conceptual model; integrity constraints and triggers; functional dependencies and normal forms; relational model, algebra, database processing and Structured Query Language (SQL), database access from Applications-Embedded SQL, JDBC, Cursors, Dynamic SQL, Stored Procedures. Emerging trends will be studied, such as NoSQL databases, internet and databases and Online Analytical Processing (OLAP).

Course Objectives -

The student will be able to:
1. Examine the problems with file-based systems and the advantages of the database approach.
2. Distinguish between the three levels in the architecture of a typical database management system.
3. Practice conceptual database design through entity-relationship (ER), enhanced ER models. Describe models of historical interest, such as Network and Hierarchical model.
4. Design and model a database application using the relational model. Design by ER and EER to relational mapping.
5. Define and apply integrity constraints and triggers; Tune design using functional dependencies and normal forms.
6. Use Structured Query Language to perform queries and to perform relational operations.
7. Understand emerging database technologies and applications.

What Will You Need to Buy, Borrow or Get For Free?

The following textbook is recommended (but not required):
Alan Beaulieu. 2008. *Learning SQL*. OReilly. ISBN 9780596007270

You will also need access to a Database Management System (DBMS) and client software. See the topics in the week 1 module called **Software Setup PART 1: Choosing a DBMS** and **Software Setup PART 2: DBMS Clients**

When Can You Get Help?

I am available by Canvas private message (inbox on the left), or Canvas discussion forum *Monday through Friday,* which I monitor several times a day. You can expect an initial reply on weekdays within 24 hours, although if your question is fairly involved, I may need to respond multiple times to address everything. My office hours are online only on Saturdays from 11:00am to 1:00pm on Canvas messages or Google hangouts by appointment. You can also get help from your group or other class members by using the Canvas discussion forums as well. This can be especially helpful on weekends. I do have an email at meadeladawn@fhda.edu but *Canvas private message is the quickest way to get a response.*

Can You Collaborate?

You can talk to friends and classmates about your work on the assignments. However, you should not give or receive completed code. Any and all collaboration should be documented in your submission.

What Is The Honor Code Policy?

Please refer to your catalog for College Policies concerning the Student Code of Conduct here:

**Student Code of Conduct   (https://www.google.com/url?
sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiJpLfoib_hAhWhITQIHb63CKUQFjAAegQIBRAC&url=https%3A%2F%2Fwww.foothill.edu**

You will receive a failing grade for any work you submit in this class that meets the criteria for academic dishonesty and you will be reported to the Office of the Dean of Student Affairs and Wellness.

How Will You Be Graded?

The grading will be broken down like this:

Assignments (7)........70 points
quizzes(5)................... 50 points
midterm exam..................100 points
final exam ....100 points

_____

total 320 points
90-100% A
80-89% B
70-79% C
60-69% D
<60% F

What is the Late Submission Policy and Drop Policy?

I accept late work without penalty up to the final exam deadline. While this policy may seem very generous, it has caused many students to fail because they put off their work until the last possible submission date. As a result, they did not have time to complete the required work. I highly recommend submitting your work on the published due date as much as possible. If life gets in the way, you can take advantage of a few extra days to complete your work, but do not let the work pile up! Because of this late work policy, I fully expect you to complete and test your work before you submit it. If the due date approaches and your code does not function properly, take a little extra time to get it right. I would rather grade late assignments than broken ones.

If you do not participate in the class by either a discussion post, or by a quiz or assignment submission within the first two weeks of class, you *may* be dropped for non-attendance. However, because of my late work policy, you can make up the work and stay in the class. Send me a private message via Canvas in the first few weeks if you need more time to jump into the work.

While I reserve the right to drop students for non-attendance, you should not rely on that. **If you wish to drop the class, you should drop the class yourself with the registrar's office** *and save a confirmation of the drop to ensure that the drop was successful.*

What If You Need Disability Accommodations?

To obtain disability-related accommodations, students must contact the Disabled Students Program and Resources (DSPS) as early as possible in the quarter. If you need disability accommodations, please visit the DSPS website:
Disabled Students Programs and Services   **(http://www.ccsf.edu/en/student-services/student-counseling/dsps/about.html)**

If you already have an accommodation notification, please contact me privately to discuss your needs.

Course Summary:

Date	Details	
Tue Apr 16, 2019	📝 **Assignment 1 (https://foothillcollege.instructure.com/courses/9248/assignments/227725)**	due by 11:59pm
Tue Apr 23, 2019	📝 **Quiz 1 (https://foothillcollege.instructure.com/courses/9248/assignments/227724)**	due by 11:59pm
Tue Apr 30, 2019	📝 **Assignment 2 (https://foothillcollege.instructure.com/courses/9248/assignments/227726)**	due by 11:59pm
	📝 **Quiz 2 (https://foothillcollege.instructure.com/courses/9248/assignments/227723)**	due by 11:59pm
Tue May 7, 2019	📝 **Assignment 3 (https://foothillcollege.instructure.com/courses/9248/assignments/227727)**	due by 11:59pm
Tue May 21, 2019	📝 **Midterm Exam (https://foothillcollege.instructure.com/courses/9248/assignments/227722)**	due by 11:59pm
	📝 **Quiz 3 (https://foothillcollege.instructure.com/courses/9248/assignments/227721)**	due by 11:59pm
Tue May 28, 2019	📝 **Assignment 4 (https://foothillcollege.instructure.com/courses/9248/assignments/227729)**	due by 11:59pm
	📝 **Quiz 4 (https://foothillcollege.instructure.com/courses/9248/assignments/227719)**	due by 11:59pm
Tue Jun 4, 2019	📝 **Assignment 5 - Database Design (https://foothillcollege.instructure.com/courses/9248/assignments/227731)**	due by 11:59pm
Tue Jun 18, 2019	📝 **Quiz 5 (https://foothillcollege.instructure.com/courses/9248/assignments/227718)**	due by 11:59pm
Tue Jun 25, 2019	📝 **Final Exam (https://foothillcollege.instructure.com/courses/9248/assignments/227720)**	due by 11:59pm