



ICS 113 Database Fundamentals

Fall 2017, CRN 61416

Welcome to Database Fundamentals. In this class, you will be introduced to relational databases. We will take a look at relational calculus, the math behind relational databases, and use Structured Query Language (SQL) to create, read, update, and delete data from a database.

Instructor Information

David Maxson

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Office Hours: Online

Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

Catalog Description

This course examines file organization and the use of computer databases. It also examines the handling of information through its organization, management and control. A substantial part of the course develops an understanding of the data processing building blocks: files, records and fields. Techniques to report and maintain data are also covered.

Student Learning Outcomes

By the end of this class, you will be able to:

1. Show conversion of computer files into a database system by creating a simple database
2. Compare a relational database to a flat database
3. Dissect a database into tables, records, fields, keys, views and relationships
4. Demonstrate the normalization process
5. Find records using Structured Query Language (SQL) in a database
6. Create reports with specific record

Class times and location

This is an online class. All lessons and interaction will be through Lulima.

Grading

Your final grade will be determined using a series of assignments. There will be a total of 12 assignments. All assignments are worth 3 points each.

To get the full three points for an assignment you must show mastery by completing the assignment with no errors. If there is an error(s), I will tell you about it and return your submission. You can then fix it and resubmit it. There is no limit to the number of times an assignment can be resubmitted.

All assignments have a due date. Work must be submitted by the due date. You can submit an assignment after its due date but you will lose 1 point if you do. This only applies to the original submission. You may resubmit an assignment at any time up until December 7, 2017.

Your letter grade is based upon the number of points you earn:

- A – 32 to 36 points.
- B – 28 to 31 points.
- C – 25 to 27 points.
- D – 13 to 24 points.
- F – 0 to 12 points.

Resources

Your textbook for this class is *Database Systems*, 11th edition by Coronel and Morris. We will use Lulima for submitting and returning all assignments. All grades will be posted in Lulima and you will be able to track your progress by utilizing the grade book. In addition, there will be discussion boards in Lulima where you may post or answer questions. Use the private message tool in Lulima to contact the instructor.

Other resources

Tutoring may be available from the TRIO office in Library Learning Commons on the WCC campus.

Statement and Policies

Disabilities Accommodation Statement

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor, Ann Lemke, to discuss reasonable accommodations that will help you succeed. Ann Lemke can be reached by phone at 235-7448, by email at lemke@hawaii.edu, or by stopping by her office in Hale Akoakoa 213.

Academic Dishonesty, Cheating, and Plagiarism

You are responsible for the content and integrity of all work you submit. The guiding principle of academic integrity will be that all files, work, examinations, reports, and projects that you submit are your own.

A final thought

Databases have become an integral part of everyday life. Governments, businesses, schools, and many individuals have turned to them to help store data and to retrieve useful information. But a poorly designed database can do as much harm as good. By learning the proper techniques to design and build a database you can provide your clients and users with meaningful information.