ICS 113 – Database Fundamentals

Welcome to Database Fundamentals. In this class, you will be introduced to how to design and build a relational database as well as how to query the database to retrieve information based upon defined criteria.

In this course you will learn to:

- Design a database based upon tables, records, and fields.
- Normalize the database to increase efficiency and improve search results.
- Use the Structured Query Language (SQL) to gather information.
- Create reports that will help the user to understand the information.

Instructor Information

David Maxson
David.Maxson@hawaii.edu
Office Hours: Online

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 Laulima.

Grading

Your final grade will be determined using a series of assignments, quizzes, and exams. There will be a total of 12 assignments and 3 quizzes and 2 exams. Assignments are worth 20 points each. Quizzes are worth 40 points each. Exams are worth 70 points each. The maximum number of points possible is 500.

Each assignment will have a due date. You may turn them in one week late but you will lose 10% of the assigned points. Exams and quizzes may not be taken late.
Your letter grade is based upon the number of points you earn.

- **A** – 450 to 500 points.
- **B** – 400 to 449 points.
- **C** – 350 to 399 points.
- **D** – 300 to 349 points.
- **F** – 0 to 299 points.

**Resources**

Your textbook for this class is David M. Kroenke’s *Database Concepts*, 4th ed. from Prentice Hall.

We will use Laulima for submitting and returning all assignments. All grades will be posted in Laulima and you will be able to track your progress by utilizing the grade book. In addition, there will be discussion boards in Laulima where you may post or answer questions. Use the private message tool in Laulima to contact the instructor.

**Other resources**

- Tutoring may be available from the TRIO office in Na'auao 146 on the WCC campus.
- The Library and The Learning Center at WCC have computers configured with all of the software needed for this class.

**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 to discuss reasonable accommodations that will help you succeed in this class. 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 for more information.

**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 work. See page 16 of the Windward Community College catalog for further clarification.

You will be guilty of cheating if you:
- Represent the work of others as your own (plagiarism).
- User or obtain unauthorized assistance in any academic work.
- Give unauthorized assistance to other students.
- Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
- Misrepresent the content of submitted work.
A final thought

Databases have become an integral part of everyday life. Governments, businesses, schools, and many individuals have turned to databases 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.
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<thead>
<tr>
<th>Week</th>
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<th>Lesson</th>
<th>Textbook Chapter</th>
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<td>Aug 23</td>
<td>Introduction to Laulima</td>
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<td>Nov 1</td>
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Holidays:
- Sep 6       Labor Day
- Nov 2       Election Day
- Nov 11      Veterans Day
- Nov 25      Thanksgiving