

Curriculum Action Request (CAR) (Form 4-93) - Maui Community College

1. Author(s) David Grooms, Rafael Boritzer, and Margaret Christensen2. Authors' unit BSH3. Date submitted to Curriculum Committee Nov 1, 20054. a. General type of action? course program

b. Specific type of action

Addition	Modification	
<input type="checkbox"/> regular	<input type="checkbox"/> number/alpha	<input checked="" type="checkbox"/> prerequisites
<input type="checkbox"/> experimental	<input type="checkbox"/> title	<input type="checkbox"/> corequisites
<input type="checkbox"/> other (specify)	<input type="checkbox"/> credits	<input type="checkbox"/> program
_____	<input type="checkbox"/> description	<input type="checkbox"/> other (specify)

5. Reason for this curriculum action

To remove "admission to the ABIT program" as a prerequisite for the course. Enrollment for this course has been low and the prerequisite may be discouraging students and community members from enrolling in the course even if they meet the other prerequisites. The prerequisite can always be reinstated at a later date, if needed, as the ABIT program matures and enrollments grow.

6. Existing course

<u>ICS 360</u>	<u>Database Application Design</u>	<u>3</u>
alpha number	title	credits

7. Proposed new/modified course

alpha number	title	credits
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8. New course description or page number in catalog of present course description, if unchanged.

Page 117 of the 2005-2006 General Catalog

9. Prerequisite(s): ICS 115 or BCIS 162, ICS 214, or consent.

10. Corequisite(s)

11. Recommended preparation

12. Is this course cross-listed? yes no If yes, list course

13. Student contact hours per week

lecture hours lab hours lecture/lab hours other hours, explain

14. Revise current MCC General Catalog page(s) _____

15. Course grading letter grade only credit/no credit either audit

16. Proposed semester and year of first offering? _____ semester _____ year

17. Maximum enrollment _____ Rationale, if applicable

18. Special scheduling considerations? yes no If yes, explain.19. Special fees required? yes no If yes, explain.

20. Will this request require special resources (personnel, supplies, etc.?) yes no

If yes, explain.

21. Is this course restricted to particular room type? yes no If yes, explain.

22. What method of delivery is appropriate for this course?

traditional HITS (interactive TV) cable on-line any of these

other, explain

23. Course fulfills requirement for _____ program/degree

Course is an elective for _____ program/degree

Course is elective for AA degree

24. This course increases decreases makes no change in number of credit required for the program(s) affected by this action

25. Is this course taught at another UH campus? yes no

a. If yes, specify campus, course, alpha and number

b. If no, explain why this course is offered at MCC

26. a. Course is articulated at

UHCC UH Manoa UH Hilo UH WO Other/PCC

b. Course is appropriate for articulation at

UHCC UH Manoa UH Hilo UH WO Other/PCC

c. Course is not appropriate for articulation at

UHCC UH Manoa UH Hilo UH WO Other/PCC

d. Course articulation information is attached? yes no

Proposed by

Dario Jimenez 10/28/05
Author or Program Coordinator/Date

Approved by

[Signature] 2/5/06
Academic Senate Chair/Date

Requested by

[Signature] 10/28/05
Division or Unit Chair/Date

[Signature] 2/24/06
Chief Academic Officer/Date

Recommended by

[Signature] 02/07/06
Curriculum Chair/Date

[Signature]
Chancellor/Date

FEB 28 2006

Maui Community College
Course Outline

1. Alpha and Number Information and Computer Science 360
ICS 360

Course Title Database Application Design

Credits Three (3)

Date of Outline November 1, 2005 (Margaret Christensen/Daniel Kruse)

2. Course Description Introduces database management systems (DBMS). Covers both theoretical and practical aspects of DBMS, such as database design, use, and implementation. Includes a final programming project to design and develop a practical database system for library access, electronic commerce, information retrieval, or a similar application. Involves the use of the database language SQL and, possibly, other languages.

3. Contact Hours/Type 3 hours/Lecture

4. Prerequisites ICS 115 or BCIS 162, ICS 214, or consent

Corequisites

Recommended Preparation

Approved by

[Signature] ^{FEB 28 2006} Date *2/24/06*

5. General Course Objectives

This course is an introduction to information and database systems. Topics covered will include database design, database implementation, normalization, and the connection of databases and the World Wide Web

For detailed information on how ICS 360 focuses on the Maui Community College general education standards, see the attached curricular grid.

ICS 360 fulfills three of the 15 credits for the Applied Business and Information Technology Bachelor of Applied Science Degree at Maui Community College.

6. Student Learning Outcomes

For assessment purposes, these are linked to #7. Recommended Course Content.

On successful completion of this course, students will be able to

- (a) discuss information and database systems,
- (b) outline Internet information systems,
- (c) represent information with data models,
- (d) use data modeling with entity-relationship diagrams,
- (e) develop relational data models,
- (f) define relational databases with Microsoft Access or other database management systems (DBMS),
- (g) revise relational schemas and perform normalization,
- (h) manipulate database content with relational algebra and DBMS,
- (i) use SQL to manipulate database content and structure,
- (j) recall how to create Web pages with HTML,
- (k) implement interaction between users and servers with ASP and JavaScript or Visual Basic,
- (l) develop database applications for the Web,
- (m) design and implement an interactive Web site,
- (n) discuss advanced issues in Web site design and implementation.

7. Recommended Course Content and Approximate Time Spent on Each Topic

Linked to # 6. Student Learning Outcomes.

1-2 Weeks	Introduction to information and database systems (a)
0 — 1 Week	Review of Internet information systems (a,b)
.5 - 1 Week	Representation of information with data models (a,c)
1 - 2 Weeks	Use of data modeling with entity-relationship diagrams (a,c,d)
1 — 2 Weeks	Development of relational data models (a,c,d,e)
1 — 2 Weeks	Definition of relational databases with a database management system(DBMS) (a,c-f)
1 — 2 Weeks	Improvement of relational schemas and normalization (a,c-g)
1 — 2 Weeks	Manipulation of database content with relational algebra and DMS (a, c-h)
1 — 2 Weeks	Use of SQL to manipulate the database content and structure (a, c-i)
.5 — 1 Week	Review of presentation of information on the Web with HTML (a,b,j)

- 1 — 2 Weeks Creation of interaction between users and servers with ASP and JavaScript or Visual Basic (a,b,j,k)
- 1 — 2 Weeks Development of database applications for the Web (a-l)
- 1 — 2 Weeks Design and implementation of an interactive Web site (a-m)
- 1 — 2 Weeks Advanced issues in Web site design and implementation (g,h,l,m,n)

8. Text and Materials, Reference Materials, Auxiliary Materials and Content

Appropriate text(s) and materials will be chosen at the time the course is offered from those currently available in the field. Examples include:

Database Management with Web Site Development Applications, Riccardi, Addison Wesley, 2003.

Database Management Systems: Designing and Building Business Applications, Post, 3rd edition, McGraw-Hill Irwin, 2005.

Database Design, Application Development and Administration, Manning, 2nd edition, McGraw-Hill Irwin, 2004.

9. Recommended Course Requirements and Evaluation

Specific course requirements are at the discretion of the instructor at the time the course is being offered. Suggested requirements might include, but are not limited to

- 10 —50% Written quizzes, midterm(s) and/or a final exam covering lectures, discussions, media presentations, lab activities, field trips, guest speakers, and reading assignments
- 5—30% Practical exams
- 0 —30% Writing summaries and reactions about database issues in the media (including newspapers, video, magazines, journals, lectures, web-based material, etc.)
- 0—20% Reading text assigned materials and answering discussion questions
- 5—20% Participation in class discussions, group and/or individual oral reports
- 10—20% Projects, reports, and/or Service-Learning
- 0—10% Class participation

10. Methods of Instruction

Instructional methods will vary considerably with instructors. Specific methods will be at the discretion of the instructor teaching the course and might include, but are not limited to

- a. quizzes and other tests with feedback and discussion;
- b. lab practical exams;
- c. lectures and class discussions;
- d. problem solving;
- e. narrated electronic presentations;
- f. videos, DVDs, CD-ROMs with detailed viewing guide and discussion questions;
- g. lab activities including experiments, lab skill lessons, and other activities;
- h. guest speakers and attendance at public lectures;
- i. group activities;
- j. oral reports and other student presentations;
- k. homework assignments such as
 - reading, or watching, and writing summaries and reactions to information/data issues in the media including broadcast television, newspapers, video, magazines, journals, lectures, web-based material, and other sources;
 - reading text and reference materials and answering discussion questions;
 - researching database issues and problems;
- l. web-based assignments and activities;
- m. reflective journals;
- n. group and/ or individual research projects with reports or poster presentations;
- o. study logs and study groups;
- p. Service-Learning, community service, and/or civic engagement projects; and
- q. other contemporary learning techniques (such as problem-based learning, investigative case-based learning, co-op, internships, self-paced programs, etc.)