CIS 69.51 Course Outline as of Spring 2008

CATALOG INFORMATION

Dept and Nbr: CIS 69.51   Title: FILEMAKER PRO
Full Title: Database Management with FileMaker Pro
Last Reviewed: 3/25/1999

Units			Course Hours per Week		Nbr of Weeks	Course Hours Total		
Maximum	3.00		Lecture Scheduled	2.00	17.5	Lecture Scheduled		35.00
Minimum	3.00		Lab Scheduled	0	17	Lab Scheduled		0
			Contact DHR	3.50		Contact DHR		61.25
			Contact Total	5.50		Contact Total		96.25
			Non-contact DHR	0		Non-contact DHR		0

Total Out of Class Hours: 70.00   Total Student Learning Hours: 166.25

Title 5 Category: AA Degree Applicable
Grading: Grade or P/NP
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly: CIS 82.15

Catalog Description:
A full semester course exploring database design and use. Included are creating files/tables, displaying and using precreated forms and custom forms, selecting particular records, using expressions and summary calculations and interfacing with the World Wide Web.

Prerequisites/Corequisites:
Course Completion of CS 101B (or CIS 101B) OR Course Completion of CS 105B (or CIS 105B or CIS 81.5B or BDP 81.5B) OR Course Completion of CS 5 (or CIS 5 or BDP 5 or BDP 51)

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: A full semester course exploring database design and use. Included are creating files/tables, displaying and using precreated forms and custom forms, selecting particular records, using expressions and summary calculations and interfacing with the World Wide Web. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of CS 101B (or CIS 101B) OR Course Completion of CS 105B (or CIS 105B or CIS 81.5B or BDP 81.5B) OR Course Completion of CS 5 (or CIS 5 or BDP 5 or BDP 51)
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit:
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

			Effective:	Inactive:
AS Degree:	**Area**		Effective:	Inactive:
CSU GE:	**Transfer Area**		Effective:	Inactive:
IGETC:	**Transfer Area**		Effective:	Inactive:
CSU Transfer:		Effective:	Inactive:	
UC Transfer:		Effective:	Inactive:	

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
Students will:
when given a written description for a particular situation, create database structure with appropriate field sizes, field types, and field names.
create calculation, summary and reappearing fields, enter data (automatically and manually), and check for accuracy.
create, edit and format layouts.
successfully print data files and layout documents with imported data.
describe and contrast the three conceptual data models.
compare and contrast logical and physical database designs.
query a database with simple and complex expressions.

Topics and Scope:

1. Definitions:
   a. database
   b. relational database
   c. files/tables
   d. entities
   e. fields
      1) properties of fields
         a) name
         b) size
         c) type

1. text
2. number
3. date
4. time
5. container
6. calculation
7. summary
8. global
 f. fields with expression
  1) order of operations
  2) functions
  3) constants
  4) field references
  5) stored calculation results
  6) defining summary fields
2. Designing the database
 a. Database design principles
 b. Normalization of tables-data redundancy
 c. Entities
 d. Key fields, Primary keys, Relating tables
3. Creating the structure for the file/table
 a. Naming files including common naming conventions
4. Define the database terms:
 a. sort
 b. ascending
 c. descending
 d. key field
 e. index
 f. expression
 g. constant
 h. field
 i. record
 j. order of operations
 k. redundancy
 l. validation
5. Distinguish between layouts appropriate for screen viewing and layouts appropriate for printing.
6. Create a database consisting of at least two related tables/files.
7. Given a database with a variety of field types, find specified records from the database using:
 a. simple comparison operators (=,<,>)
 b. AND and OR
 c. wild cards
 d. between operator (...)
8. Create a layout appropriate for inputting data on screen that includes four of the following features:
 a. formatting
 b. graphic
 c. validation rule
 d. calculated field/expression
 e. function
9. Create a layout appropriate for printing labels

10. Create a layout appropriate for printing summary information from the database
11. Create either a "mail merge" document that contains selected information from the database OR
12. Display information from the database on a Web page

Assignment:

Read approximately 30 pages per week in text book
Weekly lab exercises designed as practice for the skills and concepts presented in lecture.
A project involving a real life application of the student's choosing that demonstrates their knowledge and understanding of database fundamentals and the application.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems	Problem solving 10 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

FINAL PROJECT	Skill Demonstrations 10 - 50%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion	Exams 40 - 60%

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%

Representative Textbooks and Materials:
"FileMaker Pro 4 Bible", by Schwartz - IDG Books 1998