#### CS 63.11 Course Outline as of Fall 2015

## **CATALOG INFORMATION**

Dept and Nbr: CS 63.11 Title: MS ACCESS

Full Title: Microsoft Access Last Reviewed: 4/13/2015

Units		Course Hours per Week	•	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	4	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

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 69.31

#### **Catalog Description:**

An introduction to Microsoft Access emphasizing its use as a general purpose relational database management system. Topics include how to design, create, update, modify, select, and report from a database using the Access objects: tables, queries, forms, and reports.

### **Prerequisites/Corequisites:**

# **Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: An introduction to Microsoft Access emphasizing its use as a general purpose relational database management system. Topics include how to design, create, update, modify, select, and report from a database using the Access objects: tables, queries, forms, and reports. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment: Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Transferable Effective: Fall 1995 Inactive: Fall 2017

**UC Transfer:** Effective: Inactive:

CID:

## Certificate/Major Applicable:

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of the course, students will be able to:

- 1. Design and create tables.
- 2. Filter, sort, and search for data from tables and forms.
- 3. Given a written set of criteria, select the appropriate query type, create a query, and successfully manipulate table data.
- 4. Produce a custom form with detail, header, and footer sections.
- 5. Produce a custom report with a detail section as well as page and group headers and footers.
- 6. Create expressions to produce calculated fields.
- 7. Compare and contrast flat file and relational databases.
- 8. Distinguish between the inner and the two outer joins, examine the data requirements and apply the appropriate join.
- 9. Analyze a written description of a desired data subset and create a query, applying appropriate comparison and logical operators.
- 10. Distinguish between one to one, one to many, and many to many relationships in database design and implement the relationships between the database tables.

# **Topics and Scope:**

- 1. Introduction to database concepts
  - a. Flat file database vs. relational database
  - b. Defining relationships
    - 1) One to many
    - 2) One to one
    - 3) Many to many
    - 4) The relationship window
  - c. Organizing data
    - 1) Records
    - 2) Fields

- 3) Key fields
- 4) Tables
- 2. Access objects
  - a. Tables
  - b. Queries
  - c. Forms
  - d. Reports
- 3. Defining the structure of a table
  - a. Field name and its characteristics
  - b. Data types
  - c. Field properties
  - d. Specifying a key field
- 4. Maintaining a database table
  - a. Deleting a field
  - b. Moving a field
  - c. Adding a field
  - d. Changing field properties
  - e. Copying records from another database
  - f. Deleting records
  - g. Changing records
- 5. Queries
  - a. Simple queries with comparison operators
  - b. Using logical operators
    - 1) The OR operator
    - 2) The AND operator
  - c. Special operators
    - 1) IN operator
    - 2) LIKE operator
  - d. Relating tables in the query window
- 6. More advanced queries
  - a. Using both AND and OR in the same query
  - b. Calculated fields
  - c. Aggregate functions
  - d. Group by
  - e. Action queries
    - 1) Update
    - 2) Append
    - 3) Delete
    - 4) Make table
  - f. Top and bottom value queries
  - g. Cross tab queries
- 7. Forms
  - a. Automatic forms created by Access
  - b. Using the form wizard
  - c. Creating forms with the design window
    - 1) Adding controls
    - 2) Moving, sizing and deleting controls
    - 3) Formatting controls
  - d. The different form sections and their functions
  - e. Main forms with subforms
  - f. Filtering forms
    - 1) Filter by form

- 2) Filter by selection
- 3) Saving a filter as a query
- 4) Applying a filter saved as a query
- 8. Reports
  - a. Automatic reports created by Access
  - b. Using the report wizard
  - c. Creating reports with the design window
    - 1) Adding controls
    - 2) Moving, sizing and deleting controls
    - 3) Formatting controls
  - d. The different report sections and their functions
  - e. Main reports with subreports
  - f. Adding controls from Access
    - 1) Date
    - 2) Page number
  - g. Sorting and grouping in a report
- 9. Overview of macros

### **Assignment:**

- 1. Hands-on quizzes
- 2. Performance exams on computer
- 3. Read 20-30 pages per week
- 4. Answer end-of-chapter questions
- 5. Computer tutorial labs
- 6. Case studies done on the computer
- 7. Project incorporating database design creating tables with appropriate relationships including effective queries, reports, and forms
- 8. Two or three tests

#### **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 noncomputational problem solving skills.

Homework problems (end-of-chapter questions), case studies, project

Problem solving 70 - 75%

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

Skill Demonstrations Performance exams, tutorial labs 15 - 25% **Exams:** All forms of formal testing, other than skill performance exams. Exams Tests: multiple choice, true false, matching, or completion 5 - 10% **Other:** Includes any assessment tools that do not logically fit into the above categories. Other Category 0 - 0%

## **Representative Textbooks and Materials:**

None

New Perspectives: Microsoft Access 2013 Comprehensive, by Adamski and Finnegan. Course Technology, 2013.