

**CS 63.11 Course Outline as of Fall 2017****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		Course Hours Total	
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:

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:**      Effective:      Inactive:

**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 non-computational 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.

Performance exams, tutorial labs

Skill Demonstrations  
15 - 25%

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

Tests: multiple choice, true false, matching, or completion

Exams  
5 - 10%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

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