

**CIS 69.31 Course Outline as of Spring 2004****CATALOG INFORMATION**

Dept and Nbr: CIS 69.31 Title: MICROSOFT 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	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	0	8	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 82.21

**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, pages, and reports.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100 and completion of CIS 101B (or CIS 81.1B) is strongly recommended.

**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 database design and using the Access objects: tables, queries, forms, pages, and reports. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100 and completion of CIS 101B (or CIS

81.1B) is strongly recommended.

Limits on Enrollment:

Transfer Credit: CSU;

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

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

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 1995	Inactive: Fall 2017
<b>UC Transfer:</b>		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. Analyze a written description of a situation & apply Codd's theory of database design to create a database in the third normal form.
2. Identify eight data types and their uses.
3. Filter, sort, and search for data from tables and forms.
4. Given a written set of criteria, select the appropriate query type, create a query, and successfully manipulate the data tables.
5. Produce a custom form with detail, a header, and a footer.
6. Produce a custom report with detail as well as page and group headers and footers.
7. Create expressions to produce calculated fields.
8. Compare and contrast flat file and relational databases.
9. Distinguish between the inner and the two outer joins, examine the data requirements and apply the appropriate join.
10. Analyze a written description of a desired subset of data, and create a query, applying appropriate conditional and logical operators.
11. Distinguish between one to one, one to many, and many to many relationships in database design. Explain why intermediary tables are required, and describe and demonstrate the steps required to implement a many to many relationship.
12. Analyze an existing database and create a data dictionary for that database.

### **Topics and Scope:**

1. Introduction to Database Concepts
  - a. Flat file database vs Relational database

- b. Relationships
    - 1) One to many
    - 2) One to one
    - 3) Defining relationships
    - 4) The relationship window
  - c. Organizing data
    - 1) Records
    - 2) Fields
    - 3) Key fields
    - 4) Tables
2. Access
- a. Objects
    - 1) Table
    - 2) Query
    - 3) Form
    - 4) Report
  - b. Defining the structure of a table
    - 1) Field name and its characteristics
    - 2) Field types
      - a) Text
      - b) Number and its sub categories
      - c) Yes no
      - d) Memo
      - e) Ole
      - f) Date/Time
      - g) Currency
      - h) Autonumber
      - i) Hyperlink
      - j) Lookup Wizard
    - 3) Other field properties
      - a) Size
      - b) Caption
      - c) Decimal places
      - d) Format
      - e) Default Value
    - 4) Specifying a key field
      - a) Single field
      - b) Multiple fields
  - c. Wizards
    - 1) Form
    - 2) Report
    - 3) Query
  - d. Maintaining a database table
    - 1) Deleting a field
    - 2) Moving a field
    - 3) Adding a field
    - 4) Changing field properties
    - 5) Copying records from another database
    - 6) Deleting records
    - 7) Changing records
  - e. Queries
    - 1) Simple queries with comparison operators

- 2) Equal
- 3) Not equal
- 4) Greater than
- 5) Greater than or equal to
- 6) Less than or equal to
- f. Using the OR operator
- g. Using the AND operator
- h. Relating tables in the query window
- i. More advanced queries
  - 1) Both AND and OR
  - 2) Calculated fields
  - 3) IN operator
  - 4) LIKE operator
  - 5) Aggregate functions
  - 6) Group By
- j. Action Queries
  - 1) Update
  - 2) Append
  - 3) Delete
- k. Cross tab query
- 3. Forms
  - a. Creating forms with the design window
    - 1) Adding fields
    - 2) Moving fields and labels
    - 3) The different bands and their functions
    - 4) Main and subform forms
    - 5) Adding a picture - clip, zoom and stretch
  - b. Filters with Forms
    - 1) Filter by Form
    - 2) Filter by Selection
    - 3) Saving a filter as a query
    - 4) Applying a filter that was saved as a query
- 4. Reports
  - a. Auto report wizard
  - b. Wizard
  - c. Custom report from the design window
    - 1) Report sections and their functions
    - 2) Adding fields
    - 3) Working with controls
      - a) Moving
      - b) Sizing
      - c) Aligning
      - d) OLE objects
    - 4) Adding controls from Access
      - a) Date
      - b) Page number
    - 5) Sorting and grouping in a report
- 5. Access and the Web
  - a. Static pages
  - b. Dynamic pages
  - c. Posting reports
- 6. Overview of macros

## Assignment:

1. Written quizzes
2. Hands on quizzes
3. Performance exams on computer
4. Read 20-30 pages per week
5. Answer end of chapter questions
6. Computer tutorial labs completed to instructor's specifications
7. Case studies done on the computer meeting specifications set by instructor
8. Project incorporating database design where the student creates tables with appropriate relationships. In this project the student will also demonstrate their ability to create effective queries, reports, and forms

## 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, Project

Problem solving  
30 - 50%

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

Performance exams

Skill Demonstrations  
20 - 40%

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

Multiple choice, True/false, Matching items, Completion, Problem solving

Exams  
20 - 40%

**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 2002 Comprehensive," by Adamski  
and Finnegan - Course Technology 2002