

Access-Advanced

Course Outcome Summary

Course Information

Organization	Madison Area Technical College
Developers	Beverly Klein
Development Date	12/5/2000
Revised By	Penny Johnson
Revised Date	7/9/2008
Course Number	10-103-127
Instructional Level	Certificate, One Year Diploma, & Associate Degree
Instructional Area	Computer Software
Division	Business and Applied Arts
Department	Business Technology
Potential Hours of Instruction	24
Total Credits	1

Description

Apply advanced report and form techniques; create and modify SQL queries; create multi-page forms; administer a database system; review database design principles.

Target Population

Learners who need to acquire Microsoft Access database processing skills and qualifications for employment purposes, utilize a microcomputer as a database manager, or learn Access for personal use. Particularly appropriate for associate degree, diploma, and certificate individuals as well as those preparing for Core MOUS certification.

Types of Instruction

Instruction Type	Contact Hours	Credits
Classroom Presentation or Online Course	24	1

Textbooks

Shelly, Cashman, Pratt. *Access 2007 Comprehensive Concepts and Techniques*. Course Technology. 2004. **ISBN:** 0-619-20040-5. **Source:** MATC bookstore.

Learner Supplies

Storage device (CD, USB, jump drive, etc.). **Manufacturer:** ---. **Quantity:** 12.

Computer: Minimum--500 MHz processor or higher, 1.5 GB hard drive, 256 MB of RAM or higher. **Manufacturer:** ---.

Microsoft Windows XP with Service Pack (SP) 2 or later operating system. **Manufacturer:** ---.

Internet Explorer 7 (minimum) with internet access. **Manufacturer:** ---.

Microsoft Access 2007. **Manufacturer:** ---.

Prerequisites

Access-Beginning (10-103-145) or equivalent

Access-Intermediate (10-103-125) or equivalent

Working knowledge of Microsoft Windows (computer literacy, proficiency with a mouse, file management)

Experience sending and receiving email; moderate skills using the net

Exit Learning Outcomes

Core Abilities

A. Science and Technology

Competencies

A. Apply advanced report techniques

Competence will be demonstrated:

- B.1. through actual performance of the skill
- B.2. by using a computer, printer, and Microsoft Access 2007 for Windows
- B.3. in submitted files as specified on the assignment sheet
- B.4. by specified assignment deadlines

Criteria - Performance will be satisfactory when:

- A.1. Change a caption
- A.2. Create queries for reports
- A.3. Create reports in Design view
- A.4. Add fields and text boxes to a report
- A.5. Format controls
- A.6. Group and ungroup controls
- A.7. Update multiple controls
- A.8. Add and modify a subreport
- A.9. Change the Can-Grow properties
- A.10. Change the appearance of controls
- A.11. Modify section properties
- A.12. Add a title, page number, and date
- A.13. Add totals and subtotals
- A.14. Assign conditional values
- A.15. Create mailing labels

B. Apply advanced form techniques

Competence will be demonstrated:

- C.1. through actual performance of the skill
- C.2. by using a computer, printer, and Microsoft Access 2007 for Windows
- C.3. in submitted files as specified on the assignment sheet
- C.4. by specified assignment deadlines

Criteria - Performance will be satisfactory when:

- B.1. Create a form in Design view
- B.2. Add fields to Form Design
- B.3. Add a calculated field
- B.4. Add combo boxes
- B.5. Format combo boxes
- B.6. Format and resize controls
- B.7. Add title to form
- B.8. Add command buttons to a form
- B.9. Modify buttons and combo boxes

- B.10. Add an option group and create a macro for the option group
- B.11. Use tab controls to create a multipage form
- B.12. Add and modify a subform
- B.13. Insert charts
- B.14. Modify a chart type
- B.15. Format a chart

C. Administer a database system

You will demonstrate your competence:

- D.1. through actual performance of the skill
- D.2. by using a computer, printer, and Microsoft Access 2007 for Windows
- D.3. in submitted files as specified on the assignment sheet
- D.4. by specified assignment deadlines

Your performance will be successful when:

- C.1. Convert a database to and from earlier versions of Access
- C.2. Use the Table Analyzer, Performance Analyzer, and Documenter
- C.3. Create custom categories and groups in the Navigation Pane
- C.4. Use table and database properties to create a validation rule for a table
- C.5. Use field properties to create a custom input mask and to allow zero length
- C.6. Create single-field and multi-field indexes
- C.7. Enable and use automatic error checking
- C.8. Add a smart tag to a field in a table
- C.9. Show/Hide a smart tag
- C.10. Add a smart tag to a control in a form
- C.11. Select a startup form
- C.12. Open a database with a startup form
- C.13. Encrypt a database with a password
- C.14. Open a database with a password
- C.15. Decrypt a database and remove a password
- C.16. Understand digital certificates
- C.17. Understand the purpose and use of options within the Trust Center
- C.18. Understand how to lock a database and use a locked database
- C.19. Split a database

D. Use SQL

You will demonstrate your competence:

- E.1. through actual performance of the skill
- E.2. by using a computer, printer, and Microsoft Access 2007 for Windows
- E.3. in submitted files as specified on the assignment sheet
- E.4. by specified assignment deadlines

Your performance will be successful when:

- D.1. Change the font or font size for SQL queries
- D.2. Create a new SQL query
- D.3. Include certain fields in SQL queries
- D.4. Include fields and criteria in SQL queries
- D.5. Include all fields in SQL queries
- D.6. Use numeric and text criteria in SQL queries
- D.7. Use compound criteria in SQL queries
- D.8. Use NOT in a criterion in SQL queries
- D.9. Use computed fields in SQL queries

- D.10. Sort the results in SQL queries
- D.11. Use built-in functions in SQL queries
- D.12. Use functions in the same command
- D.13. Group the results in SQL queries
- D.14. Restrict the groups that appear
- D.15. Join tables in SQL queries
- D.16. Use subqueries
- D.17. Compare SQL queries with Access-generated SQL
- D.18. Use INSERT, UPDATE, and DELETE commands in SQL queries