

Bossier Parish Community College
Syllabus

Course Prefix and Number: CIS 209

Credit Hours: 3

Course Title: Advanced MS Access

Course Prerequisites: CIS 105

Textbook: New Perspectives on Microsoft® Office Access 2010, Comprehensive, Premium Video Edition, 1st Edition ISBN-10: 0538798475 ISBN-13: 9780538798471 **Author(s):** Joseph J. Adamski, Kathy Finnegan **Publisher:** Course Technology/Cengage.

Course Description: An in-depth exposure to database design (presently Microsoft Access 2010). The course includes how to plan, define, create, and modify databases. Practical applications of integration of other documents will also be explored in depth. 3 hrs. of lecture/lab.

Learning Outcomes:

At the end of this course the student will

- A. create and build a database, define table relationships, maintain and query a database, and create forms and reports;
- B. create advanced queries and enhance table design, use form tools and create custom forms and reports, share, intergrate, and analyze data.
- C. use action queries and advanced table relationships, automate tasks with macros, use and write Visual Basic for Applications Code, manage and secure a database.

To achieve the learning outcomes, the student will:(The letter designations at the end of each statement refer to the learning outcome(s).)

1. Learn basic database concepts and terms, Explore the Microsoft Access window and Backstage view, Create a blank database , Create and save a table in Datasheet view, Enter field names and records in a table datasheet, Open a table using the Navigation Pane, Open an Access database, Copy and paste records from another Access database, Navigate a table datasheet , Create and navigate a simple query, Create and navigate a simple form, Create, preview, navigate, and print a simple report, Learn how to compact, back up, and restore a database (A).
2. Learn the guidelines for designing databases and setting field properties, Modify the format of a field in Datasheet view, Create a table in Design view, Define fields and specify a table's primary key, Modify the structure of a table, Import data from an Excel worksheet, Create a table by importing an existing table structure, Add fields to a table with the Data Type gallery, Delete, rename, and move fields, Add data to a table by importing a text file, Define a relationship between two tables(A).

3. Find, modify, and delete records in a table, Learn how to use the Query window in Design view, Create, run, and save queries, Update data using a query datasheet, Create a query based on multiple tables, Sort data in a query, Filter data in a query, Specify an exact match condition in a query, Change the font size and alternate row color in a datasheet, Use a comparison operator in a query to match a range of values, Use the And and Or logical operators in queries, Create and format a calculated field in a query, Perform calculations in a query using aggregate functions and record group calculations, Change the display of database objects in the Navigation Pane(A).
4. Create a form using the Form Wizard, Apply a theme to a form, Add a picture to a form, Change the color and line type of items on a form, Find and maintain data using a form, Preview and print selected form records, Create a form with a main form and a subform, Create a report using the Report Wizard, Apply a theme to a report, Resize fields in a report, Insert a picture in a report, Use conditional formatting in a report, Preview and print a report(A).
5. Review table and object naming standards, Use the Like, In, Not, and & operators in queries, Filter data using an AutoFilter, Use the Iif function to assign a conditional value to a calculated field in a query, Create a parameter query, Use query wizards to create a crosstab query, a find duplicates query, and a find unmatched query, Create a top values query, Modify table designs using lookup fields, input masks, and data validation rules, Identify object dependencies, Review a Memo field's properties, Designate a trusted folder(B).
6. Change a lookup field to a Text field, View and print database documentation, Create datasheets, multiple items, and split forms , Modify a form and anchor form controls in Layout view, Plan, design, and create a custom form in Design view and in Layout view, Select, move, align, resize, delete, and rename controls in a form, Add a combo box to a form, Add headers and footers to a form, Add a combo box to a form to find records, Add a subform to a form, Add calculated controls to a form and a subform, Change the tab order in a form, Improve the appearance of a form(B).
7. View, filter, and copy report information in Report view, Modify a report in Layout view, Modify a report in Design view, Design and create a custom report, Sort and group data in a report, Add, move, resize, and align controls in a report, Add lines to a report, Hide duplicate values in a report, Add the date, page numbers, and title to a report, Create and modify mailing labels(B).
8. Export an Access table to an HTML document and view the document, Import a CSV file as an Access table, Use the Table Analyzer, Import and export XML files, Save and run import and export specifications, Create a multi-page form using a tab control, Embed a chart in a form, Create and modify PivotTables and PivotCharts, Link data from an Excel workbook(B).

9. Create an action query to create a table, Create action queries to append, delete, and update data, Define many-to-many and one-to-one relationships between tables, Learn about joining tables, Join a table using a self-join, View and create indexes for tables(C).
10. Run and add actions to macros, Single step a macro, Create a submacro, Add a command button to a form, Add a macro to a macro group, Attach a macro to a command button, Create an unbound form, Add a list box to a form, Use an SQL statement to fill a list box with object names, Create multiple macros for a form, Create a navigation form(C).
11. Learn about Function procedures (functions), Sub procedures (subroutines), and modules, Review and modify an existing subroutine in an event procedure, Create a function in a standard module, Test a procedure in the Immediate window, Create event procedures, Compile and test functions, subroutines, and event procedures, Hide text and change display colors(C).
12. Filter data in a table and a form, Save a filter as a query and apply the saved query as a filter, Create a subquery, Create a multivalued field, Create an Attachment field, Use an AutoNumber field, Save a database as a previous version, Analyze a database's performance, Link a database to a table in another database, Use the Linked Table Manager, Split a database, Encrypt a database with a password, Set database properties and startup options, Create an ACCDE file(C).

Course Requirements:

- A. Students are expected to attend classes regularly; excessive unexcused absences constitute grounds for suspension.
- B. For students taking the class via the Internet, they must understand that if he/she does not turn in assignments or take tests that this equates to being absent from class and constitutes grounds for suspension.
- C. Students must have access to Microsoft Access 2010. The software is available to the student on campus either in the computer lab during scheduled class times or in the Technology Resource Center houses on the second floor of the BPCC library.

Course Grading:

- A. Letter grades will be assigned based on a ten point grading scale (90-100 = 'A', 80-89 = 'B', 70-79 = 'C', 60-69 = 'D', 0-59 = 'F').
- B. Students are required to complete a minimum of one assignment per chapter.
- C. Students are required to complete at exam per learning outcome.