COURSE DESCRIPTION

Prerequisites: ITSW 1407 or instructor consent

This course is designed to continue preparing you to take the Microsoft Office Specialist certification test for Microsoft Office Access 2013 Specialist. Advanced concepts of database and functionality. Topics include advanced data manipulation features, importing and exporting data, and advanced macros and programming. This course may be repeated if topics and learning outcomes vary.

This is a 4 credit hour course. (3 Lec., 4 Lab.)

WECM END-OF-COURSE OUTCOMES: Demonstrate the interaction between machine-level operations and computer architecture; develop executable programs; create documentation; and incorporate input/output and file handling.

STUDENT LEARNING OUTCOMES:

Upon successful completion of ITSW 2437 Advanced Database, students will be able to:

- Write a one page research paper comparing contrasting Microsoft Office Access 2010 and Microsoft Office Access 2013
- Work individually import and export data
- Create and use macros
- Apply advanced report and from techniques
- Administer a database system

COURSE MATERIALS


GMETRIX: GMetrix.com

Other: USB Flash Drive
Pencil, Pen, Paper

A student of this institution (El Centro College) is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.
Major Course Requirements
Student will complete START HERE Assignments.
Students will complete Discussion Board items on a weekly basis.
Students will complete a Learning Style Inventory.
Students will complete a one-page research paper comparing and contrasting Office 2010, and 2013.
Students will complete exams on each chapter.
Students will complete GMetrix questions to prepare for certification
Students will complete a Microsoft Office Expert certification exam.
Students will complete Chapter, Apply Your Knowledge, Extend Your Knowledge, Analyze, Correct, Improve, In the Labs, and Consider This: Your Turn database assignments using rubrics which will evaluate the student’s skills performance of each chapter on the following topics:

Office 2013 and Windows 8: Essentials Concepts and Skills
Use a touch screen, Perform basic mouse operations, Start Windows and sign in to an account
Identify the objects on the Windows 8 desktop, Identify the apps in and versions of Microsoft Office 2013, Run an app, Identify the components of the Microsoft Office ribbon, Create folders, Save files Change screen resolution, Perform basic tasks in Microsoft Office apps, Manage files, Use Microsoft Office Help and Windows Help

Office 365
Describe the components of Office 365, Compare Office 2013 to Office 365 subscription plans Understand the productivity tools of Office 365, Sync multiple devices using Office 365, Describe how business teams collaborate using SharePoint, Describe how to use a SharePoint template to design a public website, Describe how to conduct an online meeting with Lync

Advanced Report Techniques
Create and relate additional tables, Create queries for reports, Create reports in Design view Add fields and text boxes to a report, Format report controls, Group and ungroup report controls Update multiple report controls, Add and modify a subreport, Modify section properties, Add a title, page number, and date to a report, Preview, print, and publish a report, Add totals and subtotals to a report, Include a conditional value in a report

Advanced Form Techniques
Add combo boxes that include selection lists, Add combo boxes for searching, Format and resize controls, Apply formatting characteristics with the Format Painter, Add command buttons, Modify buttons and combo boxes, Add a calculated field, Use tab controls to create a multipage form Add and modify a subform, Insert charts, Modify a chart type, Format a chart

Macros, Navigation Forms, and Control Layouts
Create and modify macros and submacros, Create a menu form with command buttons, Create a menu form with an option group, Create a macro for the option group, Use an IF statement in a macro, Create datasheet forms, Create user interface (UI) macros, Create navigation forms, Add tabs to a navigation form, Create data macros, Create and remove control layouts, Use the ARRANGE tab to modify control layouts on forms and reports
Administering a Database Design
Convert a database to and from earlier versions of Access, Use the Table Analyzer, Performance Analyzer, and Documenter, Create custom categories and groups in the Navigation Pane, Use table, database, and field properties, Create indexes, Enable and use automatic error checking, Create custom data type parts, Create a database for a template, Create a custom template, Encrypt a database and set a password, Lock a database and split a database, Create a custom web app, Create custom views for a web app

Using SQL
Understand the SQL language and how to use it, Change the font or font size for queries, Create SQL queries, Include fields in SQL queries, Include simple and compound criteria in SQL queries, Use computed fields and built-in functions in SQL queries, Sort the results in SQL queries, Use aggregate functions in SQL queries, Group the results in SQL queries, Join tables in SQL queries, Use subqueries, Compare SQL queries with Access-generated SQL, Use INSERT, UPDATE, and DELETE queries to update a database

Database Design
Understand the terms entity, attribute, and relationship, Understand the terms relation and relational database, Understand functional dependence and identify when one column is functionally dependent on another, Understand the term primary key and identify primary keys in tables, Design a database to satisfy a set of requirements, Convert an unnormalized relation to first normal form, Convert tables from first normal form to second normal form, Convert tables from second normal form to third normal form, Understand how to represent the design of a database using diagrams

Subject Matter
Topics covered in the lecture portion of the course include:
  - Advanced Report Techniques
  - Advanced Form Techniques
  - Marcos, Navigation Forms, Control Layouts
  - Administering a Database System
  - Using SQL
  - Database Design

Disclaimer
The provisions contained in this syllabus do not constitute a contract between the student and El Centro College. These provisions may be changed at the discretion of the Coordinator/Instructor. When necessary, appropriate notice of such changes will be given to the student.

The instructor-of-record may provide additional information to enhance the course to meet the needs of the enrolled students, provided that the enhancements do not conflict with the official course syllabus.

Policies
Students should click on the links below and read all of these policies.
General institutional policies
Course-related institutional policies