



HOUSATONIC COMMUNITY COLLEGE

Course Name: Database Applications

Course Number: CSA* E140

Credits: 3

Catalog description: Provides students with hands-on experience entering and editing data, working with and customizing forms, creating and using queries, creating and customizing printing reports and mailing labels, and creating and relating tables using database software. This course prepares students for the Microsoft Office Specialist (MOS) Certification core-level Microsoft Access exam.

The course requires substantial hands-on use of computers in a computerized classroom environment.

Prerequisite: Satisfactory score on placement exam or a grade of "C" or higher in ENG* E092 or permission of the instructor.

Corequisite or Parallel:

General Education Competencies Satisfied:

HCC General Education Requirement Designated Competency Attribute Code(s):

None

Additional CSCU General Education Requirements for CSCU Transfer Degree Programs:

None

Embedded Competency(ies):

None

Discipline-Specific Attribute Code(s):

COMP Computer Applications



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Course objectives:

General Education Goals and Outcomes:

None

Course Specific Objectives:

1. Understand relational databases database technology
2. Create and manage a database
3. Build tables
4. Create queries
5. Create forms
6. Create reports

Course Content:

1. Create and modify databases
 - 1.1 Create a blank desktop database, create a database from a template, create a database by using Import objects or data from other sources, delete database objects
2. Manage relationships and keys
 - 2.1 Create and modify relationships, set the primary key, enforce referential integrity, set foreign keys, view relationships
3. Navigate through a database
 - 3.1 Navigate specific records, create and modify a navigation form, set a form as the startup option, display objects in the Navigation Pane, change views of objects
4. Protect and maintain databases
 - 4.1 Compact a database, repair a database, back up a database, split a database, encrypt a database with a password, recover data from backup
5. Print and export data
 - 5.1 Print reports, print records, save a database as a template, export objects to alternative formats



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6. Create tables
 - 6.1 Create a table, import data into tables, create linked tables from external sources, import tables from other databases, create a table from a template with application parts
7. Manage tables
 - 7.1 Hide fields in tables, add total rows, add table descriptions, rename tables
8. Manage records in tables
 - 8.1 Update records, add records, delete records, append records from external data, find and replace data, sort records, filter records
9. Create and modify fields
 - 9.1 Add fields to tables, add validation rules to fields, change field captions, change field sizes, change field data types, configure fields to auto-increment, set default values, using input masks, delete fields
10. Create a query
 - 10.1 Run a query, create a crosstab query, create a parameter query, create an action query, create a multi-table query, save a query
11. Modify a query
 - 11.1 Rename a query, add fields, remove fields, hide fields, sort data within queries, format fields within queries
12. Create calculated fields and grouping within queries
 - 12.1 Add calculated fields, set filtering criteria, group and summarize data, group data by using comparison operators, group data by using arithmetic and logical operators
13. Create a form
 - 13.1 Create a form, create a form from a template with application parts, save a form
14. Configure form controls
 - 14.1 Move form controls, add form controls, modify data sources, remove form controls, set form control properties, manage labels, add sub-forms
15. Format a form
 - 15.1 Modify tab order, configure Print settings, sort records by form field, apply a theme, control form positioning, insert backgrounds, insert headers and footers, insert images
16. Create a report
 - 16.1 Create a report based on the query or table, create a report in Design view, create a report by using a wizard
17. Configure report controls
 - 17.1 Group and sort fields, modify data sources, add report controls, add and modify labels



18. Format a report

- 18.1 Format a report into multiple columns, add calculated fields, control report positioning, format report elements, change report orientation, insert header and footer information, insert images, apply a theme

Date Course Created: Spring 2018

Date of Last Revision: 01/22/2018