AUSTIN COMMUNITY COLLEGE
CONTINUING EDUCATION

INTERMEDIATE DATABASE/FILE AMANGEMENT
(Access Intermediate)

(12 hours)

ITSW 1055

COURSE SYLLABUS

Course Description: Instruction in data validation, data manipulation, browsing through records, records selection and query, indexing, and sorting. Topics include modifying tables, using database wizards, creating action queries, working with subforms and subreports. Prerequisites: Access Introduction or equivalent experience.

Objectives: Every student will be able to:

- Create and use a data dictionary
- Use a standard query language to access the database
- Link multiple files allowing simultaneous pointers
- Use templates and different views
- Modify field properties in tables
- Work with related tables
- Create, delete, and modify relationships
- Create different types of queries
- Export data

Rationale: MS Access is one of the most popular database programs used in the business community. This course will enable students to enhance their database skills and create professionally looking document.

Required Material: None

Type of Course: Short Course

Evaluation: Students will be evaluated on their competency in performing a variety of hands-on exercises throughout the course. In order to grant CEU credit for a course the students must be able to complete assessment exercises for each part of the course given by the instructor. The instructor will validate each participant's achievement of the course objectives by signing and awarding individual certificates of completion.

AUSTIN COMMUNITY COLLEGE
CONTINUING EDUCATION

INTERMEDIATE DATABASE/FILE AMANGEMENT
(Access Intermediate)

(12 hours)

ITSW 1055

COURSE SYLLABUS

Course Outline:

1. DATABASE TERMINOLOGY & THEORY
    1.1.   What Is A Database?
    1.2.   What Is A Table?
    1.3.   What Is A Record?
    1.4.   What Is A Field?
    1.5.   What Is Meant By 'Field Data Types'?
    1.6.   What Are 'Field Properties'?
    1.7.   What Is A Primary Key?
    1.8.   Types Of Database
    1.9.   Database Design Stages
    1.10.   Large Scale Database Systems

2. TRUSTED LOCATIONS
    2.1.   Allowing Access To Your Sample Folder For This Course

3. FIELDS
    3.1.   What Is A Table Lookup?
    3.2.   Creating A Lookup Within A Field
    3.3.   Modifying A Lookup Within A Field
    3.4.   Deleting A Lookup Within A Field
    3.5.   What Is An Input Mask?
    3.6.   Creating An Input Mask
    3.7.   Modifying An Input Mask
    3.8.   Deleting An Input Mask
    3.9.   What Does Data Entry Required/Not Required Mean?
    3.10.   Modifying A Field To Require Data Entry
    3.11.   Modifying A Field So That It Does Not Require Data Entry

INTERMEDIATE DATABASE/FILE AMANGEMENT
(Access Intermediate)

(12 hours)

ITSW 1055

COURSE SYLLABUS

4. PRIMARY KEYS AND INDEXING - REVIEW
    4.1.   Defining A Primary Key
    4.2.   Indexing - Reference Notes
    4.3.   Creating A Single-Field Index
    4.4.   Creating A Multiple-Field Index
    4.5.   Deleting Multi-Field Indexes

5. RELATIONSHIPS - REVIEW
    5.1.   Table Relationships
    5.2.   One-To-Many Relationship
    5.3.   Many-To-Many Relationship
    5.4.   One-To-One Relationships
    5.5.   Creating Relationships Between Tables
    5.6.   About Referential Integrity
    5.7.   Enabling Referential Integrity
    5.8.   Cascade Options
    5.9.   Cascade Update Related Fields
    5.10.   Cascade Delete Related Records
    5.11.   Enabling Cascade Options
    5.12.   Deleting Relationships

6. RELATIONSHIPS
    6.1.   What Is A One-To-One Relationship?
    6.2.   Creating A One-To-One Relationship
    6.3.   Modifying A One-To-One Table Relationship
    6.4.   Deleting A One-To-One Table Relationship
    6.5.   What Is A One-To-Many Table Relationship?
    6.6.   Creating A One-To-Many Relationship
    6.7.   Modifying A One-To-Many Relationship
    6.8.   Deleting A One-To-Many Relationship.
    6.9.   What Is A Many-To-Many Relationship?
    6.10.   Creating A Many-To-Many Relationship Using A Junction Table
    6.11.   Modifying Or Deleting A Many-To-Many Relationship
    6.12.   What Is Referential Integrity?
    6.13.   Enforcing Referential Integrity
    6.14.   Applying Automatic Updating Of Related Fields

AUSTIN COMMUNITY COLLEGE
CONTINUING EDUCATION

INTERMEDIATE DATABASE/FILE AMANGEMENT
(Access Intermediate)

(12 hours)

ITSW 1055

COURSE SYLLABUS

6.15.   Applying Automatic Deletion Of Related Records

7. JOINS
    7.1.   Applying An Inner Join
    7.2.   Modifying An Inner Join
    7.3.   Applying An Outer Join
    7.4.   Modifying An Outer Join
    7.5.   Creating A Subtract Join
    7.6.   Modifying A Subtract Join
    7.7.   What Is A Self Join?
    7.8.   Applying A Self Join

8. QUERIES
    8.1.   About Queries
    8.2.   Creating And Running An Update Query
    8.3.   Creating And Running A Delete Query
    8.4.   Creating And Running A Make Table Query
    8.5.   Creating And Running An Append Query
    8.6.   Creating And Running A Crosstab Query
    8.7.   Creating And Running A Find Duplicates Query
    8.8.   Creating And Running A Find Unmatched Records Query
    8.9.   What Is A Parameter Query?
    8.10.   Creating And Running A One Variable Parameter Query
    8.11.   Modifying A One Variable Parameter Query
    8.12.   Creating And Running A Two Variable Parameter Query
    8.13.   Modifying A Two Variable Parameter Query
    8.14.   Using Wildcards In A Query: Star
    8.15.   Using Wildcards In A Query: Brackets And Dash
    8.16.   Using Wildcards In A Query: Exclamation Mark
    8.17.   Using Wildcards In A Query: Hash
    8.18.   Showing Maximum Or Minimum Values In A Query
    8.19.   Using Calculated Fields That Perform Arithmetic Calculations
    8.20.   Grouping Information In A Query Using Functions - SUM
    8.21.   Grouping Information In A Query Using Functions - COUNT
    8.22.   Grouping Information In A Query Using Functions - AVERAGE
    8.23.   Grouping Information In A Query Using Functions - MAX & MIN

AUSTIN COMMUNITY COLLEGE
CONTINUING EDUCATION

INTERMEDIATE DATABASE/FILE AMANGEMENT
(Access Intermediate)

(12 hours)

ITSW 1055

COURSE SYLLABUS

9. EXPORTING
    9.1.   What Does Exporting Data Mean?
    9.2.   What Is A Spread Sheet Format?
    9.3.   What Is Text Only And Csv Format?
    9.4.   What Is A Pdf File?
    9.5.   What Is An Xml File?
    9.6.   Exporting A Table As An Excel File
    9.7.   Exporting A Table As A Text File (Keeping Data Format & Layout)
    9.8.   Exporting A Table As A Text Csv Formatted File
    9.9.   Exporting A Table As A Pdf Formatted File
    9.10.   Exporting A Table As An Xml Formatted File