

## **CIT 230—Advanced Microcomputer Applications (3)**

### Course Description

Students use advanced features of current word processing, spreadsheet, database management and presentation software. Integration between the various software packages is performed and students investigate other software applications and their uses in the business environment. Lecture: 3 hours. Prerequisites: none

### Course Competencies

Upon successful completion of this course, the student can:

1. work with long documents, including changing the format for a portion of a document
2. use predefined Styles to aid in formatting a document
3. use shading and borders to enhance a document
4. use mail merge features of a word processing package to merge form letters with data from word processing tables and database tables
5. create newsletters using desktop publishing features of word processing packages
6. create and use macros in word processing, spreadsheet, and database software to automate repetitive tasks
7. create template files using word processing and spreadsheet software
8. insert hyperlinks in spreadsheet files
9. create different scenarios for spreadsheet data
10. use the data management feature of spreadsheets to manipulate data and extract useful information
11. create custom forms, including forms with subforms and command buttons in a database management program
12. create custom reports in a database management program
13. create application systems and switchboard modules in a database management program

### Course Outline

- I. Advanced Word Processing Features
  - A. Dividing a Long Document into Sections
    1. Using different formatting settings in each section
    2. Using alternating headers and footers
  - B. Creating and Formatting Tables
    1. Using shading and borders to enhance a table
    2. Using math formulas and functions in tables
  - C. Other Advanced Formatting Features
    1. Applying borders and shading to paragraphs
    2. Inserting and sizing graphics and Clipart
  - D. Macros
    1. Creating macros using Visual Basic for Applications to automate repetitive tasks
    2. Saving macros using names and keyboard shortcuts
  - E. Mail Merge

1. Creating a letterhead for a form letter
  2. Creating a data file
  3. Creating a form letter using custom letterhead
  4. Merging the form letter and data file
  5. Creating envelopes and labels using data files
  6. Merging the form letter with a table from a database management program
- F. Desktop Publishing in Word Processing
1. Formatting a document into columns
  2. Inserting special typographic symbols—smart quotes, em and en dashes, bullets
  3. Using text boxes to create pull quotes
  4. Using WordArt to create a masthead
  5. Formatting a newsletter with page borders

## II. Advanced Spreadsheet Features

- A. Creating Template files
1. Using “dummy” numbers to test formulas
  2. Using Protection on a worksheet
- B. Using 3-D formulas with multiple worksheets
- C. Creating macros using Visual Basic for Applications
1. Using command buttons to execute a macro
  2. Creating and editing macros in VBA to allow screen input
- D. Other Advanced Spreadsheet Features
1. Adding hyperlinks to worksheets
  2. Saving worksheets as HTML files for publishing on the World Wide Web
  3. Storing different assumptions as scenarios
  4. Using Auditing Tools, such as Trace Precedents and Trace Dependents
- E. Database Functions in a Worksheet
1. Naming ranges in a database
  2. Sorting data within a database range
  3. Using criteria to extract information from a database range
  4. Creating data maps
  5. Creating pivot tables

## III. Advanced Database Features

- A. Creating Custom Reports and Forms from Tables and Queries
1. Editing, sizing, and moving bound and unbound controls in forms and reports
  2. Creating list boxes, combo boxes, and calculated controls in forms
  3. Creating forms with subforms
  4. Adding command buttons to a form
  5. Adding memo, OLE, and hyperlink fields to a table
- B. Saving database objects as HTML files for publishing on the World Wide Web
- C. Creating Macros using Visual Basic for Applications
1. Using macros to open database objects
  2. Setting arguments for macro actions
- D. Creating Switchboards
1. Creating and editing switchboard pages
  2. Using macros in switchboards

## IV. Presentation Applications

- A. Design aspects of creating applications

1. Using color, fonts, and white space effectively
2. Using a unifying theme throughout a presentation
- B. Creating an Electronic Slide Show Using Presentation Software
  1. Using templates
  2. Creating a blank presentation
  3. Using outline view to enter text
  4. Using embedded visuals to enhance a slide show
  5. Using custom animation with text and graphic objects
  6. Using hyperlinks and interactive OLE objects in a presentation