#### I. COURSE DESCRIPTION:

A. Department Information:

Department:	Computer Information Technology
Division:	Business and Information Technology
Course ID:	CIT 102
Course Title:	Advanced Computer Literacy
Units:	3
Lecture:	3 hours
Laboratory	None
Prerequisite:	CIT 101

B. Catalog and Schedule Descriptions: Expands upon the basic fundamentals of hardware computer concepts, theory and software applications by creating word processing, spreadsheet, database, and presentation graphics and documents introduced in CIT 101. (Formerly MIS 102)

### II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: One

### III. EXPECTED OUTCOMES FOR STUDENTS:

Upon successful completion of the course, the student should be able to:

- A. Hardware
  - 1. define and describe the areas of data management.
  - 2. describe the data maintenance procedures for updating data, including adding, changing, and deleting.
  - 3. discuss the advantages of a database management system (DBMS).
  - 4. explore several different personal computer database systems.
  - 5. understand the difference between operating systems and utility programs.
  - 6. define the types of operating systems.
  - 7. explain uses of computer communication.
  - 8. understand computer networks, communication software, and communication devices.
  - 9. understand computer security risks and the importance of backing up.
  - 10. investigate the area of computer and society, and privacy and ethics.
  - 11. analyze the term information system and identify the system development cycle.
  - 12. classify program languages commonly used today.
  - 13. outline the term programming languages.
  - 14. explain careers in the computer industry.
  - 15. understand the different types of computer certifications and how to prepare for a career in the computer industry.
- B. Software
  - 1. identify the step-by-step procedures to create documents with a title page and tables.
  - 2. understand the merge process and how to generate form letters, mailing labels, and envelopes.
  - 3. create a professional newsletter.
  - 4. apply the integrated feature by using WordArt to add special text effects to a word document.
  - 5. perform the necessary functions to create a template and workbook with multiple worksheets.
  - 6. analyze data using data tables, Visual Basic for applications, hyperlinks and the Scenario Manager.
  - 7. assemble an appropriate worksheet database by sorting and filtering.
  - 8. embed an Excel worksheet in a Word document using the drag and drop feature.
  - 9. develop custom reports, forms, and publish reports to the Web.
  - 10. enhance forms with OLE fields, hyperlinks and subforms.
  - 11. demonstrate the sequential steps necessary to create an application system using

Macros, VBA, and the Switchboard.

- 12. link a worksheet to a database.
- 13. use embedded visuals to enhance a slide show.
- 14. modify the creation of a presentation containing interactive OLE documents.
- 15. convert a presentation slide to HTML format and view it using a Web browser.
- 16. demonstrate college level writing competency by writing a comprehensive analysis of hardware and software application(s).

### IV. COURSE CONTENT:

Α.

- Hardware
  - 1. Database management and databases
  - 2. Operating systems and utility programs
  - 3. Communications and networks
  - 4. Computers security, privacy, and ethics
  - 5. Information system development
  - 6. Programming languages and program development
  - 7. Computer careers and certifications
- B. Software
  - 1. Word: Creating a document with a title page and tables
  - 2. Word: Generating form letters, mailing labels and envelopes
  - 3. Word: Creating a professional newsletter
  - 4. Excel: Creating templates, workbooks with multiple worksheets and web pages
  - 5. Excel: Data tables, Visual Basic for applications, Hyperlinks and Scenario Manager
  - 6. Excel: Sorting and filtering a worksheet database, pivot tables and creating a data map
  - 7. Access: Reports, forms, publishing reports to the Web
  - 8. Access: Enhancing forms with OLE fields, hyperlinks and subforms
  - 9. Access: Creating an application system using Macros, VBA, and the SwitchboardManager
  - 10. PowerPoint: Using embedded visuals to enhance a slide show
  - 11. PowerPoint: Creating a presentation containing interactive OLE documents

### V. METHODS OF INSTRUCTION:

- A. Lecture
- B. Demonstration
- C. Computer demonstrations to prepare students to conduct similar tasks in the lab
- D. Videos and the Internet used to introduce various topics
- E. One-on-one instruction
- F. Simulation exercises

# VI. TYPICAL ASSIGNMENTS:

- A. Read assigned chapters from the textbook and answer all review questions that follow the chapter.
- B. Typical Computer Lab Assignments:
  - 1. Create a proposal
  - 2. Develop a data source, form letter and mailing labels
  - 3. Understand the Drawing Toolbar and its applications
  - 4. Produce a multiple-sheet sales breakdown workbook using a template
  - 5. Determine the monthly mortgage payment and the future value of an investment
  - 6. Build, sort and filter a database
  - 7. Create an application system for a company database
  - 8. Implement a presentation from an outline, insert clip art, and change the slide background
  - 9. Run a slide show and add ActiveX controls
  - 10. Combine OLE (Object-Linking and Embedding)

## VII. EVALUATION:

- A. Student progress is evaluated by:
  - 1. Oral and written chapter and project tests
    - 2. True/False tests
      - a. Sequential file organization means the system can go directly to a record without having to read the preceding records.
      - b. Although expert systems can be used at any level in an organization, to date senior management for strategic decisions primarily has used them T F
      - c. A benchmark test measures the time it takes to process a set number of transactions. T F
- B. Frequency of Evaluation
  - 1. Weekly hands-on assessment testing
  - 2. Weekly written chapter and project tests
  - 3. One final hands-on project assessment examination
  - 4. Comprehensive written chapter final exam

### VIII. TYPICAL TEXT(S):

Norton, Peter. <u>Peter Norton's Essential Concepts</u>, 4<sup>th</sup>ed. Columbus, OH: Glencoe/McGraw-Hill, 2001.

Vermaat, Misty E. and Shelly, Gary B. and Cashman, Thomas J. <u>Discovering Computers 2004, A</u> <u>Gateway to Information</u>, Boston, MA: Thomson Learning-Course Technology, 2003. Vermaat, Misty E. and Shelly, Gary B. and Cashman, Thomas J. <u>Microsoft Office XP Advanced</u> <u>Concepts and Techniques</u>, Boston, MA: Thomson Learning Course Technology, 2002.

### IX. OTHER SUPPLIES REQUIRED OF STUDENTS: None