SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: MICROCOMPUTER APPLICATIONS

Code No.:   EDP 228

Program: PROGRAMMER

Semester: THREE

Date: SEPTEMBER 1993

Previous Outline
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                              New: _____   Revision: _____

APPROVED: _____   ___93/09/05___
          Dean, School of Business and   Date
                 Hospitality

MICROCOMPUTER APPLICATIONS   2   EDP 228
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       Course Name   Course Number

TOTAL CREDIT HOURS: 60

Prerequisite: EDP 219 Intro to Microcomputers

PHILOSOPHY/GOALS:

1.   To focus on the major trends that have developed, and
     are still developing, in the use of microcomputers in a
     business environment.

2.   To examine major application products that are widely
     used in business. Students will gain hands-on
     experience in using dBASE IV and the Microsoft Windows
     operating environment. The course will focus on the
     utilization of dBASE IV. Students will gain hands-on
     experience at the Command and Program levels.

3.   To gain computing knowledge and skills that can be
     utilized directly in a business environment to develop
     systems or to train other users.

TEXTS: Business Programming Using dBASE IV, Duggal.
               Using Windows, Salkind.

OTHER RESOURCES: - Manuals available from Software Technician
                                 - dBASE IV - Version 1.5
                                 - Windows - Version 3.0

STUDENT EVALUATION:

              Tests (1 @ 20%, 2 @ 25%)   70%
              Assignments/Project   30%

                                                 100%

GRADING:
              A+   -   90-100%
              A   -   80- 89%
              B   -   70- 79%
              C   -   60- 69%
              R   -   0- 59%

Warning: Students are advised to maintain a backup of all files
           on diskette. Loss of output due to a lost or damaged
           diskette will not be acceptable for a late or
           incomplete assignment or project.

GENERAL STUDENT PERFORMANCE OBJECTIVES
Upon successful completion of this course, the student should be
able to:

1.   Work effectively in a business environment where
     microcomputers are utilized.

2.   Assist staff, in a business environment, in the use and
     operation of a variety of microcomputer hardware and
     software.

3.   Design and program a customized dBASE IV application
     utilizing multiple database files linked together.

4.   Utilize the Windows Graphical User Interface effectively.
     This would include managing files, executing both windows
     and non-windows software, utilizing windows accessories, and
     customizing the GUI environment.

SPECIFIC STUDENT PERFORMANCE OBJECTIVES

Upon successful completion of this course, the student should be able to complete the following objectives:

MODULE 1:   **Essentials of dBASE IV**

1.   Describe the main features/capabilities found in a DBMS (Data Base Management System)

2.   Describe where dBASE IV might be categorized among other DBMS systems.

3.   Identify and use successfully the appropriate dBASE IV commands to:

     -   create and modify a database structure
     -   add, change, delete and remove data (fields/records) in a database
     -   create and print standard as well as customized reports
     -   access and display records within a database in different sequences
     -   obtain assistance regarding any command

4.   Describe the following modes in DBASE IV and identify the type of user who might wish to use each mode:

     -   Control Center
     -   Dot Prompt
     -   Application Generator
     -   Command Mode
     -   Program Mode

5.   Describe the significance of the record pointer in dBASE IV and utilize dBASE commands and syntax to manipulate this pointer, (eg. scope, for condition including multiple field conditions).

6.   Organize database and other associated files within catalogs (including adding and deleting files within catalogs and changing catalogs).

7.   Utilize the dBASE IV database design screen. (This will require familiarity with a variety of dBASE IV terms and key combinations, such as status line, navigation line, menu bar, Ctrl End, Shift F1, etc.)

8.   Utilize many of the commands described in
     objectives 3-6 by including them in a
     customized dBASE IV program using the
     Create/Modify Command command.

MODULE 2:   **Creating Queries, Forms, Reports and Labels**
                1.   Utilize the dBASE IV query, forms, report,
                     and label design screens to manipulate and
                     display database data as required.

                2.   Develop skill in utilizing the design screens
                     described above in order to create customized
                     designs that can then be utilized within
                     custom programs.

MODULE 3:   **Using and Relating Multiple Databases**
                1.   Utilize the multiple database and relational
                     capabilities of dBASE IV to extract and
                     manipulate data from 2 or more databases
                     simultaneously.

                2.   Develop skill in issuing the appropriate
                     commands to accomplish the above objective
                     from the dot prompt and from within programs.

MODULE 4:   **Application Development Basics including use of
                the Application Generator**
                1.   Utilize a variety of dBASE IV commands in
                     order to create customized menus. (At a
                     minimum, you must utilize bar and pop-up
                     menus; additional enhancements of your own
                     choosing should also be utilized and
                     demonstrated.)

MODULE 5:   **Designing and Programming a dBASE IV solution to a
                business case problem**
                1.   Utilize the skills mastered in all previous
                     modules as well as skills learned in related
                     courses to design and build a working dBASE
                     system. (This objective will be met by
                     working as part of a team.)

                2.   Demonstrate the skills mastered in the
                     previous objective by displaying/explaining
                     dBASE IV concepts in a test environment.

MODULE 6:   **Windows Essentials**
1.   Explain the concept of an application window and a document window.

2.   Identify and utilize a variety of Windows Terms. (Examples include control menu, group icon, program icon, title bar, menu bar, minimize button, maximize button, scroll bar, etc.)

3.   Explain and utilize a variety of terms relating to the use of a mouse. (Examples include click, double click and drag, etc.)

MODULE 7:   **Controlling the Desktop**
1.   Explain the terms and utilize the Control Panel to change colours, adjust mouse controls, customize the desktop, etc.

2.   Explain the terms and utilize the Program Manager to open and create group and program icons, move or copy icons between groups and arrange the layout of the desktop.

MODULE 8:   **Windows Tools and Accessories**
1.   Explain the terms and utilize the File Manager to manage files within Windows.

2.   Explain the terms relating to use of the Print Manager. (Note that actual use of the Print Manager is not included in this course at this time)

3.   Explain the terms and utilize the Accessories group in Windows. Specific accessories to be mastered include the Notepad and Windows Write.

tests may include both written and practical on-line material. Time taken to complete assigned problems may be an evaluation factor.

2. Quizzes may be conducted without advance warning.

3. Assignments or projects received after the due date are
   subject to a grade of zero.

4. All assignments must be completed <u>satisfactorily</u> by the date of the final test in order to fully meet the requirements of the course. Failure to do so may result in an "R" grade.

5. Students who do not write tests and quizzes at the time they are given may be allowed to upgrade their mark at the end of the semester. A written excuse, acceptable to the instructor, may be required.

6. Upgrading work is at the discretion of the instructor and may include any or all of the following:

   - a test covering specific course modules
   - an exam covering the entire course material
   - additional assignments

7. Your instructor reserves the right to modify the course as may be deemed necessary to meet the needs of the students.