

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: MICROCOMPUTER APPLICATIONS
CODE NO.: EDP228 SEMESTER: THREE
PROGRAM: COMPUTER PROGRAMMER
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New: _____ Revision: X

APPROVED: DEAN, SCHOOL OF BUSINESS & HOSPITALITY DATE _____

MICROCOMPUTER APPLICATIONS

EDP228

COURSE NAME

COURSE CODE

This course uses dBaseIV and Microsoft Windows to make the student proficient in fourth generation language concepts, database control, and up-to-date in Graphical User Interfaces (GUI's)

I. STUDENT PERFORMANCE OBJECTIVES

Upon completion of this course the student will be able to:

1. Control the relational database
2. Launch Microsoft Windows
3. Program in dBaseIV from the dot prompt

2. TOPICS TO BE COVERED

1. Simple database concepts
2. Dbase4 as a fourth generation language and its position with respect to other programming languages
3. The future of Graphic User Interfaces (GUI's) in a computing environment
4. Microsoft Windows
5. DbaseIV programming language

III. LEARNING ACTIVITIES

0.0 INTRODUCTION

Focus on the positioning of this course with respect to the programmers and programmer analysts

Know the teaching methods to be used including class discussion, group work, lab work and term project.
Understand the evaluation methods thoroughly.

Know the teacher's expectations regarding attendance, participation, assignments, tests and final grades

RESOURCES:

- 1) Hand out course outline

1.0 MICROSOFT WINDOWS

Learning Activities:

Execute effective windows skills
Complete Tutorial 1

Use menus, dialogue boxes, toolbars, and help
Complete Tutorial 2

Perform effective file management
Complete Tutorial 3

Use the file manger and the print manager
Do Tutorial 4, pages 89-101 only (Pages 106-108 later)

Use the following windows applications: clock, cardfile, notepad, calendar, and calculator
Complete Tutorial 5

Work with OLE (object linking and embedding)
Complete Tutorial 6

Resources:

Windows for Business text including computer disk

2.0 THE DBASE ENVIRONMENT

Learning Activities:

Introduce the database concept:

Understand how Dbase IV uses the keyboard

Recognize file extensions in Dbase4 Table 1.4 P14

Load Dbase IV, and understand the computer network and set-up of disks, directories

Recognize the Control Centre and its function

Move to the dot prompt and understand its function. All further work will be completed via the dot prompt

Read Chapter 1 An Overview

Resources:

dbase4 Programming textbook

Lab A2040 and connecting network and Lanschool

3.0 INTERACTIVE SKILLS

Learning Activities:

Determine the structure of the database file

Create a data base file

Updating a database

Modifying structure

Modifying record data

Remove records

Display data

Understand operators, and order of precedence

Understand the concept of the current record, next, previous

Resources:

LAB1 assignment

LAB2 assignment

4.0 WORKING FROM THE DOS PROMPT

Learning Activities:

Using the report generator, create report first

Use special keys for report and label creation

Use Query Design screen

Use some necessary utility commands similar to DOS/BASIC/FORTRAN

Use some of the many functions of Dbase4

Resources:

LAB3 assignment - Report Generator, FIRST.FRM

LAB4 assignment - The Island PI

5.0 INITIAL PROGRAMMING SKILLS

Learning Activities:

MODIFY COMMAND filename.prg

Use special keys for programming...T4.1, P94

Execute program with DO command

Use memory variables

Resources:

LAB5 alignment

6.0 DECISIONS AND PROGRAM CONTROL

Learning Activities:

Construct the DO WHILE/ENDDO loop

Exiting loops

Use IF/ELSE/ENDIF for decisions in programming

Execute CASE statement structures

Resources:

LAB6 alignment -DO WHILE/IF-ENDIF
LAB7 assignment - Credit Limit
LAB8 assignment - Case Statement

7.0 USER INPUT and MENUS

Learning Activities:

Direct screen prompt and keyboard input

@...GET and READ commands are used in programming....see section ??

Design and construct menus

Resources:

LAB9 alignment - Menus for term project

8.0 ORGANIZING A SYSTEM

Learning Activities:

Nesting..students read Pages 182-186

Developing programs in modules and using stubs..P184-194

Programming with memory variables...P194-197

Calling and Called programs

Memory variables (and scope)...p194..200

Resources:

Term Project

10.0 INDEXING

Learning Activities:

Sort records

Index records

Using an index

Compare and contrast sorting and indexing

Use FIND and SEEK

Understand the record pointer thoroughly

Use scope options

Resources:

Term Project

REQUIRED RESOURCES:

Text: DBASE Programming
Robert Wray & Philip Pratt
Boyd and Fraser Publishing
ISBN 0-87835-794-7

Windows for Business
June Jamrich Parsons
Course Technology Inc
ISBN 1-56527-070-3 (text and Disk)

Disks: Three 3.5" disks

Class tests (2 @ 20 marks)	40
Assignments	30
Term project	30

	100 marks

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

NOTES: regarding evaluation

1. Loss of data for any reason is the responsibility of the student, and is not an acceptable excuse. Several back-up copies of disks are recommended.
2. Assignments are subject to a late penalty of 10% per school day for 2 weeks. Assignments received after 2 weeks are subject to a grade of zero.
3. There will be no re-writes at the end of the course.
4. Special considerations require written request.

IV. SPECIAL NOTES

Students will be required to complete assignments, readings and term project as assigned.

Students with special needs(eg. physical limitations, visual impairment, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of the students.