SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE	INTRODUCTION TO DATA PROCESSING
CODE NO.	EDP100-5
PROGRAM	BUSINESS COMMON
SEMESTER	ONE
DATE	SEPTEMBER, 1991
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NEW ___ REVISION X

APPROVED _____ 91-08-29
DEAN DATE

Introduction to Data Processing — COURSE NAME
EDP100 — CODE NO.

Total credit time: 75 hours

Prerequisites: None

I PHILOSOPHY/GOALS:

This course provides the student with an introduction to computers and data processing. Students will learn about the components, functions and control of a computer, as well as computer applications. This course provides the student with introductions to computer programming using BASIC, to word processing using WordPerfect 5.1, and to spreadsheets using LOTUS 1-2-3.

II STUDENT PERFORMANCE OBJECTIVES:

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

1. distinguish among the different hardware and software components of a computer system, and know different commercial and educational uses of computer systems
2. understand the general functions of an operating system
3. understand word processing concepts
4. understand spreadsheet software concepts
5. understand programming concepts

III TOPICS TO BE COVERED

1. You and Computer Competency
2. Applications Software: Basic Tools
3. Systems Software
4. The Central Processing Unit
5. Input and Output
6. Secondary Storage
7. Communications
8. Files and Databases
9. Information Systems
10. Systems Analysis and Design
11. Programming and Languages
12. Emerging Applications: Power Tools
13. Your Future: Using Information Technology
14. The Disk Operating System
15. Word Processing using WordPerfect 5.1
16. Spreadsheets using LOTUS123
17. Programming using BASIC

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IV LEARNING ACTIVITIES

NOTE: refer to text for more detailed competencies and objectives

1. You and Computer Competency
   Upon successful completion of this unit, the student will be able to:
   a explain computer competency
   b distinguish among the kinds of computers, hardware and software, application and systems software
   c describe data categories

2. Applications Software: Basic Tools
   Upon successful completion of this unit, the student will be able to:
   a describe various application software packages

3. Systems Software
   Upon successful completion of this unit, the student will be able to:
   a understand the importance of systems software
   b discuss DOS, OS/2, Unix and Macintosh systems software

4. The Central Processing Unit
   Upon successful completion of this unit, the student will be able to:
   a describe the functions of the various parts of the central processing unit
   b describe the four classes of computers

5. Input and Output
   Upon successful completion of this unit, the student will be able to:
   a describe various input and output devices
   b describe ergonomics

6. Secondary Storage
   Upon successful completion of this unit, the student will be able to:
   a describe data organization
   b describe various secondary storage media

7. Communications
   Upon successful completion of this unit, the student will be able to:
   a discuss communications hardware and utilities
   b describe networks and their topologies
   c describe various communication media

8. Files and Databases
   Upon successful completion of this unit, the student will be able to:
   a discuss various database structures
   b differentiate between batch and real-time processing

9. Information Systems
   Upon successful completion of this unit, the student will be able to:
   a discuss the importance of computers in the flow and usage of information in an organization

10. Systems Analysis and Design
    Upon successful completion of this unit, the student will be able to:
    a describe the phases of the systems life cycle

11. Programming and Languages
    Upon successful completion of this unit, the student will be able to:
    a understand and describe the six steps of programming

12. Emerging Applications: Power Tools
    Upon successful completion of this unit, the student will be able to:
    a describe power tools such as CAD/CAM, artificial intelligence and desktop managers

13. Your Future: Using Information Technology
    Upon successful completion of this unit, the student will be able to:
    a describe ways to stay current with ever changing innovations
    b discuss ways people may react to new technology

14. The Disk Operating System
    Upon successful completion of this unit, the student will be able to:
    a describe computer hardware and software
    b use DOS (disk operating system) to perform various operations such as FORMAT, COPY and RENAME
    c manage disks, using various operations such as making and changing directories
    d complete DOS labs one and two in the text

15. Word Processing using WordPerfect 5.1
    Upon successful completion of this unit, the student will be able to:
    a discuss word processing concepts
    b create, edit and print documents
    c complete Word Processing labs one and two, and part of lab three in the text

16. Spreadsheets using LOTUS123
    Upon successful completion of this unit, the student will be able to:
    a discuss spreadsheet concepts
    b create, edit and print spreadsheets and graphs
    c complete Electronic Spreadsheets labs one, two and three

17. Programming using BASIC
    Upon successful completion of this unit, the student will be able to:
    a define programming processes and discuss programming analysis concepts
    b use preprogramming structures to define the logic of a program
    c create the logic to process multiple records
    d understand the use of accumulators and counters
    e understand various statement structures to create a BASIC program
    f write BASIC programs to demonstrate input, calculation, decision, loop, accumulator, counter and output operations

V EVALUATION METHODS

Tests (3 @ 25%)	75%
Assignments	20%
Participation	5%
	100%

Grading:

A+	90 and over
A	80 and over
B	70 and over
C	55 and over
R	under 55

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VI REQUIRED STUDENT RESOURCES

Text: Microcomputing Annual Edition 1991-1992
O'Leary, Williams, O'Leary

available in the Campus Shop

Disks: 2 5-1/4" floppy disks
available in most stores

VII SPECIAL NOTES

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

For the microcomputing section of this course, students are advised to maintain a backup of all files on disk. Loss of an assignment due to a lost or damaged disk is not an acceptable reason for a late or incomplete assignment.

Students with special needs, such as physical limitations, visual impairments, hearing impairments, or learning disabilities, are encouraged to discuss required accommodations, confidentially, with the instructor.

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