SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline:   COMPUTER CONCEPTS AND APPLICATION

Code No.:   EDP 130 - 2

Program:   FORESTRY, GEOLOGY, PULP & PAPER, WATER RESOURCES

Semester:   _____

Date:   SEPTEMBER 1988

Author:   FRAN DEW

New: _____        Revision: ___✓___

APPROVED: _____        85-08-24
          Chairperson                            Date

| COMPUTER CONCEPTS & APPLICATION | EDP130-2 |
|---|---|
| Course Name | Course Number |

**Length of Course:**  2 periods per week for one semester.

**Text:**   "Word Perfect - A Ready Reference Manual", Garrison, McGowen, Popyk

   "Lotus 1-2-3 - A Ready Reference Manual", Garrison, et al

## OBJECTIVES:

1.  To provide the student with an overview of basic data processing concepts.

2.  To introduce the student to application of the computer in their related field.

3.  To give the student hands-on experience with microcomputers and with word processing and spreadsheet software.

## STUDENT EVALUATION;

| Tests (2 x 35) | - 70% |    | Term Tests (2x35) | - 35% |
|---|---|---|---|---|
| Quizzes/Assignments/ |  | OR | Quizzes/Assignments/Lab | - 25% |
|   Labs | - 25% |    | Final Test | - 35% |
| Class Involvement | - 5% |    | Class Involvement | - 5% |

A final test will cover the semester's work and can be written to substitute for a failed or missed term test provided....

(1)  You have attended a minimum of 75% of all classes.
(2)  Your term grade is greater than 45%
(3)  All assignments have been completed satisfactorily (Note: late assignments may receive a 0 grade, but must still be completed satisfactorily in order to qualify to write the final test).

## GRADING:

      'A+' = 90-100%
      'A' = 80- 89%
      'B' = 66- 79%
      'C' = 55- 65%
      'R' =  0- 54%

## TENTATIVE SCHEDULE

| WEEK NO. | DESCRIPTION | REQUIRED WORK |
|---|---|---|
| 1 | Introduction to Course<br>Scheduling of Test Dates<br>Introduction to PC Lab | |
| 2-6 | Computer Concepts<br>Computer Hardware<br>DOS Concepts<br>Word Processing-Basic Features | Labs<br>**Quiz/Assignment #1** |
| 7 | **Term Test #1** | Modules 1-3, part |
| 9-10 | Word Processing-Adv. Features | Labs |
| 10-14 | Spreadsheet - LOTUS 1-2-3 | Labs<br>**Quiz/Assignment #2** |
| 15 | **Term Test #2** | Modules 3-5 |
| 16 | **FINAL TEST**<br>*Final day to complete out-<br>standing labs or assignments | Modules 1-5 |

**Note:**   Labs or assignments handed in more than 3 days after being
assigned are subject to a grade of 0.

# SPECIFIC OBJECTIVES

## MODULE 1 - COMPUTER CONCEPTS.

Upon completion of this module, the student must be able to:

1-1  Define/explain the difference between data and information.

1-2  Describe the Data Processing Cycle and how this cycle is related to the use of computers in industry.

1-3  Identify and describe several key events in the history of computer and microcomputer development.

1-4  Differentiate between different types of computers (mainframe-micro).

1-5  Identify and describe four important social/moral issues related to the use of computers (privacy, copyright, loss of employment, security).

1-6  Identify and explain the hierarchy of Hardware - Operating System - programming Languages - Application Software.

1-7  Identify and describe the main components to be found in any computer system.

1-8  Define and describe all technical terms or names utilized in this module.

1-9  Complete successfully any assignment, quiz, or test utilizing any of the objectives described in this module.

## MODULE 2:   COMPUTER HARDWARE:

Upon successful completion of this module, the student must be able to:

2-1   Identify and describe features and capabilities of each major
      component of the IBM PC computer systems used in the lab.

2-2   Define and explain a number of terms related to diskettes
      (i.e. capacity, size, sectors, tracks, file protect tab/notch).

2-3   Identify several rules to be followed when handling diskettes
      (floppy disks).

2-3   Differentiate between a microcomputer and a microprocessor.

2-4   Define and explain the importance of compatibility in microcomputer
      hardware and software.

2-5   Explain the difference between a computer device and computer
      medium (i.e. diskette drive - floppy disk).

2-6   Explain how some hardware devices can operate as input, output,
      or input/output devices.  Give examples in each category.

2-7   Operate, without assistance, all hardware and software components
      utilized during the course.

2-8   Define and describe all technical terms or names utilized in this
      module.

2-9   Complete successfully any assignment, quiz or test utilizing any
      of the objectives described in this module.

## MODULE 3:  DOS CONCEPTS (DISK OPERATING SYSTEM):

Upon completion of this module, the student must be able to:

3-1  Define and explain the need for an operating system.

3-2  Describe and explain the difference between a command line operating system (DOS) and a visual operating system (Macintosh).

3-3  Identify and describe the main functions or components of an operating system.

3-4  Identify the developer of the DOS operating system.

3-5  Load the DOS operating system and utilize the following commands properly:

|  |  |
|---|---|
| - DIRECTORY | - FORMAT |
| - COPY | - TYPE |
| - ERASE | - DISKCOPY |
| - MODE | - PRINT |

3-6  Describe and be able to utilize properly the DOS file naming conventions including the use of "wildcard characters".

3-7  Define and describe all technical terms or names utilized in this module.

3-8  Complete successfully any assignment, quiz or test utilizing any of the objectives described in this module.

## MODULE 4:  WORD PROCESSING (WORD PERFECT):

Upon completion of this module, the student must be able to:

4-1  Define the purpose of word processing.

4-2  Describe the advantages and disadvantages of using a word processing
package.

4-3  Describe and use all features of the Word Perfect package that
have been utilized in class.

4-4  Define and describe all technical terms or names utilized in this
module.

4-5  Complete successfully any assignment, quiz, or test utilizing
any of the objectives described in this module.

The following topics will be covered:

- Starting Word Perfect
- The Word Perfect Screen - Terminology
- Entering and Saving Text
- Editing Text - Basic
- Printing Text
- Editing Text - Advanced
- Using the Spell Checker and Thesaurus

## MODULE 5:  SPREADSHEETS - LOTUS 1-2-3:

Upon completion of this module, the student must be able to:

5-1  Explain why this type of application program (spreadsheet) has found wide-spread use in all industries.

5-2  Identify and describe the use of each of the LOTUS 1-2-3 major functions.

5-3  Describe the use of special keys when using LOTUS 1-2-3

5-4  Describe and use all features of LOTUS 1-2-3 that have been utilized in class.

5-5  Define and describe all technical terms or names utilized in this module.

5-6  Complete successfully any assignment, quiz or test utilizing any of the objectives described in this module.

The following topics will be covered:

- Starting LOTUS 1-2-3
- The LOTUS 1-2-3 control panel
- Entering and saving text/values/formulas
- Printing text/values/formulas
- Creating/displaying/saving LOTUS 1-2-3 graphs
- Printing graphs - text mode
                  - graphics mode
- Transferring spreadsheet data to a word processor