

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: INTRODUCTION TO MICROCOMPUTERS

Code No.: EDP 219

Program: PROGRAMMER

Semester: FOUR

Date: JANUARY, 1985

Author: B. LAILEY

New: X Revision: \_\_\_\_\_

APPROVED: \_\_\_\_\_

Chairperson

Date

85-02-06

INTRO. TO MICROCOMPUTERS

EDP 219

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Course Name

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Course Number

TIME: 4 hours/week

AIMS AND OBJECTIVES:

1. To provide an opportunity to develop an understanding of microcomputer hardware and operating system software.
2. To provide an opportunity to enhance BASIC programming skills drawing upon previous knowledge gained in earlier semesters in BASIC and COBOL.
3. To provide an opportunity to develop practical skills in the use of one or more application software products.

STUDENT EVALUATION:

Term Tests (2 x 30%)	60%
Assignments	15%
Independent Research Project (BASIC or DBASE2)	15%
Quizzes/Participation	10%
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	100%

NOTE: Students are advised to maintain a backup copy 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.

TOPIC OUTLINE

REFERENCE

- |   |                                   |
|---|-----------------------------------|
| 1) Introduction: <ul style="list-style-type: none"><li>- overview of course</li><li>- orientation to PC lab</li><li>- putting personal computing into perspective</li></ul>   | Text - Chapter 1<br>Lecture Notes |
| 2) The IBM PC: <ul style="list-style-type: none"><li>- hardware overview</li><li>- the IBM PC Family of Microcomputers</li><li>- Peripherals</li></ul>  | Text - Chapter 1<br>Lecture Notes |
| 3) Do's and Don't's of PC Operation: <ul style="list-style-type: none"><li>- diskette use</li><li>- keyboard function</li><li>- printer operation</li></ul>   | Chapter 2,3<br>Lecture Notes      |
| 4) Introduction to DOS: <ul style="list-style-type: none"><li>- similarity to VAX/VMS</li><li>- naming and locating files</li><li>- wild card characters</li><li>- executing DOS commands (internal and external)</li><li>- executing programs under DOS</li><li>- batch files</li></ul>  | Chapter 3<br>Lecture Notes        |
| 5) BASIC Programming Review: <ul style="list-style-type: none"><li>- structured programming in BASIC</li><li>- formatting output</li><li>- keyboard control in BASIC</li><li>- direct/indirect mode</li><li>- BASIC syntax</li><li>- entering and modifying BASIC statements</li><li>- constants and variables</li><li>- BASIC statements - LET, PRINT, LPRINT, REM, SWAP</li><li>- BASIC commands - LIST, LLIST, DELETE, SAVE, LOAD, NEW, KILL, AUTO, RENUM, etc.</li><li>- using the BASIC EDITOR</li></ul> | Chapter 4,5,6<br>Lecture Notes    |
| 6) BASIC Programming Review (cont'd) <ul style="list-style-type: none"><li>- looping and more looping</li><li>- sequence control</li><li>- BASIC statements - FOR...NEXT, IF... THEN, IF...THEN...ELSE, WHILE... WEND, GOTO</li></ul>   | Chapter 5<br>Lecture Notes        |

- 7) BASIC Programming Review (cont'd) Chapters 5,6,9  
Lecture Notes
- inputting data
  - subroutines
  - arrays
  - advanced output formatting
  - randomizing
  - BASIC statements - GOSUB, ON...GOSUB, RETURN, INPUT, LINPUT, READ, DATA, RESTORE, DIM, PRINT USING, LPRINT USING, RND
- 8) BASIC Programming Review (cont'd) Chapters 8,9  
Lecture Notes
- sequential file processing
  - elementary sorting techniques
  - string manipulation
  - special control codes for screen and printer
  - BASIC statements -LEN, LEFT\$, RIGHT\$, MID\$, INSTR, STR\$, VAL, LOCATE, etc.
- 9) Introductory Computer Graphics: Chapters 10,13  
Lecture Notes
- line graphics
  - bar charts
  - graphics mode - screen, colour
  - elementary drawing
  - pie charts
  - paint and draw
- 10) Application Software-Word Processing/  
Data Base Management: T.B.A.
- Note: contents of this topic will depend upon the availability of software.