SAULT COLLEGE
of Applied Arts and Technology
Sault Ste. Marie

COURSE OUTLINE

COMPUTER PROGRAMMING

EDP 105-2

revised ___Janaury, 1983 by S. Verma___

SPECIFIC OBJECTIVES:

GENERAL

The objectives of this course are to introduce the student to computer concepts and the use of the basic language. The student will use the VAXII-780 computer system to solve a variety of technical problems, and will learn to use the system command language, the EDT Editor Program, and the basic compiler and linker programs.

BLOCK I - COMPUTER SYSTEM ORGANIZATION

At the end of this block, the student will be able to:

1) describe typical hardware components of a computer system, and their function. (Processor, Memory, Disc, Tape, Printer, Terminals, etc.)

2) describe typical hardware components of a computer system, such as monitors, language translators (compilers and interpreters), editors, and linkers.

3) discuss the concept of files and recall the system of naming files on the VAX.

4) utilize the VAX DCL (Digital Control Language) to:

   a) Log On and Log Off the system
   b) Display a file on the terminal
   c) Delete files
   d) Purge files
   e) Print files
   f) Rename files
   g) Access the basic interpreter

5) Use the basic interpreter to create, modify, test and save programs.

BLOCK II - BASIC PROGRAMMING

At the end of this block, the student will be able to:

1) describe the form and operation of basic instructions used to solve problems of complexity equal to those of chapters 3-7 of "Basic Computer Programming" by Bartee.

2) utilize the basic interpreter commands to list, edit, modify, and delete instructions within a program, and to create, recall, save, unsave, append and rename programs.

3) analyze problems for computer solution using tools such as flowcharts, and create basic programs to implement those solutions.

4) run, test and debug programs assigned.

*BLOCK III - PROGRAM DEVELOPMENT

At the end of this block, the student will be able to:

1) describe the process of editing, compiling, linking, and running a program, and be able to discuss the difference between basic, object, listing and executable files.

2) use the EDT editor program to create and modify basic source programs.

3) describe the characteristics and capabilities of the EDT editor, and demonstrate an ability to use the available facilities.

4) describe and be able to use the various compiler options available with the VAX basic compiler.

* The coverage of this section will depend on the availability of time.

TEXT: Bartee, Thomas C., 1981, "Basic Computer Programming", Harper and Row Publishers, New York.

REFERENCES:

1) Foundations of Programming Through Basic by Moulton

2) VAX/VMS Primer by Digital Equipment Corporation

3) Basic Programming by Gottlieb (Schaum Series)

BASIS OF FINAL MARKS:

Mid term examination	25%
Final examination	50%
Home Assignments	
Lab Exercises (Programming)	25%

1) To get a pass grade in this course, students are required to score equal or greater than 55%.

2) Those students scoring in the range of 45% to 54%, will be considered for supplemental examination.

BLOCK XII - PROGRAM DEVELOPMENT

At the end of this block, the student will be able to:

1) describe the process of editing, compiling, linking, and running a program, and be able to discuss the difference between source, object, listing and executable files.

2) use the EDT editor program to create and modify basic source programs

3) describe the characteristics and capabilities of the EDT editor, and demonstrate an ability to use the available facilities.

4) describe and be able to use the various compiler options available with the VAX basic compiler.

* The coverage of this section will depend on the availability of time.

TEXT: Baysee, Thomas C., 1981, "Basic Computer Programming", Harper and Row Publishers, New York.

REFERENCES:

1) The Foundations of Programming Through Basic by Moulton

2) VAX/VMS Primer by Digital Equipment Corporation

3) Basic Programming by Bassilian (Schaum Series)

BASIS OF FINAL MARKS:

Mid term examination:	25%
Final examination:	50%
Home Assignments:	
Lab Exercises (Programming):	25%

1) To get a pass grade in this course, students are required to obtain a final mark equal to or greater than 55%.

2) Those students scoring in the range of 45% to 54%, will be considered for supplemental examination.