SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: INTRODUCTION TO COMPUTER SCIENCE

Code No.: CET105-5 Semester: 1

Program: COMPUTER ENGINEERING TECHNOLOGY

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APPROVED: L P Croft 92-09-16

Dean Date

INTRODUCTION TO COMPUTER SCIENCE — COURSE NAME

CET105-5 — CODE NO.

TOTAL CREDIT HOURS: 75

PREREQUISITES: None

I. PHILOSOPHY/GOALS:

This is a first computer course for the Computer Engineering Technology student intended to introduce him/her to the hardware and software concepts of the computer, and the CET program. The student will develop microcomputer skills in the areas of keyboarding, DOS and WordPerfect.

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

1. Be able to discuss general concepts of the computer field.
2. Have developed a large computer vocabulary.
3. Be familiar with the hardware and software that is used in the CET program.
4. Be familiar with the overall goals of the CET program, and the way that they are implemented.
5. Be a proficient keyboarder.
6. Be able to use the DOS operating system.
7. Be able to use the WordPerfect wordprocessor.

INTRODUCTION TO COMPUTER SCIENCE
COURSE NAME

CET105-5
CODE NO.

III. TOPICS TO BE COVERED:

1. Computer concepts and the CET program.
2. Keyboarding.
3. MS DOS.
4. WordPerfect.

IV. LEARNING ACTIVITIES

REQUIRED RESOURCES

BLOCK 1 COMPUTER CONCEPTS AND THE CET PROGRAM

TEXT:

As described below.

During this portion of the courses the student will study computer systems, applications, and techniques, and will learn how the CET program is designed to develop the student's skills in the various areas. The following topics will be covered:

1. The organization of the computer. The student will develop a view of the computer that includes the CPU, main and secondary storage, and input-output devices. The student will learn to discriminate between hardware and software, and will be able to discuss the classifications of computers according to size and application.
2. Computer software. The student will learn to describe how the computer operates, and be able to differentiate the role of the operating system and application software.
3. Computer hardware. The student will study the various hardware components of the computer and be able to discuss the

various skills required to design, configure and maintain computer hardware.

4. Software development. The student will learn the various stages of development of computer software, and be able to relate to their potential role in the process.

5. The CET program. The student will study the way in which the CET program develops their skills in each of the above areas.

6. Number Systems. The student will study different ways of representing numbers and conversion between them: Binary, Decimal, Hexadecimal and Octal.

BLOCK 2 KEYBOARDING

In this block the student will use a software training program to develop their expertise with computer keyboarding. It also serves as an example of the relationship between users and a computer software package.

BLOCK 3 MS-DOS

In this block the student will learn the capabilities of the MS-DOS operating system, and will become proficient as users of the system. Specifically they will learn to:

1. Manage the files and devices of their computer system.

2. Develop and manage tree-structured directory systems on the pc.

3. Write batch files to tailor the operating system to their needs.

INTRODUCTION TO COMPUTER SCIENCE
COURSE NAME

CET105-5
CODE NO.

BLOCK 4 WORDPERFECT

In this block the student will learn to use WordPerfect as a representative word-processing package. The student will learn to relate the operation of the applications package to the organization of the computer system hardware and software, and be able to relate the operation of WordPerfect to the operation of MS-DOS. Some of the topics covered will be:

1. The command and key structure of WordPerfect, and the general concepts of a word-processing package.

2. The menu-driven approach to WordPerfect.

3. The concept of a document, and the methods of controlling the document format.

4. The editing features of WordPerfect.

5. Advanced WordPerfect techniques such as:

    1. Line drawing.

    2. Windows.

    3. Graphics.

    4. Spell-checking.

    5. Thesaurus.

    6. Macros.

    7. Tables of contents.

    8. Columns and tables.

INTRODUCTION TO COMPUTER SCIENCE
COURSE NAME

CET105-5
CODE NO.

V. METHOD OF EVALUATION:

THEORY TESTS	60%
ASSIGNMENTS and LAB WORK	30%
QUIZZES	10%

(The percentages shown above may vary where circumstances warrant.)

Notes:
1. Lab work and assignments must be complete to the instructor's satisfaction for a passing grade to be achieved.
2. Before tests the instructor will provide details of the specific objectives to be tested.

GRADING SCHEME

A+	90	-	100%
A	80	-	89%
B	70	-	79%
C	55	-	69%
I	Incomplete		
R	Repeat		

UPGRADING OF INCOMPLETES

When a student's course work is incomplete or final grade is below 55%, there is the possibility of upgrading to a pass when a student meets the following criteria:

1. The students attendance has been satisfactory.
2. An overall average of at least 40% has been achieved.
3. The student has not had a failing grade in all of the theory tests taken.
4. The student has made reasonable efforts to participate in class and complete assignments.

INTRODUCTION TO COMPUTER SCIENCE — COURSE NAME
CET105-5 — CODE NO.

ATTENDANCE:

Absenteeism will affect a student's ability to succeed in this course. Absences due to medical or other unavoidable circumstances should be discussed with the instructor, so that remedial activities can be scheduled.

VI. REQUIRED STUDENT RESOURCES:

TEXT BOOKS:

1. Microcomputer Concepts by E. Colantonio.

2. A Laboratory Course in DOS, WordPerfect 5.1, Lotus 1-2-3, dBASE IV by E. Colantonio.

DISKETTE:

1. One 5-1/4" Double Sided Double Density (DSDD) or High Density (HD) diskette is required for the LAB classes.

VII. SPECIAL NOTES:

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

2. Your instructor reserves the right to modify the course as deemed necessary to meet the needs of students or take advantage of new or different learning opportunities.

3. The Blocks of objectives will not necessarily be covered in the order shown in this course outline.