## SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

# SAULT STE. MARIE, ONTARIO

## COURSE OUTLINE

| Course Title: | INTRODUCTION TO COMPUTER SCIENCE |
|---------------|----------------------------------|
| Code No.:     | CET 105                          |
|               |                                  |
| Program:      | COMPUTER ENGINEERING TECHNOLOGY  |
| Semester:     | ONE                              |
| Date:         | FALL 1988                        |
| Author:       | F. TURCO                         |
|               | New: Revision: X                 |
| Approved:     | Date: 5/07/08                    |

### C E T 1 0 5

## COURSE OUTLINE

LENGTH OF COURSE: 6 PERIODS PER WEEK FOR 1 SEMESTER

TEXT: "COMPUTERS TODAY 3RD EDITION" - BY DONALD SANDERS

"BUSINESS APPLICATIONS SOFTWARE FOR THE IBM PC-ALTERNATE EDITION" - BY LON INGALSBE

#### **OBJECTIVES**

## GENERAL:

The objective of this course are to:

- Introduce the student to the general concepts of the computer field.
- Develop the student's computer vocabulary.
- Familiarize the student with the hardware and software that is used in the CET program.
- 4. Familiarize the student with the overall goals of the CET program, and the means of implementing them.

## ASSESSMENT:

The final mark in the course will be arrived at as follows:

| Tests and quizzes            |     |
|------------------------------|-----|
| Assignments and labs         | 25% |
| Participation and Attendance | 10% |

## Grades will be determined as follows:

| A+ | 90 | % | to | 100 | % |
|----|----|---|----|-----|---|
| A  | 80 | % | to | 89  | % |
| В  | 70 | % | to | 79  | % |
| C  | 55 | % | to | 69  | % |
| R  | 0  | % | to | 54  | % |

#### SPECIFIC OBJECTIVES

#### THEORY

The theory of the course will follow Sanders. Periodically, usually at the end of a block, tests will be held. Prior to tests, specific requirements for that particular test will be detailed.

## BLOCK 1: BACKGROUND

At the end of this block the student shall be able to:

- Describe the general organization of a computer system and its characteristics.
- 2. Describe the historical development of the computer.
- 3. Discuss typical applications of the computer.
- 4. Describe the stages of development of software systems.
- Discuss the impact of computers on individuals and organizations.

#### BLOCK 2: HARDWARE

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

- Describe the organization of a CPU and it's general operation.
- Discuss main memory concepts, and it's development.
- 3. Discuss data entry devices and techniques.
- Discuss secondary storage and output devices and techniques.
- 5. Discuss the various levels of computer systems in use today.

#### BLOCK 3: SYSTEMS AND SOFTWARE

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

- 1. Discuss data communications techniques and applications.
- 2. Discuss the applications of word processing.
- 3. Discuss systems development techniques.
- 4. Discuss the characteristics of operating systems.
- 5. Discuss the types and uses of DBMS software.
- 6. Discuss MIS concepts.
- 7. Compare a variety of computer languages.

## BLOCK 4: THE SOCIAL IMPACT OF THE COMPUTER

At the end of this block the student shall be able to:

- 1. Discuss the concept of artificial intelligence.
- Discuss the good and bad effects that computer technology may have on people and organizations.
- 3. Discuss future trends in computer technology.

#### LAB WORK:

The lab work in this course is intended to support the theory. The concepts are the central focus, with the development of rigorous skills left to the future specialized courses. The labs will cover:

## 1. COMPUTER FAMILIARIZATION:

A PC based computer illustration package will be used to familiarize the student with the special functions and keys on the keypad.

#### KEYBOARDING SKILLS:

A PC or Vax based interactive keyboarding system will be used to develop keyboarding skills.

## 3. OPERATING SYSTEMS:

The student will learn and use MSDOS commands. He/She will learn to work effectively in a DOS environment.

## 4. WORDPROCESSING:

Wordprocessing will be done on the PC using WORDPERFECT.

#### 5. HARDWARE:

The student will be introduced to CET Hardware.