SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
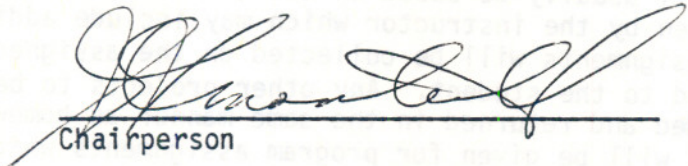
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title:	ELEMENTARY COMPUTER CONCEPTS
Code No.:	EDP 235-3
Program:	HOTEL AND RESTAURANT MANAGEMENT
Semester:	THREE
Date:	JUNE 1984
Author:	G. M. WIED

New: _____   Revision: ___X___

APPROVED: _____   84.07.03

Chairperson   Date

CALENDAR DESCRIPTION

ELEMENTARY COMPUTER CONCEPTS	EDP 253-3
Course Name	Course Number

PHILOSOPHY/GOALS:

The student will understand and be able to demonstrate:

1. The use of data processing in the business environment, with specific reference to Hotels & Restaurants.

2. The contribution of data processing to business decision making.

3. The various methods of computer-based data processing systems.

4. Elementary knowledge of programming using a high-level programming language such as BASIC.

5. Ability to use application packages on a computer system.

6. Comprehension of the impact of computers on everyday life.

METHOD OF ASSESSMENT (GRADING METHOD):

The student will be required to read the textbook. Semester tests, final examinations and homework assignments will require knowledge of its contents.

Homework assignments will usually be based on the textbook. Other assignments will be given by the instructor which may include additional resources. Homework assignments will be collected on the assigned due dates for grading and returned to the student. Any other projects to be assigned will be collected, graded and returned in the same manner as homework assignments. No credit will be given for program assignments which fail to run correctly or which do not display the correct output.

Students who do not attend 75% of lecture classes will not be permitted to write the final examination.

GRADING:

```
A  - 85% - 100%
B  - 70% -  84%
C  - 55% -  69%
I  - less than 55%
```

STUDENT EVALUATION:

Tests (3 @ 25%) - 75% (or 50% + 25% from Final Test)
Assignments   - 25%
*Final Test   - 25% (will cover entire semester's work)

*Final Test may be written only if:

1) Assignments have all been completed with correct results provided.
2) A grade to date of at least 40%.
3) 75% class attendance.

SPECIFIC OBJECTIVES:

NOTE: Module B may run parallel to Module A on a practical assignment and
       usage basis.

I MODULE A:

REFERENCE	TOPIC
Chapter 1	INTRODUCTION: After completion of this section the student will be able to: - appreciate the importance of computers in today's world - understand what a computer is and its relationship to a computer system - be familiar with some fundamental computer terms and concepts - be familiar with the various sizes of computers - microcomputers, minicomputers, mainframes - appreciate the necessity for learning about computers
Chapter 2	HOW COMPUTERS PROCESS DATA: After completion of this section the student should: - be familiar with the most common types of input, output, and storage equipment and media - understand some of the terminology applied to support devices for example, peripheral, auxiliary, online and off line - be familiar with the field, record, and file concepts relating to the organization of data - understand the key classes of software: applications software and systems software
Chapter 3	COMPUTERS PAST AND PRESENT: After completion of this section the students will be able to: - appreciate the remarkable evolution of computer technology - understand hardware developments during the four generations of computers - be familiar with the people and organizations that have played an important role in the history of computers

REFERENCE	TOPIC

Chapter 4   THE CENTRAL PROCESSING UNIT (CPU):   After completion of this section the student should:
- understand how the main sections of the CPU function
- be acquainted with how computers process instructions
- be familiar with the functions of firmware (ROM vs. RAM)

Chapter 5   SECONDARY STORAGE: After completion of this section the student should:
- have a better understanding of the role of secondary storage
- know the purposes and types of magnetic tapes and magnetic disks: how the data is stored and accessed on this media
- understand the tradeoffs involved between disk and tape storage
- have a grasp of the methods for organizing and accessing data in secondary storage

Chapter 6   INPUT AND OUTPUT EQUIPMENT: After completion of this section the student should:
- appreciate the variety of input and output devices
- understand the types of display terminals and their capabilities
- understand the types of printers and their capabilities
- appreciate other source-data automation (OCR and MICR) and special purpose input/output equipment

Chapter 12   DATABASE PROCESSING: After completion of this section the student should:
- be familiar with databases and data banks and the importance of the database approach
- appreciate some of the advantages and disadvantages of database processing

Chapter 7   TELEPROCESSING: After completion of this section the student should:
- understand in basic terms how teleprocessing methods are used in computer systems
- know what modems are and how they are used
- recognize the teleprocessing services available though common carrier, value-added networks, and local-area networks

Chapter 8   SYSTEMS SOFTWARE: After completion of this section the student should:
- understand the purpose of system software
- appreciate the primary role and functions of the operating system
- understand the role of language translators and know what utility programs do

REFERENCE   TOPIC

Chapter 9   APPLICATIONS SOFTWARE: After completion of this section the
                                      student should:
             - appreciate the importance of applications software
               development
             - be famliar with the program development cycle and its

               documentation
             - be familiar with some of the most common software application
               packages currently on the market

Chapter 13   PERSONAL COMPUTER SYSTEMS: After completion of this section
                                          the student should:
             - be aware of the nature and use of personal computer systems
             - know the characteristics of the hardware found on most
               personal computers
             - understand the use of personal computers for electric games,
               personal finance and planning, word processing, education,
               home control, and information networks

Chapter 14   COMMERCIAL SYSTEMS: After completion of this section the
                                  student should:
             - be familiar with various types of computing environments
               found in business and government
             - understand the difference between batch and online
               (interactive) processing
             - appreciate the types of computing associated with various
               aspects of the world of commerce

II   MODULE B:

After completion of this section the student will be able to:

1. Recognize the BASIC language and its structure.

2. Be able to understand and use BASIC commands to display, store and
    retrieve programs.

3. Be able to use key statements in BASIC for simple input, process and
    output operations.

4. Be able to write BASIC programs for simple keyboard inputs and be able
    to print simple reports and perform basic arithmetic and compare
    operations.

5. Be able to use some applications packages from a "user" perspective
    relevant to ones they may encounter in their field of work.

SUBJECT TO MODIFICATION

REFERENCE   TOPIC

Chapter 12   APPLICATIONS SOFTWARE: After completion of this section the student should:
- appreciate the importance of applications software development
- be familiar with the program development cycle and its documentation
- be familiar with some of the most common software application packages currently on the market

Chapter 13   PERSONAL COMPUTER SYSTEMS: After completion of this section the student should:
- be aware of the nature and use of personal computer systems
- know the characteristics of the hardware found on most personal computers
- understand the use of personal computers for electronic games, personal finance and planning, word processing, education, home control, and information networks.

Chapter 14   COMMERCIAL SYSTEMS: After completion of this section the student should:
- be familiar with various types of computing environments found in business and government
- understand the difference between batch and online (interactive) processing
- appreciate the types of computing associated with various aspects of the world of commerce.

MODULE 3:

After completion of this section the student will be able to:

1. Appreciate the BASIC language and its structure.

2. Be able to understand and use BASIC commands to display, store and retrieve programs.

3. Be able to use key statements in BASIC for simple input, process and output operations.

4. Be able to write BASIC programs for simple keyboard input, and to print simple reports and perform basic arithmetic and computer computations.

5. Be able to use some applications packages from a 'user' perspective relevant to ones they may encounter in their field of work.

PREREQUISITE TO MODULES THREE