SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: ELEMENTARY COMPUTER CONCEPTS

Code No.: EDP 235-3

Program: HOTEL AND RESTAURANT MANAGEMENT

Semester: THREE

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APPROVED: _____   __86-09-02__
          Chairperson   Date

ELEMENTARY COMPUTER CONCEPTS	EDP 253-3
Course Name	Course Number

PHILOSPHY/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.

TEXT: "Computers and The Information Society", Radlow, McGraw-Hill

METHOD OF ASSESSMENT (GRADING METHOD):

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

Homework assignments will be based on the textbook and on lecture notes. Other assignments will be given by the instructor which may include additional resources. Program assignments and other projects will be collected, graded and returned to the student.   No credit will be given for program assignments which fail to run correctly or which do not display the correct output.

Students are expected to attend classes and to participate actively.

GRADING:

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A+ - 90% - 100%
A  - 80% -  89%
B  - 70% -  79%
C  - 55% -  69%
I  - less than 55%
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STUDENT EVALUATION:

Tests (2 @ 35%)   - 70%
Assignments   - 15%
Quizzes/Participation   - 15%

SPECIFIC OBJECTIVES:

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

Module A:

REFERENCE   **TOPIC**

Chapter 1   INTRODUCTION: After completion of this section the student
                              will be able to:
                - describe the importance of computers in today's world
                - explain what a computer is and its role as part of a
                  computer system
                - define fundamental computer terms and concepts
                - define the various sizes of computers -
                  microcomputers, minicomputers, mainframes
                - explain the necessity for learning about computers

Chapter 2   HOW COMPUTERS PROCESS DATA: After completion of this section
                                             the student will be able to:
                - describe the most common types of input, output,
                  and storage equipment and media
                - define terminology applied to support devices for example,
                  peripheral, auxiliary, online and offline
                - explain the field, record, and file concepts relating to
                  the organization of data
                - differentiate between the key classes of software:
                  applications software and systems software

Chapter 3   COMPUTERS PAST AND PRESENT: After completion of this
                                             section the student will be
                                             be able to:
                - describe the remarkable evolution of computer technology
                - explain the key hardware developments during the four
                  generations of computers
                - name the people and organizations that have played an
                  important role in the history of computers and be able
                  to describe the contribution of each.

REFERENCE	**TOPIC**

Chapter 4   THE CENTRAL PROCESSING UNIT (CPU):   After completion of this section the student will be able to:
- explain how the main sections of the CPU function
- describe how computers process instructions
- differentiate between ROM and RAM

Chapter 4   SECONDARY STORAGE: After completion of this section the student will be able to:
- explain the role of secondary storage
- define the purposes and types of magnetic tapes and magnetic disks: explain how the data is stored and accessed on this media
- describe the tradeoffs involved between disk and tape storage
- comment on the methods for organizing and accessing data in secondary storage

Chapter 4   INPUT AND OUTPUT EQUIPMENT: After completion of this section the student will be able to:
- name and describe a wide variety of input and output devices
- describe a variety of types of display terminals and their capabilities
- describe a variety of types of printers and their capabilities
- describe a variety of other source-data automation (OCR and MICR) and special purpose input/output equipment

Chapter 8   DATABASE PROCESSING: After completion this section the student will be able to:
- describe the concept of a database and the importance of the database approach
- describe the advantages and disadvantages of database processing

Chapter 11   TELEPROCESSING: After completion of this section the student will be able to:
- 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

REFERENCE   **TOPIC**

Chapter 5   <u>SYSTEMS SOFTWARE:</u> After completion of this section the
                                        student will be able to:
                    - explain the purpose of system software
                    - describe the primary role and functions of the operating
                      system
                    - describe the role of language translators and
                      utility programs

Chapter 5   <u>APPLICATIONS SOFTWARE:</u> After completion of this section the
                                          student will be able to:
                    - describe the importance of applications software
                      development
                    - explain the program development cycle and the importance
                      of documentation
                    - name and describe briefly several of the most common
                      software application packages currently on the market

Chapter 9&10   <u>PERSONAL COMPUTER SYSTEMS:</u> After completion of this section
                                              the student will be able to:
                    - describe of the nature and use of personal computer
                      systems
                    - describe the characteristics of the hardware found on most
                      personal computers
                    - comment on the use of personal computers for electric
                      games, personal finance and planning, word processing,
                      education, home control, and information networks

<u>MODULE B:</u>

Chapter 9:

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

1. Define or explain a number of features of the BASIC language and its
   structure.

2. Understand and use BASIC commands to display, store and retrieve
   programs.

3. Use a vareity of statements in BASIC for simple input, process and
   output operations.

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

5. Utilize some applications packages form a "user" perspective relevant to ones they may encounter in their field of work.

*** SUBJECT TO MODIFICATION ***