SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

| Course Title: | INTRODUCTION TO COMPUTERS AND DATA PROCESSING |
|---------------|---|
| Code No.: | HDG 115-3 |
| Program: | GENERAL ARTS AND SCIENCE (G.A.S.) |
| Semester: | SECOND |
| Date: | January 1987 |
| Author: | SHARÛN MAHAR |

New: Revision:

 APPROVED:
 1 / A ^ ? / L
 N. Koch
 Jan. 12, 1987

 Chairperson
 Date

INTRODUCTION TO **COMPUTERS AND** DATA PROCESSING HDG 115

- TIME; 3 periods per week for 1 semester
- **AIM:** This introductory course will be taken by students in semester 2 of the General Arts and Science Program.

This course is intended to provide:

- 1. A grounding in Data Processing principles and methods such that a student will be better prepared for more advanced courses.
- 2. An appreciation of Data Processing principles, methods and capabilities for those students who elect to specialize in an area other than Data Processing.
- 3. Sufficient exposure to Data Processing to enable the student to decide whethter his/her interest and/or apptitude lies in this area.

STUDENT EVALUATION:

The students final grade will consist of the following components:

| Test (1 x 25 / 1 x 35) | 60% |
|------------------------|------|
| Quizzes (2 x 5) | 10% |
| Assignments | 20% |
| Participation | 10% |
| | 100% |

- Any student who fails to achieve a final grade of 55 % will be required to write a make-up test on the entire semester.
- 2. Failure to complete any assignment <u>on time</u> will result in a mark of zero.
- 3. Any student who fails to write a quiz will not be afforded the opportunity of making it up.
- 4. Any student who fails to write a test will have the opportunity of making it up at the end of the semester, providing the student submits, in writing to the instructor, the reason why he/she was not in attendance and the reason is a valid one.

INTRODUCTION TO COMPUTERS AND DATA PROCESSING HDG 115

| TOPIC | ft | TOPIC DESCRIPTION |
|-------|----|---|
| 1 | | <u>An Overview</u> - data processing defined - need for computers - what computers can do |
| 2 | | Developments in Data Processing - early calculating methods - the early computers - reasons for progress - potential of the computer - limitations |
| 3 | | What is a Computer - hardware components - input/output peripherals - classifications of computers - system components |
| 4 | | <u>Storage</u> - medias and mediums - internal and external storage - capacity |
| 5 | | <u>Data Verses Information</u> - sources of data - integrity of data - what is information - forms of information |
| 6 | | <u>Software</u> - types of software - purpose of software - sources of software |
| 7 | | <u>Operating Systems</u> purpose of operating system utilizing the power of the operating system commands |

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| TOPIC | ft | TOPIC DESCRIPTION |
|------------|----|---|
| 8 | | Application Software purpose of application software types of application software utilizing application software developing application software |
| 9 | | Documentation - purpose - types of documentation - associated documentation |
| 10 | | Intro to a Mirco Computer - system components - operating system commands |
| 11 | | <u>Packaged Software</u> - utilizing - assessing capabilities - documentation - types available |
| 12 | | Basic Approach to Logic logical approach to a task analogy as a reinforcement developing a set of instructions |
| 13 | | <pre>Introduction to Programming - types of programming languages - statements vs. commands - developing logic - implementing a logical design</pre> |
| 14 | | <u>An Alternative</u> - a glimpse at the VAX11/780 - a comparison to a micro - utilities |
| ** Note ** | | |

The topics are not necessarily in the order in which they will be covered.