SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: INTRODUCTION TO DATA PROCESSING

Code No.: EDP100-5

Program: BUSINESS (common)

Semester: ONE

Date: 1983 08

Author: JODI WIED

New: _____ Revision: X

APPROVED: _____ 83.05.27
Chairperson Date

INTRODUCTION TO DATA PROCESSING

EDP100-5

TIME: 5 periods per week for 1 semester

TEXT: Introduction to Computers & Data Processing - Shelly & Cashman

AIM: This introductory course will be taken by all students in Semester 1 of the Business Administration program. Some of these students will decide to specialize in Data Processing while others will choose one of the other business options.

This course is intended to provide:

1. A grounding in Data Processing principles and methods which will be a pre-requisite to more advanced courses for those students electing to specialize in Data Processing.

2. An appreciation of Data Processing principles, methods & 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 whether his/her interest and/or aptitude lies in this area.

SPECIFIC OBJECTIVES:

A list of objectives for each topic in the course is attached. These objectives represent minimum requirements.

STUDENT EVALUATION:

The student's final grade will consist of the following components:

Test (2 X 15)	30%
Quizzes (5 X 8)	40%
Participation - Case studies - Computer Programs - Attendance	30%
	100%

STUDENT EVALUATION (CONTINUED)

1. Any student who fails to achieve 60% will receive a final grade of R.

2. Students wishing to receive better than a "C" standing must demonstrate above average performance in each area to be graded.

3. Any student who fails to write a quiz or test at the time it is scheduled, must present a written excuse acceptable to the instructor.

4. Failure to complete any of the assigned computer programs on time will result in a mark of zero for that program. All programs must produce correct results. An Incomplete program will not be accepted until corrected.

5. Any student who consistently fails quizzes and/or tests, will automatically receive a final grade of "R". In this case, the student will not be allowed to do a re-write.

6. Communication skills are very important in a business environment. For this reason, all work submitted will be graded for spelling, punctuation, sentence structure and clarity. A student's mark may be downgraded by as much as 20% for poor quality work in this area.

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REFERENCE	TOPIC #	TOPIC DESCRIPTION
Text - Chapter 1	A1	Introduction to Computers - data processing defined - what computers can do - the program & data - the computer system - the people & the equipment in the industry
Text - Chapter 2	A2	The Evolution of the Computer Industry - historical figures & early devices - data processing classifications - 4 generations of computers - programming language developments - hardware and software - new developments & the future
Text - Chapter 3	A3	The Processing of Data - input/process/output cycle - files, records, fields - arithmetic operations - logical operations - storage & retrieval of information - organizing & manipulating data
Text - Chapter 4		The Central Processor - components of the CPU - how data is stored & accessed - executing instructions - new technology
Text - Chapter 5		Computer Input - input media - batch & transaction - oriented input - preparation of data - dedicated & specialized input devices
Text - Chapter 6		Computer Output - types of output - types of printers - CRT's - reports (external) & internal output

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REFERENCE	TOPIC #	TOPIC DESCRIPTION
Text - Chapter 7		Storage - storage media - data access, retrieval, update - file organization methods - media for large & small computers
Text - Chapters 8, 9, 10		Familiarization with - data communications & multiprogramming - data base - "time sharing", "On-line" & "Real Time" processing - systems analysis & design

Text - Chapter 12		Programming Languages
		- common language used
		- types of languages: assembler, compiler
		- steps in program development
		  - program design
		  - coding
		  - translation (compilation)
		  - testing (execution)
		  - documentation
		- operating systems

Text - Chapter 13		Computers in Society - technological changes - software developments - social & ethical implications

PART B - PROGRAMMING:

Program Design using the BASIC Programming Language

PHASE 1:

To be an on-going learning process throughout the course - running concurrently with theoretical concepts. Simple applications and procedures using "hands-on" method.

REFERENCE: "VAX BASIC"
Weinman and Kurshan

PHASE 2:

Programming in BASIC using business applications. A minimum of four major program assignments to hand-in with appropriate documentation.

REFERENCE: "Introduction to Computers and Data Processing"
Shelly and Cashman

REFERENCE	TOPIC #	TOPIC DESCRIPTION
Lecture Notes		Program Design
Text - Chapter 11	B1	- program specifications - flowcharting & other design tools - common design problems
Lecture Notes	B2	Elements of Basic Programming - BASIC defined - program structure - statements & commands - constants & variables - expressions & operators - signing-on to the computer
Lecture Notes	B3	BASIC Commands - LIST - RUN - SCRATCH - SEQUENCE - LOAD - SAVE - NEW - OLD - REPLACE
Lecture Notes	B4	Computer Arithmetic & Program Management - REMarks statement - LET statement - PRINT statement - END statement
Lecture Notes	B5	Input-Output Statements - READ statement - DATA statement - INPUT statement - PRINT statement (with options)

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REFERENCE	TOPIC #	TOPIC DESCRIPTION
Lecture Notes	B6	Control Statements - branching & comparing GO TO IF ..... THEN FOR
Text - Appendix A	B7	Programming Problems - BASIC input/output operations - BASIC arithmetic - accumulating totals - comparing - control breaks

NOTE: During the course of the semester, additional objectives may be assigned.