

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: STRUCTURED ANALYSIS AND DATA MANAGEMENT

Code No.: EDP 226

Program: PROGRAMMER/PROGRAMMER ANALYST

Semester: FOUR

Date: JANUARY, 1986

Author: W. DEBRUYNE

New: _____ Revision: X

APPROVED: 
Chairperson

86-01-06
Date

Course Name

Course Number

TIME: 6 hours per week

TEXT: Teacher Notes

AIM: The course is designed to show the student the relationships among data, the complete processing cycle, and the different processing modes used when performing various applications. The students will understand the characteristics and attributes of data, why systems and procedures are necessary to ensure accurate data. Students should understand the categories of applications suitable for processing on a computer and be able to discriminate between those applications for which a computer could be considered and those applications which could not use a computer to accomplish their tasks.

Students should understand the importance of user interface with information systems and the elements comprising them. Students gain an understanding of auxiliary storage devices.

Students will review the various access methods used in storage and retrieval of data, including both sequential and random. Students will also examine various sorting algorithms, and search techniques.

The course will also provide a more detailed understanding of program design process as well as examine indepth ISAM FILES in particular.

OBJECTIVES:

At the completion of the course, students should be able to:

1. Identify and describe through diagrams interactive processing, transaction-oriented processing, and batch processing.
2. List the attributes of data required for processing on a computer system.
3. Define the importance of the user in user interface.
4. Describe the manner in which data is stored on diskettes and fixed, hard driver.
5. Determine the appropriate auxiliary storage device for both personal computers and large computers, given the needs of the application.
6. Describe the attributes of diskettes, hard disks which affect the speeds and storage capacities found.
7. Identify the difference between sequential file retrieval and random file retrieval.
8. Manipulate indexed files and direct files.
9. Develop steps and procedures required for test data.
10. Develop modular programs.

STUDENT EVALUATION:

The student's final grades will consist of the following structure:

- 3 tests (each 15%)	@	45%
- 3 assignments (each 5%)	@	15%
- 1 project:		
documentation	@	10%
presentation	@	25%
- attitude/participation	@	5%
		<hr/>
		100%

GRADING:

- 'A' - 80-100%
- 'B' - 70- 79%
- 'C' - 55- 69%
- 'R' - 0- 54%