SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: Systems Analysis & Design

Code No.: EDP108-4

Program: Electronic Data Processing

Semester: III

Date: 1983 03 25

Author: T. June Dicks

New: _____ Revision: _____

APPROVED: _____ Dept 83

Chairperson Date

An on-going case study developed around a sales/accounts receivable/ inventory subsystem is presented.

The student must recognize this as a major culmination of work to be used in a final presentation to management. Periodically and randomly, sections of the on-going system will be checked by the instructor to ensure an acceptable market quality.

EVALUATION METHOD:

Major project design and presentation:

Design	20%
Presentation	20%
Test and Random Sampling:	40%
Ability and Willingness to Participate:	15%
Attendance:	5%

GRADING:

A	85 - 100%
B	75 - 84%
C	55 - 74%
R	55%

NOTE: A student whose attendance is less than 75% of the designated class time will not be granted permission to present the major project.

INTRODUCTION TO COMPUTER SYSTEMS AND TO SYSTEMS ANALYSIS AND DESIGN

I Introduction

-an overview of the system concept and the steps involved in designing a system

-the role of the analyst

-designing and implementing a system or procedure

-why some systems do not meet their objectives

-a basic understanding of today's technology

-introduction to the case study

(Many of the techniques used to gather data, analyze the data and prepare a meaningful report are discussed. Constraints which might be imposed along with the importance of developing a good oral and written report are stressed. The importance of controls and documentation is emphasized throughout the system.)

DESIGNING SYSTEMS

V General Design Specifications

-introduction, relation and purpose to the total concept

-guidelines for general design specifications

-project organization

-design principles

-preparing the general design phase report

-selecting a computer system

-purchasing vs. leasing a system

-summation

-on-going case study

Some basic guidelines for systems development are provided. The importance of developing a realistic implementation plan (GANTT/PERT) and the need for defining and establishing controls is continued. Some consideration is given to selecting a computer system and determining the software specifications.

VI Detailed Design: Output

-introduction, relation and purpose to the total systems concept

-output considerations

-output media available

-printed reports

-use of report layout forms

-output controls

VIII Detailed Design: Files

-introduction, relation and purpose

-types of media used

-designing files

-types of data

-file security

-file maintenance

-scheduling runs

-on-going case study

A review is made of the available types of media. In-depth coverage is given to the design of the files, types of data stored in files, file security, file management required, and the utility programs usually available for working with files.

IX Detailed Design: Determining Procedures

-introduction, relation and purpose

-segmenting the system into procedures

-factors to consider in segmenting systems

-program specifications

-presentation of the detailed design report to management

-on-going case study

This section discusses how systems are segmented into procedures. The importance of having the support of management and the involvement of the users in developing this phase is stressed as well as ensuring a continued involvement in subsequent phases of the development of the system. An outline for presenting a comprehensive report to management is designed.

IMPLEMENTATION AND EVALUATION

X Implementation: Programming Considerations

-introduction, relation and purpose

-programming

XII Implementation: Documentation and Evaluation

-relation and purpose to the total system

-types of documentation

-evaluating the system

-the formal evaluation

-on-going evaluation

-on-going case study

This section stresses the functions provided by the documentation for the project and the methods used to evaluate the system. The importance of the initial evaluation and the on-going evaluation is emphasized.

STUDENT PRESENTATION OF THE ON-GOING
SALES/ACCOUNTS RECEIVABLE/INVENTORY SUBSYSTEM