SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: COBOL I

Code No.: EDP112-7

Program: PROGRAMMER AND PROGRAMMER/ANALYST

Semester: TWO

Date: JANUARY, 1988

Author: DENNIS OCHOSKI

New: X Revision: _____

APPROVED: _____ 88-01-19
Chairperson Date

COBOL I	EDP112-7
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LENGTH OF COURSE: Seven periods per week for one semester.

TEXTS: Structured ANS COBOL: Part 1 -
Mike Murach and Paul Noll

OTHER REFERENCES: VAX 11/780 COBOL Language Reference Manual
VAX 11/780 COBOL Users Guide
(on file in work room)

PURPOSE: This course will provide students with an opportunity to develop their data processing skills by introducing them to the COBOL programming language in business data processing. Students will be exposed to most features of the language. This exposure will provide a foundation for more advanced study in semesters 3 and 4.

Programming assignments will be designed to cover a variety of business applications.

Students will also be instructed in the preparation of adequate documentation. The knowledge which they gain in this area is to be displayed by the preparation of a binder containing complete documentation of all assignments.

MODULE 1: Background and introduction to COBOL (chapters 1 and 2)

Objectives: When this module is completed the student should be able to:

1. explain the difference between sequential and indexed file organization.
2. describe the difference between a batch application and an interactive application.
3. describe operating system functions such as job-to-job.
4. describe the purpose of an interactive editor, a COBOL compiler, and a linking editor.
5. list and describe the seven tasks of the program development procedure.

MODULE 2: Basic COBOL elements and program development techniques (chapters 3 and 9)

Objective: When this module is completed the student should be able to:

1. identify the four divisions of a program, the A and B margins, comment lines, and paragraph names in the Procedure Division.
2. describe the purpose of, and code, the Identification Division and the Configuration Section in the Environment Division.
3. identify record names, data names, and numeric and nonnumeric literals.
4. code the Data Division
5. explain how shop standards can effect the quality of a COBOL program.
6. code an acceptable program using only the elements discussed to date.
7. correct the diagnostic so the program will compile clearly.

MODULE 3: Building on the COBOL basics (chapter 4)

Objectives: When this module is completed the student should be able to:

1. code the Data Division for any of the fields required by a program.
2. code the Procedure Division statements for a program.
3. describe the operation of a program and the flow of control from one module to another.
4. code an acceptable program using the elements discussed to date.
5. code usages, signs, and DISPLAY statements.

MODULE 4: Program development and structured programming techniques (chapter 10, 11, and 12).

Objectives: When this module is completed the student should be able to:

1. create a test plan and test data
2. debug a program
3. design a program using a structure chart, plan the coding of its modules using pseudocode, code it in structural style, and test it using top-down testing.
4. design an acceptable structure chart for a report preparation program and code the pseudocode for its critical modules.

MODULE 5: Advanced COBOL techniques (chapters 5,6,7)

Objectives: When this module is completed the student should be able to:

1. apply the COBOL elements presented in this module to application programs.
2. understand the use of the COPY statement to copy the members from a COPY library into a program.
3. understand the use of CALL statements to call the required subprograms whenever needed by a program.
4. code the required COBOL routines for a one-level table.
5. code the required COBOL routines for one or more indexed input files.
6. apply some of the 1985 COBOL elements to an application program.

STUDENT EVALUATION:

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

Tests	(3 x 20)	60%
Assignments		40%
		100%

Grading:

A+	--90	to	100%
A	--80	to	89%
B	--70	to	79%
C	--60	to	69%
R	-- 0	to	59%

PROGRAM DEADLINES: Each program must be handed in ON TIME with CORRECT results = 60%

Balance of Marks:

TECHNIQUES & STYLE	= 10%
EFFICIENCY	= 10%
DOCUMENTATION	= 10%
THOROUGHNESS (procedure and test data)	= 10%

Deductions: 10% per day late
: 40% if incorrect results

NOTE: There will be no rewrite/supplemental test in this course.