

## STANDARDIZED COURSE OUTLINE

### SECTION I

**SUBJECT AREA AND COURSE NUMBER:** CSC 201

**COURSE TITLE:** COBOL I

**COURSE CATALOG DESCRIPTION:**

This course provides an understanding of the COBOL programming language used with microcomputer, minicomputer and large-scale computers in business. Structured design problem-solving and programming is stressed. Topics include input/output, calculations, decision making, looping, control breaks and file updating. Extensive lab work and a familiarity with the basics of computer hardware and software are expected. *Formerly listed as CIS 110, not open to students who have successfully completed CIS 110.*

**LECTURE HOURS PER WEEK:** 3

**CREDIT HOURS:** 3

**LAB HOURS PER WEEK (if applicable):** n/a

**PREREQUISITE(S):** CSC 101

### SECTION II

#### **A. SCOPE:**

This course focuses on the introductory concepts necessary to become proficient in the COBOL programming language. The course topics include: an introduction to Structured Program Design in COBOL; the Identification and Environment Divisions; the DATA Division; the Procedure Division; designing and debugging batch and interactive COBOL programs; Data Moves and Outputs; If and Evaluate statements; and computing in COBOL.

#### **B. REQUIRED WORK:**

Will vary by instructor. Students will be expected to do all required readings, assignments, tests, and quizzes as outlined by their instructor.

#### **C. ATTENDANCE AND PARTICIPATION:**

Regular attendance, assignment submission timeliness, promptness and class/lab participation will be expected. Instructors will include specific attendance and participation policies requirements in their class syllabi.

#### **D. METHODS OF INSTRUCTION:**

Methods may include any of the following: lecture, lecture/discussion, small group, collaborative learning, experimental/exploration, distance learning, student presentations, computer demonstrations, or use of technologies such as audio-visual materials, and computer laboratory equipment. Emphasis will be on hands-on computer exercises and problems.

#### **E. OBJECTIVES, OUTCOMES, and ASSESSMENT**

Students' grades will be based on achievement of learning the objectives and outcomes listed below as measured by the instructor's methods of assessment:

<b>LEARNING OBJECTIVES</b>	<b>LEARNING OUTCOMES</b>	<b>ASSESSMENT METHODS</b>
<b>To demonstrate an understanding of:</b>	<b>Student will:</b>	<b>As measured by:</b>
An Introduction to Structured Program Design in COBOL	a) Identify, list, and define computer programming concepts and terminology b) Explain application program development and the nature of COBOL c) Identify and explain COBOL history, techniques, and sample programs	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
The Identification and Environment Divisions.	a) Use basic structure COBOL programming. b) Identify coding requirements for the ID and ENV divisions. c) Assign files and devices	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
The DATA Division	a) Form data names b) Identify and utilize the File Section, types of data, and the Working Storage Section	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
The Procedure Division	a) Format Procedure Division b) Utilize the main module of batch programs c) Code statements for input and output records	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Designing and Debugging Batch and Interactive COBOL programs	a) Using flowcharts to design and explain logical control structures b) Explain interactive processing c) Debug programs	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Data Moves and Outputs	a) Identify and use instruction formats of the move statement b) Use numeric and non-numeric moves c) Produce printed output and screen displays	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
If and Evaluate statements	a) Identify and use IF statements b) Identify and use the COBOL 85 Evaluate statement	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Computing in COBOL	a) List and explain the basic Arithmetic verbs b) Use the Compute statement c) Use signed numbers in arithmetic operations	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>

**F. TEXT(S) AND MATERIALS:**

An appropriate COBOL programming text, such as:

**Text:** Structured COBOL Programming (*current edition*)

**Author:** STERN & STERN

**Publisher:** WILEY

**G. INFORMATION TECHNOLOGY:**

This course is an information technology course and will require extensive computer lab time both for teaching and performing assignments. Students will require network accounts with access to the COBOL compiler as well as file storage space.