

## STANDARDIZED COURSE OUTLINE

### SECTION I

**SUBJECT AREA AND COURSE NUMBER:** CSC 202

**COURSE TITLE:** COBOL II

**COURSE CATALOG DESCRIPTION:**

The sophisticated use of COBOL in large-scale business applications is the focus of this advanced course. Advanced control breaks, data validation, table processing, sequential, direct, ISAM, and VSAM file processing applications are stressed. Lab work is extensive. *Formerly listed as CIS 205, not open to students who have successfully completed CIS 205.*

**LECTURE HOURS PER WEEK:** 3

**CREDIT HOURS:** 3

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

**PREREQUISITE(S):** CSC 201

### SECTION II

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

This course focuses on the advanced COBOL programming concepts. The course topics include: Iteration: Beyond the Basic Perform; Control Break Processing; Data Validation; Array Processing and Table Handling; Sequential File Processing; Indexed and Relative File Processing; Improving Program Productivity Using COPY, CALL and Other statements; and The Report Writer Module.

#### **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 policy 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>
Iteration: Beyond the Basic Perform	a) Identify and explain the simple PEFORM b) Use other types of Performs c) Use nested performs and varying statements	<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>
Control Break Processing	a) Identify and explain Control Break Processing b) List and explain program requirements for Control Break Processing	<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 Validation	a) Use validating input to avoid logic errors b) Troubleshoot input errors c) Explain data validation	<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>
Array Processing and Table Handling	a) Identify and explain single-level OCCURS clauses b) Process data stored in an array c) Use search varying, multiple-level OCCURS, and table data lookups for accumulation totals	<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>
Sequential File Processing	a) Use sequential file updating with a master file b) Check validity in update procedures c) Using update procedures with multiple transaction 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>
Indexed and Relative File Processing	a) Process indexed disk files b) List additional options for indexed file processing c) Use an indexed disk file as an external table	<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>
Improving Program Productivity Using COPY, CALL and Other statements	a) Use the Copy and Call Statements b) Manipulate text with the STRING and UNSTRING	<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 Report Writer Module	a) Identify and list benefits of the Report Writer b) Use Report section and Data Division	<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 Visual Basic 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 a COBOL compiler as well as file storage space.