University of Arkansas – Fort Smith 5210 Grand Avenue P. O. Box 3649 Fort Smith, AR 72913-3649 479-788-7000

General Syllabus

CSCE 31303 Business Application Programming II

Credit Hours: 3 Lecture Hours: 3 Laboratory Hours: 0

Prerequisite: CSCE 31203 Business Application Programming I

Effective Catalog: 2018-2019

I. Course Information

A. Catalog Description

Concentrates on advanced native COBOL file systems and processing techniques, designing and implementing a system of sub-programs, and other advanced COBOL topics.

II. Student Learning Outcomes

A. Subject Matter

Upon successful completion of this course, the student will be able to:

- 1. Design, construct, and test a COBOL program/subprogram system.
- 2. Design, construct, and test a COBOL program that utilizes the COBOL SORT verb.
- 3. Design and implement a COBOL program that utilizes indexed and sequential files.

B. University Learning Outcomes

This course enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills: Students will identify a problem, break it down into its component parts, and develop an algorithm for solving the problem and implement the algorithm using COBOL.

Quantitative Reasoning: Students will develop algorithms for solving problems involving formulas and numbers.

III. Major Course Topics

- A. Subprograms to be linked to executable and the differences between main and sub
- B. Index and sequential data structures
- C. Sort/Merge two files that are ordered on the same key field(s)
- D. Master file/transaction file processing on a time limit
- E. Design and implement a system of programs
- F. Inter-program Cobol communications