

## CSC 321 - PROGRAMMING METHODS AND FILE STRUCTURES

**CREDIT HOURS:** 3  
**PREREQUISITES:** CSC 202 and 211  
**GRADE REMINDER:** Must have a grade of C or better in each prerequisite course.

### CATALOG DESCRIPTION

Programming efficiency techniques, debugging techniques, and file processing for applications in business.

### PURPOSE OF COURSE

The purpose of the course is to increase the student's competence using programming methods for business applications and to develop strategies which will enable the student to learn additional features and/or applications.

### EDUCATIONAL OBJECTIVES

Upon successful completion of the course, students should be able to:

1. Create well-designed programs.
2. Implement methods of developing software systems.
3. Design and implement solutions to business problems.
4. Demonstrate an understanding of a business applications programming language.
5. Demonstrate basic knowledge of file design.

### CONTENT

	<b>Hours</b>
Problem Solving and Algorithm Design .....	4
Data types .....	5
Data structures .....	10
Program structure .....	10
Control structures – sequence, iteration, selection	
Control breaks	
Files .....	13
Sorting	
File structures and access methods	
Design, update, and query of files	
Exams (plus final) .....	3
	<b>TOTAL 45</b>

### REFERENCES

- Stern, Stern, & Ley, COBOL for the 21<sup>st</sup> Century, Wiley, 11<sup>th</sup> Ed., 2003.
- Popkin, Gary S., Comprehensive Structured COBOL, P.W.S. Publishing, 4<sup>th</sup> Ed., 1993.
- Shelly, Cashman, & Foreman, Structured COBOL Programming, Course Technology, 2<sup>nd</sup> Ed., 2000.