

## Computer Information Department Course Outline

### PROG 1003 INTRODUCTION TO PROGRAMMING LOGIC (F, S, On Demand)

#### ***Catalog Description***

An introductory lab course on computer program design and development. The student will write computer programs as tools for problem solving. Programs will be written using hierarchy, flow charts and programming codes. Programs will be tested and debugged. (Outside lab time will be required.)

#### ***Prerequisites***

CISQ 1103 Introduction to Computer Information (prerequisite or-co-requisite)  
MATH 0103 Intermediate Algebra (prerequisite-or-co-requisite)

#### ***Credit hours/Contact hours/Load hours***

3/3/3

#### ***Target Audience/Transferability***

This course is for students seeking training in application development, and is applicable to students seeking self-improvement or an AAS Degree in Computer Information.

#### ***Student Learning Outcomes***

The student will:

- Create an appropriate flowchart for a program to solve the task
- Design and code the appropriate program given a flowchart
- Describe an appropriate menu for a multi-part program description
- Describe the purpose of a given program
- Debug a program
- Create a program to read data from an external file
- Create a program to write data to an external file

#### ***Topics***

- Flowcharting and program organization techniques
- C++ programming language syntax and structure
- Decision-making programming constructs
- Looping programming constructs
- Object-Oriented Programming Concepts

#### ***Forms of Assessment***

Chapter quizzes  
Programming projects  
Final programming project