

CIT 110 - PROGRAMMING LOGIC AND DESIGN

Course Description

The student is introduced to topics in programming logic and design in preparation for subsequent programming courses. The course lecture material is presented via readings and videos, with activities being largely focused on coding, testing, debugging, and documenting applications. Good coding practices and simple design pattern are emphasized. Topics covered include: Simple Data Types, Control Structures, Decisions and Conditionals, Arrays, Lists, Methods, Functions, Enums, Classes, and File I/O. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Implement the appropriate data type for a given application.
- Implement control structures necessary for a given algorithm.

Application:

- Demonstrate the process of coding an application.

Integration:

- Evaluate a set of application requirements to determine the coding elements and application structure.

Human Dimension:

- Demonstrate interpersonal communication skills while relating design decisions.
- Construct a functional user interface (UI) and experience (UX).

Caring - Civic Learning:

- Identify how the quality of code effects our daily experience and interaction with technology.

Learning How to Learn:

- Select professional development resources that support their learning styles.