## IST210C: Object-Oriented Programming

Begins with an introduction to the Java programming language and then uses both Java and C# programming languages to cover topics such as: arrays, strings, collections, exception handling, and object-oriented programming. Object-oriented programming covers problem conceptualization, class definition, object instantiation, method definition and invocation, the principles and practices of reuse, inheritance, and polymorphism. It also introduces GUIs and event-driven programming.

Credits 3

Lab/Practicum/Clinical Hours 2

**Lecture Hours** 2

## **Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

IST110C

## **Learning Outcomes**

- Know the syntax of Java programming language as well as C# programming language.
- Create, compile, run and debug moderately complex Java applications.
- Use local and online code editors as well as full IDEs to create, debug, and run moderately complex programs.
- Create objects and use inheritance, polymorphism, string class to create simple multithreaded programs.
- Understand and use event handling, AWT, Swing and/or JavaFX to create interfaces.
- Use generics and the collections framework to develop applications, single and multi-dimensional arrays, and exception handling in Java.

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