**Course Syllabus**

**CS 175L - Introduction to Computer Science I Lab**

**Credits:** 1 **Contact hours:** 1

**Instructor’s or course coordinator’s name:** Gil Eckert

**Required Textbook and Other Materials:**

Cay Horstmann, Java Concepts: Early Objects, 8th Edition, 2015

**Course Description:**

Introductions to the basic concepts of programming and program development in a modern Software Development Environment with debugger and source code control.

**Prerequisite:** CS-104 **Corequisite:** CS-175

**Required or selected elective:** Required

**Course Goals:**

After completing this course, students will be able to:

• Create simple classes, methods, and programs in an object-oriented language

• Correctly use and identify appropriate primitive data types

• Use selection and repetition control statements

• Create self-explanatory code through use of comments

• Utilize an Application Development Environment (ADE)

• Utilize an Application Programming Interface (API)

• Utilize a Debugger

• Utilize source code control and versioning

**Relationship of course to student outcomes listed in criterion 3:**

In this course students are given an opportunity to:

• Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

• Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

**Topics Covered:**

Introduction to Java, Eclipse

Using Objects

Implementing Classes

Fundamental Data Types

Decisions (If and selection)

Iteration (Loops)

Debugging

Source code control and versioning (git)