

Host College: Loyalist College Java Course Name: Introduction LO-

Course Code: COMP8014

Course Duration: 40 Hours, 14 Weeks Ministry Category: Funded Course Outline Effective: September 2018

Prerequisite:

Students will be expected to download and install programs as well as upload zipped/compressed files; therefore, some experience with these types of tasks is necessary. Most students use W indows Operating System but Java can be installed on Apple or Linux Operating System as well (students should be familiar with the Operating System).

Course Description:

This course provides the beginning programmer with a guide to developing applications using the Java programming language. Java provides an excellent environment for students to build programs while learning the basics of structured and object-oriented programming techniques. This course covers object-oriented programming concepts including: creating and using classes and methods, loop structures, String method, If/Then/Else, JOptionPane Class and arrays.

Learning Objectives:

Upon successful completion of this course, you will:

- Write Java classes, methods and instantiate objects
- Create, save, and compile Java applications
- Create Java applications using GUI output
- · Correct errors and find help
- Use Java data types
- Use automatically imported, prewritten constants and methods
- Write classes using Java code structures (If, While, For, Arrays) Manipulate string data and characters

Teaching/Learning Methods:

During this course students are likely to experience self-directed learning at their own individual pace, and contact with the instructor. In addition, the opportunity to submit questions and comments both privately and to a public discussion area will be available. Students will be required to submit assignments and complete a final coding assignment.

Course Topics:

The course consists of learning the following topics:

- Creating your first Java Classes
- Using Data
- Using Methods, Classes, and Objects More Object Concepts
- Making Decisions Looping
- Characters, Strings, and the StringBuilder
- Arrays

Evaluation:

Assignments 30% Quizzes (5 in total) 10%

Midterm Exam 30% not proctored, open-book, 1 hour

Final Coding Assignment 30% Total 100%

Final Exam:

There is no final exam in this course.

Minimum Passing Grade:

Students must achieve a final total grade of at least 60% in the course to pass the course.

Deadlines:

Meeting deadlines is central to the software industry. If you want to get ahead of your competition and keep your clients, you must meet your deadlines in providing a software package. Therefore, in this course deadlines on assignments will be absolute. "Late" is defined as one minute past the deadline set by the professor/instructor for completion of your project/assignment. A missed deadline will get a 25% reduction. Twenty-four hours later, it will get a "0".

Extensions:

May be granted under extenuating circumstance only is at the discretion of your instructor.

Final Grade:

The final grade will be issued by the registering college. The minimum passing grade is 60%

Course Evaluation:

All evaluations are reviewed by the Host College and OntarioLearn. Student feedback via the evaluations provides the foundation for maintaining high standards in all OntarioLearn courses.

Required Text:

Java Programming, 9th edition Joyce Farrell Thomson Course Technology ISBN-10: 1337397075 | ISBN-13: 978-1337397070

The latest Java Software Development Kit (SDK or JDK) can be downloaded at http://www.oracle.com and JGRASP (a Java development environment) at http://www.jgrasp.org/. Students already familiar with a particular Java editor or development environment may use it instead of JGrasp.

Minimum Technology Requirements:

- Personal computer with required disk space and software (see below)
- Internet connection
- Students should have experience with storing files, using the Internet, zipping and uploading files and sending email

Unique Hardware Requirements:

Minimum Pentium III 500-MHz system with 512 MB RAM and at least 850 MB disk space

Unique Software Requirements:

- Operating System (Windows, Linux, Mac)
- Web Browser (IE, Firefox, Opera, etc.)
- File compression/zip software (W inRAR or other)
- Java SE 8.0 (Java SDK) or better
- Java editor (JGrasp, Textpad, BlueJ, Eclipse, etc.)

It is the student's responsibility to retain course outlines for potential future need such as credit transfers.

Prepared By:

Name: Janeil Neilsen Date: January 2012 Revised: Sep 2018

More information for Loyalist registered students:

Loyalist College has a Violence Prevention policy:

- All College members have a responsibility to foster a climate of respect and safety, free from violent behaviour and harassment.
- Violence (e.g. physical violence, threatening actions or harassment) is not in any way acceptable behaviour.
- Weapons or replicas of weapons are not permitted on Loyalist College property.
- Unacceptable behaviour will result in disciplinary action or appropriate sanctions.

More information can be found in the Loyalist College Student Manual