COMP 1008: INTRODUCTION TO OBJECT ORIENTED PROGRAMMING USING JAVA

Reviewer Comments

Julie McLeod (julie.mcleod) (Thu, 01 Dec 2022 13:27:48 GMT): Added Online schedule type, effective W23 as per RO. Also updated schedule types to new standard default types.

Type of Change:
Minor Course Change

Course Information

Course outlines are reviewed annually as part of continual quality improvement. This course was last updated for the effective term below.

Effective Term
Winter 2023

Full Course Title
Introduction to Object Oriented Programming using Java

Preferred Short Title
Intro Obj Oriented Prog-Java

Academic Level
Post Secondary

Subject Code
COMP - PS Computers

Course Number
1008

Academic Area
Computer Studies

Ministry Reporting Category
Business

Grade Mode
Numeric

PLAR Applicable
Yes

Total Hours
42

Schedule Types
Combination
Dual Synchronous
GC Flex
Hybrid
Independent Studies
Lab
Lecture
Online
Remote Delivery
Traditional

Course Description

In this course, students learn to program using an object oriented programming language. Students build skills in creating programs that use the object-oriented programming methodology, API classes, and user-defined classes. Throughout the course, proper program documentation using class diagrams and code comments are stressed. Unit testing is also introduced to help students learn to ensure program quality.

Prerequisites where one of the following fulfills the requirement:

Students must have successfully completed:

- COMP 1030 Programming Fundamentals
  - **or** COMP 1043 Java Introduction (ODE)

Banner prerequisites – for information only

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency
		COMP 1030	50	PS		
Or		COMP 1043	50	PS		

Transfer Credit Course(s), can be used for credit towards this course

COMP 1069 - Java Intermediate (ODE)

Course Attributes

Business Option

Course Content

- review of COMP 1030 concepts including language/grammar, primitive data types and declarations, variables and constants
- classes, methods, abstract classes and interfaces
- polymorphism and inheritance
- pass by value versus pass by reference
- String class and pattern matching
- collections, loops, and iterators
- writing class documentation
- automated unit testing
- packages - class libraries
- intro to JavaFX objects and containers
- create custom exceptions
- write to files

Course Evaluation

The passing grade for this course is 50% unless otherwise noted below. The evaluation is comprised of:

- tests 60%
- assignments 40%

Tests/examinations/assignments must be written/submitted at the time specified. Requests for adjustments to that schedule must be made before the test/exam/assignment date to the faculty member. Failure to do so will result in a mark of "0", unless an illness/ emergency can be proven with appropriate documentation at no cost to the College.

The passing grade for all courses is 50%, or letter grade of P (Pass) or S (Satisfactory) unless otherwise noted below. The passing weighted average for promotion through each semester of a program is 60% and is a requirement to graduate.

Academic Appeal
Students at Georgian College can appeal the following:
· A mark on an assignment, test, examination or work-integrated learning term
· Missing or incorrect assessment information on a grade report and/or transcript
· A charge of academic misconduct
Note: Students cannot appeal a final grade. It is the academic work that is appealable leading to the final grade i.e. final test, exam or assignment.
Refer to Academic Regulations in the Academic Appeal section for further details.

Course Learning Outcomes

Upon successful completion of this course, the student has reliably demonstrated the ability to:

1. design, develop, and run simple applications using predefined objects and classes;

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Reinforced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

2. differentiate between and correctly use primitive data types and references types;

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Reinforced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

3. devise automated unit tests and use them during development to ensure correct program functionality;

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

4. draw class diagrams to represent and define class fields and methods;

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Reinforced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

5. write and document classes based on class diagrams and specifications;

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Reinforced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

6. create new objects and classes to represent entities from a problem domain;

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Reinforced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

7. develop a Java program with a Graphic User Interface (GUI);

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems
EES6: Organization of information
EES7: Application of research and information

Evaluation

Introduced
Assessed

Upon successful completion of this course, the student has reliably demonstrated the ability to:

8. describe the concept of threads and why they are used.

This learning outcome meets the following Essential Employability Skill(s):

EES4: Approaches to problem solving
EES5: Critical thinking to solve problems

Evaluation

Introduced
Assessed

Research Ethics Board Designation

Courses that involve minimal risk research involving human subjects require Research Ethics Board (REB) designation. By checking "yes" below, you are indicating that all faculty teaching this course must obtain course-based research ethics approval.
No

Sample Syllabus
W18 COMP1008-section 1-rev A.docx

Key: 3640