

# COMP 1011: ADVANCED OBJECT ORIENTED PROGRAMMING USING JAVA

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**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**

Fall 2020

**Full Course Title**

Advanced Object Oriented Programming using Java

**Preferred Short Title**

Adv Object Oriented Prog-Java

**Academic Level**

Post Secondary

**Subject Code**

COMP - PS Computers

**Course Number**

1011

**Academic Area**

Computer Studies

**Ministry Reporting Category**

Business

**Grade Mode**

Numeric

**Alternate Grade Modes**

Challenge Exam  
Prior Learning  
Pass/Fail  
Standard Letter  
Transfer credit

**PLAR Applicable**

Yes

**Total Hours**

42

**Schedule Types**

Lab  
Combination  
Lecture  
Remote Delivery  
Traditional

### Course Description

Building on the concepts from Introduction to Object-Oriented Programming, students utilize techniques that enable the creation of more sophisticated and complex applications. Students explore deeper applications for the Java programming languages, such as mobile applications and Graphical User Interface (GUI) design and construction.

### Prerequisites where one of the following fulfills the requirement:

- COMP 1008 Introduction to Object Oriented Programming using Java
- or COMP 1069 Java Intermediate (ODE)

### Banner prerequisites – for information only

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency
		COMP 1008	50	PS		
Or		COMP 1069	50	PS		

### Do you need to remove any of the above listed pre- or concurrent requisites?

No

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

COMP 2065 - Java Advanced (ODE)

### Equivalent(s) Courses (Two-Way)

COMP 1087 - Advanced Object Oriented Programming

### Course Content

- Reviews of Object Oriented concepts (classes, objects, inheritance and polymorphism)
- Graphical User Interface (GUI)
- Event handling
- Database connections
- Network programming and communication (including JSON)
- Threads
- Streams
- Introduction to Android programming

### Course Evaluation

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

- Test(s) 60%
- Assignment(s)/Project(s) 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 9.2 Academic Appeal for further details.

### Course Learning Outcomes

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

1. design computer programs that utilize exception handling;

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

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

**Evaluation**

Introduced  
Reinforced  
Assessed

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

2. apply graphical user interface elements, and event handling to build applications that interact with the user;

**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

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

3. create computer applications that utilize connectivity classes to interact with a database system;

**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

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

4. describe techniques for establishing connections to Uniform Resource Locators (URLs) and performing data stream operations between URLs;

**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

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

5. describe MVC (model, view controller) as it relates to Java and Android development;

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

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

**Evaluation**

Introduced  
Reinforced  
Assessed

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

6. create an Android application.

**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

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## 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**

COMP1011-example-rev A.docx

Key: 3643