



## COURSE OUTLINE

**Term: Summer 2017**

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**Subject Code:**

COMP

**Course Number:** 2006

Yes

**PLA Applicable:**

**Course Name:**

Introduction to C++

**Grade Mode:** Numeric

3.0

**Credit Value:**

**Length:** 42.0

Post Secondary

**Level:**

**Prerequisite(s):**

None

**Co-requisite(s) and Concurrent Prerequisite(s):**

None

**Equivalent(s):**

None

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**Students are advised to retain course outlines for future use in support of applications for employment or transfer of credits**

**Course Description:**

Students will learn to use the Object Oriented Programming principles of encapsulation, polymorphism and inheritance in the C++ programming language. Students will obtain knowledge of C++ grammar and syntax. Emphasis is placed on the powerful programming techniques supported by C++, including object manipulation and reusability, function/operator overloading, pointers and dynamic memory allocation.

## Learning Outcomes:

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

1. use predefined objects and classes to create or modify a C++ application.
2. create new objects and classes to represent entities from a problem domain to become proficient in building programming solutions for real world problems.
3. design, develop and deploy C++ applications in order to recognize the value of object-oriented programming techniques
4. construct objects that interact in a useful way in applications in order to recognize the value of object-oriented programming techniques.

## Course Content:

Language/Grammar

- Data types and declarations
- Operators and Control Structures
- Statements
- Built-in and user-defined functions
- scope, local, and global variables
- arrays

C++ libraries

- standard input/output
- standard template library

Memory Management

- pointers, references, and dynamic memory allocation

Classes

- constructors and destructors
- encapsulation
- member access levels
- data members and member functions

Inheritance and Polymorphism

## Evaluation:

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.

Evaluation is comprised of:

Tests 40%

Assignments/Projects 60%

**Prior Learning Assessment:**

This course is eligible for Prior Learning Assessment. If you feel you have acquired equivalent skills and knowledge through life and work experience, you can request an assessment. Contact your program co-ordinator, or the Office of the Registrar.

**Appeals:**

A student at Georgian College can appeal the following:

- a. a mark on the assignment, test, examination or practical experience;
- b. a final mark for a course or co-op work term;
- c. missing or incorrect assessment information on a grade report and/or transcript

A student cannot appeal a decision regarding whether or not a PLA or Exemption is available for an individual course, nor the method of challenge used.

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