

Course Code	OOP345	Course Section	Type Course Section	Course Title	Object-Oriented Software Development Using C++
Term	Fall 2024 (2247)	Course Outline Link	<a href="#">Course Outline Link</a>	Instructional Mode	Flexible
Scheduled Weekday for Lecture	Select Day Class is Scheduled	Scheduled Class Start Time (in Eastern Time)	Select Start Time	Scheduled Class End Time (in Eastern Time)	Select End Time
Scheduled Weekday for Lab	Select Day Class is Scheduled	Scheduled Class Start Time (in Eastern Time)	Select Start Time	Scheduled Class End Time (in Eastern Time)	Select End Time
September - December					
Professor's Name	Cornel Barna	Professor's Email Address	<a href="mailto:cornel.barna@senecapolytechnic.ca">cornel.barna@senecapolytechnic.ca</a>	Professor's Telephone Number	NA
Scheduled Office Hours	Tuesday 11:50 - 13:20 (A3058, Newnham Campus) Thursday 13:40 - 15:10 (A3058, Newnham Campus)	Professor's Preferred Method of Communication	email	Expected Response Time	1 bussiness day

Assessment Summary	
Workshops	20%
Quizzes	10%
Test #1 (midterm)	30%
Test #2 (final)	40%



The semester starts on 3rd September					
Week	Class type	Topics/Activities	Instruction Mode	Class Location	Assessment (Type and weight)
Week 1	Lecture	<ul style="list-style-type: none"><li>• <b>Overview:</b> <a href="https://advoop.sdds.ca/A-Introduction/overview">https://advoop.sdds.ca/A-Introduction/overview</a></li><li>• <b>C++ Building Blocks:</b> <a href="https://advoop.sdds.ca/A-Introduction/cpp-building-blocks">https://advoop.sdds.ca/A-Introduction/cpp-building-blocks</a></li><li>• <b>Compilation and Execution:</b> <a href="https://advoop.sdds.ca/A-Introduction/compilation-and-execution">https://advoop.sdds.ca/A-Introduction/compilation-and-execution</a></li></ul>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 2	Lecture	<ul style="list-style-type: none"><li>• <b>Fundamental Types:</b> <a href="https://advoop.sdds.ca/B-Types/fundamental-types">https://advoop.sdds.ca/B-Types/fundamental-types</a></li><li>• <b>Pointers, References and Arrays:</b> <a href="https://advoop.sdds.ca/B-Types/pointers-references-and-arrays">https://advoop.sdds.ca/B-Types/pointers-references-and-arrays</a></li><li>• <b>Classes and Scoped Enumerations:</b> <a href="https://advoop.sdds.ca/B-Types/classes-and-scoped-enumerations">https://advoop.sdds.ca/B-Types/classes-and-scoped-enumerations</a></li></ul>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 3	Lecture	<ul style="list-style-type: none"><li>• <b>Inheritance and Inclusion Polymorphism:</b> <a href="https://advoop.sdds.ca/C-Class-Relationships/inheritance-and-inclusion-polymorphism">https://advoop.sdds.ca/C-Class-Relationships/inheritance-and-inclusion-polymorphism</a></li><li>• <b>Class Templates:</b> <a href="https://advoop.sdds.ca/C-Class-Relationships/class-templates">https://advoop.sdds.ca/C-Class-Relationships/class-templates</a></li></ul>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• Quiz #1 (2.5%)
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 4	Lecture	<ul style="list-style-type: none"><li>• <b>Compositions, Aggregations and Associations:</b> <a href="https://advoop.sdds.ca/C-Class-Relationships/compositions-aggregations-and-associations">https://advoop.sdds.ca/C-Class-Relationships/compositions-aggregations-and-associations</a></li><li>• <b>Expressions:</b> <a href="https://advoop.sdds.ca/D-Processing/expressions">https://advoop.sdds.ca/D-Processing/expressions</a></li></ul>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• Workshop #1 (3%)
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 5	Lecture	<ul style="list-style-type: none"><li>• <b>Functions:</b> <a href="https://advoop.sdds.ca/D-Processing/functions">https://advoop.sdds.ca/D-Processing/functions</a></li><li>• <b>Error Handling:</b> <a href="https://advoop.sdds.ca/D-Processing/error-handling">https://advoop.sdds.ca/D-Processing/error-handling</a></li></ul>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• Quiz #2 (2.5%)
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 6	Lecture	<ul style="list-style-type: none"><li>• <b>Standard Library:</b> <a href="https://advoop.sdds.ca/E-STL/standard-library">https://advoop.sdds.ca/E-STL/standard-library</a></li><li>• <b>Containers and Iterators:</b> <a href="https://advoop.sdds.ca/E-STL/containers-and-iterations">https://advoop.sdds.ca/E-STL/containers-and-iterations</a></li></ul>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• Workshop #2 (5%)
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	

Week 7	Lecture	• <b>Test #1 (midterm)</b>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• <b>Test #1 (30%)</b>
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Study week is from 21th October to 25th October					
Week 8	Lecture	• <b>Algorithms</b> : <a href="https://advoop.sdds.ca/E-STL/algorithms">https://advoop.sdds.ca/E-STL/algorithms</a> • <b>File Stream Objects</b> : <a href="https://advoop.sdds.ca/E-STL/file-stream-objects">https://advoop.sdds.ca/E-STL/file-stream-objects</a>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 9	Lecture	• <b>Raw Pointers</b> : <a href="https://advoop.sdds.ca/F-MemoryModel/raw-pointers">https://advoop.sdds.ca/F-MemoryModel/raw-pointers</a> • <b>Smart Pointers</b> : <a href="https://advoop.sdds.ca/F-MemoryModel/smart-pointers">https://advoop.sdds.ca/F-MemoryModel/smart-pointers</a>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• <b>Quiz #3 (2.5%)</b>
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 10	Lecture	• <b>Multi-Threading</b> : <a href="https://advoop.sdds.ca/G-Performance/multithreading">https://advoop.sdds.ca/G-Performance/multithreading</a> • <b>Thread Classes</b> : <a href="https://advoop.sdds.ca/G-Performance/thread-classes">https://advoop.sdds.ca/G-Performance/thread-classes</a>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• <b>Workshop #3 (5%)</b>
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 11	Lecture	• <b>Pre-Processor Directives</b> : <a href="https://advoop.sdds.ca/H-Deeper-Detail/pre-processor-directives">https://advoop.sdds.ca/H-Deeper-Detail/pre-processor-directives</a> • <b>Arrays and Pointers to Arrays</b> : <a href="https://advoop.sdds.ca/H-Deeper-Detail/arrays-and-pointers">https://advoop.sdds.ca/H-Deeper-Detail/arrays-and-pointers</a>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• <b>Quiz #4 (2.5%)</b>
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 12	Lecture	• <b>Multiple Inheritance</b> : <a href="https://advoop.sdds.ca/H-Deeper-Detail/multiple-inheritance">https://advoop.sdds.ca/H-Deeper-Detail/multiple-inheritance</a> • <b>Bit-Wise Expressions</b> : <a href="https://advoop.sdds.ca/H-Deeper-Detail/bit-wise-expressions">https://advoop.sdds.ca/H-Deeper-Detail/bit-wise-expressions</a>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• <b>Workshop #4 (7%)</b>
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 13	Lecture	• <b>Linked List Technology</b> : <a href="https://advoop.sdds.ca/H-Deeper-Detail/linked-list-technology">https://advoop.sdds.ca/H-Deeper-Detail/linked-list-technology</a> • <b>Other Topics</b> : <a href="https://advoop.sdds.ca/H-Deeper-Detail/other-topics">https://advoop.sdds.ca/H-Deeper-Detail/other-topics</a>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
Week 14	Lecture	• <b>Test #2 (final)</b>	Flexible (Attend on campus or online)	Physical Classroom (B-1083, Newnham Campus)	• <b>Test #2 (40%)</b>
	Lab		In-Person (Attend on campus)	Physical Classroom (C-3030, Newnham Campus)	
The semester ends 11th December					

Other Important Semester Dates
Monday, September 2nd - Thanksgiving (Seneca Closed) Monday, October 14th - Thanksgiving (Seneca Closed) December 25th - January 2nd - Holiday Period (Seneca Closed)
IMPORTANT INFO
Primary Addendum approved by: Please read this addendum to the general course outline carefully. It is your guide to the course requirements and activities. Please refer to the course outline for learning outcomes, course description and text and materials. <a href="#">Please also visit Welcome   School of Computer Programming and Analysis (senecapolytechnic.ca) for key information on courses, graduation requirements, transfer credit, and more from the School of Computer Programming and Analysis.</a>
Course Policies
<a href="http://www.senecapolytechnic.ca/about/policies/grading-policy.html">Grading Policy (http://www.senecapolytechnic.ca/about/policies/grading-policy.html)</a> <a href="http://www.senecapolytechnic.ca/about/policies/student-progression-and-promotion-policy.html">http://www.senecapolytechnic.ca/about/policies/student-progression-and-promotion-policy.html</a> <ul style="list-style-type: none"><li>Achieve a grade of 50% or better on the weighted average of the tests.</li><li>Achieve a grade of 50% or better on the weighted average of all assessments.</li></ul>

A+	90% to 100%
A	80% to 89%
B+	75% to 79%
B	70% to 74%
C+	65% to 69%
C	60% to 64%
D+	55% to 59%
D	50% to 54%
F	0% to 49% (Not a Pass)

**Academic Policies**

<http://www.senecapolytechnic.ca/about/policies/academics-and-student-services.html>  
For further information, see a copy of the Academic Policy, available online (<http://www.senecapolytechnic.ca/about/policies/academics-and-student-services.html>) or at Seneca's Registrar's Offices.

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