



ORIGINAL COURSE IMPLEMENTATION DATE: Fall 2003  
 REVISED COURSE IMPLEMENTATION DATE: September 2019  
 COURSE TO BE REVIEWED (six years after UEC approval): March 2025  
 Course outline form version: 05/18/2018

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

**Note: The University reserves the right to amend course outlines as needed without notice.**

<b>Course Code and Number:</b> COMP 150	<b>Number of Credits:</b> 4 <a href="#">Course credit policy (105)</a>																
<b>Course Full Title:</b> Introduction to Programming <b>Course Short Title:</b> <i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>																	
<b>Faculty:</b> Faculty of Professional Studies	<b>Department (or program if no department):</b> Computer Information Systems																
<b>Calendar Description:</b> An introduction to computer programming using a modern programming language. Students will cover fundamental concepts such as variables, data types, control structures, collections, recursion, and objects. Emphasis will be placed on clarity, style, and design throughout.  Note: Competency in computer skills is required. See <a href="#">CIS Required Skills</a> section on the CIS department website for details.  Note: Students with credit for COMP 152 cannot take this course for further credit.																	
<b>Prerequisites (or NONE):</b>	One of the following: (C or better in one of Pre-calculus 11, Foundations of Mathematics 11, Principles of Mathematics 11, or MATH 085) or (one of Principles of Mathematics 12, Foundations of Mathematics 12, Pre-calculus 12, MATH 092, or MATH 094).																
<b>Corequisites (if applicable, or NONE):</b>	NONE																
<b>Pre/corequisites (if applicable, or NONE):</b>	NONE																
<b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i> Former course code/number: Cross-listed with: Dual-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>	<b>Special Topics</b> <i>(Double-click on boxes to select.)</i> This course is offered with different topics: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, topic will be recorded when offered.)</i>																
	<b>Independent Study</b> If offered as an Independent Study course, this course may be repeated for further credit: <i>(If yes, topic will be recorded.)</i> <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit																
	<b>Transfer Credit</b> Transfer credit already exists: <i>(See <a href="http://bctransferguide.ca">bctransferguide.ca</a>.)</i> <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Submit outline for (re)articulation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>																
	<b>Grading System</b> <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit																
	<b>Maximum enrolment (for information only):</b> 35 <b>Expected Frequency of Course Offerings:</b> Every semester <i>(Every semester, Fall only, annually, etc.)</i>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">Typical Structure of Instructional Hours</th> </tr> </thead> <tbody> <tr> <td style="width: 70%;">Lecture/seminar hours</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td style="text-align: center;">15</td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td style="text-align: right;"><b>Total hours</b></td> <td style="text-align: center;"><b>60</b></td> </tr> </tbody> </table>		Typical Structure of Instructional Hours		Lecture/seminar hours	45	Tutorials/workshops		Supervised laboratory hours	15	Experiential (field experience, practicum, internship, etc.)		Supervised online activities		Other contact hours:		<b>Total hours</b>	<b>60</b>
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Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes																	
<b>Department / Program Head or Director:</b> Talia Q	<b>Date approved:</b> December 2028																
<b>Faculty Council approval</b>	<b>Date approved:</b> December 7, 2018																
<b>Dean/Associate VP:</b> Dr. Tracy Ryder Glass	<b>Date approved:</b> December 7, 2018																
<b>Campus-Wide Consultation (CWC)</b>	<b>Date of posting:</b> February 22, 2019																
<b>Undergraduate Education Committee (UEC) approval</b>	<b>Date of meeting:</b> March 1, 2019																

**Learning Outcomes:**

Upon successful completion of this course, students will be able to:

- Demonstrate an ability to write cohesive computer programs.
- Write well-documented and effective code.
- Use a programming language to write programs to solve a variety of problems using the following:
  - Conversion tables
  - Storing and retrieving information from file storage
  - Sorting an array
  - Processing two dimensional tables
  - Processing matrices
  - Iteration
  - String manipulation
  - Array processing
  - Pointers
  - Iteration to calculate summations
  - Real and Integer mathematics
  - Choose from sets of outcomes

**Prior Learning Assessment and Recognition (PLAR)**

Yes     No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)

The course will be delivered in lecture-lab format, with numerous demonstrations and hands-on activities.

The lab portion gives students and the instructor the ability to view and interact with current projects.

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Gaddis, T.	Starting Out With Java: From Control Structures Through Objects	<input checked="" type="checkbox"/>	Pearson	
2.		<input type="checkbox"/>		
3.		<input type="checkbox"/>		
4.		<input type="checkbox"/>		
5.		<input type="checkbox"/>		

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)**Typical Evaluation Methods and Weighting**

Final exam:	35%	Assignments:	10%	Field experience:	%	Portfolio:	%
Midterm exam:	25%	Project:	%	Practicum:	%	Other:	%
Quizzes/tests:	15%	Lab work:	15%	Shop work:	%	Total:	100%

**Details (if necessary):****Typical Course Content and Topics**

- Variables
- Functions
- Introduction to pointers
- Introduction to numerical methods
- Logic and selection
- Repetition
- Containers
- Arrays
- Recursion
- Introduction to Objects