

<p><b>Course Description:</b></p> <p>This course introduces students to computer science. Students will design software independently and as part of a team, using industry-standard programming tools and applying the software development life-cycle model. Students will also:</p> <ul style="list-style-type: none"> <li>-develop creative solutions for various types of problems as their understanding of the computing environment grows;</li> <li>-explore environmental and ergonomic issues, emerging research in computer science and global trends in computer-related fields, and post-secondary options</li> </ul>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;"><b>Level:</b></td> <td style="padding: 2px 5px;">Grade 11 University</td> </tr> <tr> <td style="padding: 2px 5px;"><b>Credit Value:</b></td> <td style="padding: 2px 5px;">1.0</td> </tr> <tr> <td style="padding: 2px 5px;"><b>Prerequisite:</b></td> <td style="padding: 2px 5px;">Open</td> </tr> <tr> <td style="padding: 2px 5px;"><b>Department:</b></td> <td style="padding: 2px 5px;">Technology Department</td> </tr> <tr> <td style="padding: 2px 5px;"><b>Course Fees:</b></td> <td style="padding: 2px 5px;">None</td> </tr> </table>	<b>Level:</b>	Grade 11 University	<b>Credit Value:</b>	1.0	<b>Prerequisite:</b>	Open	<b>Department:</b>	Technology Department	<b>Course Fees:</b>	None
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<b>Course Fees:</b>	None										

<p><b>Textbooks &amp; Resources:</b></p> <ul style="list-style-type: none"> <li>● Growing Success: Assessment, Evaluation and Reporting in Ontario Schools</li> <li>● The Ontario Curriculum Grade 10 and 12: Computer Studies, 2008 (revised)</li>   <li>● Google Classroom will be used to distribute class material</li> </ul>
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<p><b>Course Evaluation:</b> Student Evaluation consists of two components...</p>	
<p><b>1) Learning Skills &amp; Work Habits:</b></p> <p>Students are evaluated on 6 Learning Skills &amp; Work Habits. The 6 Essential Skills are:</p> <ul style="list-style-type: none"> <li>● Responsibility</li> <li>● Organization</li> <li>● Independent Work</li> <li>● Collaboration</li> <li>● Initiative</li> <li>● Self-Regulation</li> </ul>	<p>These six attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) &amp; Needs Improvement (N) and reported on the report card. They are not included in the course mark, unless specified in the curriculum expectations.</p>
<p><b>2) Course Mark (Assessment of Learning):</b></p> <p>Student performance standards for knowledge and skills are described in the curriculum Achievement Chart. The curriculum is assessed in four categories:</p> <ul style="list-style-type: none"> <li>● Knowledge 25%</li> <li>● Thinking &amp; Inquiry 20%</li> <li>● Communication 15%</li> <li>● Application 40%</li> </ul>	
<p style="text-align: right;"><b>It is the student’s responsibility for submitting evidence of Learning.</b></p>	

<p><b>Course Conduct Policies:</b> See Student Agenda, in particular the Online Code of Conduct.</p>
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**Course Outline (Quadmester - Covid19)**

<b>Unit</b>	<b>Description</b>	<b>Approx Time</b>	<b>Approx Unit Evaluation</b>
<b>Programming Basics/ Review</b>	Basic variables, decisions and loops. Data types Input and outputs	1 - 2 days	Quiz
<b>Arrays and Lists</b>	One dimensional arrays Sub-arrays (slices) Index expressions Using arrays with various data types. Applications using arrays: Sorting, Searching	(1/4 course)	Quiz Assignment
<b>Modularity</b>	Procedures and Functions Decomposition Parameters Return values Validations	(1/4 course)	Assignment
<b>Files and Data Structures</b>	File Reading and Writing Parsing Records Simple Database concepts Applications Exception handling	(1/4 course)	Assignment Cumulative Test
<b>Software Development Life Cycle</b>	Basic concepts, techniques, tools. Models: Waterfall, Agile, etc.	(1/4 course)	Cumulative Assignment. Quiz

**General Information:**

**Ongoing:** Problem Solving and Algorithms included throughout all units.  
Computers and Society, Environment, and Post Secondary reading assignments.

**Academic Honesty:** SATEC + TDSB Academic Honesty policy will apply.

**Late Work:** Late work, that has not been previously coordinated/discussed with the teacher, will be marked at the discretion of the teacher.

**Field Trips:** Due to Covid-19, there will be no field trips.

**Recommended Resources:** Google Classroom  
Language is teacher dependent. Currently, it is Python.

**How to Seek Extra Help:** Extra help times scheduled prior to afternoon sessions; via email

**Certifications:** None.

This course meets ICT SHSM program requirements..

