519-938-9355 <u>Course Outline</u> www.ugdsb.on.ca/westside

Course: ICS3U Teacher(s): Mr. D. Pinizzotto Program Leader: Mr. R. Marchildon

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Course Description: 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. They will also write and use subprograms within computer programs. Students will develop creative solutions for various types of problems as their understanding of the computing environment grows. They will also explore environmental and ergonomic issues, emerging research in computer science, and global career trends in computer-related fields.

Prerequisite - None.

Big Ideas (overall learning outcomes for the course):

- Develop a good understanding of the different types of postsecondary education and career prospects in computer studies.
- Relate specifications of a program to user requirements and following the software development process the entire time
- Demonstrate the ability to use different data types, including arrays to develop computer programs
- Use control structures (loops and if statements) and simple algorithms to complete processes in a computer program
- Develop efficient ways to complete programs using subprograms in the code
- Correctly follow the proper code maintenance and conventions

Assessment and Evaluation: Formative assessments are used to improve student learning by providing varied opportunities to demonstrate an understanding of course expectations in preparation for summative evaluations. Summative evaluations test groups of key expectations. Failure to complete a summative evaluation may result in the expectations of the course not being met and the credit not being granted.

	Term Work (60%)
Unit of Study	Summative Evaluations
Discovering Computational Thinking	Knowledge Building Summative Task
Basic Programming Principles	Culminating Assignment
Conditions, Repetition, and Lists	Culminating Assignment
Methods, Graphics and Object Oriented Programming	Culminating Assignment
20 - Time Project	Final Product, Timeline, and Reflection
Observations and Conversations	Assessment of Critical Thinking (10%)
	Final Summative (30%)
	Culminating Final Assignment
	Interview/Reflection of Learning

Achievement Categories: Student learning is assessed and evaluated with respect to the following four categories of knowledge and skills.

Knowledge and Understanding: 25%

Thinking: 25%

Communication: 25% **Application:** 25%

Course Materials and Replacement Cost	
None	

Late Policy

Students are expected to complete all assigned work and submit it by the teacher's established due date. Every attempt will be made to encourage students to complete all assigned work on time so their grade represents their actual achievement. Should a student submit work past the due date, a late mark penalty will be assigned. All summative assessments must be submitted for course credit. Please see Westside's Assessment and Evaluation Policy for more details.

Student Expectations

Every student enrolled in mathematics at Westside is expected to:

- be on time to class
- be prepared for class each and every day. This means you bring a writing utensil, calculator and paper with you to class
- actively participate in class discussions
- complete homework assigned
- learn to problem solve using the techniques you will learn in class

Final Assessments/Examinations

Culminating activities for each unit must be completed by the student in order to achieve the credit. Failure to complete any one of them may result in loss of credit.

There are no extensions or exemptions for final assessments without the approval from an administrator.

The following soft skills will be assessed:

Responsibility, Organization, Independent Work, Collaboration, Initiative, Self-Regulation

I have read and understand the course outline: (front and back)
Student Name (please print):
Signature:
Parent/Guardian Name (please print):
Signature:
Parent/Guardian email (please print):
