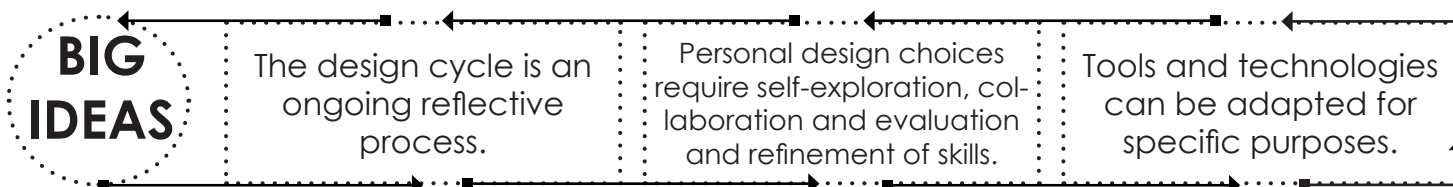




# APPLIED DESIGN SKILLS & TECHNOLOGY

# COMPUTER PROGRAMMING 12

**COURSE OUTLINE** | **MS. LIGHTMAN** | **MCMPR11/12** | **ROOM:211**



CURRICULAR COMPETENCIES (DO)	CONTENT (UNDERSTAND)
<ul style="list-style-type: none"> <li>&gt;<b>Applied Design</b>- understanding, defining, ideating, prototyping, testing, making and sharing</li> <li>&gt;<b>Applied Skills</b>- Identify and evaluate skills needed in relation to a specific task</li> <li>&gt;<b>Applied Technologies</b>- Demonstrate awareness and safety procedures with technology use</li> </ul>	<ul style="list-style-type: none"> <li>&gt;Design opportunities</li> <li>&gt;Ways to modify existing code to meet a particular purpose</li> <li>&gt;Requirements of a problem statement</li> <li>&gt;A variety of programming languages</li> <li>&gt;Computational thinking processes</li> <li>&gt;Appropriate use of technology, including digital citizenship, etiquette, and literacy</li> </ul>

## COURSE DESCRIPTION:

This is a project based course, designed to provide students with the opportunity to explore and learn a variety of computer coding languages for web development, animations, simple game design and more. All students, regardless of previous computer knowledge and experience, are welcome to take this course to learn an introductory level of programming skills or advance what they already know.

## LEARNING ACTIVITIES:

In the grade 12 course, students will learn through planning, participating, and creating projects using the various software and tools provided in this course. Each unit will be comprised of the delivery of information, group learning, in class exercises and small assignments to prepare students for their **five final independent projects**. In-class attendance is crucial and self-discovery and sharing of knowledge amongst classmates is expected.

ASSESSMENT	A	B	C+	C	C-	I-F*
	86-100%	73-85%	67-72%	60-66%	50-59%	0-49%
	Excellent	Very Good	Good	Satisfactory	Minimal	Incomplete

\*Incomplete and missing work may result in a mark below a C- or 50%. In the first two terms, students will therefore receive an 'I' on their formal reports which will change to failing mark at the end of the year if the work remains incomplete.

# UNITS

- 1. INTRODUCTION TO COMPUTER PROGRAMMING - code.org
- 2. INPUTS AND OUTPUTS WITH BLOCK CODING - Micro:bit & microbit.org
- 3. WEB DEVELOPMENT CODING - Dreamweaver, html, css, & javascript
- 4. CODING FOR GAME DEVELOPMENT - Spheros
- 5. INDEPENDENT PROGRAMMING EXPLORATION - Choice code & platform

## POLICIES & PROCEDURES

**In addition to following the Windsor Technology Agreement as outlined in the agenda book, students are expected to meet and respect the following expectations in class:**

- >Food, drinks and gum are NOT permitted in the computer labs (water in a sealed water bottle/container is the only exception.)
- >Cellphones can be a fantastic educational tool and all of those applications are accessible on the desktop computer you will be using! Therefore, no cellphones are required nor permitted during class. Please put your phone in the pocket system in the classroom to help you remain focused, present and mindful:)
- >Keep your Internet use professional. Facebook, twitter, youtube and other personal uses of the Internet is NOT permitted during class (ask if you are unsure). Feel free to log into your preferred music streaming account however, to listen to music while you work. Don't forget your ear/head phones!
- >Please notify the teacher immediately if the equipment/furniture/materials are not working properly.
- >Keep your computer station clean at all times for your own sake as well as the students who use your station in another class!
- >Do NOT forget to log out!! Find a system that helps you remember your log-in information, then be sure to save all work to your **home drive** (not to the desktop or documents) and log out when you are finished to keep your account safe.
- >Attendance: Homework is not assigned in this class (YOU. ARE. WELCOME.). This means that attendance is crucial for success since class time, is the right time, to do your work. If this is a concern for your learning style, please let me know sooner than later! It is your responsibility to make up for missed work during lunch or after school. ←

## TEACHER INFO

**FYI:** With a part-time schedule and teaching in multiple rooms, email is the best way to get in touch, or you may find me in the teacher prep space on the 200 level. ALSO, I will be going on Maternity Leave in October. Please know that class content is subject to change according to the new teacher's discretion.  
**clightman@sd44.ca - 604-903-3700 ext. 213 - mrsilightman.weebly.com**

**NOTE TO PARENTS/GUARDIANS:** Students will be required to use an email address to use a variety of online coding platforms. To keep personal and professional information separate, it is recommended that students use an email account that is for school use only (such as their NVSD email). To keep private information protected, students will not be permitted to post full names and other personal information on any online content. A parent/guardian signature on this outline is required to approve the above information.

Please sign and have your parent(s)/guardian(s) read and sign Student: \_\_\_\_\_  
this course outline which will indicate that you and they have  
been informed of the Computer Programming course infor- Parent/Guardian: \_\_\_\_\_  
mation. Any concerns or questions should be directed to Mrs. Lightman.