

**SOUTH CARLETON HIGH SCHOOL**  
 Ottawa-Carleton District School Board  
**STUDENT OUTLINE**  
**ICD20**  
 Digital Technology and Innovations  
 Grade 10

Credit Value: 1.0

Hours: 110

Prerequisite: none

**Course Overview**

This course helps students develop cutting-edge digital technology and computer programming skills that will support them in contributing to and leading the global economic, scientific and societal innovations of tomorrow. Students will learn and apply coding concepts and skills to build hands-on projects and investigate artificial intelligence, cybersecurity, and other emerging digital technologies that connect to a wide range of fields and careers. Using critical thinking skills with a focus on digital citizenship, students will investigate the appropriate use and development of the digital technologies that they encounter every day, as well as the benefits and limitations of these technologies.

**Expectations**

Unit Title	Overall Expectations
Understanding Computers	<b>A1.</b> describe the functions of the internal components of a computer (e.g., CPU, RAM, ROM, cache, hard drive, motherboard, power supply, video card, sound card) <b>A2.</b> describe the features and limitations of various operating systems <b>A3.</b> describe different types of malware and common signs of an intrusion, and explain how to prevent malware attacks
Computers and Society	<b>B1.</b> describe a variety of adaptive technologies that help to improve computer accessibility <b>B2.</b> identify measures that help reduce the negative effects of computers on the environment
Introduction to Programming	<b>C1.</b> use correct terminology to describe programming concepts <b>C2.</b> write a program that uses looping structures and includes a decision structure for two or more choices <b>C3.</b> write clear and maintainable code using proper programming standards

**Accommodations for Exceptional Students**

The technology department makes every effort to accommodate the identified needs of exceptional (IPRC'd) students and will attempt to differentiate curriculum delivery methods, student modes of expression, and assessment methods as recommended by the student's individual education plan (IEP).

**Teaching Strategies**

Units are activity based. Teacher demonstrations and research activities provide the students with the necessary terminology and methodology to complete the activities. Classroom discussions, collaborative and co-operative learning, research, report writing and taking notes will assist students in meeting the course expectations. Upon completion of this course, students will demonstrate the ability to apply skills and knowledge to practical situations that involve the completion of work assignments and problem-solving activities. Students will be expected to use the Internet to find resources for their projects.

**Resources/Textbooks/Technological Integration**

A series of in-house workbooks and electronic resources.

**Evaluation**

Term Report	Final Report
Students will be evaluated on the overall expectations listed above. Evaluations will cover a balance of Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation.	Term 70% Summative task(s) 30% 100%

**Key Evaluation Dates:**

**Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 6<sup>th</sup> and 31<sup>st</sup> and June 8<sup>th</sup> to June 26<sup>th</sup>**

**Absence from evaluations during these dates must be substantiated with a medical certificate or equivalent documentation as approved by administration.**

**Classroom Management**

Due to the nature of the technology classroom, no food or beverages, jackets or bags can be allowed. Adherence to school Internet use policy will be strictly enforced. Noncompliance will result in the removal of computer privileges for the students for an indeterminate period of time.

More information on South Carleton High School's policy on Assessment and Evaluation and on Academic Integrity can be accessed on our school website [www.southcarleton.ca](http://www.southcarleton.ca)