# SOUTH CARLETON HIGH SCHOOL

Ottawa-Carleton District School Board STUDENT OUTLINE TCJ 20

> Construction Technology Grade 10

Credit Value: 1.0 Hours: 110 Prerequisite: none

#### **Course Overview**

This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement. Students will develop an awareness of environmental and societal issues related to construction technology, and will explore secondary and postsecondary pathways leading to careers in the industry.

**Specific Expectations** 

Unit Title	Overall Expectations
A. CONSTRUCTION TECHNOLOGY FUNDAMENTALS	A1. describe the components and systems of buildings, the properties of various building materials, and the processes in which those materials are used; A2. demonstrate an understanding of the safe and correct use of construction tools, equipment, and techniques;
B. DESIGN, LAYOUT, AND PLANNING SKILLS	B1. design construction projects, individually or in small groups, applying a design process to plan and develop the projects and other problem-solving processes to address various related problems and challenges; B2. use drawings to represent design ideas and solutions to technological challenges, and interpret drawings accurately when working on construction projects; B3. apply the mathematical skills required in the planning and building of construction projects.
C. FABRICATION, ASSEMBLY, AND FINISHING SKILLS	C1. use tools, equipment, and techniques correctly and safely when preparing materials for a project; C2. use fabrication and assembly techniques safely, accurately, and in the correct sequence;
D. TECHNOLOGY,THE ENVIRONMENT, AND SOCIETY	D1. demonstrate an understanding of ways in which the construction industry affects the environment; D2. describe ways in which the construction industry affects society

## **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 demonstrates 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

#### **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%	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