### SOUTH CARLETON HIGH SCHOOL Ottawa-Carleton District School Board STUDENT OUTLINE

TTJ 3C
Transportation Technology
Grade 11

Credit Value: 1.0 Hours: 110 Prerequisite: none

#### **Course Overview**

This course enables students to develop technical knowledge and skills as they study, test, service, and repair engine, electrical, suspension, brake, and steering systems on vehicles, aircraft, and/or watercraft. Students will develop communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will develop an awareness of environmental and societal issues related to transportation, and will learn about apprenticeship and college programs leading to careers in the transportation industry

Specific Expectations

Unit Title	Specific Expectations
A.TRANSPORTATION TECHNOLOGY FUNDAMENTALS	A1. demonstrate an understanding of the fundamental principles of engines and their service, repair, and maintenance; A2. demonstrate an understanding of basic electrical and electronic circuits and their components; A3. identify the function and explain the operation of the major systems and components of vehicles, aircraft, and/or watercraft; A4. demonstrate accurate and appropriate use of technical and mathematical knowledge and skills in the study of transportation technology;
B. TRANSPORTATION TECHNOLOGY SKILLS	B1. demonstrate an understanding of engine operation and repair by performing a variety of service operations; B2.demonstrate the ability to test and repair basic electrical circuits safely and correctly; B3. demonstrate the ability to service and repair steering/control, suspension, brake, and body systems;; B4. develop appropriate solutions to transportation technology challenges and/or repair problems.
C. TECHNOLOGY,THE ENVIRONMENT, AND SOCIETY	C1. Technology and the Environment C2. Technology and Society
D. PROFESSIONAL PRACTICE AND CAREER OPPORTUNITIES	D1. Health and Safety; D2. Career Opportunities.

# **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**

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

### **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 30<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