

**SOUTH CARLETON HIGH SCHOOL**  
**Ottawa-Carleton District School Board**  
 STUDENT OUTLINE  
**TCJ 4C**  
 Transportation Technology  
 Grade 12

Credit Value: 1.0

Hours: 110

Prerequisite: none

**Course Overview**

This course enables students to further develop technical knowledge and skills as they study, test, service, and repair engine management systems; powertrains; steering/ control, suspension, brake, and body systems on vehicles, aircraft, and/or watercraft; and/or small-engine products. Students will refine communication and teamwork skills through practical tasks, using a variety of tools and equipment. Students will expand their awareness of environmental and societal issues related to transportation and their knowledge of 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 operation of engine management systems; A2. demonstrate an understanding of the principles of operation of power transfer devices; A3. demonstrate an understanding of troubleshooting techniques used to diagnose problems in powertrain systems; A4. assess the effect of modifying a vehicle, aircraft, or watercraft; A5. demonstrate accurate and appropriate use of technical and mathematical knowledge and skills in the study of transportation technology
B. TRANSPORTATION TECHNOLOGY SKILLS	B1. demonstrate the use of a variety of troubleshooting techniques to service and repair engine management systems; B2. inspect, service, and repair drivetrain components in compliance with manufacturers' standards; B3. use proper procedures for the inspection, servicing, and repair of steering/control, suspension, brake, and body systems; B4. develop appropriate solutions to a variety of repair challenges
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**

Term Report	Final Report	
<i>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.</i>	Term	70%
<i>Term</i>	Summative task(s)	30%
<i>70%</i>		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 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](http://www.southcarleton.ca)