

**SOUTH CARLETON HIGH SCHOOL**

Ottawa-Carleton District School Board

**STUDENT OUTLINE****TTJ20**

Transportation Technology

Grade 10

Credit Value: 1.0

Hours: 110

Prerequisite: none

**Course Overview**

This course introduces students to the service and maintenance of vehicles, aircraft, and/or watercraft. Students will develop knowledge and skills related to the construction and operation of vehicle/craft systems and learn maintenance and repair techniques. Student projects may include the construction of a self-propelled vehicle or craft, engine service, tire/wheel service, electrical/battery service, and proper body care. Students will develop an awareness of related environmental and societal issues, and will explore secondary and postsecondary pathways leading to careers in the transportation industry.

**Specific Expectations**

	<b>Specific Expectations</b>	<b>Approximate Timelines</b>
Transportation Technology Fundamentals	- explain how engines work to produce power, and identify the function and explain the maintenance requirements of the cooling, lubrication, and fuel systems;	4 weeks
Transportation Technology Skills	- use problem-solving processes to design and fabricate a project that converts and uses energy, and to address various problems or challenges related to vehicles or craft; - demonstrate the safe and correct use of a variety of maintenance and repair techniques for servicing powertrain components;	12 weeks
Technology, The Environment, and Society	- demonstrate an understanding of ways in which various aspects of the transportation industry affect the environment and ways in which harmful effects can be remedied or reduced;	2 weeks
Professional Practice and Career Opportunities	- demonstrate an understanding of and compliance with occupational health and safety regulations and standards in transportation technology; - identify career opportunities in the transportation industry and the education and training required for them.	2 weeks

**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**

<b>Term Report</b>	<b>Final Report</b>	
Students will be evaluated on the overall expectations listed above. Evaluations will cover a balance of Knowledge & Understanding, Application, Communication, Thinking, Inquiry and Problem Solving.	Term	70%
	Summative task	20%
	Final Exam	10%
		<b>100%</b>

**Key Evaluation Dates:**

**Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 19<sup>th</sup> and 30<sup>th</sup> and June 8<sup>th</sup> to June 23<sup>rd</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)