

SOUTH CARLETON HIGH SCHOOL
Ottawa-Carleton District School Board
STUDENT OUTLINE
TMJ3C
Manufacturing Technology
Grade 11

Credit Value: 1.0

Hours: 110

Prerequisite: none

Course Overview

This hands-on, project-based course is designed for students planning to enter an occupation or apprenticeship in manufacturing directly after graduation. Students will work on a variety of manufacturing projects, developing knowledge and skills in design, fabrication, and problem solving and using tools and equipment such as engine lathes, milling machines, and welding machines. In addition, students may have the opportunity to acquire industry-standard certification and training. Students will develop an awareness of environmental and societal issues related to manufacturing and will learn about secondary school pathways that lead to careers in the industry.

Specific Expectations

Unit Title	Specific Expectations	Approximate Timelines
Manufacturing Technology Fundamentals	- demonstrate an understanding of the primary manufacturing industries and the processes and technologies related to them; - demonstrate an understanding of how a design process is used in the planning and development of a manufacturing project.	4 weeks
Manufacturing Technology Skills	- use technical design and production skills to interpret and prepare drawings and to develop process plans for a manufacturing project; - demonstrate the ability to select appropriate materials for the manufacture of a product and prepare them properly for production.	12 weeks
Technology, the Environment, and Society	- demonstrate an understanding of ways in which the manufacturing industry affects the environment; - explain how the manufacturing industry affects various aspects of society.	2 weeks
Professional Practice and Career Opportunities	- demonstrate an understanding of and compliance with health and safety legislation, standards, and practices as they relate to processes, materials, tools, and equipment used in manufacturing;	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

Term Report	Final Report	
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%
		100%

Key Evaluation Dates:

Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 8th and 31st and June 4th to June 26th.

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