SOUTH CARLETON HIGH SCHOOL
Ottawa-Carleton District School Board
STUDENT OUTLINE
TMJ2O
Manufacturing Technology
Grade 10

Credit Value: 1.0	Hours: 110	Prerequisite: none

Course Overview
This course introduces students to the manufacturing industry by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about technical drawing, properties and preparation of materials, and manufacturing techniques. Student projects may include a robotic challenge, a design challenge, or a fabrication project involving processes such as machining, welding, vacuum forming, or injection moulding. Students will develop an awareness of environmental and societal issues related to manufacturing, and will learn about secondary and postsecondary pathways leading to careers in the industry.

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Specific Expectations

Unit Title	Specific Expectations	Approximate Timelines
Manufacturing Technology Fundamentals	- demonstrate an understanding of the manufacturing industry and of processes and technologies related to manufacturing; - demonstrate an understanding of how a design process is used in the planning and development of a manufacturing project.	4 weeks
Manufacturing Technology Skills	- apply an appropriate design process to plan and develop a product; - develop and use a manufacturing process plan to produce a product.	12 weeks
Technology, the Environment, and Society	- demonstrate an understanding of ways in which the manufacturing industry affects the society and the environment; - demonstrate an understanding of ways in which the manufacturing industry affects society.	2 weeks
Professional Practice and Career Opportunities	- identify and demonstrate compliance with health and safety legislation, standards, and procedures related to the manufacturing industry; - describe career opportunities in the manufacturing industry and the education and training required for these careers.	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 Summative task Final Exam		70% 20% 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