

SOUTH CARLETON HIGH SCHOOL

Ottawa-Carleton District School Board

STUDENT OUTLINE**TDJ3M**

Design Technology

Grade 11

Credit Value: 1.0

Hours: 110

Prerequisite: none

Course Overview

This course provides students with opportunities to apply the principles of technological design to challenges in communications, manufacturing, electronics, transportation, architecture, industrial and consumer products, health and safety equipment, and environmental services. Students will identify user needs, estimate labour and material costs, analyze material characteristics, and illustrate design solutions, using traditional and computer-based methods. They will also acquire the basic design skills required for postsecondary studies in engineering, manufacturing, architecture, and construction.

Unit Title	Specific Expectations	Approximate Timelines
Drawing Skills & CAD	<ul style="list-style-type: none"> - a variety of planning techniques and tools to come up with solutions - use hand-drawn sketches to organize sequences, clarify relationships - use orthographic projections to convey solutions - illustrate ideas and solutions using hand-drawn and computer illustrations, as well as technical drawings 	4 weeks
Material Selection Mechanical Design	<ul style="list-style-type: none"> - design and fabricate models, prototypes, or mock-ups - test solutions against materials, fabrication and design criteria - identify potential implementation problems; 	5 weeks
Industrial Design	<ul style="list-style-type: none"> - describe project ideas and solutions; - describe methods to test and evaluate design solutions; 	5 weeks
Architectural Design	<ul style="list-style-type: none"> - analyze design criteria from given design briefs - explain how the choice and use of materials may affect the environment 	5 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 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>Assessment/Evaluation tools include tests/quizzes, assignments, performance tasks and rich assessment tasks</i>	Term	70%
	Summative task	20%
	Final Exam	10%
Term		100%

Key Evaluation Dates:

Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 13th and 24th and June 2nd to June 17th.

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