SOUTH CARLETON HIGH SCHOOL

Ottawa-Carleton District School Board
STUDENT OUTLINE

TDJ20

Design Technology Grade 10

Credit Value: 1.0 Hours: 110 Prerequisite: none

Course Overview

This course requires students to design and develop innovative products and services. Students will learn the following: how to identify user needs related to specified design problems; the physical properties of selected materials and their application in product design; techniques to create physical products and services; various presentation techniques; how to test and evaluate design solutions; and the implications of technology on the development of products or services. They will also become aware of design-related careers.

Specific Expectations

Unit Title	Specific Expectations	Approximate Timelines	
Drawing Skills	- a variety of planning techniques and tools	4 weeks	
	- use charts or hand-drawn sketches to organize sequences, clarify		
2D & 3D design	relationships		
	- illustrate ideas and solutions using hand-drawn and computer		
	illustrations, as well as technical drawings		
Engineering & Mechanical Design	- design and fabricate models, prototypes, or mock-ups	5 weeks	
	- test solutions against design criteria and identify potential		
	implementation problems;		
Industrial Design	-describe project ideas and solutions;	5 weeks	
	- describe methods to test and evaluate design solutions;		
Architectural Design	- analyze design criteria from given design briefs	5 weeks	
	- explain how the choice and use of materials may affect the		
	environment		

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	
Assessment/Evaluation tools include tests/quizzes,		Term	70%
assignments, performance tasks and rich assessment tasks		Summative task	20%
		Final Exam	<u>10%</u>
Term	70%		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