

**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 2D & 3D design	B1. uses a variety of planning techniques and tools B2. use charts or hand-drawn sketches to organize sequences, clarify relationships A3. illustrate ideas and solutions using hand-drawn and computer illustrations, as well as technical drawings	4 weeks
Engineering & Mechanical Design	A4. B3. design and fabricate models, prototypes, or mock-ups A2. A5. test solutions against design criteria and identify potential implementation problems;	5 weeks
Industrial Design	A1. describe project ideas and solutions; B4.D2. describe methods to test and evaluate design solutions;	5 weeks
Architectural Design	B1. analyze design criteria from given design briefs C1.C2.D1 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
Students will be evaluated on the overall expectations listed above. Evaluations will cover a balance of Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation.	Term 70% Summative task 30% <b>100%</b>
<b>Key Evaluation Dates:</b>	
Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 6 <sup>th</sup> and 31 <sup>st</sup> and June 8 <sup>th</sup> to June 30 <sup>th</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)