

**SOUTH CARLETON HIGH SCHOOL**

Ottawa-Carleton District School Board

**STUDENT OUTLINE****TDJ4M**

Design Technology

Grade 12

Credit Value: 1.0

Hours: 110

Prerequisite: TDJ3M

**Course Overview**

This course provides students with opportunities to solve problems in design through the use of technical drawings, model building, testing, and marketing. Students will research, design, and test solutions for residential or commercial architecture, industrial engineering, and manufacturing. They will also examine the educational requirements of a technical design-related career in engineering, architecture, or industrial design.

Unit Title	Specific Expectations	Approximate Timelines
Design Drawing and Studio Skills	- use either traditional or computer-based methods to create industry-standard drawings (e.g., three-dimensional projections, working drawings, floor plans, perspectives and elevation views, details, auxiliaries, section and assembly drawings)	4 weeks
Modeling and Prototyping	- construct functional models and prototypes of their finished products - create effective displays and presentations of their finished products - estimate the costs of project materials and labour	5 weeks
ISU (mechanical or industrial design)	- prepare effective design briefs outlining problems that require design solutions - use technical illustrations, traditional or computer-aided drawing methods, and models to present ideas and solutions effectively.	5 weeks
Architectural Design	- demonstrate an ability to consult pertinent technical reference materials (e.g., trade literature, catalogues, and applicable codes such as the OBC, the ESC, and municipal bylaws) as required by the project. - describe the sequence of construction used in frame construction and identify the related trades	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	70%		<b>100%</b>

**Key Evaluation Dates:**

**Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 13<sup>th</sup> and 24<sup>th</sup> and June 2<sup>nd</sup> to June 17<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)