

SOUTH CARLETON HIGH SCHOOL
Ottawa-Carleton District School Board
STUDENT OUTLINE
TDJ4M
Design Technology
Grade 12

Credit Value: 1.0

Hours: 110

Prerequisite: none

Course Overview

This course introduces students to the fundamentals of design advocacy and marketing, while building on their design skills and their knowledge of professional design practices. Students will apply a systematic design process to research, design, build, and assess solutions that meet specific human needs, using illustrations, presentation drawings, and other communication methods to present their designs. Students will enhance their problem-solving and communication skills, and will explore career opportunities and the postsecondary education and training requirements for them.

Specific Expectations

Unit Title	Specific Expectations	Approximate Timelines
Design Drawing and Studio Skills	B1-B3, A3. 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	A4. B3. construct functional models and prototypes of their finished products A2. A5. create effective displays and presentations of their finished products A5. estimate the costs of project materials and labour	5 weeks
Mechanical/Industrial Design	A1. prepare effective design briefs outlining problems that require design solutions B4. D2. use technical illustrations, traditional or computer-aided drawing methods, and models to present ideas and solutions effectively.	5 weeks
Architectural Design	B1. 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. C1. C2. D1. describe the sequence of construction used in frame construction, identify the related trades and explain how the choice and use of materials may affect the environment	5 weeks
Professional Practice	D2. identify career opportunities in fields related to technological design, and describe the training and education required for these careers.	Throughout

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.

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%
		100%
Key Evaluation Dates:		
Technological Studies summatives will come due within the school's Summative and Evaluation Period between January 6 th and 31 st and June 8 th to June 30 th		
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