

Technological Design TDJ3M

<p>Course Description: This course examines how technological design is influenced by human, environmental, financial, and material requirements and resources. Students will research, design, build, and assess solutions that meet specific human needs using working drawings and other communication methods to present their design ideas. They will develop an awareness of environmental, societal, and cultural issues related to technological design. They will explore career opportunities in the field, as well as the college and/or university program requirements for them.</p>	Grade 11 - Mixed
	Level: (University & College)
	Credit Value: 1.0
Prerequisite: None	Department: Technology Department
Course Fees: None	

<p>Textbooks & Resources:</p> <ul style="list-style-type: none"> ● Growing Success: Assessment, Evaluation and Reporting in Ontario Schools ● The Ontario Curriculum Grade 11 and 12 Technological Education ● Google Classroom will be for general documentation, SATEC drop/pick up for Digital Drawings, TDSB Software

<p>Course Evaluation: Student Evaluation consists of three components...</p>	
<p>Learning Skills & Work Habits:</p>	
<p>Students are evaluated on 6 Learning Skills & Work Habits. The 6 Essential Skills are:</p> <ul style="list-style-type: none"> ● Responsibility ● Organization ● Independent Work ● Collaboration ● Initiative ● Self-Regulation 	<p>These six attributes are evaluated on a scale of Excellent (E), Good (G), Satisfactory (S) & Needs Improvement (N) and reported on the report card. They are not included in the course mark, unless specified in the curriculum expectations.</p>
<p>70% = Term Mark (Assessment of Learning):</p>	
<p>Student performance standards for knowledge and skills are described in the curriculum Achievement Chart. The curriculum is assessed in four categories:</p> <ul style="list-style-type: none"> ● Knowledge 20% ● Thinking & Inquiry 20% ● Communication 20% ● Application 40% 	<p>Term Work 70%</p> <p>It is the student's responsibility for submitting evidence of Learning.</p> <p>The 70/30 Evaluation may have to flex due to COVID.</p>
<p>30% = Final Evaluation (Assessment of Learning):</p>	
<p>The final evaluation, administered at or towards the end of the course is based on the evidence shown to the right. Assessment will be based on the four categories noted above. The final evaluation accounts for 30% of the final mark.</p>	<p>ISU (Independent Study Unit) 30%</p> <p>The 70/30 Evaluation may have to flex due to COVID.</p>

<p>Course Conduct Policies: See Student Agenda.</p>
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Course Outline (Quadmester - Covid19)			
Unit	Description	Location of Learning + Approx Time	Unit Evaluation
Design Theory	Review of Design Process Steps. Understanding how 'making' teaches.	HOME: 2.5 hours	Read Article. Design Process Review. Interpretation.
Measurement	Learn Imperial Measurement.	HOME: 2.5 hours	Video Practice handouts.
General Safety Training	General Woodshop Safety. Equipment Knowledge + Hand Tool Knowledge.	SCHOOL: 15 hours	Demo Tool Use. Safety Booklet.
Technical Drawing	Learn basic drawing skills using Inventor Pro 2018 or similar.	SCHOOL: 10 hours	Independent Tutorial Study: Invento/ AutoCAD/ SketchUP
Model Making + 3D Printer Project	Preparing a Board ('BIG 3'): Students will learn how to prepare rough lumber for fine woodworking. They will use the jointer, thickness planer and table saw.	HOME: 30 hours	Research Design Ideas Drawings Create project.
Woodshop Project	Students will design, draw and build a small wooden project.	HOME + SCHOOL: 30 hours	Research Technical Drawings. Built Project.
Portfolio	Students will create a portfolio of projects, resume & career page. Students will reflect on the skills gaining in this course and how they are 'transferable'.	HOME: 10 hours	Portfolio = Website with Resume, Projects, Career Review, Transferable Skills.

Note: Order units are delivered may change due to student needs and resources available during the course.

General Information:

Field Trips: Due to Covid-19, there will be no field trips.

Recommended Resources: Google Classroom, School network documents and internet, library.

How to Seek Extra Help: Mornings, during class and email.

Certifications: None.

Safety Training: All students will complete wood shop safety training to the Teachers standards prior to use.