TDJ 2O

Technological Design

Teachers	Mr. Heidt, Mr. Martin thomas.heidt@ocdsb.ca craig.martin@ocdsb.ca Room 177 - Technological Design Studio
Required Materials	Binder, lined paper, pen / pencil, **laptop*** *** HIGHLY recommended**
Course Enhancement Fee	**Total $25 + $5** $15 for Woodworking Projects (soft and hardwood lumber) $5 for hardware (clothespin spring, wheel, dowel) $5 for T-shirt vinyl heat transfer, 3D printing filament $5 for safety glasses **(may provide your own)**

Course Profile

This program is highly recommended for those considering **Engineering** and related **Skilled Trades**. This course introduces students to these professions by giving them an opportunity to design and fabricate products using a variety of processes, tools, and equipment. Students will learn about 3D modelling and CAD design, properties and preparation of materials, woodwork and assembly techniques. Student projects will include woodworking projects using machines and hand tools. Students will develop an awareness of environmental and societal issues related to design, and will learn about pathways leading to careers in the industry and related professions. **There is no prerequisite for this course.**

It is **recommended** that you be enrolled in Technological Design if you are considering participating in **First Robotics** along with the mandatory Manufacturing or Computer Engineering course.

An active course calendar, current course handouts and links to software that are used throughout the course can be found at the website link below:

Link to Grade 10 Tech Design Course

Course Outline

Safety & Organization Unit - covers safe operating practices for the shop & equipment
Measurements, Drawings & Machines Unit - in planning and creating a giant clothespin
Design Unit - Processes and concepts of design - spinning top launcher & arena design
Woodworking Unit - milling, laminating, properties of materials (cutting board)
Exploration of Areas of Design - Architectural, Interior Design, Fashion, and Mechanical
Summative - creating a custom display item (shelf, case, plaque etc.)

Course Evaluation

Course evaluation is divided into 70% term work and 30% final summative task. Details of how the 70% term mark is derived are included below. For explanations of the Ministry expectations, please follow this link:

http://www.edu.gov.on.ca/eng/curriculum/secondary/teched910curr09.pdf (pg 105-110)

Tasks	**Ministry Expectations**												
	A1	A2	A3	A4	A5	B1	B2	B3	B4	C1	C2	D1	D2
Safety Floor Plan			✔										
Clothespin		✔			✔								
“Top Secret” Launcher	✔		✔		✔	✔						✔	
Cutting Board							✔	✔	✔	✔		✔	
Explore Areas of Design		✔		✔	✔		✔	✔			✔		✔
Custom Display Item			✔		✔	✔		✔	✔	✔		✔	
Portfolio Presentation			✔	✔	✔	✔	✔			✔			

When assigning new work, the evaluation rubric is provided at that time. Google Classroom is used extensively to assign and track various assignments.

Marks recording will be done in MaMa - the School Board provided marks recording app.