

Dufferin-Peel Catholic District School Board

St. Joseph S. S.

Course Outline

Department:	Technological Education
Course Title:	Construction Technology
Course Code:	TCJ 20
Course Type:	Open
Grade:	10
Prerequisite:	None
Credit Value:	1.0
Hours:	110 hrs

Ministry Guidelines:	Technological Education Guidelines The Ontario Curriculum Grade 9 and 10 Ministry of Education and Training
-----------------------------	---

Course Description: Technology, Grade 10, Open (TCJ20)

This course introduces students to building materials and processes through opportunities to design and build various construction projects. Students will learn to create and read working drawings; become familiar with common construction materials, components, and processes; and perform a variety of fabrication, assembly, and finishing operations. They will use a variety of hand and power tools and apply knowledge of imperial and metric systems of measurement, as appropriate. Students will develop an awareness of environmental and societal issues related to construction technology, and will explore secondary and postsecondary pathways leading to careers in the industry.

Prerequisite: None

Teacher: Mr. Daley

Revision Date: October 1, 2020

Assessment and Evaluation

Knowledge/Understanding	Quizzes & Tests	25%
Thinking	Written assignments	25%
Communication	Sketching & Drawing Oral Communication Self assessment & evaluation	25%
Application	Practical work	25%
Final Evaluation	Culminating activity (30%)	30%
Total		100%

The following table provides a summary of achievement in each percentage grade range and corresponding level of achievement:

<i>Percentage Grade Range</i>	<i>Achievement Level</i>	<i>Summary Description</i>
80-100 %	Level 4	A very high to outstanding level of achievement. Achievement is above the provincial standard.
70-79 %	Level 3	A high level of achievement. Achievement is at the provincial standard.
60-69 %	Level 2	A moderate level of achievement. Achievement is <i>below</i>, but approaching the provincial standard.
50-59 %	Level 1	A passable level of achievement. Achievement is <i>below</i> the provincial standard.
Below 50 %		Insufficient achievement of curriculum expectations. Credit will not be granted in this course.

Teachers, parents and students can be confident that students who are achieving a level 3 are well prepared for work in the next grade or the next course.

Teaching and Learning Strategies

A variety of teaching and learning strategies are used throughout this course including:

- classroom lessons
- collaborative and cooperative learning
- team or group brainstorming
- student teacher conferencing
- independent and collaborative research and testing
- independent study and writing
- individual and group presentations
- developing confidence to contribute to society
- the use of computer technology in the classroom

The teacher will provide all students with the information, resources, guidance, and special accommodations necessary to complete each task safely and successfully. Teachers should also provide opportunities for students to work independently and in groups. Career education, cooperative education and other workplace experiences will also be explored through discussion or exercises.

SPECIAL REQUIREMENTS

This is an intensely practical course. **Daily attendance and participation is vital!**

Safety is of utmost importance when working in the Construction shop. Safety glasses and proper clothing must be worn at all times.

Course Units

UNIT # 1. (HAND TOOL PROJECT)

- Dressing stock - notes
- Quiz – Dressing stock
- Shop safety assignment
- Measurement (Imperial & Metric) & Layout tools assignment
- Test – Dressing stock, shop safety, measurement, layout tools
- Hand tools
 - Hand planes assignment
 - Handsaws assignment
- Quiz – Hand planes & Handsaws

UNIT # 2. (CLASS PROJECT)

- Wood joints
- Woodworking machines
 - Table saw / Radial Arm saw assignment
 - Jointer / Thickness planer assignment
- Test – Table saw, RAS, Jointer, Thickness planer
- Power tools
- Quiz - power tools

UNIT # 3. (SCALE HOUSE PROJECT)

- Footings & foundations
- Floor systems assignment
- Wall framing systems assignment
- Quiz – floor systems, wall framing systems
- Quiz – building construction terminology

UNIT # 4. (PLUMBING AND ELECTRICAL CONNECTIONS)

- Plumbing assignment
- Electrical wiring assignment
- Quiz – plumbing, electrical wiring

FINAL ASSESSMENT & EVALUATION

- Culminating Activity

