



Westside Secondary School

Orangeville, Ontario, Canada



519-938-9355

Grade 12 Construction Course Outline

www.ugdsb.on.ca/westside

Course: TCJ 4C	Teacher(s): Craig Thomson	Program Leader: James Wardle
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Course Description:

This course focuses on the development of knowledge and skills related to residential construction. Students will gain hands-on experience using a variety of construction materials, processes, tools, and equipment; learn about building design and planning construction projects; create and interpret working drawings and sections; and learn how the Ontario Building Code and other regulations and standards apply to construction projects. Students will also develop an awareness of environmental and societal issues related to construction technology, and will explore career opportunities in the field.

Big Ideas

A technology course is often viewed as an opportunity for students to develop **skills and knowledge** for use with **tools and materials**. While this is one of the goals of this course, it is equally important for students to **think critically** about the technological world. This course will encourage students to examine why we use technology and resources and the impact on our global society. Students will develop the skills to interact in a collaborative manner in order to emulate the required relationships common in workplace settings. By using **creative processes** students will develop their abilities to think **divergently and laterally** to more clearly examine the technology used in our world.

Overall Expectations

- A1. demonstrate an understanding of construction materials, processes, and components;
- A2. describe the building codes, regulations, and standards that govern construction projects;
- A3. demonstrate an understanding of the systems in a residential building;
- A4. demonstrate an understanding of design considerations for residential buildings;
- A5. use construction terminology correctly.
- B1. apply a design process and other problem-solving processes and techniques as appropriate to develop solutions for construction problems or challenges;
- B2. create and use working drawings for a variety of residential construction projects;
- B3. determine, use, and communicate accurate technical data in the design of construction projects;
- B4. use the mathematical skills required in designing, laying out, and preparing estimates for construction projects.
- C1. demonstrate appropriate technical skills, including the safe use of construction tools, equipment, and materials;
- C2. demonstrate safe and accurate building techniques;
- C3. correctly apply various finishes to complete residential construction projects.
- D1. demonstrate an understanding of the environmental effects of construction projects, and ways of reducing harmful effects;
- D2. describe how society and the construction industry affect each other.
- E1. Demonstrate an understanding of and comply with health and safety regulations and practices specific to the construction industry;
- E2. Describe career opportunities in the construction industry, and the importance of lifelong learning for these careers.

Achievement Categories: Student learning is assessed and evaluated with respect to the following four categories of knowledge and skills.

Knowledge and Understanding: 25% **Thinking: 25%**

Communication: 25%

Application: 25%

Assessment and Evaluation:

Formative assessments are used to improve student learning by providing varied opportunities to demonstrate an understanding of course expectations in preparation for summative evaluations. Summative evaluations test groups of key

expectations. Failure to complete a summative evaluation may result in the expectations of the course not being met and the credit not being granted.

Late Policy:

Students are expected to complete all assigned work and submit it by the teacher's established due date. Every attempt will be made to encourage students to complete all assigned work on time so their grade represents their actual achievement. For late and missed summative assessments, please see the *Westside Students' Contract for Missing Evidence of Learning*.

More details about Westside's Assessment and Evaluation Policy is available at:
<http://www.ugdsb.ca/westside/wp-content/uploads/sites/74/2016/12/Westside-Assessment.pdf>

Please see BELOW for Summative Assessment List.

I have read and understand the **TCJ 4C** Course Outline:

Student Name (please print): _____ Signature: _____

Parent/Guardian Name (please print): _____ Signature: _____

Parent/Guardian E-Mail address (please print clearly): _____

	Term Work (70%)
Unit of Study	Summative Evaluations
Components of Structures	Research and Presentation Assignment
Design and Planning	Design and Planning Package for Practical Build(s)
Residential Construction	Practical Build of Elements for Residential Construction - Observation/Reflection
Furniture/Millwork Construction	Practical Build of Furniture or Millwork Artifact- Observation/Reflection
Alternative Building Techniques	Research and Presentation Assignment
Health and Safety	Research and Presentation Assignment
	Final Summative (30%)
Final Project	Individual Design and Construction Project (15%)
Portfolio	Presentation of Individual Work (15%)