



## Course Outline Co-operative Education & Construction Technology

*The Hamilton-Wentworth District School Board*  
**Building Careers From the  
Ground Up Construction Program**

**Course Codes:**

**TCJ 4E8** Co-operative Education and **TCJ 4E2** Construction Technology.  
Students will earn two Co-op & two Construction Technology credits.

**Pre-requisites:**

Co-operative Education students must have successfully completed, or be concurrently enrolled in a related course(s) before being placed in the co-op program. Building Careers From The Ground Up students will be concurrently enrolled in the TCJ4E2 2 credit construction course.

**NOTE:**

It is strongly recommended that students have successfully completed grade 11 Construction Technology at their home school.

# Co-operative Education

## **Course Description**

Co-operative education is a planned learning experience, for which credits are earned, that integrates classroom theory and learning experiences at a workplace to enable students to apply and refine the knowledge and skills acquired in a related curriculum course or a locally developed course. This practical experience will assist them in making successful transitions to post-secondary education, apprenticeship programs, or directly to the workplace.

<b>Course Title:</b>	Cooperative Education and Other Forms of Experiential Learning.
<b>Grade:</b>	Appropriate to student learning interests, readiness, and learning preferences, as per related in-class tie.
<b>Course Type:</b>	Open.
<b>Ministry Code:</b>	As per each student's related course.
<b>Credit Value:</b>	1-4+ credits. Each credit is equal to 110 hours.
<b>Prerequisite:</b>	Coop students must take their related course(s) concurrently with the coop course or have successfully completed the related course(s) before being placed in the coop course.
<b>Textbook(s):</b>	N/A
<b>Required Materials:</b>	Classroom materials; workplace dress code; transportation to and from coop; personal protective equipment if required i.e. safety boots.

## **Curriculum Expectations**

### **Job Readiness:**

Resumes, Cover Letters and other Business Letters, Applications, Interviews, Portfolios, Effective communication via telephone, in person and e-mail, Dress Code, Employability Skills, Learning Skills, and Essential Work Habits (Ontario Skills Passport).

### **Health and Safety in the Workplace:**

WHMIS, YWAP (Young Worker Awareness Program), Rights and Responsibilities, Labour Laws, Personal Protective Equipment, Placement-Specific Health and Safety Considerations, Workplace Hazards, Reporting Procedures, Workplace Violence Prevention.

### **Rights and Responsibilities:**

Confidentiality and Right to Privacy, Work Ethics, Human Rights, Right to work in a climate free from discrimination, abuse, and harassment, Employment Standards Act, History and Role of Unions.

### **Workplace Opportunities and Challenges:**

Workplace component (Employer assessment and Teacher evaluation based on individual student PPLP)

### **Reflective Learning:**

Future career direction and successful transition between Post-Secondary Institutions, Apprenticeship or the Workplace. Understand the relationship between the curriculum expectations of the related course and the placement. Self-Assessment and reflection on personal growth at the placement.

## **Units:**

A variety of activities and learning opportunities will be designed to facilitate an understanding in the following units:

### **Per 2 credit coop**

<b>Unit 1</b>	Pre-Course Counselling and Interviewing	Placement specific
<b>Unit 2</b>	Pre-Placement	15-20 hours
<b>Unit 3</b>	Integration/Reflective Sessions	14 hours
<b>Unit 4</b>	The Placement Component	220 hours min.
<b>Unit 5</b>	Personalized Placement Learning Plans	Working document

### **Assessment and Evaluation = 70%**

(Based on the Ministry document Growing Success 2010)

Achievement of both the curriculum expectations and the placement expectations.

### **Evaluation Criteria**

Job Readiness	Health & Safety	Rights & Responsibilities	Workplace Challenges & Opportunities	Reflective Learning
2.5%	5%	2.5%	<ul style="list-style-type: none"><li>Employer assessment</li><li>Teacher evaluation</li></ul>	<ul style="list-style-type: none"><li>Discussions &amp; log sheets</li></ul>

### **Final Evaluation = 30% Culminating Activities**

(Based on the Ministry document Growing Success 2010)

Students may experience a combination of evaluation methods towards the end of the course and/or unit(s).

### **Assessing Student Learning Skills**

Students will be assessed on the six learning skills and work habit categories;

- Responsibility
- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

Teachers will use the following letter symbols to report on students' development of the six learning skills and work habits:

E — Excellent

G — Good

S — Satisfactory

N — Needs Improvement

# Achievement Policy

A final grade is recorded for every course, and a credit is granted and recorded for every course in which the student's grade is 50% or higher. The final grade for each course in Grades 9-12 will be determined as follows.

## Ministry Policy

"Seventy percent of the grade will be based on evaluations conducted throughout the course. The portion of the grade should reflect the student's most consistent level of achievement throughout the course, although special consideration should be given to more recent evidence of achievement.

Thirty percent of the grade will be based on a final evaluation in the form of an examination, performance, essay, and/or other method of evaluation suitable to the course content and administered towards the end of the course." (*Ontario Secondary Schools Grade 9 to 12 – Program Planning and Assessment* p. 15)

## Considerations relating to achievement of the curriculum expectations:

1. The evaluations of the expectations should reflect the student's most consistent levels of achievement for the particular sections. Although, special consideration should be given to more recent evidence of the achievement at the end of the semester.
2. Thirty percent of the grade will be based on final evaluations over the last four to six weeks of the course, which may consist of a combination of performance, essay, and/or other methods of evaluation suitable to the expectations.
3. "Individual Education Plan (IEP) for exceptional students identifies the student's learning expectations: outlines how the school will help the student achieve the expectations through appropriate special education programs and services; and identifies the methods by which the student's progress will be reviewed." (*The Ontario Curriculum Grades 9 to 12 Program Planning and Assessment* p. 8)
4. Evaluations indicating how the student is moving towards achieving expectations should occur periodically throughout the semester.
5. A student who is ill on the day of an evaluation, must immediately upon his/her return, arrange with the teacher for a make-up evaluation. A doctor's note is required for a make-up evaluation for a final exam or final culminating activity.
6. To ensure that further instruction time is not missed, make-up evaluations may take place outside of class time, either before school or on a negotiated make-up test day.

# **Construction Technology Grade 12**

## **Workplace Preparation TCJ4E**

This course enables students to further develop technical knowledge and skills related to residential construction and to explore light commercial construction. Students will continue to gain hands-on experience using a variety of materials, processes, tools, and equipment; create and interpret construction drawings; and learn more about building design and project planning. They will expand their knowledge of terminology, codes and regulations, and health and safety standards related to residential and light commercial construction. Students will also expand their awareness of environmental and societal issues related to construction technology, and will explore entrepreneurship and career opportunities in the industry that may be pursued directly after graduation.

**Prerequisite:** Construction Technology, Grade 11, Workplace Preparation

### **A. CONSTRUCTION TECHNOLOGY FUNDAMENTALS**

- A1.** assess the properties and applications of a variety of construction materials, tools, equipment, and processes;
- A2.** demonstrate an understanding of building codes, regulations, and standards for construction projects;
- A3.** use construction terminology correctly;
- A4.** apply mathematical skills and scientific concepts in the planning and building of a variety of construction projects.

### **B. DESIGN, LAYOUT, AND PLANNING SKILLS**

- B1.** apply a design process and/or other problem-solving methods as appropriate when planning a variety of residential and/or light construction projects, and demonstrate an understanding of the design considerations for these projects;
- B2.** create and interpret working drawings for residential and/or light commercial construction projects;
- B3.** apply accurate technical data and relevant building codes, regulations, and standards when planning and developing construction projects;
- B4.** plan and lay out systems for residential and/or light commercial buildings.

### **C. FABRICATION, ASSEMBLY, AND FINISHING SKILLS**

- C1.** apply appropriate technical skills, including the safe use of the tools, equipment, and materials required to build construction projects;
- C2.** apply safe and accurate techniques for building construction projects;
- C3.** complete construction projects by correctly applying finishing materials and installing fixtures and devices.

### **D. TECHNOLOGY, THE ENVIRONMENT, AND SOCIETY**

- D1.** demonstrate an understanding of the environmental effects of construction projects, and ways of reducing harmful effects;
- D2.** demonstrate an understanding of how the construction industry affects society.

### **E. PROFESSIONAL PRACTICE AND CAREER OPPORTUNITIES**

- E1.** demonstrate an understanding of and comply with health and safety regulations and practices specific to the construction industry;

**E2.** describe the organization and management of construction companies and the entrepreneurial skills needed to establish a successful construction business;

**E3.** describe the skills and training required for careers in the construction industry.

## **Evaluation policy**

Marks will be calculated using the prescribed learning strands based on the following weighting:

<b>A. CONSTRUCTION TECHNOLOGY FUNDAMENTALS</b>	20%
<b>B. DESIGN, LAYOUT, AND PLANNING SKILLS</b>	20%
<b>C. FABRICATION, ASSEMBLY, AND FINISHING SKILLS</b>	30%
<b>D. TECHNOLOGY, THE ENVIRONMENT, AND SOCIETY</b>	10%
<b>E. PROFESSIONAL PRACTICE AND CAREER OPPORTUNITIES</b>	20%
<b>TOTAL WEIGHTING</b>	<b>100%</b>

## **Final mark breakdown**

<b>TERM WORK</b>	70%
<b>CULMINATING TASK / FINAL EVALUATION</b>	30%
<b>FINAL MARK</b>	<b>100%</b>

\*Students are required to follow all outlined School policies and Safety contracts at all times.

For more information please see the link below;

<http://schools.hwdsb.on.ca/saltfleet/about/>