# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



# **COURSE OUTLINE**

COURSE TITLE: The Construction Industry

CODE NO.: OEL1130 SEMESTER: F14

**PROGRAM:** Commercial Construction Management Certificate

**AUTHOR:** Vaughan Smith

**DATE:** Fall 2014 **PREVIOUS OUTLINE DATED:** 

**APPROVED:** "Ted Newbery" Aug 2014

CHAIR DATE

**TOTAL CREDITS**: 3

PREREQUISITE(S): N/A

**HOURS:** 36 hours

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For additional information, please contact Ted Newbery, Chair School of Continuing Education

(705) 759-2554

# I. COURSE DESCRIPTION:

Students explore many facets of the construction industry, and examine the factors that impact this industry such as: the economy, emerging trends, technology, health and safety, and the environment. Students also examine the roles, responsibilities and relationships of a construction owner, designer, and contractor with an introduction to different methods a commercial construction project can be delivered. In this online course, students participate in readings, quizzes, research, discussions, and collaborative group work.

### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

By the end of this course, students will have demonstrated the ability to articulate the function of a Construction Manager and the impact of the; economy, government, technology, safety, and the environment on the construction industry.

## **Learning Outcomes**

- 1. Explain the concept of a project as it relates to the construction industry.
- Differentiate the roles, responsibilities and relationship among the owner, designer, and contractor, involved in a commercial construction project.
- 3. Recommend to an owner of a construction project a method of delivering a commercial construction project for a given scenario, such as: General Contracting, Design Build, Construction Management, and Project Management.
- 4. Articulate the traits of a successful Construction Manager involved in a commercial construction project.
- 5. Research the economic impact of the construction industry.
- 6. Investigate emerging trends that have an impact on the construction industry.
- 7. Synthesize the construction industry's record on environmental and safety issues.

### III. TOPICS:

Orientation

Orientation:

- Introduction
- Navigation
- Netiquette
- FAQ

Module 1: Overview of the Construction Industry Learning Outcomes covered: 1

## Topics:

Construction Industry Overview

- Construction Industry Defined
- Construction Industry Versus Manufacturing Sector
- Construction Categories
- Types of Contractors
- Construction Associations

Module 2: Construction Management Learning Outcomes covered: 1 & 4

#### Topics:

- Organizational Structure of a Construction Firm
- Project Defined
- Roles and Responsibility of a Construction Manager
- \* Discussion 1:Traits of a Successful Construction Manager 5%

Module 3: Construction Project Delivery Methods Learning Outcomes covered; 2 & 3

#### Topics:

- Participants Involved in a Construction Project
- General Contracting
- Design Build
- Construction Management
- Project Management
- \* Quiz 1: Project Delivery Methods 2%
- \* Assignment 1: (Individual) Study Method of Delivering a Construction Project 25%

Module 4: Economy and the Construction Industry Learning Outcomes covered: 5

### Topics:

- Construction Economics
- Construction Economic Concepts
- Government Influence and Construction Capacity
- Canadian Construction Economic Facts
- \* Quiz 2: Economy 2%

Module 5: Emerging Trends and the Construction Industry Learning Outcomes covered: 6

### Topics:

- Public Private Partnership
- Wireless Technology
- Information Technology
- Construction Tools and Processes
- Globalization
- \* Quiz 3: Emerging Trends 2%
- \* Discussion 2: Emerging Trends 5%

Module 6: Sustainability and the Construction Industry Learning Outcomes covered: 7

### Topics:

- Sustainability
- Green Construction
- Environmental Assessment
- Construction and Demolition Waste
- \* Quiz 4: Sustainability 2%
- \* Discussion 3: Sustainability 5%

Module 7: Health & Safety and the Construction Industry Learning Outcomes covered: 7

#### Topics:

- Health and Safety in the Construction Industry
- Impact of Construction Accidents
- Health and Safety Program
- \* Quiz 5: Health and Safety 2%
- \* Assignment 2: (individual) Journal Reflection relating to course content 25% (all modules)
- \* Group Collaboration Assignment 25%

Note: This assignment content is flexible as it can relate to topics in Module 5 to 7.

# IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

No textbook or materials required.

## V. EVALUATION PROCESS:

 Quizzes 5 @ 2%
 10%

 Discussions 3 @ 5%
 15%

 Individual Assignments 2 @ 25%
 50%

 Research Assignment 1 @ 25%
 25%

Your final grade will be a percent and will be converted to a letter grade by your registering college.

### VI. SPECIAL NOTES:

- 1. If you are a student with a disability please identify your needs to the tutor and/or the Centre for Students with Disabilities at your registering college.
- 2. Students, it is your responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.
- 3. Course outline amendments: The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.
- 4. Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct* (<a href="https://my.saultcollege.ca">https://my.saultcollege.ca</a>). Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, discuss with your course instructor the preferred documentation format for referencing source material.