

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: CONSTRUCTION TOOLS AND SAFETY

CODE NO. : CCT100 **SEMESTER:** 1

PROGRAM: Construction Carpentry Techniques
& Civil Engineering Technician

AUTHOR: Sam Spadafora

DATE: Sept 09 **PREVIOUS OUTLINE DATED:**

APPROVED:

“Corey Meunier”
CHAIR

DATE

TOTAL CREDITS: 4

PREREQUISITE(S): none

HOURS/WEEK: 4

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For additional information, please contact Corey Meunier, Chair
School of Technology & Skilled Trades
(705) 759-2554, Ext. 2610

I. COURSE DESCRIPTION:

Upon successful completion of this course, the student will be able to describe the methods and procedures for the safe use of hand and power tools, powder- actuated tools according to industry standards of practice. The student will also be able to demonstrate the basic skills required to safely operate the previously mentioned tools.

Students can expect an introduction to and information for new construction workers to know their rights and to work safely. Students can also expect to learn the importance of accessing the Occupational Health & Safety Act & the Regulations, and be able to identify and assess health & safety hazards associated with formwork, working at heights, manual material handling, electrical hazards, equipment hazards, traffic control, trenching hazards, hoisting rigging and crane hazards, and confined space hazards.

II. LEARNING OUTCOMES:

1. Adhere to applicable health and safety related legislation and practices.
2. Assist in preparing construction specifications, material and cost estimates.
3. Assist in planning, scheduling and monitoring construction and civil engineering projects.
4. Demonstrate relevant mathematical, computer and technical problem solving skills as it relates to civil engineering / construction projects.
5. Demonstrate an understanding of the working roles and inter-relationships required to adhere to the objectives of the project and work in accordance to labour-management principles and practices.
6. Apply sound environmental practices and policies in civil engineering / construction projects.

III. REQUIRED RESOURCES/TEXTS/MATERIALS:

1. **2009 Pocket Ontario OH&S Act & Regulations – Construction Edition** (Available in the Sault College Book Store)
2. **Construction Health and Safety Manual (2008 Edition)**
(Available in the Sault College Book Store)
3. **Personal Protective Equipment (PPE) and Tools** will be required during classes to be conducted in a shop environment. PPE and tools required are:
 - a) CSA Certified Hard Hat
 - b) CSA Certified (Green Patch) work boots
 - c) CSA Certified Safety Glasses
 - d) Work gloves e) Carpenters work pouch
 - f) 25 foot measuring tape
 - g) Carpenters Hammer
 - h) Speed Square
 - i) Carpenters pencil

IV. EVALUATION PROCESS/GRADING SYSTEM:

Application Exercises- Based on the students' ability to safely and properly operate tools and construct projects to specifications.	50%
Tests	35%
Attendance	15%
	100%

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	

S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

V. SPECIAL NOTES:

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.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Substitute course information is available in the Registrar's office.

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade “C”, (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to <https://my.saultcollege.ca>.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

If a student is unable to write a test or exam at the scheduled time the following procedure shall apply:

- The student shall provide the professor with advance notice (in writing) of the need to miss the test
- The student shall provide documentation as to the reason for the absence and the make-up will be at the discretion of the professor.
- Upon return the student is responsible to make arrangements for the writing of the test. This arrangement shall be made prior to the next scheduled class.
- In the event of an emergency, the student shall telephone the professor as soon as possible at 759-2554, to notify of the absence. If the professor is not available, the college has a 24 hour voice mail system.
- In the event of an test missed due to emergency, the student shall provide documentation from a professional such as doctor or lawyer.

All late assignments (without documentation) will receive a maximum grade of C (60%).

VII. TOPIC OUTLINE

Outcome	Topic and Content	Reading	Week
1	1. Personal Protective Equipment 1.1. Shop Safety Rules 1.2. Eye Protection / Head Protection 1.3. Foot Protection/Hearing Protection 1.4. Respiratory Protection 1.5. Hand/Skin Protection, High Visibility Clothing 1.6. Equipment Handling 1.7. Personal Protective Equipment Test (Written)	Handout Const H&S 2008 Edition	1,2,3
1,2,3,4,6	2. Hand Tools 2.1. Introduction To Hand Tools 2.2. Hand Tools Test (Written) 2.3. Reading A Measuring Tape (Imperial/Metric) 2.4. Hands Tools Demo 2.5. Hand Tools Project ()	Handout	3,4,5,6
1,2,3,4,6	3. Power tools 3.1. Introduction To Power Tools 3.2. Power Tools Demo / Testing (Passport) 3.3. Power Tools Project (Work Bench)	Handout	7,8,9,10,11
1,5	4. Health And Safety 4.1. Introduction To Construction 4.2. Legislation 4.3. Common Health and Safety Hazards 4.4. Personal Protective Equipment 4.5. Manual Material Handling and Back Care 4.6. House Keeping 4.7. Access Equipment 4.8. Basic Electrical Safety	Handout Const H&S 2008 Edition OH&S Act	12,13,14,15