## SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



## COURSE OUTLINE

**COURSE TITLE**: CARPENTRY I

CODE NO.: CCT102 SEMESTER: ONE

PROGRAM: CONSTRUCTION CARPENTRY TECHNIQUES

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**DATE:** SEPTEMBER **PREVIOUS OUTLINE** SEPTEMBER

2015 **DATED**: 2010

APPROVED: "Corey Meunier"

**CHAIR** 

**TOTAL CREDITS:** FOUR

PREREQUISITE(S): NONE

**HOURS/WEEK:** FOUR

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Technology and Skilled Trades
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### I. COURSE DESCRIPTION:

This course will introduce elements of Carpentry. You will learn about the carpentry trade including relevant professional associations, considerable time will be spent on health and safety aspects that are relevant to the trade and those that will keep you and others safe on the job site.

You will be introduced to common Carpentry materials and equipment such as, wood and lumbar, joints and fasteners, nails and woodscrews, drill bits and scaffolding.

The course will conclude with a building activity designed to incorporate the lessons learned in the course to a relevant structure.

### II. LEARNING OUTCOMES:

- 1. Describe and demonstrate methods and procedures for the use of hand, power and stationary tools and equipment according to industry standards and practices.
- 2. Adhere to applicable health and safety related legislation and practices.
- 3. Assist in preparing construction specifications, material and cost estimates.
- 4. Demonstrate recognition for the necessity and value of life-long learning in the field.
- 5. Apply sound environmental practices and policies in civil engineering and construction projects.

Outcome		<b>Topic and Content</b>	Reading	Week
4,5	1.	Trade Background	Hand outs	1
		Role of a carpenter		
		Carpenters' Union		
		Home Builders' Associations		
		Construction Associations		

2,4,5 2. Health and Safety Handout 2,3 Personal Protective Equipment Construction WHMIS Labels and Data sheets H&S 2008 (1) Safe handling and disposal Techniques (2) Reporting hazards to supervisor Jobsite Safety (1) Appropriate measures for lifting (2) Use of electrical protection and safety devices on tools and equipment (3) Good housekeeping practices Fire Safety practices in the workplace (1) Select appropriate fire extinguishers for class A, B, C and D. Assignment #1- Unit questions on Health and Safety. 2.6. Test #1- Health and Safety 3,4,5 3. Types of Materials Carpentry 4 Types of panel stock (plywood, OSB, waferboard, Fund MDF) use and application. Level 1 Types of sealants, abrasives and preservatives, uses and applications Interior and exterior finishing material in both Residential and Commercial construction, uses and applications. Assignment #2- Unit questions on Types of Materials. Test #2-Types of Materials 3,4,5 4. Wood/Lumber 5,6 Characteristics of wood and lumber according to Carpentry species and grade. Fund Level 1 Different methods used to saw and cut trees into lumber. Proper methods for safely handling and storing lumber. Assignment #3-Unit questions on Wood/Lumber Test #3-Wood/Lumber

1, 2,3,5	5.	Joints/Fasteners	0	7,8,
		Types of wood joints	Carpentry Fund Level 1	
		Appropriate fasteners, adhesives and glues		
		Assignment #4-Unit questions on Joints/Fasteners		
		Test #4-Joints and Fasteners		
		Activity #1- Constructing basic wood joints		
2,3,5	6.	Nails and Woodscrews	Carpentry	9
		Assignment #5 Nails and screws	Fund Level 1	9
		Test #5- Nails and screws		
2,3,5	7.	Drill Bits	Handout	9
		Types of drill bits	Tiandout	9
		Test #6- Drill bites		
1,2,3	8.	Stick building a Scaffold	Handout	10,11, 12
		8.1 Activity #2 – Build a Scaffold according to the provided drawings (Groups)		
3,5		Material Estimating	Handout	13
		9.1 Activity #3-Calculate material quantity and costs for the completion of a room		
1,2,3	10.	Designing and Building a Ladder		
		10.1. Design a Wooden Step Ladder		14,15
		10.2. Activity #4 - Once the Design has been approved students will be assigned into groups. Each group will build a ladder according to the design.		

### III. REQUIRED RESOURCES/TEXTS/MATERIALS:

**Personal Protective Equipment (PPE) and Tools** will be required during classes to be conducted in a shop environment. PPE and Tools required are:

- CSA Certified Hard Hat
- CSA Certified (Green Patch) work boots
- CSA Certified Safety Glasses
- Work gloves
- · Carpenters work pouch
- 25 foot measuring tape
- Carpenters Hammer
- Speed Square
- · Carpenters pencil

## **Text Books required are:**

- Carpentry Fundamentals (Level 1)
- Construction Health and Safety Manual

### IV. EVALUATION PROCESS/GRADING SYSTEM:

Assignments and tests (7and 6)	45%
Activities (4)	40%
Attendance	15%
Total	100%

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	Grade Point Equivalent
A+ A	90 – 100% 80 – 89%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
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	
X	subject area.  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.

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

### V. SPECIAL NOTES:

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

### 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.

#### VI. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.