# 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

Home Inspection Technician

**AUTHOR:** Sam Spadafora /Barry Sparrow

DATE: September PREVIOUS OUTLINE September

2011 **DATED:** 2010

APPROVED: "Corey Meunier"

CHAIR DATE

TOTAL CREDITS: FOUR

PREREQUISITE(S): NIL

**HOURS/WEEK**: FOUR

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(705) 759-2554, Ext. 2610

#### 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:

- 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.

# 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 (2008 Edition)

# 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 Point
Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	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	
	subject area.	
Χ	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:

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 on the portal form part of this course outline.

Week	Outcomes	Format	Hours	Topic/Content	Readings	Assignments	Assessment	Resources
				Introduction and History				
1	4,5	Lecture	2	Trade background, and role Carpenters' Union Home Builders' Association and Construction Association				Handout
		Lab	2	History of Carpentry	Handout	Assignment 1	Peer Evaluation	Handout
				Health and Safety				
2	2,4,5	Lecture	2	Personal Protective Equipment WHMIS Labels and Data Sheets Safe Handling and Disposal Reporting Hazards Jobsite Safety	Handouts			Handout Construction Health & Safety Handbook
		Lab	2	Appropriate Lifting Methods Electrical Protection and Safety Devices on Tools and Equipment Site Housekeeping Practices Fire Safety in the Workplace	Construction Health & Safety Handbook	Assignment 2	Peer Evaluation	
3	2,4,5	Lecture	2	Jobsite Fire Hazards and Prevention Recognize and Select Appropriate Fire Extinguishers				Handout Construction Health & Safety Handbook

Week	Outcomes	Format	Hours	Topic/Content	Readings	Assignments	Assessment	Resources
				for Class A,B,C and D				
		Lab	2	Fire Extinguisher Handling Fire Response Procedures		Assignment 3	Peer Evaluation Test 1 (Health and Safety)	Handout
				Materials				
4	3,4,5	Lecture	2	Types of Panel Products Use and Application of Panel Materials Sealants, Abrasives and Preservatives Use and Application of Interior and Exterior Finishes				Handout Carpentry Fundamentals Level 1
		Lab	2	Types of Materials		Assignment 4	Peer Evaluation Test 2 Materials	
				Wood and Lumber				
5	3,4,5	Lecture	2	Characteristics of Wood Lumber Species and Grades				Handout Carpentry Fundamentals Level 1
		Lab	2	Wood and Lumber I		Assignment 5	Peer Evaluation	
6	3,4,5	Lecture	2	Lumber Milling Methods Handling and Storing Lumber				Handout

Week	Outcomes	Format	Hours	Topic/Content	Readings	Assignments	Assessment	Resources
		Lab	2	Wood and Lumber II		Hand Tool Project	Test 3 Wood and Lumber	Handout Carpentry Fundamentals Level 1
				Joints and Fasteners				
7	1,2,3,5	Lecture		Recognize Types of Wood Connections and Joints				Handout Carpentry Fundamentals Level 1
		Lab	2	Constructing Basic Wood Joints		Assignment 6		Handout
8	1,2,3,5	Lecture	2	Recognize, Identify and Select Appropriate Wood Fasteners (Nails and Screws) Fasteners and Adhesives				Handout
		Lab		Wood Fasteners		Assignment 7	Test 4 Joints and Fasteners	
9	2,3,5	Lecture	2	Recognize and Select Wood Drill Bits				Handout Carpentry Fundamentals Level 1
		Lab	2	Wood Fasteners, Wood Boring		Assignment 8	Test 5 Nails and Screws Test 6 Drill Bits	
				Scaffolding				

Week	Outcomes	Format	Hours	Topic/Content	Readings	Assignments	Assessment	Resources
10	1,2,3	Lecture	2	Introduction to Site (Stick) Built Scaffolding				Handout
		Lab	2	Scaffolding I		Assignment 9 Group Activity	Peer Evaluation	Carpentry Fundamentals Level 1
11	1,2,3	Lecture	2	Site Built Scaffolding Methods and Safety				Handout
		Lab	2	Scaffolding II		Assignment 9 (continued)		
12	1,2,3	Lecture	2	Site Built Scaffolding Methods and Safety				Handout Construction Health & Safety Handbook
		Lab	2	Scaffolding III		Assignment 9 (concluded)	Project Submission	
				Material Estimating				
13	3,5	Lecture	2	Material Estimating Calculation of Quantities				Handout
		Lab	2	Material Estimate for a Room				
				Wood Construction (Ladder)				
14	1,2,3	Lecture	2	Design and Construct a Vertical Access (Step) Ladder		Assignment 10		Handout
		Lab	2	Ladder Construction I				
15	1,2,3	Lecture	2	Design and Construct a Vertical Access (Step) Ladder				
		Lab	2	Ladder Construction II			Project Submission	

CARPENTRY I 9 CCT102

Week	Outcomes	Format	Hours	Topic/Content	Readings	Assignments	Assessment	Resources
16		Lecture	2	Course wrap-up				