SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



CICE COURSE OUTLINE

| COURSE TITLE: | Carpentry I | | |
|--|--|-------------------------|---------|
| CODE NO. : MODIFIED CODE: | CCT102 CCT0102 | SEMESTER | : Fall |
| PROGRAM: | Construction Carpentry Techniques | | |
| AUTHOR: | Sam Spadafora | | |
| MODIFIED BY: | Barry Sparrow Annunziata (Nancy) Tassone,Learning Specialist CICE | | |
| DATE: | Program Sept/2016 | PREVIOUS OUTLINE DATED: | 2015 |
| APPROVED: | | "Angelique Lemay" | Sept/16 |
| | | DEAN | DATE |
| TOTAL CREDITS: | Four | | |
| PREREQUISITE(S): | None | | |
| HOURS/WEEK: | Four | | |
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For additional information, please contact the Dean, School of Community Services Interdisciplinary Studies, Curriculum & Faculty Enrichment (705) 759-2554, Ext. 2737

I. COURSE DESCRIPTION:

CICE students, with assistance from a Learning Specialist, will acquire a basic knowledge of the types, use and the application of materials used in Residential and Commercial construction. A basic knowledge of wood and lumber properties including the applicable wood joints and fasteners required will be acquired. Skills will be developed using a variety of shop projects.

II. LEARNING OUTCOMES:

Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will demonstrate a basic ability to:

- 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 | Topic and Content | Reading | Week |
|---------|-----------------------------|--------------|------|
| 4,5 | 1. Trade Background | Hand outs | 1 |
| | Role of a carpenter | Outs | |
| | Carpenters' Union | | |
| | Home Builders' Associations | | |
| | Construction Associations | | |
| 2,4,5 | 2. Health and Safety | Handout | 2,3 |

| | Personal Protective Equipment WHMIS Labels and Data sheets | Constructic 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, wafer board, MDF) use and application. | Fund Level 1 | 4 |
| | 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 | | |

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| 3,4,5 | 4. Wood/Lumber | | - 0 |
|----------|--|------------------------------|------|
| | Characteristics of wood and lumber according to species and grade. | Carpentry Fund Level 1 | 5,6 |
| | Different methods used to saw and cut trees into lumber. | Lever | |
| | 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 | | 7.0 |
| | Types of wood joints | Carpentry Fund | 7,8, |
| | Appropriate fasteners, adhesives and glues | Level 1 | |
| | 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 | | 0 |
| | Assignment #5 Nails and screws | Carpentry Fund Level 1 | 9 |
| | Test #5- Nails and screws | | |

| 2,3,5 | 7. Drill Bits | Handout | 9 |
|-------|---|---------|--------------|
| | Types of drill bits | Tanuout | 9 |
| | Test #6- Drill bites | | |
| 1,2,3 | 8. Stick building a Scaffold | Handout | |
| | 8.1 Activity #2 – Build a Scaffold according to the provided drawings (Groups) | | 10,11, 12 |
| 3,5 | 9. Material Estimating | Handout | 10 |
| | 9.1 Activity #3-Calculate material quantity and costs for the completion of a room | | 13 |
| 1,2,3 | 10. Designing and Building a Ladder | | |
| | 10.1. Design a Wooden Step Ladder | | 11 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. | | 14,15 |

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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 Level 1 Trainee Guide Edition: Fifth Edition Author: NCCER Publisher: Pearson ISBN 978-0-13-340380-0

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 | Definition | 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 |
|----|---|
| | subject area. |
| Х | 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.

Addendum:

Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

CICE Modifications:

Preparation and Participation

- 1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

- 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
- 2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

- 1. Use a question/answer format instead of essay/research format
- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group
- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.