



**I. COURSE DESCRIPTION:**

This is the first of three courses intended to familiarize the CICE student with residential construction and builds on skills and knowledge developed in Semester 1 courses. The CICE student, with assistance from a learning specialist, will be involved in topics including building layout, excavation, footings, and foundations; drain tiles, sill plates, and floors. The CICE student will learn through the hands-on application of theory taught during the course.

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

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

**1. *Adhere to health and safety, and current construction related legislation and practices.***Potential Elements of the Performance:

- Demonstrate safe work practices including injury prevention and the use of personal protective equipment
- Use tools and equipment according to specified direction / instructions
- Ladder and scaffold safety
- Fall arrest training
- Power tool safety
- Elevated platform safety
- General hand tool safety

**2. *Have a basic understanding and read residential plans.***Potential Elements of the Performance:

- Understand all residential symbols
- Read measurements both Imperial and Metric
- Know building codes and specifications

**3. *Understand and discriminate various building and construction materials including engineered lumber.***Potential Elements of the Performance:

- Understand engineered lumber and its applications, including
- Wood I-beams
- Laminated Veneer Lumber (LVL)

- Glue-laminated beams
- Open web trusses
- Laminated-strand lumber

**4. *Prepare construction specific material lists and cost estimates.***

Potential Elements of the Performance:

- Read and have a basic understanding of architectural drawings
- Understand the use of scale in architectural drawings
- Identify architectural symbols
- Prepare material lists for specified residential plans
- Estimate costs

**5. *Layout and prepare footings and foundations.***

Potential Elements of the Performance:

- Site preparation
- Identify types of form systems for foundations, concrete, insulated concrete form or block (pressure treated)
- Lay out and installing footings and foundations
- Complete basic volume calculations for footing forms
- Determine weights and sizes of footings
- Proper location and securing of footings
- Drainage tile placement
- Damp-proofing below grade

**6. *Understand and assemble floor framing assemblies.***

Potential Elements of the Performance:

- Determine sizing for floor framing using span tables
- Understand live and dead loads
- Types of floor framing
- Platform framing
- Girders and beams
- Sill plates, headers and trimmers
- Floor joists, trusses and platform finishing
- Floor sheathing
- Assemble a floor frame
- Entrance platforms and stairs

**III. TOPICS:**

1. Protect yourself and others
2. Safe and proper use of hand tools, power tools, elevated platforms, ladders and scaffolding
3. Cutting and fitting materials with the proper estimated lengths, widths and thicknesses
4. Understanding and reading residential plans
5. Building materials and cost estimating
6. Footings and foundation systems
7. Floor framing assemblies
8. Entrance platforms and stairs

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

- Handouts, calculators, green tag safety boots, safety glasses at all times in the class / on the work site
- Text book **Modern Carpentry**, Essential Skills for the Building Trades, 11<sup>th</sup> Edition, 2008, Wagner and Smith, along with accompanying work book

**V. EVALUATION PROCESS/GRADING SYSTEM:**

Assignments and tests	30%
Practical activities	55%
Attendance	15%

The following semester grades will be assigned to students:

<b>Grade</b>	<b><u>Definition</u></b>	<b><i>Grade Point Equivalent</i></b>
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	

U	placement or non-graded subject area. 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.

#### **VI. SPECIAL NOTES:**

##### 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.

#### **VII. COURSE OUTLINE ADDENDUM:**

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

**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.