

Prepared: Barry Sparrow Approved: Corey Meunier

Course Code: Title	ARC0101: BUILDING AND CONSTRUCTION ESTIMATING			
Program Number: Name	1120: COMMUNITY INTEGRATN			
Department:	C.I.C.E.			
Semester/Term:	17F			
Course Description:	This course introduces the student to the fundamental principles of construction estimating. The topics covered will deal with the measurement of construction work, reading construction documents (prints and specifications) as well as records management. Emphasis is placed on estimating site work, concrete, masonry, steel and wood, using detailed and systematic methods. Computer-based spreadsheets will be used to prepare estimates and assignments. Students will learn to assemble and sort estimate information for a complex project in a logical and manageable manner and develop organizational and time management skills. Students will also become familiar with issues relating to construction waste management and reduction as well as environmental controls as it relates to construction estimating.			
Total Credits:	5			
Hours/Week:	4			
Total Hours:	60			
Essential Employability Skills (EES):	<ul> <li>#1. Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.</li> <li>#3. Execute mathematical operations accurately.</li> <li>#4. Apply a systematic approach to solve problems.</li> <li>#5. Use a variety of thinking skills to anticipate and solve problems.</li> </ul>			
Course Evaluation:	Passing Grade: 50%, D			
Evaluation Process and Grading System:	Evaluation Type	Evaluation Weight		
	Assignments and Activities	50%		
	Final Test	25%		
	Mid-term Test	25%		
Books and Required Resources:	Estimating in Building Const Publisher: Pearson Prentice	ruction by Frank R. D Hall T	agostino/Leslie Feigenbaum/Clint Kissoon	



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	ISBN: 978-0-13-223137-4		
Course Outcomes and Learning Objectives:	Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will acquire varying levels of skill development relevant to the following learning outcomes:		
	Course Outcome 1.		
	Upon successful completion, the student will be able to: 1. Assist in preparing construction specifications, material and cost estimates.		
	Learning Objectives 1. Course Outcome 2. Upon successful completion, the student will be able to: 2. Assist in planning, scheduling and monitoring construction and civil engineering projects. Learning Objectives 2.		
	Course Outcome 3.		
	Upon successful completion, the student will be able to: 3. Apply sound environmental practices and policies in civil engineering/construction projects.		
	Learning Objectives 3.		



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### Course Outcome 4.

Upon successful completion, the student will be able to: 4. Demonstrate relevant mathematical, computer and technical problem solving skills as it relates to civil engineering/construction projects.

### Learning Objectives 4.

### **Course Outcome 5.**

Upon successful completion, the student will be able to: 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.

## Learning Objectives 5.

#### **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 guizzes.)

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.** 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.

B. Tests may be modified in the following ways:



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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.

#### C. 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.

#### D. 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

 Formally summarize articles and assigned readings to isolate main points for the student
 Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

#### E. Evaluation:

Is reflective of modified learning outcomes.



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Date:

**NOTE:** Due to the possibility of documented medical issues, CICE students may require alternate methods of evaluation to be able to acquire and demonstrate the modified learning outcomes

Wednesday, September 6, 2017

Please refer to the course outline addendum on the Learning Management System for further information.