

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: COMPUTER BASED ESTIMATING

Code No.: CON 206 Semester: IV (Winter)

Program: CIVIL ENGINEERING TECHNOLOGY

Author: B. Sparrow

Date: JAN 00 Previous Outline Date: JAN 98

Approved: \_\_\_\_\_  
Dean Date

Total Credits: 3 Prerequisite(s): ARC101  
Length of Course: 16 Weeks Total Credit Hours: 48

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## **I. COURSE DESCRIPTION**

This course will continue to introduce the student to the fundamental principles of estimating, as this course is a continuation of ARC 101. The student will be introduced to using the computer as a tool in the generation of cost estimates, through the utilization of Timberline software. The importance of preliminary work will be emphasized, through to the advanced techniques used to systematically solve the task of preparing and generating an estimate for a given construction project.

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

Upon successful completion of this course the student will demonstrate the ability to:

### **1) Generate required information from a given set of contract documents**

Potential elements of the performance:

- Identification of the basic fundamentals of estimating
- Determination of appropriate estimating procedures
- Systematic structuring of required construction data

### **2) Understand concepts of and demonstrate the proper use of Timberline Precision Estimating software**

Potential elements of the performance:

- Identification of the relevant terms and definitions of Precision Estimating
- Appropriate software manipulation and customization
- Creation of various construction work packages
- Modification of databases to suit local requirements

### **3) Generate a complete and coherent estimate for a given construction project**

Potential elements of the performance:

- Access relevant databases
- Application of computerized estimating procedures
- Calculation of both individual items and assemblies
- Printing various estimating reports

## **III. TOPICS:**

- 1) General Review of Mensuration & Estimating Fundamentals
- 2) Introduction to Timberline and Starting the Software
- 3) Estimate Set-up
- 4) Performing the Estimate
- 5) Printing Reports

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

Timberline Student Workbook or Reference Manual  
Handouts

#### V. EVALUATION PROCESS/GRADING SYSTEM

Each student will be assigned a final grade on successful completion of assignments and tests, weighted as follows:

Assignments	40%
Three tests	60%
<b>TOTAL</b>	<b>100%</b>

Each assignment carries equal weight. Each test also carries equal weight. Late submittals will receive a maximum grade of 60%. Assignments handed in more than one week late will receive a grade of zero. An average of 60% on assignments and 60% on tests is required for successful completion of this course. The following letter grades will be assigned to students in post-secondary courses:

<b>Grade</b>	<b>Percentage(%)</b>	<b>Grade Point Equivalent</b>
A+	90-100	4.00
A	80-89	3.75
B	70-79	3.00
C	60-69	2.00
R (Repeat)	59 or below	0.00

CR (Credit) Credit for diploma requirements has been awarded.

S Satisfactory achievement in field placement or non-graded subject areas.

U	Unsatisfactory achievement in field placement or non-graded subject areas.
X	A temporary grade used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (See Policies and Procedures Manual - Deferred Grades and Make-up.)
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when for extenuating circumstances, it has been impossible for the faculty member to report grades.

## VI. SPECIAL NOTES:

- **Special Needs**

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717, 491 so that support services can be arranged for you.

- **Retention of Course Outlines**

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions. Substitute course information is available at the Registrar's Office

The professor reserves the right to change the information contained in the course outline depending on the needs of the learner and the availability of resources.

- **Plagiarism**

Students should refer to the definition of academic dishonesty in the *Students Rights and Responsibilities* handbook. Students who engage in academic dishonesty will receive an automatic failure for that submission and other such penalty as the professor may decide, up to and including expulsion from the course. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

- **Testing Absence**

If a student is unable to write a test on the date assigned, the following procedure must be followed:

1. The student shall provide the professor with advance notice, preferably in writing of his/her need to miss the test.
2. The student may be required to document the absence at the discretion of the professor
3. All decisions regarding whether tests shall be rescheduled will be at the discretion of the professor.
4. The student is responsible for making arrangements with the professor, immediately upon return to the College, with respect to make-up of the missed test prior to the next scheduled class for the course in question.
5. In the event of an emergency on the day of the test, the student may be required to produce documentation to support the absence and must telephone the College to identify the absence. The college has a 24-hour electronic voice messaging system at 759-2554.

## **VII. PRIOR LEARNING ASSESSMENT**

Students who wish to apply for advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following:

## **VIII. DIRECT CREDIT TRANSFERS**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer for from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.