

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



Sault College

**COURSE OUTLINE**

**COURSE TITLE:** Estimating - Advanced

**CODE NO.:** CON 206 **SEMESTER:** Winter

**PROGRAM:** Architectural/Construction

**AUTHOR:** M. Brodie/B. Sparrow

**DATE:** Jan 07 **PREVIOUS OUTLINE DATED:** Jan 06

**APPROVED:**

	_____	_____
	<b>DEAN</b>	<b>DATE</b>

**TOTAL CREDITS:** 3

**PREREQUISITE(S):** ARC 101

**HOURS/WEEK:** 3

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*For additional information, please contact the Dean*

*Technology, Skilled Trades, Natural Resources & Business*

*(705) 759-2554, Ext. 2688*

## I. COURSE DESCRIPTION

This course will continue to introduce the student to the fundamental principles of estimating, as this course is a continuation of ARC101. Using a project-oriented format, the student will compile a complete estimate including direct and indirect costs. The importance of preliminary overview work will be emphasized, as well as the development of a systematic approach in preparing and generating an estimate and bid. The student will be expected to use the computer and spreadsheet software as a tool in the assembly of cost estimates.

## 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 (drawings and specifications) and develop estimate layout**

Potential elements of the performance:

- Determine required trades and sections for a particular project
- Distinguish the take-offs that are required (own forces vs. sub-trades)
- Interpret General Requirements as described in specifications
- Utilize a computer spreadsheet for the organization of estimate information

2) **Generate quantity take-offs for selected trades and assemble sub-trade information for a given construction project**

Potential elements of the performance:

- Develop a quantity estimate of direct cost of materials and components for selected 'own forces' trades
- Create a summary of indirect costs
- Develop a list of potential subtrades and suppliers
- Prepare a preliminary estimate summary

3) **Determine, assess and apply cost component information**

Potential elements of the performance:

- Apply cost component information to 'own forces' trades
- Determine and apply indirect cost information
- Assess subtrade cost information

4) **Compile cost information in an organized manner using industry standard procedures**

Potential elements of the performance:

- Create, format and print estimate and summary sheets
- Create a subtrade and supplier sheet
- Create a final estimate incorporating and employing the following items:
  - Own forces estimate
  - Indirect costs
  - Subtrade budget numbers and costs
  - Overhead and profit markups
  - Market condition adjustments
- Prepare a final estimate and complete a bid form for a simulated tender closing

### **III. TOPICS:**

1. Estimating Review
2. Project Overview and Assessment
3. Direct and Indirect Costs
4. Organizing and Setting up an Estimate
5. Estimating Quantities for Selected Divisions
6. Analyzing Sub-trade Costs
7. Assembling a Final Estimate and Tender Close

**IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**Estimating in Building Construction

Frank R. Dagostino Leslie Feigenbaum Clint Kissoon

Pearson Prentice Hall

ISBN 0-13-039126-3

The student will also be expected to provide floppy disks or other media for creation of data backups and/or assignment submission.

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

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

Assignments	70%
Attendance and Participation	10%
Final Tender Package Submission	20%
<b>TOTAL</b>	<b>100%</b>

Late submittals will receive a maximum grade of 60%. Assignments handed in more than one week late will receive a grade of zero.

The following semester grades will be assigned to students in postsecondary courses:

<b>Grade</b>	<b>Definition</b>	<i>Grade Point Equivalent</i>
A+	90 – 100%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	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.	
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:**

- **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 E1101, Ext. 703 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.