SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Construction Estimating II

CODE NO.: CON 206 SEMESTER: 04W

PROGRAM: Construction Technician

AUTHOR: B. Sparrow

DATE: 01-09 PREVIOUS OUTLINE DATED: 01-07

APPROVED:

"Corey Meunier"
CHAIR

DATE

TOTAL CREDITS: 3

PREREQUISITE(S): ARC 101

HOURS/WEEK: 3

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For additional information, please contact Corey Meunier, Chair School of Technology & Skilled Trades

(705) 759-2554, Ext. 2610

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:

 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. subtrades)
- 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

V. EVALUATION PROCESS/GRADING SYSTEM:

Assignments	70%		
Attendance and Participation	10%		
Final Package Submission	20%		
Total	100%		

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	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.	
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:

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 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 postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. 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.

Course Outline Amendments:

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

Substitute course information is available in the Registrar's office.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.