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



COURSE OUTLINE

<u>Course Title</u>: Project Management and Environmental Law

Code No.: CIV215/ENV315/WTR315 Semester: II (Winter)

Program: Civil/Construction/Architectural/Water/Environmental

Author: B. Sparrow

Date: January 00 Previous Outline Date: January 98

Approved:

Dean

Date

Total Credits: 3Prerequisite(s): NoneLength of Course: 16 WeeksTotal Credit Hours: 48

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I. COURSE DESCRIPTION:

This course will provide the technical student with a general understanding of construction management principles, contract administration procedures and contract law, as well as knowledge of environmental laws and regulations that have an impact on construction projects.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1) Demonstrate and apply knowledge of the Canadian legal system and provincial laws

Potential Elements of the Performance:

- discuss the history of the Canadian legal system
- distinguish between contract law, tort and criminal law
- list the requirements necessary for a contract
- compare issues of liability due to contract and tort
- apply the Ontario Environmental Protection Act to a given situation
- apply the Ontario Water Resources Act to a given situation

2) Recognize and describe types construction contracts, bid procedures, contract administration procedures and contract general conditions

Potential Elements of the Performance:

- recognize and describe application of fixed price contracts
- recognize and describe application of construction management contracts and procedures
- · list and describe the basic contract documents, plans and specifications
- · understand bidding and contract award and rejection procedures
- · describe the relationship and responsibilities of owners, contractors and consultants
- · describe procedures for changes to contracts in construction
- define contract general conditions
- · compare risk in fixed price and construction management contracts

3) Understand and describe management goals, procedures and organization

Potential Elements of the Performance:

- understand the function and purpose of management
- · list and describe types of business organizations in construction

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE: (continued)

- understand issues of human resources management in construction
- · recognize issues relating to management of materials, labour and equipment

4) **Planning, scheduling and controlling work**

Potential Elements of the Performance:

- describe procedures for estimating contract time
- · create and interpret Gantt diagrams to estimate time and manage projects
- create task lists
- · draw network diagrams from assigned task lists
- determine the critical path in a network diagram
- understand the application of computers in creating and managing network diagrams

5) Understand bonds and insurance, dispute resolution, liens and lien legislation in construction

Potential Elements of the Performance:

- · understand how disputes arise in construction contracts
- examine methods and procedures in dispute resolution including arbitration
- describe the purpose and need for bonds and insurance in construction
- understand the application of The Construction Lien Act of Ontario
- define and determine substantial completion
- understand the purpose and function of statutory holdbacks

III. TOPICS:

- 1) The Legal System, Contracts and Environmental Law
- 2) Construction Contracts, Types and Procedures
- 3) Management Goals and Organization
- 4) Planning Scheduling and Controlling Work in Construction
- 5) Dispute, Bonds, Insurance and Liens in Construction

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Keith Collier: <u>Managing Construction - The Contractual Viewpoint</u> Delmar Publishers Inc.

V. EVALUATION PROCESS/GRADING SYSTEM

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

TOTAL	100%
Three tests	60%
Assignments	40%

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 postsecondary courses:

Grade	Percentage(%)	Grade Point Equivalent
A+	90-100	4.00
А	80-89	3.75
В	70-79	3.00
С	60-69	2.00
R (Repeat)	59 or below	0.00
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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.
Х	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/or other such penalty the professor may decide 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.