# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ON.

# **COURSE OUTLINE**

COURSE TITLE:

Project Management and Law

COURSE CODE:

**CIV 215** 

PROGRAM:

Architectural/Civil/Environmental Technology

SEMESTER:

IV (Winter)

AUTHOR:

Henry Pietrzakowski

DATE:

4 January 1994

PREVIOUSLY DATED:

December 1991

APPROVED

(DEAN)

DATE:



TOTAL CREDIT HOURS: 3
PREREQUISITES:

#### I. INTRODUCTION

Construction today has become very complex and is constantly confronted with new problems and unique situations: new materials, new equipment, new technology, specialized labour, unions, health and safety ordinances, codes and regulations.

Before a construction project is undertaken, a cost estimate and preliminary time schedule have to be in place. Once work gets underway, the estimate and the schedule have to be adhered to by the project manager in order to facilitate a "successfully" completed project. Apart from these major considerations, there are a myriad of other factors that have to be managed efficiently in order to ensure the future viability of the individuals involved.

Technology is a key resource of profound importance for corporate profitability and growth. Effective management of technology links engineering, science and management disciplines to address the issues involved in the planning, development, and the implementation of technological capabilities in order to shape and accomplish the strategic and operational objectives of an organization.

#### II. PHILOSOPHY AND GOALS

To familiarize the student with construction management practices, planning and scheduling, construction economics, bidding procedure, contractual arrangements, contract documents, bonds and insurances and contract administration.

## III. STUDENT PERFORMANCE OBJECTIVES

Upon successful completion of the course, the student will be able to:

- 1. Apply planning and scheduling principles to construction projects.
- Identify types of contracts and the many contractual relationships that exist on a construction project.
- 3. Select the basic components of a set of contract documents.
- 4. Describe the purpose and responsibilities of the project manager.
- Apply the basic principles of problem solving.
- 6. Identify the various individuals and their respective roles on a construction site.
- 7. Identify the various components of the contract administration process.
- 8. Plan a contract.

### IV. TOPICS TO BE COVERED

## A. The Project Environment

- 1. History of Project Management
- 2. Project Goals
- 3. Basic Project Management Philosophy
- The Project Manager

# B. The Individuals Involved

- 1. The Role of the Client
- The Role of the Architect
- 3. The Role of the Engineer
- 4. The Role of the Contractor
- 5. The Role of the Contract Manager
- 3. The Role of the Clerk of the Works

# C. Construction Contracts

- 1. Plans and Specifications
- Types of Contracts
- 3. Capital Project Contracting
- 4. Approach to Project Execution

# D. Contract Administration

- Payment Certification
- 2. Changes and Delays
- 3. Contract Litigation

## E. Bidding for Contracts

- 1. Competitive Bidding
- 2. Bid Bonding
- 3. Bidding on various types of contracts
- Bid Depositories

## V. METHOD OF EVALUATION

Students will be assigned a final grade based on successful completion of tests, assignments, projects and attendance, weighted as follows:

Assignments/Exercises Interim Test Final Test	30% 25% 35%

Late assignments will be penalized. Attendance and punctuality will be considered in the student assessment.

A final letter grade will be assigned as follows:

A+ 90-100% A 80-89% B 70-79% C 55-69% R Repeat

## VI. STUDENT RESOURCES

Total Engineering Project Management
G.J. Ritz
McGraw Hill Book Company

The Contractor's Guide to Construction Law
E.J. Brogden
McGraw Hill Book Company

Construction Methods and Management S.W. Nunally Prentice Hall

Law for Professional Engineers
D.L. Marston
McGraw Hill Book Company

#### VIII. SPECIAL NOTES

- 1. Students with special needs are encouraged to discuss required accommodations in confidence with the instructor.
- 2. The instructor reserves the right to modify the course and course outline as deemed necessary to meet the needs of the students.

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