

CIV 215 - 3  
COURSE NUMBER

PROJECT MANAGEMENT & LAW  
COURSE NAME

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

TOTAL CREDIT HOURS: 48

COURSE OUTLINE

PREREQUISITES: NONE


COURSE TITLE: PROJECT MANAGEMENT AND LAW

CODE NO.: CIV 215-3 SEMESTER: IV

PROGRAM: ARCHITECTURAL/ENVIRONMENTAL/CIVIL

AUTHOR: JOHN K. THEIL

DATE: DECEMBER 1991 PREVIOUS OUTLINE DATED: DECEMBER 1990

APPROVED: Dean  Date Jan 9/192

PROJECT MANAGEMENT & LAW

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TOTAL CREDIT HOURS: 48

PREREQUISITES: None

**I. PHILOSOPHY/GOALS:**

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

**II. STUDENT PERFORMANCE OBJECTIVES:**

Upon successful completion of this course the student will:

1. Apply planning and scheduling principles to construction projects.
2. Determine owning and operating costs of construction plant and equipment.
3. Identify types of contracts and the numerous contractual relationships that exist on a construction project.
4. Select the basic components of a set of contract documents.
5. Identify the basic legal principles which are used to avoid or resolve construction disputes.

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III. TOPICS TO BE COVERED:

TOPICS	HOURS
Construction Management Project Development Elements of Construction Management	3
Planning and Scheduling Scheduling Principles Bar Graph Method Critical Path Method (CPM) Activity Times	8
Construction Economics Time Value of Money Elements of Equipment Cost Owning Costs Operating Costs	8
Construction Contracts Contract Documents Contract Law Form of Contract Rules of Interpreting a Contract Termination of Contracts Builder's Liens	12
Plans and Specifications Contract Drawings Specification Formats	3
Contract Administration Progress Reports and Payments Changes and Delays Claims and Disputes	3



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IV. LEARNING ACTIVITIES

REQUIRED RESOURCES

1.0 CONSTRUCTION MANAGEMENT

Lecture Notes

Upon successful completion of this unit the student will be able to:

- 1.1 Identify the major steps in the project development process
- 1.2 List the principal methods by which facilities are constructed
- 1.3 Identify elements of construction management

2.0 PLANNING AND SCHEDULING

Lecture Notes

Upon successful completion of this unit the student will be able to:

- 2.1 List the principle use of schedules
- 2.2 Prepare a bar graph
- 2.3 Prepare activity-on-arrow and activity-on-node diagrams
- 2.3 Calculate event-times

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IV. LEARNING ACTIVITIES

REQUIRED RESOURCES

3.0 CONSTRUCTION ECONOMICS

Lecture Notes

Upon successful completion of this unit the student will be able to:

- 3.1 Apply the basic equations of engineering economy
- 3.2 Perform depreciation calculations
- 3.3 Determine total owning cost
- 3.4 Identify the major elements of operating cost
- 3.5 Calculate total owning and operating costs

4.0 CONSTRUCTION CONTRACTS

Lecture Notes

Upon successful completion of this unit the student will be able to:

Text: Chapter 3  
Chapter 4  
Chapter 5

- 4.1 Identify typical components of a set of "Contract Documents"
- 4.2 Define the three (3) elements of a contract
- 4.3 Discuss the basic rules of interpretation of contracts
- 4.4 List various reasons and methods of contract termination
- 4.5 Identify the use of and legal interpretations of Builder's Lien

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IV. LEARNING ACTIVITIES

REQUIRED RESOURCES

5.0 PLANS AND SPECIFICATIONS

Lecture Notes

Upon successful completion of this unit the student will be able to:

- 5.1 List typical aspects of construction plans
- 5.2 Organize specifications according to the Uniform System for Building Specifications

Lecture Notes

6.0 CONTRACT ADMINISTRATION

Upon successful completion of this unit the student will be able to:

- 6.1 Identify the types of payment certificates commonly used on construction projects
- 6.2 Interpret and apply the terms of a contract to changes and delays
- 6.3 Identify mechanisms of resolving claims and disputes



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V. METHOD OF EVALUATION:

Assignments/Exercises	20%
Interim Test	25%
Final Examination	55%

Grading:

A+ = 90 - 100%
A = 80 - 89%
B = 70 - 79%
C = 60 - 69%

A passing grade will be based on a minimum composite grading of 60%. Students obtaining a composite grading of 55 to 59% may be allowed to complete a supplementary examination.

VI. REQUIRED STUDENT RESOURCES:

TEXTBOOK(S):

Brogden, E.J.; The Contractor's Guide to Construction Law (CAN); McGraw-Hill Book Company.

VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION:

REFERENCES:

Nunally, S.W.; Construction Methods and Management, 2nd Edition; Prentice-Hall Canada Inc., Toronto.

Marston, D.L.; Law for Professional Engineers, 2nd Edition; McGraw-Hill Ryerson Limited

VIII. SPECIAL NOTES

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

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PROJECT MANAGEMENT & LAW

COURSE NUMBER

COURSE NAME

METHOD OF EVALUATION:

- 101
- 102
- 103

- Assignments/Exercises
- Interim Test
- Final Examination

Grading:

- A+ = 90 - 100%
- A = 80 - 89%
- B = 70 - 79%
- C = 60 - 69%

A passing grade will be based on a minimum composite grade of 60%. Students obtaining a composite grading of 60 to 70% may be allowed to complete a supplementary examination.

VI. REQUIRED STUDENT RESOURCES:

TEXTBOOK(S):

Student, E.J.: The Contractor's Guide to Construction Law, 2nd Edition, McGraw-Hill Book Company.

VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION:

REFERENCES:

Student, E.J.: Construction Methods and Management, 2nd Edition, McGraw-Hill Canada Inc., Toronto.

Stinson, D.D.: Law for Professional Engineers, 2nd Edition, McGraw-Hill, Toronto.

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