COURSE OVERVIEW
Introduce students to fundamental concepts in project management and construction industry. The course also covers topics and techniques for estimating, planning, scheduling, and control of engineering, procurement and construction projects. Students will also be introduced to basics of Engineering Economics and project financing.

LEARNING OUTCOMES
- Economics:
  ✓ Ability to apply economic principles in decision making through understanding and analyzing the time value of money and cash flows as well as economic comparison methods for different decision alternatives (CEAB Indicator 11.1).
- Tools:
  ✓ Ability to create, adapt, modify and extend tools and techniques to manage and solve problems in particular in project and construction management. The students will learn tools and techniques for planning, scheduling, estimating, and project control and will develop the ability to adopt or enhance them to manage project more efficiently (CEAB Indicator 5.3).
- Communications:
  ✓ Ability to understand, analyze and respond to technical and non-technical instructions and questions (CEAB Indicator 7.1).
OPTIONAL REFERENCES


COURSE OUTLINE

1. Introduction to the Course
2. Engineering Decision Making
3. Time Value of Money
4. Cash Flow Analysis
5. Comparison Methods
6. Project and Project Management Overview
7. Construction Industry and Project
8. Project Participants
9. Construction Processes
10. Construction Contracts and Delivery Methods
12. Mid-Term
13. Construction Scheduling Fundamentals
14. Network Calculation, CPM and PDM
15. Overlapping Network Models
17. Construction Estimating II
18. Project Control Fundamentals
19. Earned Value Method
20. Course Review
21. Final exam

COURSE EVALUATION

Grade components will be weighted as follows in computation of the final course grade:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-class assignments and course participation</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>20%</td>
</tr>
<tr>
<td>Term Project</td>
<td>25%</td>
</tr>
<tr>
<td>Final exam</td>
<td>35%</td>
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</tbody>
</table>
POLICIES

Course Specific Policies
Students are expected to attend and actively participate during class sessions offering insight, comment, reinforcement, contrary views, and underscoring examples. Quizzes/assignments will be given randomly.

Late submissions will not be accepted and the submitted materials will not be graded.

Announcements made in class or placed on Avenue are considered to have been communicated to all students including those individuals that are not in class.

Discriminations
The Faculty of Engineering is concerned with ensuring an environment that is free from all adverse discrimination. If there is a problem that cannot be resolved by discussion among the persons concerned, individuals are reminded that they should contact their department chair, the sexual harassment office, or the human right consultant as soon as possible.

Academic Dishonesty
Attention is drawn to the “Statement of Academic Ethics” and the Senate Resolutions on Academic Dishonesty as found in the Senate Policy Statement distributed at registration and available in the Senate office. Any student who infringes one of these resolutions will be treated according to the published policy. Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty please refer to the Academic Integrity Policy, specifically Appendix 3, located at: http://www.mcmaster.ca/univsec/policy/AcademicIntegrity.pdf

The following illustrates only three forms of academic dishonesty:
1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
2. Improper collaboration in group work or individual assignments.
3. Copying or using unauthorized aids in tests and examinations.

Requests for Relief for Missed Academic Term Work (Assignments, Mid-Terms, etc.)
The McMaster Student Absence Form is a self-reporting tool for Undergraduate Students to report absences that last up to 3 days and provides the ability to request accommodation for any missed academic work. Please note this tool cannot be used during any final examination period.

You may submit a maximum of 1 Academic Work Missed requests per term. It is YOUR responsibility to follow up with your Instructor immediately regarding the nature of the accommodation.

If you are absent more than 3 days or exceed 1 request per term you MUST visit your Associate Dean's Office (Faculty Office). You may be required to provide supporting documentation.

This form should be filled out immediately when you are about to return to class after your absence. http://academiccalendars.romcmaster.ca/content.php?catoid=11&navoid=1698#Requests_for_Relief_for_Missed_Academic_Term_Work

Student Code of Conduct
The Student Code of Conduct (SCC) exists to promote the safety and security of all the students in the McMaster community and to encourage respect for others, their property and the laws of the land. McMaster University is a community which values mutual respect for the rights, responsibilities, dignity and well-being of others. The purpose of the Student Code of Conduct is to outline accepted standards of behavior that are harmonious with the goals and the well-being of the University community, and to define the procedures to be followed when students fail to meet the accepted standards of behavior. All students have the responsibility to familiarize themselves with the University regulations and the conduct expected of them while studying at McMaster University.


Note: This structure represents a plan and is subject to adjustment. The instructor and the university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity