



## COURSE OUTLINE: CIV215 - PROJECT MANAG & LAW

Prepared: Barry Sparrow

Approved: Corey Meunier, Chair, Technology and Skilled Trades

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| <b>Course Code: Title</b>   | CIV215: PROJECT MANAGEMENT AND LAW  |
| <b>Program Number: Name</b>   | 4080: CIVIL ENG TECHNICIAN  |
| <b>Department:</b>  | CIVIL/CONSTRUCTION  |
| <b>Semesters/Terms:</b>   | 19W   |
| <b>Course Description:</b>  | This course will provide the student with a general understanding of construction management principles as well as knowledge of applicable laws and regulations related to contracts and construction projects. The student will learn to assist in the planning, scheduling and monitoring of construction projects. The student will develop an understanding of the roles and relationships of project participants as it relates to achieving project objectives. |
| <b>Total Credits:</b>   | 3   |
| <b>Hours/Week:</b>  | 3   |
| <b>Total Hours:</b>   | 45  |
| <b>Prerequisites:</b>   | There are no pre-requisites for this course.  |
| <b>Corequisites:</b>  | There are no co-requisites for this course.   |
| <b>Substitutes:</b>   | CIV210  |
| <b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>                         | <b>4080 - CIVIL ENG TECHNICIAN</b>  |
| Please refer to program web page for a complete listing of program outcomes where applicable. | VLO 3 complete duties and assist in monitoring that work is performed in compliance with contractual obligations, applicable laws, standards, bylaws, codes and ethical practices in the civil engineering field.   |
|   | VLO 5 collaborate with the project team and communicate effectively with project stakeholders to support civil engineering projects.  |
|   | VLO 6 collect, process and interpret technical data to produce written and graphical project-related documents.   |
|   | VLO 7 use industry-specific electronic and digital technologies to support civil engineering projects.  |
|   | VLO 9 assist in the scheduling, cost estimation and monitoring of the progression of civil engineering projects by applying principles of construction project management.  |
|   | VLO 11 apply teamwork, leadership and interpersonal skills when working individually or within multidisciplinary teams to complete civil engineering projects.  |
| <b>Essential Employability Skills (EES) addressed in this course:</b>                         | EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.   |
|   | EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.  |
|   | EES 5 Use a variety of thinking skills to anticipate and solve problems.  |
|   | EES 6 Locate, select, organize, and document information using appropriate technology and information systems.  |



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| <b>Course Evaluation:</b>  | Passing Grade: 50%, D   |                  |  |  |  |                  |  |  |  |
|--|---|------------------|--|--|--|------------------|--|--|--|
| <b>Other Course Evaluation &amp; Assessment Requirements:</b>  | <p>Grade<br/> Definition Grade Point Equivalent<br/> A+ 90 - 100% 4.00<br/> A 80 - 89%<br/> B 70 - 79% 3.00<br/> C 60 - 69% 2.00<br/> D 50 - 59% 1.00<br/> F (Fail)49% and below 0.00</p> <p>CR (Credit) Credit for diploma requirements has been awarded.<br/> S Satisfactory achievement in field /clinical placement or non-graded subject area.<br/> U Unsatisfactory achievement in field/clinical placement or non-graded subject area.<br/> X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.<br/> NR Grade not reported to Registrar's office.<br/> W Student has withdrawn from the course without academic penalty.</p> <p>Attendance<br/> Students are only allowed to miss three classes without a documented explanation. One mark will be deducted from your overall grade for each undocumented explanation. The maximum deduction in overall grade is not to exceed 15%. Valid documented explanation include:</p> <ul style="list-style-type: none"> <li>• Medical reason</li> <li>• Family emergency</li> <li>• Child care issue</li> <li>• Transportation problems</li> <li>• And any other reasonable explanation</li> </ul> <p>The documented explanation has to be sent to the course professor by e-mail no later than three days from a missed class. A Doctor note, etc., is to be attached as a PDF file to your e-mail.</p> |                  |  |  |  |                  |  |  |  |
| <b>Books and Required Resources:</b>   | Construction Project Management by Frederick E. Gould and Nancy E. Joyce<br>Publisher: Pearson Prentice Hall Edition: 4th Edition<br>ISBN: 9780132877244  |                  |  |  |  |                  |  |  |  |
| <b>Course Outcomes and Learning Objectives:</b>  | <table border="1"> <thead> <tr> <th>Course Outcome 1</th> <th>Learning Objectives for Course Outcome 1</th> </tr> </thead> <tbody> <tr> <td>Upon successful completion, the student will be able to:<br/> 1. Complete duties and assist in monitoring that work is performed in compliance with contractual obligations, applicable laws, standards, bylaws, codes and ethical practices in the civil engineering field.</td> <td>1.1 Identify relevant legislation and bylaws that apply in specific situations e.g., Construction Lien Act, etc.<br/> 1.2 Read and interpret building codes i.e., Ontario Building Code<br/> 1.3 Assist in the review and preparation of typical contracts for compliance with basic legal principles and the tendering process<br/> 1.4 Apply ethical reasoning to social and contractual issues that evolve when implementing civil engineering projects</td> </tr> <tr> <th>Course Outcome 2</th> <th>Learning Objectives for Course Outcome 2</th> </tr> <tr> <td>Upon successful completion, the student will be able to:</td> <td>2.1 Identify the disciplines involved in the planning, designing</td> </tr> </tbody> </table>   | Course Outcome 1 | Learning Objectives for Course Outcome 1 | Upon successful completion, the student will be able to:<br>1. Complete duties and assist in monitoring that work is performed in compliance with contractual obligations, applicable laws, standards, bylaws, codes and ethical practices in the civil engineering field. | 1.1 Identify relevant legislation and bylaws that apply in specific situations e.g., Construction Lien Act, etc.<br>1.2 Read and interpret building codes i.e., Ontario Building Code<br>1.3 Assist in the review and preparation of typical contracts for compliance with basic legal principles and the tendering process<br>1.4 Apply ethical reasoning to social and contractual issues that evolve when implementing civil engineering projects | Course Outcome 2 | Learning Objectives for Course Outcome 2 | Upon successful completion, the student will be able to: | 2.1 Identify the disciplines involved in the planning, designing |
| Course Outcome 1   | Learning Objectives for Course Outcome 1  |                  |  |  |  |                  |  |  |  |
| Upon successful completion, the student will be able to:<br>1. Complete duties and assist in monitoring that work is performed in compliance with contractual obligations, applicable laws, standards, bylaws, codes and ethical practices in the civil engineering field. | 1.1 Identify relevant legislation and bylaws that apply in specific situations e.g., Construction Lien Act, etc.<br>1.2 Read and interpret building codes i.e., Ontario Building Code<br>1.3 Assist in the review and preparation of typical contracts for compliance with basic legal principles and the tendering process<br>1.4 Apply ethical reasoning to social and contractual issues that evolve when implementing civil engineering projects  |                  |  |  |  |                  |  |  |  |
| Course Outcome 2   | Learning Objectives for Course Outcome 2  |                  |  |  |  |                  |  |  |  |
| Upon successful completion, the student will be able to:   | 2.1 Identify the disciplines involved in the planning, designing  |                  |  |  |  |                  |  |  |  |

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| 2. Collaborate with the project team and communicate effectively with project stakeholders to support civil engineering projects.   | and implementation of civil engineering projects<br>2.2 Identify the rights, roles and responsibilities of project stakeholders associated with civil engineering projects  |
| <b>Course Outcome 3</b>   | <b>Learning Objectives for Course Outcome 3</b>   |
| Upon successful completion, the student will be able to:<br>3. Collect, process and interpret technical data to produce written and graphical project-related documents.  | 3.1 Prepare and modify documents according to established criteria and industry standards e.g., Canadian Construction Documents Committee (CCDC)<br>3.2 Select and use appropriate technologies to produce documents for civil engineering projects<br>3.3 Read the criteria for the project and identify appropriate information sources.<br>3.4 Use systematic approaches and paper-based and computerized techniques to collect civil engineering data   |
| <b>Course Outcome 4</b>   | <b>Learning Objectives for Course Outcome 4</b>   |
| Upon successful completion, the student will be able to:<br>4. Use industry-specific electronic and digital technologies to support civil engineering projects.   | 4.1 Select and use industry specific electronic and digital technologies to design projects, produce plans and to solve project related problems (e.g., project scheduling)   |
| <b>Course Outcome 5</b>   | <b>Learning Objectives for Course Outcome 5</b>   |
| Upon successful completion, the student will be able to:<br>5. Assist in the scheduling, cost estimation and monitoring of the progression of civil engineering projects by applying principles of construction project management. | 5.1 Identify the phases of the project and their component activities<br>5.2 Follow project schedules and cost estimates needed to complete each phase of work<br>5.3 Assist in the monitoring of the financial resources, project budgets, human resources and timelines used in civil engineering projects<br>5.4 Provide technical information for the development of a project schedule<br>5.5 Assist in the development of a project schedule using project management tools and/or software, e.g., MS Project, critical path, Gantt chart |
| <b>Course Outcome 6</b>   | <b>Learning Objectives for Course Outcome 6</b>   |
| Upon successful completion, the student will be able to:<br>6. Apply teamwork, leadership and interpersonal skills when working individually or within multidisciplinary teams to complete civil engineering projects.              | 6.1 Take initiative and work independently with minimal supervision<br>6.2 Use effective time management and organizational techniques to prioritize tasks and goals  |



**Evaluation Process and Grading System:**

| <b>Evaluation Type</b>     | <b>Evaluation Weight</b> | <b>Course Outcome Assessed</b> |
|----------------------------|--------------------------|--------------------------------|
| Assignments and Activities | 50%                      |                                |
| Final Test                 | 25%                      |                                |
| Mid-term Test              | 25%                      |                                |

**Date:**

June 11, 2018

Please refer to the course outline addendum on the Learning Management System for further information.

