

COURSE NUMBER: PR2691

COURSE TITLE: Capstone Project II

COURSE DESCRIPTION:

The capstone project enables the learner completing a Diploma in the Telecommunications Engineering Technology (Co-op) program to demonstrate the application of skills and knowledge developed throughout the program. Learners taking this course will work with minimal supervision on a project, under the guidance of a faculty member. The learner can work independently or in teams of two to carry out an in-depth study of a problem, design or technical application, and fully document and present their findings.

Learners can commence planning for the course prior to the beginning of the final year of studies. Since the project and report are to be prepared through independent study, the assigned hours represent only part of the time that learners are expected to allocate to the course. Regular meetings with a faculty supervisor will be scheduled within the assigned hours and it is **mandatory** that learners attend these meetings.

This course will be delivered to the learners by a technical instructor in collaboration with a communications instructor.

PREREQUISITES: PR2690 - Capstone Project I (Seminar) and all courses in previous academic semesters

CO-REQUISITES: None

CREDIT VALUE: Four (4) (One credit carried over from PR2690)

COURSE HOURS PER WEEK: Three (3)

LAB HOURS PER WEEK: Zero (0)

SUGGESTED TEXT: To be determined by Instructor

LEARNING RESOURCES:

Lannon, J.M., & Klepp, D. (2009). *Technical communication with MyCanadianTechCommLab* (5th Canadian ed.). Pearson Education Canada. ISBN-13: 9780321735225

MAJOR TOPICS:

1.0 Technological Expectations

- 2.0 Time Management
- 3.0 Project Planning
- 4.0 Documentation of Research
- 5.0 Applied Report Writing Strategies
- 6.0 Editing and Revising Project Reports
- 7.0 Oral Report Presentation

LEARNING OBJECTIVES:

Upon completing this course, a proficient learner should be able to:

1.0 Technological Expectations

- 1.1 Demonstrate knowledge of the processes associated with initiating a project
- 1.2 Demonstrate knowledge of the requirements for managing the processes associated with executing various elements of the project such as quality control, budget control, communications, and team development
- 1.3 Apply knowledge gained from the area of study and acquired research to develop the project
- 1.4 Evaluate outcomes that result from the project work

2.0 Time Management

- 2.1 Explain time management in a work environment
- 2.2 Explain priority setting and working efficiently
- 2.3 Explain time management in the writing process

3.0 Project Planning

- 3.1 Monitor and revise project progress based on initial GANTT chart prepared for the project in Capstone Project I (Seminar)
- 3.2 Schedule meetings with a supervisor
- 3.3 Prepare progress reports to plan strategies to complete the project
- 3.4 Record project activities such as meetings, research activities, and contacts
- 3.5 Prepare a log book recording all activities related to the report such as meeting minutes, lab activities, library research, contacts, and communications

4.0 Documentation of Research

- 4.1 Demonstrate knowledge of the American Psychological Association (APA) documentation procedure
- 4.2 Demonstrate knowledge of APA parenthetical referencing
- 4.3 Demonstrate knowledge of APA reference list entries

5.0 Applied Report Writing Strategies

- 5.1 Prepare a draft report containing an introduction, discussion, conclusions, recommendations, and an effective summary in a format that is in compliance with the APA guidelines
- 5.2 Revise and edit so that the style is clear, concise and correct
- 5.3 Using APA guidelines utilize headings to make information in the report accessible
- 5.4 List sources of information using guidelines of APA documentation
- 5.5 Ensure that the draft report references relevant current technical literature
- 5.6 Demonstrate, through the draft report, a clear understanding of the subject of the study, and of the associated scientific, mathematical and technical fundamentals related to the program area
- 5.7 Demonstrate, through the draft report, the ability to communicate in written form on a technical subject
- 5.8 Present the draft report of the project to faculty and peers indicating the progress of the report, changes to the initial proposal, problems associated with the report and details as to how the report will be completed

6.0 Editing and Revising Project Reports

- 6.1 Revise and edit the draft report
- 6.2 Prepare a formal report employing acceptable principles of documentation, grammar, writing style, electronic principles, graphics, and design in compliance with the APA guidelines
- 6.3 Present the report in an acceptable format utilizing the following components:
 - 6.3.1 Cover and title page
 - 6.3.2 Letter of transmittal
 - 6.3.3 Summary
 - 6.3.4 Acknowledgements
 - 6.3.5 Table of contents
 - 6.3.6 List of figures
 - 6.3.7 List of tables
 - 6.3.8 Introduction
 - 6.3.9 Body of the report
 - 6.3.10 Conclusion
 - 6.3.11 Recommendations
 - 6.3.12 List of references
 - 6.3.13 Appendices
- 6.4 Present the final report to the supervisor

7.0 Oral Report Presentation

- 7.1 Utilize faculty and peer comments and feedback on the presentation of the proposal and the draft report, to develop a final presentation on the capstone project

- 7.2 Develop an oral presentation utilizing various audio visual techniques developed during other oral presentations of the report
- 7.3 Present the report orally to an audience of peers, faculty and invited guests using appropriate audio visual presentation aids
- 7.4 Answer questions on the report from the audience following presentation of the report

EVALUATION:

Proposal Presentation: 20% [From PR2690 - Capstone Project I (Seminar)]
Final Project Presentation: 80%

Note: The final project presentation evaluation is based on consultations with supervisor, progress reports/log book, draft project report, oral presentations and final project report.

DATE DEVELOPED: March 2012

DATE REVIEWED:

REVISION NUMBER:

DATE REVISED:

Note to instructor: Check PIRS to ensure this outline is the most current version