COURSE NUMBER: CM1400

COURSE TITLE: Technical Report Writing I

COURSE DESCRIPTION:

This course is designed to teach technology students the fundamentals of technical reporting. Emphasis is on strategies of technical reporting, research techniques and organizational skills.

PREREQUISITES: None

CO-REQUISITES: None

CREDIT VALUE: Three (3)

COURSE HOURS PER WEEK: Three (3)

LAB HOURS PER WEEK: Zero (0)

SUGGESTED TEXT:

One of

Lannon, J. M., & Klepp, D. (2012). *Technical communication with MyCanadian TechCommLab, Canadian edition* (5th ed.). Toronto: Pearson Education Canada. ISBN: 0321735226 or ISBN-13: 978-0321735225

or

MacLennan, J. (2011). *Effective communications for the technical professional* (2nd ed.). Toronto: Oxford University Press Canada. ISBN: 9780195425475

Pringle, M., & Gonzales, J. (2010). *The APA style of documentation (A pocket guide).* Prentice Hall. ISBN-10: 01328685084 (This is a package prepared by Pearson)

Hayes, C. G. (1996). *English at hand*. Townsend Press. ISBN: 0-944210-25-2

American Psychological Association. (2010). *Publication manual of the American Psychological Association.* Author. ISBN: 978-1-4338-0561-5

LEARNING RESOURCES: None

MAJOR TOPICS:

1.0 Introduction
2.0 Sentence and Paragraph Construction
3.0 Characteristics of Technical Writing
4.0 Technical Descriptions
5.0 Research Techniques
6.0 Technical Abstract
7.0 Technical Correspondence

LEARNING OBJECTIVES:

1.0 Introduction

1.1 The Communication Process
- 1.1.1 Explain the roles of the sender and receiver in the communication process
- 1.1.2 Discuss the influence of non-verbal communication on verbal communication
- 1.1.3 Define several common barriers to communication
- 1.1.4 Outline the importance of dealing with barriers in the workplace and in other settings

1.2 Perform library orientation and discuss resources extraction for research purposes

2.0 Sentence and Paragraph Construction

2.1 Examine and Apply Principles of Sentence Construction
- 2.1.1 Define a sentence and review the four types including; Interrogative, Exclamatory, Imperative, Declarative or Simple, Compound, Complex, Compound-Complex
- 2.1.2 Identify the essential parts of a sentence, particularly subject and verb, direct and indirect object
- 2.1.3 Differentiate among phrases, clauses, and sentences
- 2.1.4 Differentiate between dependent and independent clauses
- 2.1.5 Analyze common sentence errors (fragments, comma splices, and fused sentences) and examine strategies for correcting these errors
- 2.1.6 Analyze common sentence flaws which contribute to unclear messages (unnecessary shifts, pronoun reference, and parallel structure)
- 2.1.7 Discuss the major concepts related to subject-verb agreement
- 2.1.8 Apply rules and principles for writing clear, concise, complete sentences which adhere to the conventions of grammar, punctuation, and mechanics
- 2.1.9 Use key punctuation (colon, semicolon, and comma)

2.2 Examine and Apply Principles of Paragraph Construction
- 2.2.1 Discuss the basic purposes for writing
- 2.2.2 Define a paragraph and describe the major characteristics of an effective paragraph

2.2.3 Define and analyze the following in selected paragraphs:
- 2.2.3.1 Intended audience
- 2.2.3.2 Primary purpose
- 2.2.3.3 Topic sentence

2.2.4 Analyze and apply the steps in the writing process (planning, shaping, drafting, revising, editing, and proofreading)

2.2.5 Apply techniques for gathering ideas (free writing, brainstorming, outlining, mapping, etc.)

2.2.6 Examine selected paragraphs for techniques to develop clear and well-developed paragraphs
- 2.2.6.1 Details (facts, figures, reasons, examples)
- 2.2.6.2 Coherence techniques (traditional expressions, parallel structure, and pronoun reference)
- 2.2.6.3 Sentence arrangement (according to time, according to location, from general to specific, from specific to general, from least to most important, from problem to solution)
- 2.2.6.4 Methods of development (description, classification, cause and effect, definition, comparison and contrast, process, and definition)

2.2.7 Write well-developed, coherent, unified paragraphs which illustrate the following: a variety of sentence arrangements; conciseness and clarity; and adherence to correct and appropriate sentence structure, grammar, punctuation, and mechanics

3.0 Characteristics of Technical Writing

3.1 Distinguishing Technical Writing from Other Forms
- 3.1.1 Identify the qualities of effective technical writing
- 3.1.2 Explain the elements of tone and style for technical reporting
- 3.1.3 Compare and contrast writing climactically with writing technically

3.2 Reading Technical Documents
- 3.2.1 Discuss the methods for reading technical documents
- 3.2.2 Explain how note-taking skills help focus on main ideas

3.3 Organizing Technical Definitions
- 3.3.1 Explain informal and formal sentence definitions with examples
- 3.3.2 Write five formal sentence definitions for a list of related terms
- 3.3.3 Explain the methods by which definitions may be incorporated into a report

4.0 Technical Descriptions

4.1 Describing a Mechanism

4.1.1 Define the all-inclusive mechanism
4.1.2 Outline the guidelines for describing a mechanism
4.1.3 Write a 150-word physical description of a small mechanism from a given list for an uninformed reader of a mechanism at rest or a mechanism in operation

4.2 Describing a Mechanism in Operation
4.2.1 Distinguish between describing a mechanism and describing a mechanism in operation
4.2.2 Write a 250-word description of a mechanism in operation from a list of topics

4.3 Describing a Process
4.3.1 Explain how a process description focuses more on what the technician does rather than on how the instruments work
4.3.2 Outline the sequence for a process description
4.3.3 Describe in one paragraph the process for a given topic

5.0 Research Techniques

5.1 Researching Technical Data
5.1.1 Discuss the following methods of data collection: Observation, testing, interviewing and studying printed material
5.1.2 Apply the steps in the writing process (planning, shaping, drafting, revising, editing, and proofreading)
5.1.3 Apply techniques for gathering ideas (free writing, brainstorming, outlining, mapping, etc.)
5.1.4 Select a topic for a mechanism in operation or for a process and research it and then record the findings

5.2 Organizing Technical Data
5.2.1 Develop an outline for a topic
5.2.2 Expand the outline and develop the topic following the necessary instructions for presenting a mechanism in operation or a process to an uninformed audience

5.3 Using Audio/Visual Aids
5.3.1 Discuss the value of Audio/Visual Aids in a technical presentation
5.3.2 Select two appropriate audio-visual aids and create a document

6.0 Technical Abstract

6.1 Reading the Article
6.1.1 Select a three page article from a technical journal
6.1.2 Skim the article and record at least three details observed

6.2 Selecting Main Ideas
- 6.2.1 Read the article carefully and underline the topic sentence of each paragraph
- 6.2.2 List the summary statements and key example of the article
- 6.2.3 Define technical terms

6.3 Writing the Rough Draft
- 6.3.1 Examine the major points recorded and delete redundant points
- 6.3.2 Write out a draft of major points with examples

6.4 Revising Rough Draft
- 6.4.1 Examine rough draft for appropriate sentence structure, paragraph structure and mechanics; insert appropriate changes
- 6.4.2 Reduce final draft to one quarter to one tenth of original size

7.0 Technical Correspondence

7.1 Reviewing Fundamentals of Technical Correspondence
- 7.1.1 List, define and write an example of the elements of business letters, memos, and emails
- 7.1.2 Demonstrate the various formats and styles of writing
- 7.1.3 Discuss style and tone in business writing

7.2 Writing letters, memos and emails
- 7.2.1 Explain why persuasive techniques are important in business letters
- 7.2.2 Discuss the positive approach in letters of inquiry and complaint
- 7.2.3 Outline the criteria for writing letters, memos and emails
- 7.2.4 Construct a letter, memo, and email in response to given situations

EVALUATION:

Quizzes:	25%
Assignments:	
Technical Description:	15%
Technical Process Description:	15%
Technical Abstract:	10%
Technical Correspondence:	25%
Class Participation:	10%

DATE DEVELOPED: June 15, 1994 **DATE REVIEWED:**

REVISION NUMBER: 7 **DATE REVISED:** March 2014

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