COMP 3040 – Technical Communication in Computer Science

Course Description

Calendar entry

This course is designed to help students become more effective and confident writers in the context of the computing profession. Students will be introduced to a broad range of written and oral presentation styles used in the computing workplace. Prerequisite: Students must be enrolled in third year (or higher) of a majors or honours program in the Department of Computer Science.

General Course Description

This course will facilitate the development of improvement in written and verbal communication. Students will consider the role of the writing process, and then apply the writing process to common communication mediums generated within the computing profession. Content will include professional communication, and software documentation. Students will also be introduced to several tools used for software documentation.

Detailed Prerequisites

Before entering this course, a student should be able to:

- Write basic sentences and paragraphs in English.
- Use a word processor, text editor.

Course Goals

By the end of this course students will:

- Understand the purposes of technical communication.
- Understand the importance of applying the writing process when communicating.
- Know how to contribute effectively within a group to achieve a collective goal.
- Understand the roles of various mediums in technical communication.
- Know tools, approaches and resources used in software documentation.
- Improve awareness of the larger social context of technical communication.

Learning Outcomes

Purposes

1. Define technical communication and its subcategories.

- 2. Classify various types of technical communication into subcategories.
- 3. Identify common traits and components in technical documentation.
- 4. Critique the rhetorical expectations of technical documentation.

Writing Process

Students should be able to:

- 1. Describe the stages of the writing process.
- 2. Appreciate the importance of each stage of the writing process.
- 3. Identify intended audience and purpose in existing communication.
- 4. Evaluate the audience and purpose for their own communication goals.
- 5. Produce communication that effectively communicates to a given audience.
- 6. Produce communication that effectively achieves a given purpose.
- 7. Justify the merits of applying the writing process to communication tasks.

Groups

Students should be able to:

- 1. Describe common group roles and behaviours.
- 2. Identify group roles and group behaviors, in others and themselves.
- 3. Apply developing group skills during group activities
- 4. Work together in a group to achieve a common goal.

Mediums

Students should be able to:

- 1. Identify various mediums within the area of technical communication.
- 2. Critique the benefits and drawbacks of various mediums.
- 3. Identify and determine effective mediums for a given audience and purpose.
- 4. Adapt technical content from one medium to another.
- 5. Apply the writing process to communication in various mediums.
- 6. Produce written communication using various mediums.
- 7. Produce oral communication using various mediums.
- 8. Describe how the medium affects the content and delivery of the technical information.

Documentation

Students should be able to:

- 1. Describe and appreciate the purpose of software documentation.
- 2. Describe and use common documentation tools and strategies.
- 3. Apply the writing process to software documentation.

- 4. Produce documentation using common documentation tools.
- 5. Locate and critique resources on software documentation.

Social Context

Students should be able to:

- 1. Describe the role of technical communication within the field of computing technology.
- 2. Describe and asses the use of rhetoric, images, and figures as persuasive tools.
- 3. Analyze case studies where outcomes were affected by technical communication decisions.
- 4. Analyze case studies to evaluate social and ethical considerations in technical communication.
- 5. Describe and defend the political importance of language, including gender neutral language, and word choices that support indigenous cultures.