# Master Syllabus

## ENL 266 Technical Communication

**University Studies Cluster Requirement 1C: Intermediate Writing**
This University Studies Master Syllabus serves as a guide and standard for all instructors teaching an approved course in the University Studies program. Individual instructors have full academic freedom in teaching their courses, but as a condition of course approval, agree to focus on the outcomes listed below, to cover the identified material, to use these or comparable assignments as part of the course work, and to make available the agreed-upon artifacts for assessment of learning outcomes.

## Course Overview

Technical Communication is about the series of informed choices that writers make when communicating ideas and processes to other people. In this class, students learn how to make the best choices, incorporating critical thinking and writing skills to create reader-based documents that meet the needs of their audience, purpose, and context. Through assigned readings, homework, and in-class exercises, students sharpen their critical thinking and writing skills by focusing on how the content, organization, writing style, mechanics, and design of a technical document must be adapted to meet the needs of its audience and to achieve its purpose.

To prepare for major written assignments, students complete weekly written homework assignments, including document analysis, drafts of assignments, peer reviews, and online discussions. Class time includes short lectures, small group and large class discussions, short student presentations, analysis of documents, and writing exercises that ask students to critically think about and apply key concepts. Collaborative learning strategies are encouraged with students working together in class and on one major assignment. Throughout the term, students learn and apply writing skills used by technical professionals to create reader-based documents and presentations that have a developed sense of content, organization, writing style, mechanics, and information design.

## Learning Outcomes

**Course-Specific Learning Outcomes.** After completing this course, students will be able to:

- Analyze and discuss technical documents and presentations, using key concepts in technical communication
- Write documents and give oral presentations with a clear understanding of your audience, using an appropriate tone and style, establishing the desired relationship, and motivating the desired outcome
- Accomplish your purpose (in oral and written presentations) by stating a clear position and supporting that position with logical points/sub-points, insightful reasoning and/or persuasive examples
- Create user-based documents and presentations that are well organized, easy to follow, and include appropriate headings/bullets/lists and visuals

- Manage writing and review processes, using effective research methods and collaboration strategies, and demonstrating facility with conventions of standard written English (grammar, usage, mechanics)

**Cluster 1C Learning Outcomes.** After completing this course, students will be able to:

- Read with comprehension and critically interpret and evaluate written work in discipline-specific context
- Demonstrate rhetorically effective, discipline-specific writing for appropriate audiences
- Demonstrate, at an advanced level of competence, use of discipline-specific control of language, modes of development, and formal conventions
- Demonstrate intermediate information literacy skills by selecting, evaluating, integrating, and documenting information gathered from multiple sources into discipline-specific writing

## Texts and/or Assigned Readings

- *Technical Communication Today, 4/E* by Richard Johnson-Sheehan. Pearson: 2012
- *Technical Communication, 12/E* by John M. Lannon and Laura J. Gurak. Pearson: 2011
- *Practical Strategies for Technical Communication* by Mike Markel. Bedford/St. Martin's: 2013
- *Technical Communication, 12/E* by Mike Markel. Bedford/St. Martin's: 2012

## Examples of Assignments

The following represents examples of the kinds of assignments instructors may assign.

| Unit | % of Grade | Pages |
|---|---|---|
| Technical communication skills assessment | 15 | 2–3 single-spaced |
| Descriptions/Definitions | 20 | 5–6 single-spaced |
| Team project (proposal, instructions or user guide, oral presentation) | 25 | 6–8 single-spaced |
| Final analysis report | 20 | 2–3 single-spaced |
| Homework (weekly written homework: document analysis; drafts of assignments; peer reviews; online discussions) | 20 | 20 + pages |
| | Total: 100 | |

## Common Assignment: Descriptions/Definitions

For the common assignment, students learn methods for describing and defining technical objects, processes, and ideas. Students identify and analyze a variety of technical descriptions/definitions. Students then create a technical description/definition for a specified audience and purpose. In their justification memo, students assess their work in relation to

existing information about the product or process and describe how they met the needs of their audience in terms of its content, organization, style, and design.

Assigned chapter readings:

- Chapter 6: Technical descriptions and specifications
- Chapter 18: Designing documents and interfaces
- Chapter 19: Creating and using graphics
- Chapter 9: Using plain and persuasive style

Deliverables:

- Technical description (2-sided information sheet with expanded definition/description)
- Glossary of terms that are unique to your field or that have special meaning in your field (20 terms minimum)
- Justification memo (2-pages, single-spaced)

## Common Assignment Evaluation

The common assignment demonstrates all four of Cluster 1C's learning outcomes:

1. Read with comprehension and critically interpret and evaluate written work in discipline-specific context
2. Demonstrate rhetorically effective, discipline-specific writing for appropriate audiences
3. Demonstrate, at an advanced level of competence, use of discipline-specific control of language, modes of development, and formal conventions
4. Demonstrate intermediate information literacy skills by selecting, evaluating, integrating, and documenting information gathered from multiple sources into discipline-specific writing

The common assignment is evaluated on content, organization, style, and design.

### Content

- Writer draws on a variety of techniques (partitioning, definitions, use of senses, similes, analogies, metaphors) for describing an object or process for a specified audience (1C SLOs 1, 2, 3, 4)
- Writer includes the type and amount of information needed by the audience; details are relevant and insightful (1C SLO 4)
- Writer makes claims and supports those claims with compelling evidence (1C SLO 4)
- Writer provides insight, synthesizing and extending key concepts in technical communication to create a cohesive argument about how communication is situated in audience, context, and purpose (1C SLOs 1, 2, 3, 4)

### Organization

- Material is organized into sections with headings (1C SLOs 2 & 3)
- Introduction states the writer's purpose, main point, and forecasts the documents' content (1C SLOs 2 & 3)

- Paragraphs are complete with topic sentences that state the writer's points, leading the reader through the document (1C SLOs 2 & 3)
- Documents are conceptualized as a whole, drawing on reader-based organizational patterns to aid comprehension (1C SLOs 2 & 3)

### Style

- Language, tone, and voice are adapted to the writer's purpose and audience (1C SLOs 1, 2, & 3)
- A variety of sentence constructions engage the reader (1C SLOs 2 & 3)
- Transitions between paragraphs and sentences guide readers through the material and aid comprehension (1C SLOs 2 & 3)
- Document has no mechanical errors and requires no revision; sources are properly cited (1C SLOs 2 & 3)

### Design

- Page design is deliberate, using genre conventions and information design principles to lead the reader through the document (1C SLOs 2 & 3)
- Headings, lists, and other graphical elements are appropriate and help the reader access information with efficiency (1C SLOs 2 & 3)
- Graphics are labeled, captioned, and integrated, working in concert with the text to further the writer's points (1C SLOs 2, 3, 4)

## Sample Course Outline

The following course outline represents examples of the types of assignments instructors may assign. Chapter readings align with *Technical Communication Today, 4/E* by Richard Johnson-Sheehan. Pearson: 2012.

**Unit 1: Technical Communication Skills Assessment**

In this unit, students research the technical communication skills needed in their professional fields. Students read, summarize, and synthesize information about communication skills, conduct interviews of professionals in their fields, and review websites of potential employers to analyze the range of communication skills required in their profession and to think critically about audience and purpose. Instructors may choose one of the following options.

- Option A: Students write a report about the technical communication skills they will need as professionals. Students interview professionals in their field and research the websites of potential employers, writing a report that summarizes and synthesizes information about technical communication skills in the student's field of study. Length: 2–3 pages, single spaced.
- Option B: Students create a job portfolio. The purpose of this unit is to get students to think rhetorically, analyzing their audience and purpose and creating documents that meet those needs. Deliverables include the following:
    - Two letters of application (tailored for two different positions)
    - Resume
    - Business card and "branded" letterhead
    - At least two relevant samples of your work (print or electronic)

- Justification memo to instructor, explaining your decisions

Assigned reading for this unit:

- Chapter 1: Communicating in the workplace
- Chapter 2: The technical writing process today
- Chapter 5: Letters, memos, & emails
- Chapter 9: Activity reports (Option A)
- Chapter 15: Starting your career (Option B)
- Chapter 16: Organizing and drafting
- Chapter 18: Designing documents and interfaces

**Unit 2: Descriptions/Definitions**

In Unit 2, students learn methods for describing and defining technical objects, processes, and ideas. In this unit, students identify and analyze a variety of technical descriptions/definitions. Students then create a technical description/definition for a specified audience and purpose. They can revise an existing technical description for a different audience and purpose or describe a new process, product, or idea. In their justification memo, students assess their work in relation to existing information about the product or process and describe how they met the needs of their audience in terms of its content, organization, style, and design.

Assigned chapter readings:

- Chapter 6: Technical descriptions and specifications
- Chapter 18: Designing documents and interfaces
- Chapter 19: Creating and using graphics
- Chapter 9: Using plain and persuasive style

Deliverables:

- Technical description (2-sided information sheet with expanded definition/description)
- Glossary of terms that are unique to your field or that have special meaning in your field (20-terms minimum)
- Justification memo (2-pages, single-spaced)

**Unit 3: Team Project**

In Unit 3, students engage in a team project to learn effective collaboration strategies. In teams, students analyze the needs of a community, propose a project, and then write a set of instructions (option A) or a user guide (option B).

- Option A: Student teams create a step-by-step guide to help other people accomplish a specific task and then post their instructions on the Internet and interact with the people who have read and/or used their instructions. Students may post their instructions to sites such as http://instructables.com or http://howto.wired.com/wiki/Main_Page or http://blog.makezine.com/projects/

- Option B: Students identify a problem in their community that can be resolved with a user guide (for example, a user manual for the ECE campus lab to introduce new UMass Dartmouth engineering students to the equipment). Students use their

technical communication skills to describe and document technical objects, processes, and ideas to meet the needs of specified users.

Assigned chapter readings:

- Chapter 3: Teamwork
- Chapter 13: Planning and persuasion
- Chapter 8: Proposals
- Chapter 12: Strategic planning
- Chapter 21: Presenting your results

Deliverables:

- Proposal (2 pages, single-spaced)
- Instructions or user guide (at least five steps, 10 pictures, and 1,000 words)
- Oral presentation (poster or electronic slide presentation)

Student work is evaluated on content, organization, style, mechanics, and design and their ability to create reader-based documents that include the type and amount of information the reader needs to know to take action and that organize and present the information so the reader can access it efficiently.

**Unit 4: Technical Communication Analysis Report**

In unit 4, students write an analytical report about the team project. In their reports, students discuss how the documentation met the needs of the audience, given the document's context of use and overall purpose. Students also discuss their collaboration strategies.

Assigned chapter readings

- Chapter 10: Analytical reports

Deliverable: 2–3 page, single-spaced report

Student work is evaluated on content, organization, style, mechanics, and design, specifically their use of key concepts and vocabulary in technical communication to describe their documentation. This final report asks students to articulate the ways in which their documentation met the needs of the audience, given the context and purpose. Students bring together all of the concepts learned over the semester, analyzing, persuading, organizing, selecting, and designing information to meet the readers needs and to achieve its purpose.

# Rationale Statement

Technical Communication is designed around outcomes that reflect core competencies in the technical fields, meeting the needs of students in the College of Engineering and the English Department. This class satisfies the University Studies Writing Intensive requirements: 20-plus pages of writing, peer review, drafting, instructor feedback, and "chunked" writing assignments that deepen student learning.

In addition, this course is based on an extensive body of research in rhetoric and technical communication and is designed around core competencies used by professionals in business and industry who write. Our approach extends beyond information transfer models that privilege clarity and correctness as the markers of success to reader-based models that situate communication and its effectiveness within an audience, purpose, and context. Therefore assignments, homework, and in-class exercises focus on how the content, organization, writing style, mechanics, and design of a technical document must be adapted to its audience, purpose, and context. Weekly homework assignments ask students to define and analyze key concepts from the readings, and to apply the following principles:

- **Abstracting and synthesizing information**. In technical communication, writing for an audience means assessing and interpreting the type and amount of information needed in a given situation. In this class, students learn strategies for selecting and synthesizing what readers need to know. To ask whether a piece of communication is clear is to ask whether its shape and form make sense for the given situation. Assignments and activities encourage students to analyze multiple types of documents, their own included, for the ways in which ideas and processes are figured for different audiences.
- **Examining the context.** In this course, students are asked to not only analyze documents and writing practices in relation to their audience and purpose, but to also examine the larger context and the reasons for one response or set of arguments rather than another. In technical communication, clarity is based on understanding how meaning is tied to a larger network of relationships. Class exercises include activities such as reverse engineering documents to understand the ways in which documents and presentations are part of a network of relationships and interests.
- **Experimenting and collaborating.** To learn how to present complex ideas and processes, students need to experiment with different writing and revising strategies. But students tend to resist trial and error—once they've written a draft, they often consider it done save for minor revision. Throughout the term, students try new tools and review strategies to effectively critique each other's work. With these activities, they can see multiple ways of responding to the same assignment, giving them the chance to critically analyze the work of the class and to reflect on their own contribution. As a result, they learn new ways to revise their documents beyond proofreading.

In a class dedicated to and informed by an extensive body of theory and research on communication, our students learn to think critically about communication and to develop their skills as writers—skills they can apply in the classroom and in their professional lives.