



# WISCONSIN

## UNIVERSITY OF WISCONSIN-MADISON

University of Wisconsin - Madison  
College of Engineering [EGR]  
Last Offered: 2015 Spring [1154]  
Direct Link to this Syllabus :

<http://aefis.engr.wisc.edu/index.cfm/page/CourseAdmin.ViewABET?coursecatalogid=86&pdf=True>

1. **E P D 397, Technical Communication**
2. **Credits : 3    Contact Hours : 37.5**
3. **Textbook and Materials :** Radioactive; Lauren Redniss; 1st edition; No Year Given

**a. Other Supplemental Materials :**

Writing models and course resources on course websites

• **Specific Course Information :**

- a. **Brief description of the content of the course (Course Catalog Description) :** Communication for engineering, science, and technology; theory and practice in planning, preparing, and critiquing reports, proposals, instructions, and business correspondence; research strategies, collaborative work; oral presentations.
- b. **Pre-requisites or Co-requisites :** Junior standing
- c. **Required**

• **Specific Goals for the Course :**

**a. Course Outcomes :**

1. Write effective technical and research reports, proposals, procedures, memoranda, process explanations, and/or professional correspondence aimed at an interdisciplinary audience.
2. Prepare and deliver professional presentations and briefings, in a style suitable for both future engineering design courses and a multidisciplinary workplace using visual aids and computer technology.
3. Develop life-long learning skills through identifying, retrieving, and critically analyzing technical information gathered through library research, online databases, interviews with experts, primary research, and other sources.
4. Review and revise written and oral communications; improve structural, stylistic, grammatical, and mechanical writing skills.
5. Develop, integrate, and edit tables, charts, and diagrams to better illustrate technical concepts.
6. Work productively in a team, through sharing ideas, collaborating on decisions, planning projects, and reviewing each other's work as a team.
7. Practice making thoughtful, well-informed career choices through crafting emails, cover letters, resumes, letters of transmittal, self evaluations, or other daily business communications.
8. Research, listen, and intelligently participate in discussions of contemporary engineering issues; understand and identify the economic, environmental, political, and societal impacts of engineering decisions.
9. Understand and identify ethical and professional responsibilities; show knowledge of the role of moral theories and codes of ethics in decision making.

- **ABET Student Learning Outcomes :**

- (d) Ability to function on multidisciplinary teams.
- (f) Understanding of professional and ethical responsibility.
- (g) Ability to communicate effectively.
- (h) The broad education necessary to understand the impact of engineering solutions in a global and societal context.
- (i) Recognition of the need for and an ability to engage in life-long learning.
- (j) Knowledge of contemporary issues.

- **Brief List of Topics to be Covered :**

- Developing communication processes: understanding the situation, purpose, and audience
- Understanding communication attributes: content, structure, format, language, illustrations, appropriateness
- Listening and reading critically; thinking logically; evaluating information sources; using evidence effectively
- Designing and producing effective persuasive, informative, or analytic documents and presentations
- Reviewing, evaluating, and revising technical documents and presentations
- Writing email, letters, and memos; formal technical proposals, technical and research reports; procedures and instructions
- Giving technical presentations using visual aids: illustrations, graphs, tables, charts, diagrams
- Writing and presenting for a variety of audiences, including experts, managers, technicians, and the general public
- Working and writing as a team
- Finding library and internet resources; creative research strategies
- Reviewing grammar, syntax, and editing
- Understanding intellectual property: patents, trademarks, copyright, and plagiarism
- Understanding workplace communication needs: Resumes, job market research, employment correspondence, interviewing, organizational culture, professional ethics, inter-office survival skills, globalization, and international communications