SCOPE OF THE COURSE: The need to communicate about science, environment and technology is great in our fast-paced and highly complex modern society. Yet, for most people, reading about scientific or technological subjects can be a painful experience. This is particularly true for laypersons because they do not understand the technicalities behind scientific discoveries.

However, this is a problem not only for laypersons. Scientists and engineers also are faced with reading tedious technical reports or complicated articles in scientific journals. Such reports and articles are hard to understand and absorb because of the authors' poor writing techniques, poor organization, and excessive use of jargon.

This course is designed to help you learn how to communicate simply and effectively about science, environment, health, medicine and engineering topics and to steer you away from the pitfalls of incomprehensible, dull and disorganized writing. During the first half of the course, you will learn how to use writing techniques developed in journalism to communicate about scientific information, as done by professional science and environmental writers. These individuals, often trained in science, environment, journalism and related fields, translate the complex into the comprehensible for readers of daily newspapers, general magazines and specialized scientific magazines. They write clearly, succinctly and interestingly about science, environment, health, medicine, technology and engineering topics. People like to read what they write. As part of your course, you will learn how to write news and feature articles and conduct interviews.

Increasingly throughout the course, we will apply these techniques to technical writing problems that will help you write effective technical reports, letters and memoranda. You will learn how to translate technical information and to write persuasive reports that managers and other laypersons can understand and read with ease.

In the course of our readings and class discussions, we also will examine some of the problems involved in trying to communicate about science and technology to the public, particularly those relating to the interactions of scientists and journalists.

Whatever your future profession, the skills you will learn in this course--accuracy, organization, clarity, brevity and sophistication of expression--will prove valuable.
ASSIGNMENTS: The only way to learn to write is to practice. This class lives on writing assignments in and out of lab. Assignments will probably include:

- A media analysis paper (4-5 pages)
- Short papers varying from 1.5 to 3 pages (alcoholism, corporate environmental reporting, schistosomiasis, SE Asian environmental journalism)
- A physical description, process description, final paper proposal, recommendation, feasibility report, letter, abstract and executive summary
- A final paper (article) (6-8 pages)
- Whatever else turns me on

The final article will be on an approved (by me) science, environment, health, medicine, technology or engineering topic. I give no exams but you must complete all assignments to pass the course. If you don't complete the assignments, you receive an "incomplete," according to the department’s rule. No exceptions.

PAPER FORMAT: Type double spaced lines with one-inch margins. Resistance is futile. If you do not comply, I will not grade the papers and when you finally turn them in properly formatted, they will be dropped a full grade for being late.

LATE PAPERS: I must grade many papers each week and cannot keep track of miscellaneous papers and subjects. My head only handles one subject at a time. You can help by turning papers in on time. Lab papers are due at the end of lab unless I relent. Bribes are useless.

Outside papers are due in the lecture or lab period or will be considered late and will be downgraded. Papers up to two weeks late lose two full letter grades. Papers later than two weeks may be refused and graded with an F. I give no guarantee as to when I will return late papers. Do not make the mistake of thinking that just because you think you have an "A" in the course that you can skip turning in papers. ALL PAPERS MUST BE TURNED IN! If I return a paper for a "do-over," I often mark a date on it and you must return the corrected paper by the date indicated. Do-overs are due when I tell you.

This course is for three or four credits only. No pass-fail. No audit.

CLASS ATTENDANCE: Required! Come to every class. You cannot simply read the books and pass this course. My lectures differ from the reading assignments. I change the schedule at will. Miss class and you miss information you need to know. Miss writing lab and you miss instructor feedback, fall behind on lab exercises that often cannot be made up, and miss getting your paper back on time. You get one unexcused absence so save it. If you take it in week two, what will you do in week eight? Tell your friends to get married in another semester because you cannot miss class to attend. A Monday class equals one absence; a Thursday lab equals two or three absences. If you have more than one unexcused absence, your final grade will be lowered by one grade (B to B-, C+ to C,
etc.). Lab is 3 hours and counts as two classes although we don't always stay to the end of every lab! Sometimes we stay longer.

Tell me before you plan an excused absence, but remember, I'm the one who decides whether it is a legitimate excused absence. Get your assignment and or handouts from me; I won't chase you. Please bring an appropriate excuse note as soon as possible after an excused absence.

GRADES: Your final grade will be based roughly as follows:
Lab and Short Outside Writing Assignments = 25%
Longer Outside Assignments = 40%
Final Article = 25%
Class participation and attendance = 10%

Your work will be graded on quality, effort and improvement. You don't have to be a "natural" writer to do well in this class. Ninety percent of the students do very well in this course.

INSTRUCTOR: I am an adjunct professor of journalism, and a professional science and environmental writer and editor. I also am a technical communications consultant. I teach Jour 123/311 (Science, Environmental and Technical Writing), Jour 11 (News writing), Jour 114/314 (Technical Communication), Jour 361 (Jour. internship); and in the past have taught Jour 125 (Environment, The Public and the Media); and (at Muhlenberg and Lehigh) Intro to Public Relations.

In addition to teaching, I wrote and edited articles for Lehigh's annual research magazine (now defunct; don't blame me) and wrote the Energy Research Center newsletter (until I ran out of energy). I write and edit science and technical articles and book chapters for local, national and international clients. I give workshops on technical writing.

Before starting work as a full-time writer-editor, I wrote extensively in environmental public information and public relations and I continue to write on a broad range of environmental and technical subjects. My wife and I co-wrote a United Nations handbook for environmental journalists and an article on Asian environmental journalists. Every so often we conduct environmental writing seminars in SE Asia.