

EARTH: THE PHYSICAL ENVIRONMENT

GEO/CIV 225
Fall Term 1996

Course Requirements

Laboratory: Students will complete the three-hour weekly laboratory sessions in the lab. Since the purpose of labs is to introduce you to geology as a science, these labs include field trips, as well as work with minerals and rocks in the lab and in the field, and lab book exercises.

TECHNICAL PAPER: All students will write a technical paper of no more than 7 pages. The subject should be proposed in writing by each student by **November 30**. The proposal should include a short paragraph on what you plan and several references (properly cited as to journal, dates, pages, etc.) which were consulted by you and are relevant to the proposed paper. Note that these should be original publications, not newspaper or news magazine reports (which are themselves summaries of original work).

The technical paper will be due Friday, January xx, 1997. Papers **cannot be accepted after Jan. xx**, the last date for handing in papers in lieu of a final exam, except with a dean's approval. Late papers will be reduced in grade. See special handout. See Bonini if you have questions.

Student Acknowledgment of Original Work: Please note that lab work for 225, the homework assignments, and the technical paper are independent assignments (unless clearly stated by the instructor for a lab or two). Therefore, you must write and sign the required statement:

"This paper represents my own work in accordance with University regulations."

Final Grade: The weight of the various elements in the course are as listed below. Note especially that in order to pass the course, a passing grade must be earned in the laboratory portion.

| | |
|---------------------------|------------|
| Tests: First hour exam | 10% |
| Second hour exam | 10% |
| Third hour exam | 15% |
| Fourth hour exam | 15% |
| Laboratory & Problem Sets | 25% |
| Technical paper | <u>25%</u> |
| | 100% |

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SOME GUIDE LINES FOR THE TECHNICAL PAPER

You are required to write a technical paper of no more than 7 pages (5 well-written pages would be better). As independent work it has the goal of getting you more involved in the subject matter of this course and in an area of your personal interest. We will be available to discuss this with you. This paper may be either:

- (i) a technical paper on a subject related to geology, fairly specifically oriented however, or,
- (ii) a technical paper on a subject related to some practical application of geology such as the siting or impact of a dam or tunnel, for which geologic insight would be a significant input.

On **November 30**, hand in (1) a tentative subject title, (2) a short statement on what it is that you plan to write about, and (3) several properly cited references you've read. **The paper is due on January xx, 1997.** It cannot be accepted after January 22, the last date for a paper in lieu of a final exam, without a dean's approval. There will be a grade reduction for late papers. The paper is to be handed into the departmental office, 113 Guyot Hall, by 4:00 PM on January xx.

For many this will be the first technical paper you have written. It should be written for a technical audience of peers and in a technical style (which differs from themes and expository writing in Lit.). Consult a good professional journal for style, especially the Professional Papers of the U.S. Geological Survey, the Bulletin of the Geological Society of America, or the publications of the ASCE, etc., in the geology or engineering libraries.

This paper is to be independently written and researched. Items to be considered in grading are:

- a) presentation and development of the subject in a well-thought out manner.
- b) overall quality of the paper with respect to the subject.
- c) resolution of ideas and issues.
- d) intellectual tone and understanding of issues involved.
- e) clarity and style of technical writing, including citations.

FORMAT

A formal report should generally contain the following categories (after Mathewson, 1982). Note that these are not necessarily the subject headings that you will use, but are indicative of the content of sections:

- I. A. Title page
 B. Abstract
- II. Body of the Report
 - A. Introduction, including *Purpose and Scope of Study*
 - B. Investigation
 Field, laboratory, analysis techniques, etc.
 - C. Results
 What comes out of this study
 - D. Discussion of results
 - E. Conclusions and, possibly, recommendations
- III. References and Appended material
 - A. References cited
 - B. Field and/or laboratory data, if important.
 - C. Other materials, e.g. photos, exhibits, etc., but these are better included within the text. All photos, maps, etc. should be called Figures and numbered in sequence as called. Tables are called tables and numbered sequentially.

Your paper should be on standard 8 1/2 X 11 inch paper (figures, whether maps, photos, or drawings, must be foldable to that size if larger), and no more than 7 pages of text. Figures and items under I and III above do not count in the allowable 7 pages. Generally, it is better to place smaller figures on the text page (leaving space for them to xerox in later) or on the page following its first call in the text.

TITLE PAGE: A separate sheet with only the following on it: title of paper, student's name, date, the statement shown below, the university name, and student acknowledgment of original work, signed. Here is a sample (condensed):

(top)
The Agony and the Ecstasy: The National Forest
Service and Environmental Geology

James J. Jones '98
January 19, 1996

(lower middle)
This paper is an independent report
prepared for GEO/CIV 225
EARTH: The Physical Environment

Princeton University
Princeton, New Jersey 08544

(bottom)
This paper represents my own work in accordance
with University Regulations

(your signature)