

Charleton A. I.

Survey  
CC Intro to geology

**Geology 110  
Spring 1996**

Instructor: Mary Savina  
Mudd 164  
Office Hours: M 3-4 p.m., W 3:30-4:30 p.m., Th 8:30-9:30

Lab and Class Assistants: Karen Bobbitt, Miles Mercer, Josh Feinberg, Laura Veirs

Geology, broadly defined, is the scientific study of the Earth and planets. In Geology 110 this term, we will focus on several themes related to processes that operate on a global or planetary scale: planetary evolution, climate change, plate tectonics, evolution of life, and the geologic effects of human beings. Most labs will help us build an understanding of the geologic history of southeastern Minnesota, a history that went on for more than one billion years before humans came on the scene. Studying this region should help us come to understand "natural" (i.e. pre-human) processes and rates of processes. In many discussions and reading, we will consider how humans have altered natural systems and changed the rates of some geologic processes. We will also want to consider the future - of the Earth and of humanity. How might natural forces change the present state of the earth? What alternative actions are available to societies concerned about natural hazards or climate change? What can individuals do? These final questions turn out to be ones that will require some knowledge of different cultures and resources, because neither resources, consumption nor environmental problems are equitably distributed across the world or across the U.S.

We will treat these themes and questions in a broad way, concentrating on general understanding rather than on masses of facts. I hope you will develop a sense of the immense scale of geologic processes, both in time and in space. Through lectures and labs, I hope you will come to understand the methods that scientists have used to develop our present understanding of the Earth and planets. You will also gain what I hope will be the rewarding experience of working with other students in the class on several assignments. Throughout the course, but particularly for one project, you will have the opportunity to investigate how the geologic environment affects the lives of people throughout the world. And of course, I hope you will enjoy this course. Please feel free to ask questions and discuss problems with me at any time.

I do not take a traditional approach to introductory geology, and, in fact, I do not assign reading from a traditional text. (See the list of required reading below.) The other section of Geology 110 is using a more traditional text (Skinner and Porter, 1995, **The Blue Planet**: New York, John Wiley, 493 p.) and I encourage you to read sections of it, if you wish.

## COMMUNICATING

Please feel free to call my office (x4404) and leave a message on voice mail if I'm not available. I can also be reached on the VAX (MSAVINA). I hope to set up a VAX conference for the course, to permit us to exchange ideas and questions. The VAX is also a quick way for me to communicate with the class. So please get a VAX account if you don't already have one. I may post especially provocative and interesting journal entries to this VAX conference. I will do this anonymously unless you tell me otherwise.

## CLASS WORK

There are three class periods and one four-hour lab each week. Written assignments include an individual paper on geology and human society, a group poster project on the geology of southeastern Minnesota and a journal that is to be kept throughout the term. Specific assignment sheets will be distributed for the two papers. Most of the field lab write-ups can be used as illustrations and background material for the poster on southeastern Minnesota. There will be many oral presentations, culminating in a formal group presentation during the final part of the term.