
TOPICS: We will follow the order of topics as in the text with special emphasis on the following: matter and minerals; igneous rocks—especially volcanoes; sedimentary and metamorphic rocks; geologic time; ground and surface water; glaciers and global climate changes; earthquakes; the earth’s interior; plate tectonics—creating the seafloor, continents, and mountains; energy—its production, use, and environmental costs; petroleum and other natural resources; and what planetary geology can tell us about the history and perhaps future of our own earth.

GRADING: The grades will be based on the following: two midterms @ about 25% each, a final @ about 35%, and classroom participation, occasional pop quizzes and home projects @ about 10 to 15%. The tests will be a combination of objective and essay questions.

COURSE OBJECTIVES: My objective in this course is to pass on some of the knowledge and appreciation of the way the earth works that I have gained in the almost 40 years since I took this class and decided to become a geology major. I will concentrate on the things that I know most students find exciting and useful in their lives and minimize things that are uncommon or esoteric and that only a specialist really needs to know in detail. I want to show you the way science works, how we proceed from careful observations of rocks, glaciers, crystals, etc. to put together a model of when, where, why, and how all these formed. How are rocks formed, what causes earthquakes, how are mountains built, how do we know how old a rock is, why do volcanoes erupt, etc.?

MY EXPECTATIONS OF YOU: Just as I will put my heart into sharing with you insights gained over many years, much study, and many expeditions to rugged places, I hope that you will read the suggested pages each day, study, and try to get as much from each class session as you can. If you put your heart into this course, I guarantee that both you and I will have fun and that you will look back on this as one of the most enjoyable, useful, and horizon-broadening courses that you have ever taken. The most common remark on the student evaluations from the last time I taught this course was ‘I thought that I was going to hate this class or, at least, find it really boring, but I have really enjoyed it and got a lot out of it!' ‘

If you find that geology or my way of teaching it is not interesting, fun, and profitable to you, I urge you to please drop this class and find another GE class that will satisfy the units you need. Probably the most important thing you can do in the four, five, six (!:) years of college is to find a field/career that you really like—and that involves finding courses that turn you on, not off!!

OFFICE: GMCS. If you cannot make these times, see me and we hopefully can find a good time for both of us.