

GEOL 352 Environmental Geology Seminar

Course number: 10741

Tuesday, 7:00 to 9:30 pm (first meeting, January 22)

Room 316, Delehanty Hall, Trinity Campus

Our world is facing a slew of environmental issues for which the understanding of Earth as a system is critical to crafting meaningful and workable solutions. Global warming, the world-wide modification of our landscapes, and the dispersion of persistent pollutants including organic chemicals and heavy metals are just a few of the environmental issues for which a global perspective and an appreciation of deep time and geologic principals are important.

In this seminar, we will read and discuss works by a variety of authors. Initially, we will read chapters from books including those written by Ruddiman suggesting that humans have changed climate for millennia, by Lovelock implying that we are destroying Gaia's self-regulation that has maintained Earth for eons, and by Weisman who contemplates Earth without people. We'll examine articles by Hooke suggesting that humans are now the premier force shaping Earth's surface and by Broecker and Alley suggesting our actions have the power to change global oceanic circulation. As the semester progresses, those of us in the class will select other related readings for discussion.

Our evenings will be spent not only considering the science but focusing on the moral and ethical dilemmas of being a practicing scientist in the first decade of the 21st century. How do we reconcile doing curiosity-driven science with the need to understand and approach globally threatening issues? How do we all lead our lives as ethical, global, citizen-scientists in the 21st century?

This seminar is appropriate for graduate students in any science or engineering program.

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