

## Incorporating Sustainability in the Course Material

Instructor: Bruce James

Course: ENSP 101 (Environmental Science)

The students will write an analytical paper during the first month of the semester in which they will link the “Big Ideas of sustainability” with one of five case studies from the Bill Moyers film, “Earth on Edge.” The five case studies discussed in the video relate to

1. Sustainable agriculture in the Midwest of the United States
2. Sustainable logging in the Pacific Northwest
3. Grazing issues and cultural change in Mongolia
4. Coastal ecosystems, tourism, and coral reefs in Brazil
5. Sustainable freshwater management for people and ecosystems in South Africa

They will research the issues raised in the film, relate their findings to several of the Big Ideas of Sustainability, and then discuss the scientific, cultural, and future aspects of the case study. By specifically asking them to incorporate a strong sustainability component, they will be able to understand better and more specifically what “sustainability” means in a multi-disciplinary context.

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Instructor: Bruce James

Course: ENSP 400 (Capstone in Environmental Science & Policy)

In the Capstone course, we spend approximately six weeks on environmental ethics with an orientation to sustainability issues related to future generations, wilderness areas, economics, and the ethical traditions of teleology, utilitarianism, deontology, and holism. This is followed by two major, team projects in which the students work in interdisciplinary teams on recommendations for an island nation to make the transition in energy systems to the Post-Petroleum Era and to plan for freshwater distribution in a watershed of the world.

Although the course, as a whole, and these case studies, specifically, are strongly linked to sustainability now, the connection will be strengthened. The teams will be asked to coordinate their research on the island nation or watershed with a number of the Big Ideas of Sustainability, and to show how the “triple bottom line” of ecosystems, economy, and culture can be incorporated. The oral presentations and their written papers will focus on these links.

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Instructor: Bruce James

Course: ENST 440 (Crops , Soils, and Civilization)

I have taught this course since 1989, and so it has naturally built on the ideas of the Brundtland Report, by looking at the rise and fall of ancient civilizations. I use a multi-disciplinary approach that brings concepts together from the agricultural sciences, environmental history, cultural and physical anthropology, ecology, religion, and gender studies. The focus is on how human uses and abuses of soil, water, and land resources led to the increasing or decreasing complexity of the ancient societies of Mesopotamia, the Mediterranean, the Maya, and the Anasazi.

Beginning next spring, the two required papers will focus on linking the Big Ideas of Sustainability to the historical data and evidence for or against the “sustainable” nature of a particular civilization. Then, the students will use the same type of evaluation for a parallel modern culture. In this way, the ideas of sustainability will be evaluated with evidence on how a society succeeded or failed, and over what time period. Such a perspective provides valuable context for predicting how current human actions may affect future human populations living in complex societies, or civilizations, if they exist today.