

## General Education Curriculum Proposal

**Proposal that History 366: Global Environmental History fulfill the following G.E.C. requirement options:**

**4 C: Social Science: Human, Natural, and Economic Resources, and  
6 B: Diversity Experiences: International Issues**

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History 366 is being renamed “Global Environmental History.”<sup>1</sup> This course was developed by the instructor at Tufts University in 1993, with support from the interdisciplinary Environmental Studies Major, and taught six times between the spring of 1994 and the Fall of 2000, under the title of “Time, Nature, and Humanity.” It was approved at Tufts as for the Social Sciences/Humanities Core of the **Environmental Studies major**, the Global Conflict, Cooperation, and Justice cluster and the Economic cluster of the **International Relations major**, and the history elective of the **Archaeology major**.

This course offers a broad inclusive analysis of the human condition in global history very broadly defined. It begins with an overview of the relationship of biological evolution and climate change in geological time, focusing on the environmental conditions of the emergence of the genus homo and then of modern humans. This first section establishes several basic themes that run throughout the course, primarily the relationships among environmental “forcing,” human demography, and human technological culture. Here I introduce the debate between the synthetic approaches of Thomas Malthus and Ester Boserup, one arguing that technology constrains population, and the other that population drives technological change. Having established a model of the bio-cultural “human revolution” of approximately 100-50,000 years ago, we then explore the post-Pleistocene “agricultural revolution,” the emergence of “pristine states,” and the conditions of agricultural societies through 1700, building a global model of agricultural regimes, soils, disease, and the role of politics as forms of nature-mediating “technology.” If the agricultural revolution can be seen as conditionally bio-cultural (in the sense of agricultural species codependency), we treat the post 1700 “industrial revolution” as a “cultural revolution,” sketching the replacement of solar-derived with fossil (paleo-solar) fuel energy systems, the “demographic transition,” and the ecological impact of industrial technology – particularly in terms of the issue of human-induced (“anthropogenic”) climate change. In this final section we discuss the utility of long-

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<sup>1</sup> The title currently listed in the Ohio State course bulletin [2002-03] for History 366 is “Environmental Issues in International and Historical Perspective.” The course was developed at the Mansfield campus by Prof. Dominic, who has retired.

wave [Kodratiev] theories of economic change, their possible demographic and environmental corollaries, and their applicability to the longer sweep of human history.

The development and “maintenance” of this course has involved the synthesis of a number of natural science and social science literatures. In the end, it is a synthesis taught by an historian in the mode of a social scientist; I have never wanted to claim to offer this as a course for natural science credit. While “History” at Ohio State is classified in the “Humanities,” historians seeking to explain the regularities of the human past have long considered themselves social scientists. The social science literatures that I draw upon include anthropology, archaeology, demography, geography, and economics.

The course meets the criteria for the **Social Science/Human, Natural, and Economic Resources option** in a variety of ways.

1. It examines the basic material conditions of human existence, as they have been transformed in key epochs in the past, with particular emphasis on analytic approaches deriving from demography, environmental and development economics, long-wave theories, and evolutionary anthropology.
2. It poses synthetic theories of population, resources and technology, those of Malthus and Boserup, and tests their validity in a series of grand human transformations. As the course comes to a close, students have the opportunity to think about the future, and to ask whether it will be defined by a pessimistic Malthusian outcome, or a more optimistic Boserupian outcome, in which environmental stress leads to human revolution. Thus I try to suggest throughout the course the place of human agency within the bounds and limits imposed by nature and numbers, environment and population.
3. It introduces the students to the “ecological circumscription” model of agricultural origins and pristine state-formation posed first by Robert Carneiro, as derived from Boserup’s thinking, and suggest how it might apply to the bio-cultural “human revolution” and the “pristine” industrial revolution of 1700-1800.
4. It seeks to contextualize and explain human difference within the limits of our common genetic history and the various fortunes imposed by global environments. Thus, while the earth is 4.6 billion years old, humans have a common genetic origin in African at roughly 100-50,000 years ago. Contemporary human differences have been shaped fundamentally over the past 10,000 by the different qualities of continental ecologies, rather than any significant “racial” differences. Here I posit an important differentiation between the grain/cattle/plow complexes developing in Eurasian semi-arid/temperate biomes, vs. the vegacultural/hoe complexes developing in tropical biomes.
5. The course develops a model of human behavior regarding population, resources, and standard of living that allows rigorous comparisons of the human condition through

time and space, and similarly comparable models of human social/ecological transformation.

Regarding this course's appropriateness for the **Diversity Experiences: International Issues option**. Several other features should be stressed.

1. This is fundamentally a "global" course. Though I am an American historian, the course has very little American history content, with the exception of the final analysis of energy and human-induced climate change.
2. The nature of the topic requires consideration of a wide range of global societies. Particular attention is given to African and European Paleolithic societies, emergent Neolithic and urban societies in southwest Asia, tropical societies in the Americas, the impact of disease on ancient and medieval societies in Europe, India, and China, the ecological impact of empire-building in Africa and the Americas, and the ecological condition of "industrial revolution" in Great Britain.
3. Students of widely diverse national origins have taken the course together as Tufts International Relations majors, and I have found our common discussion of the human condition to have been one the most satisfying experiences of my teaching career.