

The Environmental Transformation of the Arctic

Fiat Lux seminar, Winter 2007

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Though signs of global climate change can be seen all over the earth, the Arctic and surrounding land areas are currently experiencing particularly dramatic change, including loss of sea ice and snow cover, disappearance of permafrost, and the melting of the Greenland ice sheet. This course will examine the reasons the Arctic is warming so much more rapidly than the rest of the world and the consequences of Arctic change for the northern regions and the global environment. From the looming extinction of polar bears to the redrawing of international political boundaries as land and ice shift, the Arctic is also a prime example of the adaptation of ecosystems and humans to rapid environmental change. Since climate change comparable to what is already occurring in the Arctic is anticipated for the rest of the planet in the coming century, our focus on the Arctic will give a glimpse into the rest of the earth's future.

MEETING TIME: Thursdays 2-2:50PM. No classes will be held during finals week.

GRADING

This one-unit seminar will be graded P/NP (Pass or Not Pass). To receive a "Pass" grade, you must attend at least 8 out of 10 sessions.

READING

The only assignments outside of class for this course are readings. Below are the week numbers, topics of discussion, and reading for each week.

- 1** Introduction
- 2** Overview of climate change: Kolbert, part I
- 3** Overview of climate change: Kolbert, part II
- 4** Overview of climate change: Kolbert, part III
- 5** Overview of Arctic climate change: "Impacts of a Warming Arctic" Summary
- 6** Popular press on Arctic: New York Times series on Arctic climate change
- 7** Popular press on Arctic: Other articles
- 8** "Impacts of a Warming Arctic" Key Findings (TBA)
- 9** "Impacts of a Warming Arctic" Key Findings (TBA)
- 10** Lessons for other regions: UCS report on California climate change

Here is a reminder of some of the important dates affecting registration in this course: January 19, 2007 is the last day to change Study Lists (add, drop courses) without a fee through URSA, and Friday, February 2 is the last Day to drop a class without a transcript notation.