

# **Geography H410: Global Climate and Environmental Change**

## **Autumn 2009 Syllabus**

*Call # 12234, 5 credits, no prerequisites*

**Class: MW 08:30-10:18 AM 1116 Derby Hall (first floor)**

**Instructor: Dr. Bryan G. Mark ([mark.9@osu.edu](mailto:mark.9@osu.edu))**

1136 Derby Hall, 247-6180 (phone)

Office hours: by appointment; 10:30 AM – 12:00 PM (after class)

**Teaching Assistant: Justine Law ([law.108@osu.edu](mailto:law.108@osu.edu))**

1145 Derby Hall, 419-512-5536 (phone)

Office hours: MT 2:00-3:30PM

**Course Scope & Objectives:** This interactive honors class, taught in a lecture / seminar format, aims to understand and critically evaluate the climatic and environmental changes currently facing our planet. The issue of global warming is central to the class, and forms a context for you to develop and apply critical thinking. This will be fostered in class by careful reading, lectures, discussion, films, exercises, team debates, and presentations. To understand climate change science, we will review fundamental theory, concepts, key evidence, and methodology. We will also address larger political and economic dimensions to the issue, particularly as we evaluate implications for the future and possible solutions. A key objective is to provide you with the knowledge base and skills to critically evaluate information you read or hear from various media sources.

Yet environmental changes imposed by humans on our planet are vast, and both natural and socio-political systems are feeling the stress. To explore these changes and far-reaching effects, we will read a text called “Plan B 3.0: Mobilizing to Save Civilization.” As the title states, the stakes involved in this issue are serious. Although this book presents a singular perspective and “plan” of action, it will give us an instructive framework of regular readings to guide our in-class discussions. It is insufficient on its own, particularly for covering current and ongoing scientific research, so we will make use of additional readings that can be found either in the OSU library eReserves, or via electronic journals accessed from the library webpage. You will gain experience using peer-reviewed literature to research a topic and then summarize your findings both orally and in writing.

**Prerequisites:** This course has no prerequisites except that you must be officially admitted to the University Honors Program.

**GEC Requirements:** This course meets B.A. and B.S. Degree GEC requirements for Natural Science (Physical Science) and Social Sciences (Human, Natural, and Economic Resources).

**Textbooks:**

- 1) (**required**) Brown, Lester R.(2008). *Plan B 3.0 Mobilizing to Save Civilization*. W. W. Norton & Company, NY, 371 pp.
- 2) (**recommended**) Mann, Michael and Krump, Lee (2008). *Dire Predictions: Understanding Global Warming*. DK Publishers. ISBN# 978-0-1360-4435-2

**Note on texts:**

- All of *Plan B 3.0* is available in pdf form, free of charge, at: <http://www.earth-policy.org/Books/PB3/index.htm>.
- The recommended text is good to have, and is a relatively inexpensive paperback, available on Amazon (if not at the OSU bookstores), but not required.
- *Dire Predictions* is a good way to digest the latest IPCC Assessment Report findings (<http://www.ipcc.ch/ipccreports/assessments-reports.htm>).
- Additional readings will come from: Dessler, A. E. and E. A. Parson, *The Science and Politics of Global Climate Change: A Guide to the Debate*. Cambridge Univ. Press, Cambridge, pp. 188, 2006. (out of print)

**Additional Class Materials:**

Selected journal articles and book chapters will be placed on electronic reserve (eReserves) for the class. Throughout the quarter additional reading and reference materials may be required. Additional materials may be placed on reserve throughout the quarter. The list of these will be maintained on the class web page under Reserve Materials. All materials (unless otherwise indicated) are on closed reserve in the Geology Library in Orton Hall [the building with the bell tower on the south side the Oval]. All materials will be filed under Geography H410 unless otherwise indicated.

**Carmen web page:**

You will be alerted in class about updates on our Carmen class web page. On the CarmenThe schedule of activities (lectures, guest speakers, group discussions, field trips, debates, presentations, papers, and films) will be also be posted on the Carmen class web page and will be updated as the class progresses. Lecture Power Point slides will be compiled into pdf and posted. Except for the first week of the class, readings are assigned in the week prior to the presentation of the material. Note that the class schedule may change slightly as the quarter progresses and you will be alerted to these changes. Remember that this is a lecture/ seminar style course and thus you need to **remain flexible** so that we may capitalize on climate- and/or environment-related events and special speakers on campus.

**Grading:**

You will be evaluated on a number of components, all of which depend on active participation. The following distribution of points does not give any single course component predominance, and the instructor reserves the right to alter as needed (recall that seminar flexibility!).

**Group presentations: 22% (two presentations – 11% each)**

**Individual research paper: 20%**

**Exercises: 20% (Exercise 1 – 4%; Exercise 2 – 8%; Exercise 3 – 8%)**

**Debates: 22% (two debates – 11% each)**

**Participation & Attendance: 16%** This final part means attending all classes and field trips, turning in all work on time, participating in the discussions, asking questions, being attentive and engaging with the class. You are allowed one un-excused absence. An excused absence requires written documentation (doctor's excuse) or prior permission from Dr. Mark to be absent. I consider your requests on a case by case basis.

**An Important Note about Plagiarism and Academic Misconduct:** Plagiarism and other forms of cheating will not be tolerated. Please see the Code of Student Conduct ([http://studentaffairs.osu.edu/resource\\_csc.asp](http://studentaffairs.osu.edu/resource_csc.asp)). University rules provide severe penalties for academic misconduct, ranging from course failure to dismissal from the university. University rules are found in the handbook used in all survey courses: "University Survey - A Guidebook and Readings for New Students." Any questions about this policy, or your grade, should be brought directly to the attention of Dr. Mark.

**Students with Disabilities and Special Needs:** Any student needing special accommodation on the basis of any disability must advise the instructor at the beginning of class. All necessary accommodations will be made upon presentation of relevant certification, presented in a timely manner. Students are also responsible for making contact with the Office for Disability Services prior to or at the beginning of the quarter, at 150 Pomerene Hall, 1760 Neil Avenue. They may be reached by telephone at (614) 292-3307, TDD (614) 292-0901, or on the web at <http://www.ods.ohio-state.edu/>.

**Welcome to this Honors Seminar!**

I look forward to working with you as a group and individually as you learn more about your environment and the Earth's climate system - past, present and future.

Sincerely,  
Bryan G. Mark