Climate Affairs: A Multidisciplinary Approach to Understanding Climate Change, Society and Environment Interactions

Climate and climate-related issues such as food security, water resources, energy production and consumption, public health and public safety have during the last decade become increasingly important to governments, corporations, individuals, as well as to the general public.

Historians like to debate the influences that define a century. The 19th century is often considered the British century, whereas the 20th was decidedly American. As we move into the 21st century, some predict that China’s growing power will characterize the coming decades. A possible scenario is one in which the century’s defining influence is not a political superpower but is climate change, as droughts in sub-Saharan Africa, floods in Central America, fires in Australia, infectious diseases outbreaks in the mid-latitudes as well as in the tropics. Climate change, variability and extremes will increasingly command media headlines and our attention.

The interplay between climate, environment, and society is too important to be left to any single academic discipline alone. Coping with climate throughout the 21st century will require the expertise of economists, ecologists, ethicists, geographers, lawyers, political scientists, and policymakers. This course will enhance the value of the traditional disciplines as well as of multidisciplinary education and training.

This course presents the basic knowledge that students and professionals will need as a starting point to address climate change and climate-related impacts on society and the environment. The course readings and related course activities will expose students to society’s increasing vulnerability to a changing climate, will identify and discuss concepts and terms used in climate discussions, and will explain the obvious and not-so-obvious ways that climate variability, change, extremes and seasonality influence human well being around the world.

Although the African continent will receive special attention, no part of the globe will be excluded for study and discussion. Topics include but are not limited to the following: The contributions of environmental reports that preceded the Intergovernmental Panel on Climate Change assessment in 2007, environment and climate related changes attributed to a warmer atmosphere, society’s use of climate information in decision-making, the development of regional and global cooperation and conflict over greenhouse gas emissions. Climate Change & Society does not dwell on global warming, but the societal upheaval implicit in many global-warming scenarios — rising sea levels, a melting Arctic, regional droughts — makes lessons widely applicable.

Completion of the course will provide the students with a skill set to understand and critically evaluate articles and reports on global warming, will provide students with a user-friendly understanding of the science, impacts, policy & law, politics, economics and ethics & equity aspects of a changing climate, and will introduce them to literature on each of these aspects.

Similar to a sister program in Australia, the relevance to societies, people and the environment will be covered under the umbrella topic of climate ethics, including issues such as potential winners and
losers from climate change, intergenerational equity and instruments of hazard avoidance and disaster reduction.

Grading (along the following lines):

35% --- midterm and final (exam or paper, to be decided)
35% --- quizzes (for understanding, not to catch you off-guard)
20% --- mini-project assignments
10% --- participation (in class-related activities)

Attendance:

It should go without saying, attendance in class is favored. Some days you won’t want to be there for some reason. That goes for me too. But, I have to be there, so you should be there too.

Office Hours:

My office is on East Campus at INSTAAR, 1540 30th St (bldg, RL2, room 107. My tel. # there is 303-492-5957. My cell # is 303-579-4034. Office hours are Thursdays 2-3pm in the main International Affairs program office, University Club A5. Meetings in the UMC also can be arranged at any time.

Text Books:


Reading Assignments

1. January 13, 15 --- Introduction to course and students

Glantz (2003), Climate Affairs (cxa), Preface, pp. 1-12
WMO, Climate into the 21st Century (c21c), pp. 3-41
Mann and Kump (m/k), pp. 6-15
Attenwood , “The truth about climate change”
http://www.youtube.com/watch?v=S9ob9WdbXx0 (other pro and con global warming videos are also on youtube, to get a glimpse a variety of views)

Suggestion:
See, “Slumdog Millionaire” (Q&A theme);
“An Inconvenient Truth” (Global Warming overview)  
Background for use throughout course (many articles, videos, sources, groups:  
http://www.proventionconsortium.org/?pageid=95)

2. Jan 20, 22 — What is all this concern about climate?  
The physical stuff (climate variability, climate change, extremes and seasonality)  
c21c, 202-221  
cxa, 13-41, 99-182  
m/k, 18 – 21  
http://dsc.discovery.com/convergence/globalwarming/timeline/timeline.html

3. Jan 27, 29 — climate science (how the system works)  
c21c, 44-101  
m/k 142-153

4. Feb 3, 5 — climate impacts on ecosystems  
m/k, 108 -139  
cxa, 67-98  

BirdLife International, “Human impacts on bird habitats”  

Commoner’s “4 laws of ecology” www.umaine.edu/umext/earthconnections/earth/chapter3.htm

Millennium Ecosystems Assessment, Summary,  

5. Feb 10, 12 — climate impacts on societies  
Droughts, floods, tropical storms and Early Warning Systems (EWSs).  
UN Environment Programme (Kenya), 2008. Eight short impacts videos  

BBC’s “Planet Under Pressure” (video/slide clips for biodiversity, water and energy)  
6. **Feb 17, 19 --- society’s impacts on climate (direct impacts on atmosphere)**

   c21c, 28-29; 92-103

   Matt Damon, video clip on ‘unintended side effects’, “Good Will Hunting”
   [http://www.proventionconsortium.org/?pageid=95](http://www.proventionconsortium.org/?pageid=95)

7. **Feb 24, 26 --- climate politics (national level)**

   [www.publicdiplomacy.org/54.htm](http://www.publicdiplomacy.org/54.htm)

   “Local politics leading national policy”, [www.seattle.gov/Mayor/Climate/](http://www.seattle.gov/Mayor/Climate/)


   Green Futures, “The new politics of climate change” (November 27, 2008)
   [http://www.forumforthefuture.org/greenfutures/articles/soapbox_71](http://www.forumforthefuture.org/greenfutures/articles/soapbox_71)

8. **March 3, 5 --- Climate politics (international)**


   “People Power”, [www.alertnet.org/thefacts/reliefresources/508903.htm](http://www.alertnet.org/thefacts/reliefresources/508903.htm)


9. **March 10, 12 --- climate economics**

   m/k 156-189

   US Congressional Budget Office (CBO),

“Mitigation Saves”, http://ilankelman.org/miscellany/MitigationSaves.rtf


(Speaker from UK?)

10. March 17, 19 --- climate Ethics & Equity

m/k, 190-197
Mark Lynas, “High Tide”, (The book has cases of climate change impacts)

“Commentaries on Tuvalu”, www.islandvulnerability.org/tuvalu.html#commentary

Climate change: Maldives seek new homeland”, http://www.greenleft.org.au/2008/775/39994


Climate Equity Campaign, “Principles for Climate Equity” http://democracyinaction.org/dia/organizationsORG/foe/content.jsp?content_KEY=3615&t=ClimateEquityCampaign.dwt

11. March 20-29

SPRING BREAK

12. March 31 + April 2 ---climate ethics & equity

Student-organized Roundtable


13. April 7, 9 --- climate and law

“Human Rights & A Changing Climate”
also see www.climatelawpolicy.org

Turner, “Justice on Earth”, 13-21, 204-05
FYI, www.climatelaw.org/

Stephen Gardiner paper
montreal protocol
Toronto conference
Law of the sea
Are we creating a law of the atmosphere?

14. April 14, 16 --- climate research methods: how we know what we know

cxa, 214-238
c21c, 155-199
m/k. 64-75


topics: ordinary knowledge, FBA, History, modeling

15. April 21, 23 --- climate and the media

Anthony Downs, “Up and Down with Ecology: The issue attention cycle”
http://www.anthonydowns.com/upanddown.htm


Federman, “What is the meaning of ‘the medium is the message’”? 
http://individual.utoronto.ca/markfederman/article_mediumisthemessage.htm

***Guest Lecturer***

THIS WEEK: Glantz is Organizing Climate and Water Workshop for the UN WMO and UN Water Program, Skopje, MACEDONIA

15. April 28 (Review), 30 (open mic!)

MAY 1 to MAY 6 - FINALS
University of Colorado Policies

Accommodation of Disabilities
If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner so that your needs may be addressed. Disability Services determines accommodations based on documented disabilities. Contact: 303-492-8671, Willard 322, and http://www.Colorado.EDU/disabilityservices.

Religious Observances
Campus policy regarding religious observances requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please contact me early in the semester if you are aware of any conflicts between our course schedule and your needs for religious observances. See full details at http://www.colorado.edu/policies/fac_relig.html.

Classroom Behaviour
Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See polices at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

Discrimination and Harassment
The University of Colorado at Boulder policy on Discrimination and Harassment, the University of Colorado policy on Sexual Harassment and the University of Colorado policy on Amorous Relationships apply to all students, staff and faculty. Any student, staff or faculty member who believes s/he has been the subject of discrimination or harassment based upon race, color, national origin, sex, age, disability, religion, sexual orientation, or veteran status should contact the Office of Discrimination and Harassment (ODH) at 303-492-2127 or the Office of Judicial Affairs at 303-492-5550. Information about the ODH, the above referenced policies and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at http://www.colorado.edu/odh.

Honor Code
All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at http://www.colorado.edu/policies/honor.html and at http://www.colorado.edu/academics/honorcode/.