

GEG 515
Seminar: Human Dimensions of Global Environmental Change
Fall 2005, Wednesdays, 2:30-5:00pm, MB 307

Please check Blackboard regularly for updated syllabi, schedules, assignments and announcements.

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Course overview and objectives:

GEG 515 introduces the student to issues in global environmental change (GEC), focusing on the human dimensions of that change. The International Human Dimensions Programme (IHDP) defines GEC as the “set of biophysical transformations of land, oceans and atmosphere, driven by an interwoven system of human activities and natural processes” and its human dimensions as “the causes and consequences of people's individual and collective actions, including changes that lead to modifications of the earth's physical and biological systems.” This seminar investigates the human causes of global change, while contextualizing such “driving forces” within the larger body of research on the impacts of global change on society and the environment, and efforts to mitigate such changes.

The following thematic and methodological areas are emphasized:

- The socioeconomic, political and “natural” forces that drive GEC
- Land use and cover change (LUCC) as a predominant form of GEC, and tropical forests, grasslands and urbanizing areas as locations of LUCC
- Institutional dimensions of GEC and international environmental regimes
- Remote sensing and land change modeling as methodologies in GEC research

This seminar involves extensive reading and writing, emphasizing scholarly research and critique. *You are strongly encouraged to browse the online content of the IHDP and International Geosphere-Biosphere Programme (IGBP) websites to familiarize yourself with their ongoing projects, Science plans and the general GEC research agenda.*

<http://www.igbp.kva.se/cgi-bin/php/frameset.php> and <http://www.ihdp.org/>

Readings, participation and class presentations

Several readings will be assigned each week, according to the course schedule detailed in the following section. The readings are available either from my office or through the library's online search resources. Please ensure you complete all required readings before each class session. Every week, a group of 2-3 students will be responsible for preparing and presenting on the week's topic and readings in a thoughtful and critical manner. Students are expected to

attend all classes and engage in discussions and respectful critique, identifying strengths and weaknesses of the arguments presented. This graduate-level course at the University of Miami fosters independent thinking and learning, enabling students to contribute to the professions and fields of study that we draw upon. Since the course follows a seminar format, I will guide and keep us on target, but you are responsible for acquiring, digesting and synthesizing the material assigned, and organizing your understanding and insights in a manner presentable to the rest of the class. If you miss more than three classes, you may fail the course. Absences must be cleared with me beforehand and accompanied with appropriate medical/legal documentation.

Course Schedule, Fall 2005

Aug 24: Course introduction and logistics

Aug 31: Overview: global environmental change and human dimensions research

Sep 7: Land Use/Cover Change (LUCC): Proximate Causes

- Overview and Research Agenda
- Tropical Forests, Grasslands, Introduced Species, Urban Expansion

Sep 14: Land Use/Cover Change (LUCC): Empirical Correlations and Driving Forces

- IPAT and empirical correlations
- Driving forces

Sep 21: Food Security, the GM debate and Disease

Sep 28: Nature-Society: Cultural and Political Ecology

- Overview
- Cultural Ecology

Oct 5, 12, 19: TBA

Oct 26: Nature-Society: Cultural and Political Ecology

- Political Ecology: Overview and Origins
- Political Ecology: Structural & Marxist Approaches; Gender, Power, Participation
- Critique, Eclectic Ecologies

Nov 2: Institutional Dimensions and International Environmental Regimes

- Institutional Dimensions of Global Environmental Change
- Common Property

Nov 9: Institutional Dimensions and International Environmental Regimes

- International Environmental Regimes

Nov 16: Spatial methodologies in Land Change Monitoring and Research

- Remote Sensing in Monitoring and Modeling Environmental Change
- Methodological problems and critique

Nov 23: TBA

Nov 30: Human Dimensions Research: Overview, Critique and Directions

Writing assignments

Writing assignments will consist of one final paper chosen by you with my approval, and 6 short papers through the course of the semester. Please substantiate your arguments with evidence and/or logical reasoning. Credit authors and general sources (including websites) whose ideas you draw upon with appropriate citations and references in your written work, in keeping with the standards of good scholarship and academic honesty. The short papers must strictly adhere

to a word limit (no more than 400 words), and your final paper may not exceed 3000 words. All papers should include a word count, be double spaced and typed in size 12 font, with each page numbered. Literature cited, figures, and tables do not count towards the word limit, and should be appended on separate pages. Please follow the *Annals of the AAG* citation format.

Assignments and papers due:

- Sep 7: *Analyze the Human Dimensions agenda and its implications for research.*
- Sep 14: *What is the most significant proximate source of global environmental change?*
- Sep 21: *Highlight the challenges and opportunities in bridging IPAT and theories of change.*
- Oct 26: *What can cultural and political ecology contribute to HDGEC research?*
- Oct 26: Draft of proposal for final paper (400 words also)
- Nov 16: *Describe the role of institutions in causing and confronting environmental change.*
- Nov 23: *Highlight the dominant problems in modeling LUCC.*
- Nov 23: Last day to turn in optional draft of final paper
- Dec 2: Final paper due by 5pm

Evaluation

You will be evaluated as follows:

General participation (attendance, discussions etc.)	15%
Class presentations (clarity, comprehension, critique)	30%
Short papers (6 reqd. papers, lowest grade dropped)	25%
Term paper	30%

There are no extra credit options.

Academic honesty: Students are expected to know and follow all UM policies regarding academic honesty. If you are not familiar with these policies I recommend you review the appropriate sections of your UM student handbook.

Students with disabilities: Students with disabilities should identify themselves to me during the first week of classes. Arrangements for your needs will be made in cooperation with UM's Office of Disability Services (ODS) as necessary to provide you with an effective learning experience in this course. All such arrangements related to your disability will be kept confidential. You may contact ODS at 284-2800, or visit them in the Academic Development Center, Suite N201, University Center between 8:30am and 5:00pm, Monday to Friday.