

DEPARTMENT OF GEOGRAPHY
McGILL UNIVERSITY

GEOG 510: HUMID TROPICAL ENVIRONMENTS

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Course Description

Concern over the fate of tropical forests, climate change, and the welfare of indigenous peoples who depend upon their natural environment for sustenance has stimulated broad interest in humid tropical environments. The purpose of this course is to provide a more in depth understanding of tropical ecosystems, the people of the rain forest, and the development experience in tropical regions. Of particular emphasis here are the biophysical characteristics of the various humid tropical environments (e.g., forest, savanna, aquatic), indigenous peoples and their traditional livelihood practices (e.g., shifting cultivation, agroforestry, forest product extraction), and commercial activities (e.g., colonization, livestock and permanent agriculture, plantations, mineral and energy projects) undertaken to promote economic development in frontier areas. Prospects for more sustainable development and conservation of tropical resources are considered. Regional focus for the course is Amazonia.

Class Format

Seminar: Friday 10:00am - 1:00pm Wednesday, Room 429, Burnside Hall

Evaluation

Grades will be assigned according to:

1. Article summaries	10%
2. Book Review (4-5 pages, due Oct. 2nd)	15%
3. Term Paper Proposal (1 page + biblio, due Oct. 19th)	5%
4. Critique of Scientific Research Article (4 pages, due Nov. 9th)	15%
5. Term Paper (20-25 pages of text, due Dec. 5th):	40%
6. Class Participation	15%

Article summaries: Each week there will be 2-3 core readings. In addition, a complementary reading will be assigned to each student. Prepare a summary of the complementary article assigned for reading each week. Identify the objective, methods, key findings and what the article relates to the core readings for that week. Due on the day of discussion.

Book Review: Choose a scientific travel and exploration account of a renowned person who traveled and worked in the humid tropics, i.e., naturalist or scientific explorer. Your choice of book must be approved by the instructor. In your review, provide first a brief summary followed by a commentary on the book's contents. The review will be presented in class.

Term Paper Proposal: Choose a specific research question on humid tropical environments and submit it to the instructor for comment. Once the question is approved, develop a brief proposal that sets forth why this research question is worth pursuing (both practically and theoretically), and shows how the question will be answered. Include a bibliography of relevant literature on the topic.

Critique of Scientific Research Paper: The instructor will assign a research paper for reading and critiquing. A written critique will be submitted and presented in class.

Term Paper: Prepare a term paper that answers your research question. Include all relevant references and materials. Each student will present his or her term paper to the class at the end of the semester. The paper is due on December 5th.

Class Participation: As a seminar, active participation during class is crucial. Readings will be assigned to the group as a whole but also to individuals who will report back to class. Debates on specific issues will be held. Grading for participation will be based on attendance and performance during presentations, debates and class discussion.

All written work must be submitted on the due date. A penalty of one letter grade per day (including weekends) will be deducted for late work.

Academic Integrity. McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <<http://www.mcgill.ca/integrity>> for more information).

Course Organization

This course is divided into four parts. General readings will be provided on the subject of each part, as well as on specific issues of contemporary importance that will serve to focus class discussion.

Part I: Biophysical Environment of the Humid Tropics. In this part, we examine the nature of the biophysical environment of the humid tropics (e.g., climate, soils, and biota), emphasizing the ecological relationships, biodiversity, and productivity of rain forest, montane, coastal and savanna biomes. What are the principal characteristics of such biomes? Why is the tropical forest so diverse? How stable are tropical environments? How can we explain their fragility?

Part II: Indigenous Peoples, Resource Use and Management. In the second part, we study the people who live in the humid tropics and depend most directly on the natural resource base for subsistence. Who are these indigenous people and how do they use these fragile environments? Have the biophysical characteristics of such environments shaped traditional indigenous lifeways, settlement patterns and material culture? Do indigenous peoples of the tropics actively manage their environment for sustainability? How do such peoples cope with exogenous economic change? What are the primary threats to tropical indigenous peoples?

Part III: Livelihoods, Poverty and Development in the Humid Tropics. Here we examine the development experience and the implications for the tropical rain forest, resource abundance and household welfare. What factors explain poverty among rain forest peoples?

How important is the forest to the rural poor, and who depends most on the forest? How have natural resource booms affected growth and development prospects? What are the land use and land cover implications of resource use in the humid tropics?

Part IV: Tropical Conservation & Sustainable Development. In the final section, we turn to issues of tropical resource conservation and on-going efforts for more sustainable development. What alternatives exist to deforestation? How can tropical agriculture and forest product extraction be made more sustainable? What roles can NGOs play? What promise does extraction and extractive reserves offer? How 'natural' are the biophysical landscapes of the tropics that we seek to preserve? How can environmental conservation be approached through the lens of poverty alleviation?

Class Schedule

September

- 7 Introduction/Lecture
- 14 Lecture [reschedule to Tuesday, Sept. 11th]
- 21 Biological Diversity: Origins & Expressions
- 28 Presentation of Book Review (book review due) [reschedule to October 2nd]

October

- 5 Rain Forest Use and Indigenous/Folk Peoples
- 12 Poverty and Rural Livelihoods
- 19 Tropical Deforestation: Causes & Consequences (paper proposal due)
- 26 Tropical Reforestation and the Forest Transition

November

- 2 Natural Resource Booms, Busts & Conflict
- 9 Alternatives for Sustainable Development (article critique due)
- 16 Environmental Conservation in the Tropics I
- 23 Environmental Conservation in the Tropics II
- 30 Term paper presentations (paper due Dec. 5th)