ENVR 335B: Biodiversity and Conservation in Borneo
Spring 2015

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COURSE DESCRIPTION
The conservation of biodiversity, of the variety of living organisms on Earth, has recently become a major focus of scientific and environmental concern and policy. This course draws on perspectives from conservation biology, politics, anthropology, ethics and, environmental studies to explore the issues and challenges surrounding the “biodiversity crisis” in Malaysian Borneo. Borneo is one of the world’s most spectacularly biodiverse and culturally rich areas, and one where the process of land conversion from forest to human uses is ongoing. We will examine the biology, history, politics, economics and ethics surrounding conservation in Malaysia. Because this is a Connections course, we will explore the interplay between the sciences, social sciences and values to better understand how the natural sciences both inform and are informed by such fields of study as philosophy, sociology, anthropology, political science, history and economics. Students will be asked to analyze questions using multiple disciplinary lenses, engage in cross-disciplinary dialogue, and synthesize and integrate the different perspectives to come to a richer and fuller understanding of the challenges of biodiversity conservation in developing, tropical regions.

The essential learnings or big ideas/questions of this class are:

- What is biodiversity and why is it considered important?
- Developing an appreciation for the vast diversity of life even beyond animals and plants.
- Understanding what constitutes science and how we do science and evaluate evidence.
- Examining the relationship between science and values.
- Examining how values, meanings, expressions and behaviors regarding the environment compare across individuals, cultures, time and/or geographic space?
- How and why are individual and collective decisions affecting the environment made and what are the implications? How do competing values shape these decisions?
- What are the trade-offs associated with different environmental decisions? How does our consideration of these trade-offs change across income levels?
- How do we think about conservation in areas inhabited by indigenous groups who are dependent on the land and the biodiversity it harbors?
- How might one influence individual and/or collective values, decisions and actions affecting the environment?
- How is biodiversity conservation practiced when people are part of the landscape?

COURSE LEARNING OUTCOMES
- demonstrate an understanding of the complexity of the concept of biodiversity and its central role in the discipline of conservation biology
- demonstrate an understanding of how biodiversity has evolved over time, how it varies temporally, spatially and taxonomically, the principal threats to its persistence and its fundamental role in maintenance of ecosystem function
- assess the role of conservation science in informing and influencing public opinion and policy
• demonstrate an understanding of how conflicts in stakeholder values impacts interpretation of scientific information and decision-making.
• conduct a project drawing on your experience in the class, integrating the class materials, the field trips, guest lectures and service work.
• demonstrate an ability to apply critical thinking skills and analyze relevant literature related to biodiversity issues
• communicate effectively, both in oral and written form (class discussions, class presentations, written papers and journal)

TEXTS
Dowie, Mark. Conservation Refugees
Other Readings will be emailed or posted on Moodle
Language Materials will be provided in class

Course Logistics: Summary

Students are expected to attend class sessions every Tuesday evening during the semester, from 5:30pm to approximately 8pm. In Malaysia, students are expected to attend all class sessions, which will include morning meetings, as well as possible afternoon sessions field trips.

Malaysia component: The required abroad portion of the course will take place in Sarawak, Malaysia. Students are expected to buy their own air tickets and may continue traveling after the end of the program, at their own discretion and expense (but note that visas granted on arrival will only be good for 30 days). You must be in Kuching by the afternoon of May 21st (details will be provided in class). The last day of the program will be June 8th. At that time, students will be released, and may return to the U.S. or continue traveling. You are responsible for your travel expenses getting to and from Kuching. Room and board, as well as most travel expenses within the country will be covered by the program, however, you should bring extra money to cover any additional expenses you may incur, such as eating out, buying souvenirs, and any additional traveling you plan to do.

Key Dates:  
May 21: Program begins in Kuching, Malaysia
June 8: Program ends the morning of the 8th in Kuching

Course Expectations

Students will be expected to keep up to date with assigned course readings and lectures, participate in discussions, and work independently outside of class time in pursuing their research projects, both at UPS and abroad.

In Malaysia, students are expected to show high levels of maturity, sound judgment, responsibility, and respect for cultural difference. Failure to do so can result in being sent home at your expense, at any time. Students are expected to avoid staying out late, becoming intoxicated in any way, engaging in inappropriate relationships, violating local cultural and religious norms, and doing anything that will inhibit their performance (or the performance of others) in the class.

Both here and in Borneo, you are, as always, expected to attend class regularly, ask questions when they are unclear about a concept, and do the readings prior to coming to class so that you will be prepared to participate in discussions. Class participation is a significant portion of your grade: don’t be timid. More than one absence during the course, even if excused, can affect your grade.
Plagiarism or cheating in any form will not be tolerated. Everything you write must be your own, entirely original composition, and that includes the weekly writings. Any acts of cheating or plagiarism will be reported to the Academic Dean’s office, and may result in failing the course and further disciplinary action.

Be considerate to other students and the professor. Avoid being loud and bringing food or drinks to class. Do not talk loudly to your neighbor, pass notes, text message, or enter the class late. Turn off your cell phone and any other noise-making devices you may have prior to entering the classroom, and do not fiddle with them during class.

**Understanding**

There are 100 points total for the class thus the number of points for an assignment is the percentage of the total points for the class. You will have many opportunities to develop and demonstrate your understanding of the key ideas, skills and content for this class both individually and as part of a group, including:

- Language and Participation: 15
- Short Essay: 5
- Weekly Writings: 15
- Field Guide Page: 5
- Presentation: 5
- Project Draft: 15
- Project: 25
- Participation: 15

**TOTAL**: 100

**Project Draft**

During the semester, students will develop a research paper. Topics should be amenable to doing some interviews and data gathering while we are in Borneo. These topics must be developed in conjunction with the professor. Once a topic is chosen and approved, you must start developing a research proposal, which will involve extensive library research. You will first hand in an annotated bibliography and then later a full draft of your literature review and proposed interview questions. The paper should be approximately 10-15 pages. During the final class session, you will share your research with the class as a presentation. A prompt for this assignment will be handed out during the semester.

**Completed Research Project Paper**

Your Research Draft will be a full investigation of a topic through academic and popular sources, but it will also propose primary, ethnographic (or other hands-on) research needed to further explore its central questions. This research will be conducted in Sarawak, in consultation with the course professor, and will be reported on and discussed with the class. Upon its completion, you will integrate your original research findings with the library research done for the Draft, to develop a full research essay of 16 - 20 pages. This paper will be due shortly after the end of our time in Borneo. A detailed prompt for this assignment will be handed out during the semester.
Class Participation and Language Study
An important component of this course is participation, attendance, and pre-class preparation. Students are encouraged to engage in classroom discussions whenever possible since such discussion enriches the learning process and will play a critical role in this course. Your participation indicates that you are able and willing to share ideas. Everyone can learn a lot from others in this class, and the best classroom atmosphere is created when people actively engage others and share their time and knowledge. Bear in mind also that quality, not only quantity, counts. Consistent attendance is, of course, expected, although attendance in no way equals participation!

Weekly Language study and homework. We are very fortunate to have a native Malay speaker teaching introductory language this semester. Language lessons are an opportunity for you to get more out of your time in Malaysia, and I encourage you to spend as much time on language as you can. Because this is not a language class, the amount of time and effort you put into learning Malay is up to you, but I will expect that you have at least made an effort to complete all assigned exercises (correctly or not) and to learn assigned vocabulary. Evaluation of language homework and participation will be based on effort, and integrated into the overall participation grade.

Organism Reports
Every student will become an expert on at least one species or organism that we may or may not encounter that is a species or group of conservation concern and/or cultural importance. Students will write up a short account and provide class with a 5 minute overview of their species. More detailed instructions will be posted on Moodle.

Short Essay
There will be one short essay assigned after Spring Break that will ask you to consider the issues raised in Conservation Refugees.

Emergency Procedures
Please review university emergency preparedness and response procedures posted at www.pugetsound.edu/emergency/. There is a link on the university home page. Familiarize yourself with hall exit doors and the designated gathering area for your class and laboratory buildings.

If building evacuation becomes necessary (e.g. earthquake), meet your instructor at the designated gathering area so she/he can account for your presence. Then wait for further instructions. Do not return to the building or classroom until advised by a university emergency response representative.

If confronted by an act of violence, be prepared to make quick decisions to protect your safety. Flee the area by running away from the source of danger if you can safely do so. If this is not possible, shelter in place by securing classroom or lab doors and windows, closing blinds, and turning off room lights. Stay low, away from doors and windows, and as close to the interior hallway walls as possible. Wait for further instructions.

Student Accessibility and Accommodation
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Peggy Perno, Director of the Office of Accessibility and Accommodations, 105 Howarth, (253) 879-3395. She will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. See http://www.pugetsound.edu/academics/academic-resources/disability-services/

Student Bereavement Policy
Upon approval from the Dean of Students' Office, students who experience a death in the family, including parent, grandparent, sibling, or persons living in the same household, are allowed three consecutive weekdays of excused absences, as negotiated with the Dean of Students’. For more information, please see the Academic Handbook. See http://www.pugetsound.edu/student-life/student-handbook/academic-handbook/bereavement-policy/
Tentative Course Schedule

Week 1 - January 20
Introductions to each other and to course
Field Trip to Slater Museum

Week 2 – January 27
What is biodiversity, how do we measure it, extinction and why does it matter?
Kareiva and Marvier, Ch. 1, 2

Week 3 – February 3
Ecosystems of Borneo
Ecosystem Services
Sodhi et al. TREE
Kareiva and Marvier, Ch. 3
Treasure Island at Risk
Synthesis/Critique of Ecosystem Services
HoB – Green Economics

Week 4 – February 10
Terrestrial Impacts – Logging, Fires, Agriculture
HoB Environmental Status 2014
Curran
Koh and Wilcove
Wilcove
Adam Smith Institute

Week 5 – February 17
Policy Response I - Protecting Areas
Kareiva and Marvier, Ch. 5
Chapin
Chan,K. et al.

Week 6 – February 24
Policy Response II – Protecting Species
Flagship Species and Illegal Wildlife Trade
Smits, W. Thinkers of the Jungle excerpts
Nijman, V.
TRAFFIC. 2008.
Brashares et al. 2004
Pearce 2005

Week 7 - March 3
Marine Conservation and Fisheries or Hydropower

Week 8 – March 10
Conservation and People – Indigenous Tribes of Borneo

Conservation Refugees -Start

SPRING BREAK!!!!
Week 9 – March 24  
Project Conferences

Week 10 – March 31  
Conservation and People

Conservation Refugees (Finish)

Week 11 – April 7  
Conservation and People

Brosius
Peluso

Week 12 – April 14  
The Economics and Politics of (Eco)Tourism

Mayer, J. Everyone Wants to Get A Head  
Honey, In Search of the Golden Toad  
Carrier and MacLeod, Bursting the Bubble: The Socio-cultural Context of Ecotourism

Week 13 – April 21  
Where do we go from here?  
Readings TBA

Week 14 – April 28  
Presentations

Week 15 – May 5  
Finish Presentations and Dinner