ASB Puerto Rico: Rainforest Conservation

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GOALS
While the slogan “Save our Rainforests” is one that readily comes to mind when one thinks of global environmental issues, the practices involved in conserving the rainforest often do not as readily spring to mind with the slogan. Though the details of rainforest conservation look different from country to country, the principles and goals are often quite similar. Because of economic shifts over the last century, Puerto Rico is an area that has seen rainforest regeneration and as such is an ideal place to study the principles and practices of conservation. In this course students will learn about the cultural and ecological environments in Puerto Rico in order to prepare them for the one-week trip to Las Casas de la Selva in Patillas, Puerto Rico.

COURSE OBJECTIVES
Objective 1: History and Culture of Puerto Rico
By the end of the course students should have a better understanding of the economic history of Puerto Rico and how that history has shaped the way that the land was used.

Objective 2: Rain Forest Ecology and Conservation
By the end of the course, students should understand a rainforest ecosystem and understand the goals and methods of rainforest conservation.

Objective 3: Local Conservation
By the end of the course students should understand way in which conservation works locally in order to understand how the principles of conservation can be applied to different ecosystems.

EXPECTATIONS
Students are expected to attend class and complete all assigned readings and work before meeting. Attendance at each class is mandatory and active participation is expected. Any use of electronics that detracts from active participation will not be tolerated and can affect the student’s grade. Failure to demonstrate commitment to the seminar may result in a failing grade. If concerns arise feel free to email the student facilitators.

Evaluations will consist of: 45% class participation, 30% discussion questions, 25% final assignment

Participation: Students are expected to attend class prepared to discuss the materials assigned for that day. Engaging with other students’ opinions will be necessary for a successful seminar and as such any absences could count against the participation grade. Additionally students will work
in pairs weeks 5, 6, and 7 to put together a presentation and lead discussion. If an emergency arises or you are too sick to come to class and you cannot come to a meeting, please contact the facilitators and we will figure out how to make up the absence.

Discussion questions: Students will be required to come up with three discussion questions based on the readings. Questions must be emailed to the student facilitators by noon the day of class to be given full credit.

Final Assignment: For our last meeting students will be given the opportunity to focus on an aspect of Puerto Rican culture that they find interesting and share it with the class. This involves finding a piece of art, a news article, or other medium that reveals something about Puerto Rico and can be connected to what we have learned in the course.

SCHEDULE
Week 1: ASB icebreaker games/ introductions to conservation in general

The first half of hour of class will be spent getting to know one another as to foster a sense of community. General topic of environmentalism and why it is important and what can be done to help mitigate environmental damage will be covered. Class heavily focused on discussions from students.

Week 2: Brief History of Puerto Rico

Puerto Rico has a very rich history that this class will briefly cover. Discussions about the environmental history of Puerto Rico will follow, such as what caused the degradation of the rainforests, what has been done to fix these problems, and what can be done in the future to further help solve these problems.

Reading due:
• http://welcome.topuertorico.org/history.shtml
• http://www.britannica.com/EBchecked/topic/482879/Puerto-Rico

Week 3: Rainforest Ecology

This class will look at the big picture of the rainforest and how it all fits together. This class will start looking into why it’s important to maintain species endemic to the area and ideas of species richness. Powerpoint presentation of some of the highlights of the key ecology points from the video with comments/discussion about those topics.

Reading due: Screening of Planet Earth’s Jungle/Rainforest episode-50 minutes (DVD will be available for students who can’t come to the screening times)

Week 4: Plant Identification in Puerto Rico

This class will focus entirely on the specific types of plants that are endemic to the island. This is an important topic, since our service trip will likely be planting endemic species that have
been majorly wiped out in the area. Discussions will follow about why each plant is important to the ecosystem, and the qualities of each plant that aid the ecosystem.

Reading due:
- http://www.dailykos.com/story/2012/05/21/1093110/--Puerto-Rico-s-Native-and-Imported-Flora#
- http://botany.si.edu/pubs/CUSNH/vol51web.pdf

**Week 5: History of Land Use Related to Forest Regrowth**
This class will go over some of the ways that people have used and affected the forest. Coffee growth, cattle grazing, and logging will all be be discussed as well as the current ways that Tropic Ventures is using the land. We will begin to explain secondary forestry and how it relates to the forest as a whole. For weeks 5, 6, and 7 students will be presenting in pairs on a topic of their selection related to land use and conservation. They can use assigned readings or outside research to put together their information.

Reading Due:
- Select pages from the organization’s site: [http://eyeontherainforest.org/](http://eyeontherainforest.org/)

**Week 6/7: Rainforest Conservation**
This class will focus on what ways the rainforest can be conserved and show examples of how and why the rainforest has been wiped out all over the planet. Presentation by one group per week on their selected topic. Discussion will ensue about how these changes to the rainforest occurred and what can be done to protect the rainforest.

Reading due:
• Janzen, D. 1998. Gardenification of wildland nature and the human footprint. *Science* 279:1312-1313. (Students can read either of the Janzen, don’t need to tread both)

  http://link.springer.com/article/10.1023/B:LAND.0000018364.68514.fb#

**Week 8/9: Prairie Conservation/ Prairie Project Trip**

*This class will focus on what conservation looks like locally. What kind of conservation techniques are being used currently and what can be done. Guest lecturer Stephen Packard. After this class, a field trip will be taken to volunteer at a forest preserve in the area to hands on learn about conservation and see what kinds of conservation occur locally.*

**Reading due:**


• Chapters 1, 2 of Chicago Region Biodiversity Council. 1999. *Biodiversity Recovery Plan*. Privately published. Available online:  

**Week 10: Puerto Rican Culture**

*The last topic to be discussed before we leave for Puerto Rico is the culture. Puerto Rico has a rich culture, especially since Puerto Rico is currently a U.S. territory and therefore has different rights that will be discussed. The class will be immersing itself into a different culture and it will be important to learn about the cultural differences before leaving.*

**Reading due:** Homework will be to find a poem, art piece, article on Puerto Rico, etc. that reflects Puerto Rican culture to bring in to the class

*Ex:*  
http://www.pbs.org/wgbh/masterpiece/americancollection/woman/ei_poetry_esteves.html  
http://www.huffingtonpost.com/jaime-fortuno/will-congress-tell-puerto_b_553544.html