



UNIVERSIDAD SAN FRANCISCO DE QUITO
SCHOOL: CIENCIAS BIOLÓGICAS Y AMBIENTALES
COURSE: ANT 0386 – Island Socio Ecosystems
Semester: 201910 First Semester 2019/2020 - NRC: 1020
Schedule: MTWTHF 09:00 - 11:50 (Room 2 - GAIAS)

PROFESSOR INFORMATION:

Name: Diego Quiroga

E-mail:

Office: GSC Third Floor

Office hours: Monday to Friday 3-5

COURSE INFORMATION:

Credits: 3

Prerequisites: There are no prerequisites for this course.

COURSE DESCRIPTION:

Students will learn about the theory applications of different theories that explain the workings of socioecological systems. This course seeks to understand the complex ways in which humans interact with their environment with an emphasis in Islands and coastal environments. We look at this adaptation as a series of feedbacks which generate resilience and change. We concentrate on Islands and marine environments. The course analyzes these interactions from a historical and global perspective as well as looking at specific examples in the Galapagos. We will explore these interactions using ideas that come from human ecology, political ecology and the study of complex systems, resilience and vulnerability. We will use the Galapagos as a particular example of the way in which societies relate to their environment and the different aspects both positive and negative of that adaptation. We will take a historic view of the human interaction with nature with an emphasis in islands and coastal environments and look at the ways in which this interaction has changed through time. Students will have to analyze the complexity of the situation and develop their own models and studies so as to be able to apply the conceptual frameworks studied to specific cases.

The course will have a field component which will expose students to the complexities of management fragile island ecosystems that have humans living surrounded by protected areas. They will also learn about the different perspectives and constructs that diverse groups held of these areas.

No	Learning Objectives	Level
1	To identify some of the main theories that help us understand the adaptation of humans to their natural environment.	Initial
2	Study the way in which humans have adapted to coastal and island environments and the challenges that these adaptations represent.	Medium
3	To understand the Galapagos as a Socio Ecological System by looking at the diverse manners in which humans interact with the natural environment	Advance



GRADING SCALE

Percentage	Grade	Consideration	Points
91-100%	A	Excellent	4
81-90%	B	Good	3
71-80%	C	Intermediate	2
61-70%	D	Deficient	1
-60%	F	Failed	0

Midterm	25%
Field Reports	10%
Research Paper	25%
Final Paper	25%
Class Participation	15%

Descriptions of the evaluation categories:

FOR THE FIELD EXCURSIONS

- A) **EL Progreso.** We will have a field course to El Progreso where we will explore the different issues affecting the agricultural sector. We will talk to farmers and other people living in the area about the way in which they face problems such introduced species, lack of water, poor soils and expensive work force. You will have to write a formal report about this trip.
- B) **Fishing trip.** Students will participate in a fishing trip of Pesca Vivencial with local fishermen. You will have an opportunity to talk with the fishermen and discuss their views about the way in which the authorities are managing the GNP. The fishing trip is an opportunity for the students to learn about the way in which the fishermen have changed their perspectives about conservation and the Galapagos Marine Reserve. You will have to write a formal report about this trip.

Project

. Students have to write a paper describing the results of their project

- 8 to10 pages paper double space.
- The paper has to deal with one of topics sections covered in the class and must address at least one of the theoretical frameworks discussed in class.
- Students must use at least 5 peer reviewed articles.
- The topic of the paper must be approved by the instructor during the first week of class. Students have to meet with the instructor during that week.
- It is recommended, although not required that students do interviews and engage in participant observation.

Midterm: the midterm will be based on the readings and the lectures of the first section of the course. The midterm will consist of word definitions, short essays and long essays.



Final: The final will be based on the second section of the course. It will have a take home portion. Students will have to answer a question that will test their capacity to reflect on their experience on the Galapagos on a systematic way, dealing with some of the mains concerns regarding the conservation of the Islands. The second part of the final is an in class section. The in class section will consist of short essays and word definitions.

Class participation and presentations:

Students must read the article indicated in the syllabus before class and they must actively participate in class discussion. Students have to give a short presentation of their research paper in the last day of the course.

FOR THE ORAL PRESENTATION OF THE INDEPENDENT RESEARCH PROJECTS

The purpose of this oral presentation is to share with your class the findings of your research project. Each group will have 15 min to do it, plus 3 minutes to answer questions. All group members are expected to talk.

Final Exam

The final Exam will be in part a take home exercise. Students will have to answer a question that will test their capacity to reflect on their experience on the Galapagos on a systematic way, dealing with some of the mains concerns regarding the conservation of the Islands. The second part will consiste of some

Class Schedule and Main Bibliography:

Students will get a reading package on the first day of class.

Week 1

	1. Introduction and general concepts.	
	2. History of People and Islands: The history of the colonization of Islands.	Read one: Whittaker, Robert. The Human Impact on Island Ecosystems William F. Keegan and Jared M. Diamond Colonization of Islands by Humans: A Biogeographical Perspective
	3. Human Adaptations to Marine and Island Environments, Ecosystem Services and Human Capital.	Read one: a. Robert Costanza The ecological, economic, and social importance of the oceans b. S. Schneegans, K. Ikhlef and D. Nakashima Islands of the Future. UNESCO
	4. Field trip to El Progreso	
	5. Complexity, resilience and socio-ecological systems.	Read one: a. Carl Folke Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations` b. Gonzalez, Montes, Rodriguez and Tapia. Rethinking the Galapagos Islands as a Complex Social-Ecological System: Implications for conservation and Management.



Week 2

	6. Darwin, Darwinism and the Social Sciences	Read one: . Diego Quiroga and Gonzalo Rivas. Darwinian Emergence, Conservation, and Restoration. Novel Ecosystems and Hybrid Environments. b. David Sloan Wilson, Elinor Ostrom, Michael E. Cox Generalizing the core design principles for the efficacy of groups
	5. Midterm	
	7. Visions of Nature and Animals in the Galapagos	Read one: a. Judith Denkinger, Diego Quiroga, and Juan Carlos Murillo Assessing Human– Wildlife Conflicts and Benefits of Galapagos Sea Lions on San Cristobal Islands in Denkinger and Vinueza The Galapagos Marine Reserve Chapter 13 b. Hennessy Elizabeth. 2013 Producing ‘prehistoric’ life: Conservation breeding and the remaking of wildlife genealogies
	8. The Galapagos Marine Reserve	Read one: a. Mauricio Castrejon, Omar Defeo, Gunther Reck, and Anthony Charlese Fishery Science in Galapagos: From a Resource-Focused to a Social–Ecological Systems Approach . in Denkinger and Vinueza <i>The Galapagos Marine Reserve</i> Chapter 8 b. Anna Schuhbauer. Volker Koch Assessment of recreational fishery in the Galapagos Marine Reserve: Failures and opportunities
	9. Politics and the Environment in Galapagos	Read one: a. Diego Quiroga Crafting nature: the Galapagos and the making and unmaking of a "natural laboratory" b. Diego Quiroga Changing Views of the Galapagos.
	Visit to El Progreso	

Week 3



	10. The human impact on the Marine Resource and the Efforts to preserve the environment in Galapagos	a. Watking and Cruz Galapagos at Risk. Charles Darwin Foundation
	11. Tourism, and Ecotourism in the Galapagos.	Fishing for Solutions: Ecotourism and Conservation in Galapagos National Park W.H. Durham Michele M.



		Hoyman and Jamie R. McCall The Evolution of Ecotourism: The Story of the Galapagos Islands and the Special Law of 1998
	Class Presentations and general discussion	
	Final Exam.	

POLICIES:

All courses are governed by the USFQ Student Manual which can be downloaded at [Manual del Estudiante](#)



a. Fishing for Solutions: Ecotourism and Conservation in Galapagos National Park W.H. Durham Michele M. Hoyman and Jamie R. McCall The Evolution of Ecotourism: The Story of the Galapagos Islands and the Special Law of 1998

12. Presentations

13. Final Exam