

Community-Based Marine Conservation in the Gulf of California
(ENV 181S-02/328-01)

Instructor: Xavier Basurto

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TA: TBD

Syllabus - Spring 2020

Important Dates:

Block C: March 16th – April 8th 2020. Field Trip dates: TBD, 2020.

Airport: Hermosillo, Sonora (HMO).

Deadline final paper or project: April 6th @ 5pm

Students interested in this course must:

1. Read syllabus in its entirety and determine if this is the right course for you.
2. Write and submit a one page essay (single spaced) stating you have read the syllabus and describe a) why you want to take the course, and b) how it would contribute to your interests and/or professional goals. I also want to know what is your level of experience camping in remote isolated places, with little privacy, and primitive facilities, and how comfortable you are in and around boats. Also state what is your level of swimming proficiency and whether you are trained on wilderness first aid. Send your essay to xavier.basurto@duke.edu Essays will be considered confidential and only read by the instructor.

General description:

This is an experiential education course designed to allow students to learn first-hand about “community” and “conservation” and how both come together in the context of the marine environment thus “community-based marine conservation.” To do this, the class creates the conditions so students can interact directly with individuals engaging with community-based marine conservation from a diversity of perspectives. We choose the Gulf of California in Mexico as an illustration because of its prominence as a region of high conservation interest and its history with community-based conservation. Students must read about its culture and natural history before travelling to the region. Once there we visit with fishers, conservation practitioners, tourism operators, marine protected area managers, indigenous people, and others to understand how they view, practice, and govern conservation. We also visit the places that are the object of conservation, so students can experience first hand the rich cultural and natural history and develop their own understandings of community-based marine conservation.

The class will provide students with an appreciation of the role that different cultural perspectives play in the practice of community-based conservation. Students have the opportunity to confront their own worldview with that of the coastal communities we visit, and consider how different viewpoints challenge the practice of community-based conservation. Students have the opportunity to talk to fishermen when they are fishing offshore or bringing in their catch. In the past we have participated as observers in meetings organized by local conservation organizations, visited with local entrepreneurs engaged in sustainable aquaculture, and talked to government officials in charge of managing marine protected areas and fishing activities.

We read key papers in the literature on community-based conservation and discuss them among our group. Readings allow students to relate global and local perspectives, confront their own understandings with those of academics or practitioners, and find out which of the processes that we are witnessing might not be unique to the particular places and people we interact with. Overall, daily experiences provide students with the opportunity to contextualize the readings in ways that create long lasting colorful impressions. Often, our richest discussions take place in the most informal settings, like around the campfire after dinner or while watching shooting stars and satellites on Tiburon Island.

The class is also designed to expose students to the importance of understanding cultural and natural history of place i.e., the Gulf of California. In the past we have been able to visit beautiful remote islands and discuss their high biological importance for the nesting of entire populations of seabirds. Students have witnessed the rich biological productivity created by wind-generated upwellings in the form of aggregations of thousands of dolphins and seabirds chasing many more sardines, or been surrounded by sperm whales coming to the surface after a 45-minute immersion to feed on squid. Students also have the opportunity to snorkel with sea lions in rocky reefs and discover different forms of life confined in tide-pools in rocky shores. These contexts also facilitate the discussion of what gets conserved? Why? Who gets to decide? What is the role of fishers in biological monitoring for conservation of marine protected areas? What is the role of scientific biological knowledge compared to the local traditional knowledge of fishers and indigenous peoples that have lived in this area for many years?

The fine print:

Physical challenge: We spend long hours outdoors, often in sunny, desert (hot during the day, cold at night), dusty, and primitive conditions. Pre-course fitness exercise is recommended for all students planning to attend this course.

Health: One of very two students gets 12-24 hrs. of acute stomach-related illnesses every year. Staying hydrated is of key importance to quickly bouncing back. Come prepared.

Swimming skills and boating: Students need to know how to swim and be comfortable travelling by outboard motor boat for hours at a time to get to remote locations. Boats are very safe for group travel and are handled by very experienced local guides.

Field station life: Shared sleeping accommodations and bathrooms offer little privacy.

Internet: Limited to no internet in more than half of the course. When available, internet is very slow.

Planning to work on other projects during the course? For $\frac{3}{4}$ of the class you will have no time to work on anything else. Finish your MP or independent study presentation before the start of block D.

Primitive Camping: Multi-night backcountry camping. Toilets are not available.

Language: The class will be taught in English, however students are advised to prepare for Spanish. The more Spanish you speak the more you will get out of the class.

Cooking: To build a sense of community among members of the class, and to keep class costs reasonable, students share cooking responsibilities throughout the course. Some of the best discussions are to be had while cooking at the station and in the field!

Adaptability: As any other field course in a developing country it is difficult to predict what we will see and in what order activities will happen until we are down there. Being able to adapt to changing weather conditions is an important strategy for local coastal communities' ability to survive. We will do the same.

Class Requirements:

1. Previous coursework: Political Ecology and/or Conservation and Development are highly recommended and students having taken these courses might be given priority to sign up to the class.
2. Field journal: During the field portion of the course, students are required to keep a class journal of their daily observations and field notes. Keeping your journal will count towards your participation. The instructor and TA will ask you to show your notes at the middle and at the end of the trip.
We expect to see notes about:
 - a) Working your thoughts and ideas about your class write-up.
 - b) General observations about events, interactions, people and the environment we visit. Make these observations as detailed as possible. We want to see names, time of

day, date, location, drawings, anything you need to reference a particular observation as closely as possible. Think you want to be able to recall these moments 10 years from now.

- c) Personal reflexivity. How your own worldview might affect the interpretation of events, situations, or interactions with individuals and communities during the class. E.g., culturally wise, what challenges you the most?
3. Readings: Students are expected to do the readings as determined by our schedule in order to be able to adequately participate in class discussions. There will be a pre-course readings quiz before we leave for Mexico.
4. Active participation: Students are expected to play an active role on building a sense of community among the group. You do that by showing interest in and respect for the local people and places we visit, asking questions, and actively listening and articulating your thoughts through group discussions. Active participation will count towards your participation grade.
5. Interview: Students are expected to carry out at least one interview (see Bernard, 2006; Chapter 9) with a community member and/or conservation practitioner that we visit. The interview will count towards your participation grade.
6. Blogging: We will be blogging our course. Each of you will be responsible of blogging at least once during the trip. Blogging will count towards your participation grade.
7. Class write-up: You are required to write reflection of one of the four main concepts of the class, or one you may propose to the instructor and TA during the course. For the most part the ideas and text will come from your field journal and so this will be an opportunity for you to better reorganize and further reflect on your journal notes. Expected length will be of at least double-spaced six pages. These page parameters do not include references, figures or your own drawings from the field, if you decide to use any, but not a requirement.
8. Course evaluations: (not really a class requirement) We will do them upon our return. We take them very seriously to continuously improve the class. The instructor and TA do not get to see them until after grades have been submitted.

GRADING

Final grade will be based on the pre-course readings quiz (20%), your participation during the course (50%), and your final write-up (30%).

Reading quiz: A high score will demonstrate outstanding understanding of the reading materials and in a far second place, ability to memorize key facts.

Participation: A high grade in participation shows outstanding discipline in keeping up with journal entries throughout the course, not only at the end (15%). Being an active participant as described above (i.e., asking questions, actively listening, participating in

class discussions) (25%), and submitting your blog entries on time and as agreed at the beginning of the course (10%).

Class write-up: A high score on the class write-up will show an outstanding ability to weave in insights from readings, group discussions, group interactions, and field observations. I am looking to hear your own voice and thought. Excellent writing skills, and attention to detail, that reflects good field-note taking skills. When you submit your final reflection write-up please label the file with your name and date.

Feedback at halftime: Look for me half way the course to talk about how you are doing and what are my expectations for the rest of the course.

Instructors' general expectations: I expect students to contribute to building a sense of community among the group, showing a cooperative spirit at all times such as being on time and ready and available to help others, and with class logistics when needed. To show interest in and respect for the local people and places we visit. To put the needs of the group before their own, and generally show character, patience, and prudence, particularly when the challenges of being in the field arise.

Location and facilities:

<http://www.prescott.edu/kino-bay-center/visitor-information/index.php>

Ecological and cultural information about the area:

<http://www.prescott.edu/kino-bay-center/regional-ecology-culture/index.php>

Class participants. The team!!

MAIN ACTIVITIES

- Visit Marine Protected Areas by boat
- Snorkel (1-3 times possible) – bring wetsuit if you have one.
- Primitive Camping on Islands to learn Gulf of California natural history
- Travel to visit fishing communities by car
- Meetings with fishermen, MPA managers, community leaders, NGO personnel, etc.
- Formal classroom time – Discussion of readings and presentations by Xavier Basurto
- Possible 2-4 mile hike on rugged terrain
- Often we will have group meetings to deconstruct what happened during the day.

Order and activities will vary depending on local weather conditions and interesting social events going on at the time: BE FLEXIBLE

READINGS (Some readings to be updated, but this will give you a sense of quantity)

Before traveling to Mexico (included in the quiz)

It is strongly suggested that you read these in this order presented below. You will get out the most this way.

0. Preamble:

Watch the documentary “Made in Mexico/ Hecho en Mexico” 2012 (1hr 40min) Directed by Duncan Bridgeman. Available in Vimeo or Netflix or Youtube??

1. Historical Context:

Jürgen Buchenau. 2008. Mexican Mosaic: A Brief History of Mexico. Wiley. (There are a few copies left at ship store! Try getting them there first please) (Quiz on last two chapters).

2. The Seri:

Basurto, X. and Alejandro Garcia-Lozano. “Commoning and the commons as more-than-resources: A historical perspective on Comcáac or Seri Fishing.” Chapter on the Book Commonisation and Decommonisation. Ed. By Prateep Nayak, forthcoming.

Supplemental:

Felger, R. S., and M. B. Moser. 1985. The People. In: *People of the Desert and Sea. Ethnobotany of the Seri Indians*. Felger, R. S., and M. B. Moser. (Eds). Tucson, AZ: University of Arizona Press. (Ch 1, 2 & 3).

3. Community-based Conservation:

Agrawal, A., & Gibson, C. C. (1999). Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation. *World Development*, 27(4), 629–649. doi:10.1016/S0305-750X(98)00161-2

4. Small-scale fisheries:

Pauly, Daniel. 1997. "Small-Scale Fisheries in the Tropics: Marginality, Marginalization, and Some Implications for Fisheries Management." In *American Fisheries Society Symposium; Global Trends: Fisheries Management*, eds. E. K. Pikitch, D. D. Huppert and M. P. Sissenwine. Vol. 20, American Fisheries Society Symposium; Global Trends: Fisheries Management: American Fisheries Society {a}, Suite 110, 5410 Grosvenor Lane, Bethesda, Maryland 20814-2199, USA. 40-49.

Supplemental:

Salas, S., Chuenpagdee, R., Seijo, J. C., & Charles, A. (2007). Challenges in the assessment and management of small-scale fisheries in Latin America and the Caribbean. *Fisheries Research*, 87(1), 5-16.

5. Local fisheries governance:

Basurto, X, Ana Cinti, Luis Bourillón, Mario Rojo, Jorge Torre, Hudson Weaver. 2012. The Emergence of Access Controls in Small-Scale Fisheries: A Comparative Analysis of Individual Licenses and Common Property-rights in Two Mexican Communities. *Human Ecology*. 40(4): 597-609. DOI 10.1007/s10745-01-9508-1

6. Conservation as a new form of intervention:

Chapin, M. (2004). A Challenge to Conservationists. *World Watch Magazine*, 17(6), 17–31. [\[pdf\]](#)

A Challenge to Conservationists: Phase II (Responses to Chapin). (2005). *World Watch Magazine*, (January/February), 5–20. [\[pdf\]](#)

7. The Biophysical System:

Lluch-Cota, S. E., E. A. Aragón-Noriega, F. Arreguín-Sánchez, D. Aurióles-Gamboa, J. J. Bautista-Romero, R. C. Brusca, R. Cervantes-Duarte, R. Cortés-Altamirano, P. Del-Monte-Luna, A. Esquivel-Herrera, -Cervantes, M. Kahru, M. Lavín, d. Lluch-Belda, D. B Lluch-Cota, J. López-Martinez, S. G. Marinone, M. O. Nevárez-Martinez, S. Ortega-Garcia, E. Palacios-Castro, A. Parés-Sierra, G. Ponce-Diaz, M. Ramírez-Rodriguez, C. A. Salinas-Zavala, R. A. Schwartzlose and A. P. Sierra-Beltrán. 2007. The Gulf of California: Review of Ecosystem Status and Sustainability Challenges. *Progress in Oceanography* 73: 1-26. [\[pdf\]](#)

Readings on how to conduct participants observation, do interviews and take fieldnotes (not included in the quiz but you need this to know how to take fieldnotes):

Russ Bernard 2006. *Research Methods in Anthropology*. 4ed. Altamira Press.

Chapter 13: Participant observation

Chapter 14: Field notes. How to take them, code them, manage them.

Chapter 9: Interviewing