Course Description
This course studies the relationships and challenges that coexist between human manipulation of the natural resource base and its conservation. Students study the roots and causes of deforestation, hunting, mangrove clearing, overfishing, hydroelectric dam building as well as projects, programs, movements, and initiatives aimed at addressing consequent social and environmental conditions. Through lectures from academics, researchers, practitioners, and community leaders, students gain insight into and learn about the challenges local and regional populations face as they seek to conserve their natural resources. Students live with and learn from diverse populations when they engage in rural homestays with subsistence agriculturalists, indigenous families, families living in buffer zones of protected areas, and in urban homes.

Learning Outcomes
By the end of the course, students will have had the opportunity to attain the following:
- An intimate understanding of the principle human and environmental factors that induce resource use, conservation and/or conflict in Panama.
- Greater awareness of the challenges local populations and resource users face when determining and making decisions over resources.
- An understanding of the major challenges to conservation and their intersection with human survival in Panama and in the tropics in general.
- The opportunity to become intimately familiar with current projects that impact the Panamanian natural resource base and their profound effect on local populations.
- The ability to assess how global trends, national policy, and rural-urban dichotomies affect local resource use and decision making.
Course Schedule

*Please be aware that topics and excursions may vary to take advantage of any emerging events, to accommodate changes in our lecturers’ availability, and to respect any changes that would affect student safety. Students will be notified if this occurs.

Dr. Aly Dagang, Campana
Introduction to conservation in the Tropics

Reading:

Dr. Osvaldo Jordan, USMA
Topic: Introduction to conservation in Panama

Dr. Osvaldo Jordan, USMA
Topic: Priorities for land and marine conservation in Panama

El Cope National Park, Barrigón, Coclé
Topic: Community-nature tourism as a vehicle for conservation

Readings:
- Klytchnikova I. and P. Dorosh 2009 How tourism can (and does) benefit the poor and the environment – a case study from Panama. En Breve, 8/09: 146.

Further reading:

Assignment questions:
1. According to Broadbent et al. what is the potential for ecotourism to positively impact forest conservation? What are the potential downsides? What are the problems?
2. Address and discuss Broadbent et al.’s results. What did they find unexpectedly? What do you think of their recommendation? Do you agree/disagree?
3. Compare the benefits of and challenges to sustainable tourism discussed in the Klytchnikova and Dorosh, and the Hemke readings. Are their ideas and projections realistic?
4. Based on your interviews, experiences in Barrigón, and what you have read, what is the potential for institutionalizing ecotourism and sustainable tourism in Panama legally and administratively? What are the potential barriers? Be specific.

Please note: For the assignment, you are to interview two of the following people – Sr. Macedonio, Sr. Ariel hijo, Sr. Ariel padre, Sr. Faustino, Sra. Ana, Sra. Micaela, any of the park guards, your homestay family, or any other community member of Barrigón or La Rica. Please be sure all group members participate in the interviewing process. The group should read all three of the readings above (Kirkby et al. is optional, and can be included in your response if you’d like).

La Amistad International Park buffer zone, Cerro Punta, Chiriquí

Topic: La Amistad UNESCO Biosphere – the intersection of protected areas and human communities

Dr. Aly Dagang

Introduction to the La Amistad UNESCO Biosphere – geography, resources, use, and risks for conservation

Readings:

Please note: Please interview two or more of the following stakeholders: members of GORACE, members of AMIPILA, members of FUNDICCEP (see Miller 100-103), PILA park guards, Sr. Omar in Volcan, Cerro Punta business owners and employees, your homestay families, park guides, agricultural workers, and/or any other Cerro Punta residents.

Assignment questions:
1. What are the historical factors that have influenced resource use patterns in the PILA buffer zone?
2. Discuss the Costa Rican and Panamanian park decrees. What are the perceived strengths and weaknesses?
3. What are the differences in current park management? What are the consequences?
4. Explain the UNESCO biosphere and its seven protected areas. Discuss their connectivity and current threats.

Changuinola, Bocas del Toro and EARTH University, Costa Rica

Topic: The role of food production in tropical conservation

Readings:
Further reading:

Please note: Please interview your homestay family in Costa Rica, and one or more of the following stakeholders: Sr. Orlando Lozada (cacao farmer and president of ASAP), Sra. Zeneida Rodriguez (cacao farmer), banana plantation workers at COOSEMUPAR, and/or students at EARTH University.

Assignment questions:
1. According to the articles, agricultural landscapes have an important role to play in environmental conservation. Discuss the articles’ conclusions and their utility.
2. Reflect on the conclusions of the articles you read. Develop five different policies aimed at boosting conservation in agricultural landscapes that minimally impact food production. Base your responses on the articles’ findings, recent lectures, field experiences, and your interviews. Be sure to discuss the pros and cons of your policy ideas with stakeholders before presenting them in your responses. In your response, include your audience, the mechanism(s), the expected outcomes, and the monitoring and evaluation processes for each policy.

Dr. Aly Dagang
Framing the role of agriculture and food production within tropical conservation

Sieykin, Territorio Naso, Teribe River, Bocas del Toro
Topic: Indigenous peoples and resource use

Readings:

Please note: Please choose one of the above readings for the assignment. Please interview your homestay family and the program site coordinator Sr. Edwin Sanchez.
1. Reflect on your recent learning experiences, the readings, and the discussion at FUNDICCEP, can hydroelectric projects be a part of the landscape in indigenous lands?
2. Dams are regarded as a source of clean energy (in some cases they qualify for carbon credits) and they have been a vehicle for development as well as conservation (PILA park decrees). If you agree, explain and defend your points of view. If you are opposed, discuss your arguments and suggest alternatives.

Isla Porvenir, Comarca Guna Yala

**Topic: Marine conservation and local livelihoods**

**Readings:**

**Assignment questions:**
1. Solis Rivera et al. (2012). Discuss the findings in Guna Yala and Bocas del Toro. What are the common threads at the two sites? Please provide your opinions of the authors’ recommendations. Substantiate and justify your arguments.
2. Hoehn and Thapa (2009). Do their conclusions reflect the data? What is your opinion of their extrapolations? Reflect on the data and offer your own conclusions.
3. Guarderas et al. (2008). What is the current status of marine protection in Latin America and the Caribbean? What are the challenges and why?

**Please note:** Please interview two residents from Porvenir and integrate them into your responses.

Burbayar Private Forest Reserve, Mesoamerican Biological Corridor

**Topic: Payment for environmental services and private conservation incentives**

Please note: Please interview Sr. Iñaki Lopez (owner of Burbayar Reserve) and the Burbayar guide.

Readings
Students are responsible for all of the required readings, and should be prepared to bring them to bear during program activities. The readings aim to help students place the classes in their context, to engage lecturers, to generate questions for class discussions, and to deepen students’ knowledge of particular topics.

Course Requirements

Assignments
- Students will sign up for a group of their choice - according to their thematic interest.
- Each group will read all of the readings listed in the syllabus.
- Each group will develop written responses to the assigned questions and submit these electronically before or on the day of the discussion.
- Each group will make an oral presentation on their topic in addition to providing the written responses to the questions. That is, each group will present once during the semester. Each group will consult three additional resources on their topic and integrate these into their presentation. The group will share these resources electronically with the class prior to the oral presentation. The presentation should include:
  - a critical analysis of the readings and the topic
  - deeper insight into the topic
  - respond to the assigned questions
  - participation from each group member
  - reflect on the groups’ interviews
  - quality work
  - adhere to the presentation guidelines for oral presentations and power points
- At each site, students will interview assigned local stakeholders. The findings of the interviews will be integrated into and cited in the students’ written responses and oral presentations. Each group will determine the content of their interviews. Interviews can serve to fill information gaps, respond to unanswered questions, and provide greater insight into specific topics.

Discussions (dates will be provided)
- Community nature tourism discussion
- La Amistad protected areas and conservation discussion
- Agriculture and conservation discussion
- Indigenous peoples and resource use discussion
- Marine conservation and local livelihoods discussion
- Private reserves for conservation discussion

Evaluation and Grading Criteria

Assessment
Timely completion of all assignments is expected. Late submissions will be penalized.

Responses to assigned questions will be evaluated in the following manner:
Organization (15%)
Analysis (30%)
Depth (30%)
Substantiation of arguments (25%)

Oral presentations will be evaluated according to:
Organization (15%)
Equal participation among group members (15%)
Depth of discussion (30%)
Substantiation of arguments (25%)
Integration of references (10%)
Following instructions (above) (5%)

Participation is crucial to student success in this course and will be gauged based on student contribution to discussions, involvement during excursions, respect for the host culture, punctuality, cooperation, and flexibility. Attendance at all program activities is mandatory.

Final course assessment:
- Oral presentation 20%
- Short essay questions 1 17%
- Short essay questions 2 17%
- Short essay questions 3 17%
- Short essay questions 4 17%
- PES article presentation 12%

Grading Scale
94-100%  A
90-93%  A-
87-89%  B+
84-86%  B
80-83%  B-
77-79%  C+
74-76%  C
70-73%  C-
67-69%  D+
64-66%  D
<64  F

Expectations and Policies
- **Come prepared.** Be on time, have your readings completed and points in mind for discussion or clarification.
- **Complete assignments on schedule.** This will help you keep up with your classwork and ensure you don’t fall behind.
- **Ask questions in class. Engage the lecturer.** The speakers and professors you will meet are leaders in their fields in Panama. Take advantage of the opportunity.
- **Comply with academic integrity policies** (no plagiarism or cheating, nothing unethical).
- Respect differences of opinion (classmates, lecturers, local constituents engaged with on the visits, someone you may sit next to on the bus). You are not expected to agree with everything you hear, but you are expected to listen across difference and consider other perspectives with respect.
- Consider your place and position in all dimensions. Demonstrate culturally appropriate behavior and expression always.

Please refer to the SIT Study Abroad Student Handbook for policies on academic integrity, ethics, warning and probation, diversity and disability, sexual harassment and the academic appeals process.