

# Panama

## Tropical Ecology, Marine Ecosystems, and Biodiversity Conservation

Experience one of the world's most ecologically diverse countries. Explore the critical environmental and social issues affecting its preservation.

## Coursework

### Tropical Ecology, Marine Ecosystems, and Biodiversity Conservation Seminar

ENVI 3000 / 4 credits / 60 class hours

An interdisciplinary course conducted in Spanish and English with required readings, relevant educational excursions, and a strong field component. Through academic field study and experiential learning processes, students learn about the ecology and biology of a range of tropical terrestrial and marine ecosystems. Students also have the opportunity to examine the ecological, international, and sociocultural factors affecting tropical biodiversity conservation in one of the world's most biodiverse countries. Lecturers are drawn from institutions such as the Smithsonian Tropical Research Institute, the University of Panama, and EARTH University in Costa Rica.

Seminar topics typically include:

#### Terrestrial Ecosystems

Community ecology; conservation biology; forest-canopy ecology; mammal ecology; forest dynamics; botany; ecology of insect-plant relationships; bird behavior and ecology.

#### Marine Ecology

Marine ecosystems and biodiversity; ecology and conservation of coral reef communities, mangrove biology, and wetland ecology; sea turtle biology and conservation.

#### Conservation in the Tropics

Challenges to/international protected areas and national parks; poverty and the environment; community forestry; indigenous cultures and natural resource use; industrial and sustainable agriculture; marine resources harvesting and conservation; ecotourism and conservation.

#### Educational Excursions

The program engages in seven weeks of field study, including: courses at the Smithsonian Tropical Research Institute in Bocas del Toro and Barro Colorado Island; a birding ecology course at one of the Audubon Society "world's top 10" birding sites; a wetland ecology course at a site deemed a Wetland of International Importance by the Ramsar Convention on Wetlands; a terrestrial ecology course in a UNESCO Biosphere World Heritage Site; a sustainable agriculture excursion at EARTH University in Costa Rica, the

foremost sustainable agriculture college in the hemisphere; a sea turtle ecology and conservation course; a field stay at a sustainable coffee farm in La Amistad International Park buffer zone; visits to an organic agroforestry chocolate farm and to an industrial banana plantation.

### Intensive Language Study: Spanish

SPAN 1000–4000 / 4 credits / 60 class hours

Emphasis on speaking, reading, and writing skills through classroom and field instruction. Based on in-country evaluation, including oral proficiency testing, students are placed in intensive beginning, intermediate, or advanced classes, with further language practice in homestays and field visits.

### Environmental Field Study Seminar

ENVI 3500 / 4 credits / 60 class hours

A course in field research methods in both the natural and social sciences. This course focuses on learning how to collect, analyze, integrate, and report ecological data to further the understanding of complex issues involving terrestrial and marine ecological conservation. Field studies include designing research projects; writing research proposals; interviewing; surveys; mapping; and maintaining a field journal. Specific ecological field study methods can include micro- and macrohabitat analysis; biotic sampling and analysis; fauna and flora identification; biodiversity monitoring; population analysis; animal behavior; and water analysis. The course provides an introduction to the Independent Study Project, field study ethics, and the World Learning/SIT Human Subjects Review Policy.

### Independent Study Project

ISPR 3000 / 4 credits / 120 class hours

Depending on student interest, research can be conducted in cloud forest highlands, coral reefs, lowland forests, mangroves, rural villages, indigenous communities, or other sites within Panama. Sample research topics: community resource management; regeneration of canopy emergents in primary forest; sustainable fisheries; coral reef organisms; mangrove health; nontimber forest products and local use; sustainable agriculture; agroforestry; ecotourism for resource conservation; ethnobotany.



Credits 16

Program Base Panama City

Language Study Spanish

Homestay Panama City, 4 weeks

Rural Visit/Homestays Protected area community, indigenous community, subsistence agriculture community, rural village in Costa Rica, Pacific coast community

Other Accommodations Hostels, farm houses, cabins, or small hotels

Independent Study Project 4 weeks

Prerequisites Previous college-level coursework and/or other significant preparation in environmental studies, ecology, biology, or related fields, as assessed by SIT.

Headed by SIT Panama alumnus Tim Soo (Emory University), **Few for Change** raises tuition money for children living in one of five autonomous, indigenous territories in the mountains of Panama. **Learn more** at [www.sit.edu/PNE](http://www.sit.edu/PNE).