

# Ecuador

## Comparative Ecology and Conservation

Explore tropical ecosystems and the complexities of human adaptations to different environments in Ecuador's four distinct ecological regions.

## Coursework

### Comparative Ecology and Conservation Seminar

ENVI 3000 / 4 credits / 60 class hours

An interdisciplinary course conducted in Spanish and English with required readings, educational excursions, and independent observations. Utilizing a comparative approach, students examine Ecuador's four distinct ecological regions (Sierra, Coast, Amazon, Galápagos), focusing on biodiversity along with human and conservation issues in the context of local, national, and global development pressures. Course content is delivered during weeklong excursions and day trips as well as in the classroom in Quito.

Seminar topics typically include:

#### *Ecuadorian Life and Culture*

Precolonial and colonial history; contemporary political and economic issues; multinational and local industrial/agricultural trends; indigenous culture and ethnicity; agrarian reform; human rights and gender issues; sustainable development; globalization and international institutions; activism and social movements.

#### *Comparative Ecology*

Ecological zones and natural processes in Ecuador; flora and fauna diversity; evolution and speciation; soils and water; primatology, ornithology, entomology, and botany; ecology of the Andes premontane and montane forests; extreme climate and highland flora and fauna adaptation; páramo ecology and botany; Amazon lowland tropical forest ecology and diversity; herbivory and pollination biology; natural history of the Galápagos; coastal and mangrove ecosystems; marine life of the Galápagos.

#### *Conservation and Policy*

Politics and economics of ecosystem conservation and management; social and environmental impacts of the flower, mining, and petroleum industries; cultural survival of ethnic groups; subsistence farming; consequences of resource exploitation; grassroots conservation efforts; ecotourism and tourism industry issues; appropriate and sustainable agriculture in deli-

**Please note:** This program will have credit distribution and/or other curriculum changes beginning in the fall 2012 semester. Please visit [www.sit.edu/ECE](http://www.sit.edu/ECE) for details.

cate ecosystems; national parks and protected areas management; social and economic issues; environmental threats and potential solutions in different ecological regions in Ecuador.

#### *Educational Excursions*

Three weeklong excursions and several day trips throughout the semester introduce students to Ecuador's unique ecosystems and issues related to their conservation. Students spend time in the Ecuadorian Amazon, on a cloud forest reserve, on the páramo, in the Andean highlands, and on the Galápagos Islands, among other destinations.

#### **Intensive Language Study: Spanish**

SPAN 2000–4000 / 4 credits / 60 class hours

Emphasis on speaking, reading, and writing skills through classroom and field instruction. The focus is on building language skills applicable to the study of ecology and conservation. Based on in-country evaluation, including oral proficiency testing, students are placed in intensive intermediate or advanced classes, with further practice during homestays, lectures, and field visits.

#### **Environmental Field Study Seminar**

ENVI 3500 / 4 credits / 60 class hours

A course in research methods in the social and natural sciences, focusing on how to collect, analyze, integrate, and report social and ecological data to understand and evaluate environmental issues. Reciprocity and environmental sustainability principles and practices are the basis of the curriculum. Introduction to the Independent Study Project (ISP). Students receive training in field study ethics and the World Learning/SIT Human Subjects Review Policy prior to the ISP period. Ecological field study methods are based on hands-on activities, including micro- and macrohabitat analysis; biotic sampling and analysis; fauna and flora identification; biodiversity monitoring, including species richness and biodiversity indices; population analysis; animal behavior; climate analysis;



**Credits** 16

**Duration** Fall/Spring 15 weeks

**Program Base** Quito

**Language Study** Spanish

**Homestay** Quito, 8 weeks

**Rural Visit/Homestays** 3–4 day rural homestays on the Galápagos Island of Isabela and in the Intag Cloud Forest

**Other Accommodations** Hostels, field camps, reserve lodges, and boats

**Independent Study Project** 4 weeks

**Prerequisites** Previous college-level coursework and/or significant preparation in environmental studies, ecology, biology, or related fields, as assessed by SIT. Four recent semesters of college-level Spanish or equivalent and the ability to follow coursework in Spanish, as assessed by SIT.

soil and water analysis; remote sensing and Geographic Information Systems.

#### **Independent Study Project**

ISPR 3000 / 4 credits / 120 class hours

Conducted throughout Ecuador based on requests from local organizations and communities. **Sample topic areas:** flora or fauna census; biodiversity and population assessments; endangered species and conservation efforts; shark fishing; soil or water studies; geology related to ecology and conservation; community conservation projects; local reserves' management needs; environmental movements; traditional agriculture; mining or petroleum industry environmental implications and/or alternatives; impact of tourism on local communities; environmental education.