**Course Goals**

The objective of this field course is to give you hands-on experience in principles and practice of conservation biology. The course will be held in a ‘conservation crisis’ setting—the Atlantic Forest of Brazil. We will explore conservation strategies in this human-dominated biome, where successful strategies can only occur when they address socioeconomic issues.

This global seminar is for upper-division undergraduates and graduate students with an interest in applied conservation biology and human dimensions of environmental change. Method of instruction emphasizes experiential learning through field exercises and research projects. Key to your training will be opportunities to undertake work related to on-going, operational programs of an in-country environmental NGO (non-governmental organization). Such work will be as group workshops and individual research projects.

**Dates:** 9-26 May 2016 (2½ weeks)

**Location:** The course will be hosted by the Instituto de Pesquisas Ecológicas (IPÊ; Institute of Ecological Research), a Brazilian environmental NGO’s. IPÊ has implemented integrated, local community conservation programs for the past 20 years throughout Brazil. We will work out of their headquarters campus in Nazaré Paulista, a rural municipality in São Paulo state. This location provides the socio-environmental context to successfully learn about on-the-ground conservation solutions. Website: [http://www.ipe.org.br/english](http://www.ipe.org.br/english).

Midway through the course, we will travel to the Serra do Mar Biodiversity Corridor which stretches over 1000 km along the South Atlantic coast. Here, we will stay for 4 days within a state park that protects roughly half of the Corridor and which is proactive in reducing conflict between conservation priorities and communities embedded in the park.

**Prerequisite:** 2000- or higher-level course in EBIO, ENVS, GEOG, ANTH, IAFS, or other discipline related to ecology and/or socioeconomic development (confer with instructor).

**Credits:** 3. Course credits go towards fulfilling ENVS’s Applications and selected specialization requirements and EBIO’s 4000-series and Lab/Field course requirements.

**Class size:** 8-15 students

**Program Resources**

Program overview brochure: [http://studyabroad.colorado.edu/?go=BrazilGS](http://studyabroad.colorado.edu/?go=BrazilGS)
Other pre-departure information: [http://studyabroad.colorado.edu/?go=onceaccepted](http://studyabroad.colorado.edu/?go=onceaccepted)
**Key Course Topics –**

1) The Atlantic Forest
   a) Biodiversity hotspots – Background
   b) Atlantic Forest biodiversity – Species and landscapes
   c) Human-dominated landscapes
   d) Brazil’s Forest Code and National Reserve System

2) Conservation biology
   a) Ecological principles – Review
   b) Origins and geography of biodiversity
   c) Biology of species vulnerability
   d) Conservation medicine

3) Threats to biodiversity
   a) Drivers of habitat loss and fragmentation
   b) Climate change
   c) Disruption of global biogeochemical cycles

4) Conservation practical approaches
   a) Linking human community sustainable development and conservation
   b) Restoring connectivity in human-dominated landscapes
   c) Ecosystem services – Watershed integrated assessment
   d) Environmental education
   e) Application of indigenous knowledge
   f) Conflict resolution

**Program Staff –**

Faculty Director: Dr. Timothy Kittel is a research ecologist and climate scientist at CU’s Institute of Arctic and Alpine Research (INSTAAR). He teaches winter and summer field ecology courses at CU’s Mountain Research Station and for the past 15 years has been teaching conservation biology field courses in Brazil and the Caribbean. Dr. Kittel’s teaching approach emphasizes experiential learning. email: kittel@colorado.edu; website: http://culter.colorado.edu/~kittel/.

Co-Instructor: Gabriela Cabral Rezende (MS Wildlife Conservation) is a research scientist at IPÊ. She is Coordinator for IPÊ’s conservation program for the Black Lion Tamarin, a rare and highly endangered primate found only in the Atlantic Forest of São Paulo state. email: gabriela@ipe.org.br.

**Textbooks –** Copies of all readings will be available on-site, no charge.


**Evaluation and Grading –**

Evaluation is based on written assignments, individual research project, participation in field and in-class activities, and a field journal. Grading breakdown is: Assignments 30%, Individual project 40%, Class participation 25%, Journal 5%

Final grades are assigned as follows: A 90-100%, B 80-89%, C 70-79%, D 50-69%, F <50%