Course Description
This course prepares students to learn effectively in a nontraditional, cross-cultural environment and provides experience with specific field study techniques, both ecological and anthropological, facilitating students’ development of an in-depth Independent Study Project. Emphasis is placed on understanding cultural differences, ecosystem appropriate technology, and ethics in the context of fieldwork. The course integrates field exercises, activities, assignments, observations, and interviews, with a focus on recording, interpreting, and analyzing data from primary sources and the natural environment.

Course Objectives
- To improve standard methodological skills, including in-depth interviewing, participant and non-participant observation, data recording techniques, interpersonal communication field techniques, and case studies
- To gain direct experience in field methodologies for general ecology, natural history and experimental design, and data recording, interpretation and analysis
- To encourage students to examine, discuss, and postulate linkages between ecological, cultural, and anthropological methodologies and the presentation of information
- To promote critical analysis of personal and social responsibilities, locally and globally, through the development of advocacy and activism skills and approaches
- To foster insight and utilization of culturally appropriate methodologies and field study ethics, based upon the premise and practice of reciprocity and sustainability
- To promote the application of appropriate methodologies, with an emphasis on the ethics of environmental and human subject research, used to carry out an Independent Study Project employing the unique human and physical resources available in Ecuador

Expected Learning Outcomes
By the end of the course, students should be able to:
• Collect, analyze, integrate, and report social and ecological data
• Discuss the importance and relevance of ethics in research
• Critically evaluate program-related themes
• Develop methodological skills necessary for conducting natural science investigations relevant to sustainable development and conservation biology.

Methodology
This course will enable students to become familiar with basic methodologies needed for effective and ethical study of Ecuadorian society, culture, and environment, especially in preparation for the Independent Study Project (ISP), as well as gain direct experience in field methodologies for general ecology, the scientific method, and experimental design. This course will combine lectures, class discussions, field exercises, educational excursion activities, and independent investigations. In line with the experiential learning model of the SIT Study Abroad Program, the methodology used seeks to balance the presentation of academic works and investigations with the students’ own ideas and experiences. Students will be expected to critically analyze the strengths and weaknesses of scientific, cultural, and anthropological methods across ecological zones, ethnic and gender groups, and socio-economic demographics, among other factors in order to reflect upon the nature of their results and those of experts.

This knowledge will provide students with the background needed to understand techniques used for information gathering, to realize and critically evaluate the contextual basis for scientific results, and to develop their own methods for conducting investigations. Students will:

• Practice and study relevant material on identification, sampling, collection, and ecological analysis techniques through individual reading, field observation, and information from expert guides;
• Test the applicability of techniques across environmental variables and human demographics, thus promoting a comparative outlook to be adapted in home settings.

Course Requirements
Readings
All readings will be distributed to students during Orientation Week
• Environmental Research Methods and Ethics Reading Packet
• Galapagos/ Coast Reading Packet (selected articles)
• Cloud Forest/ Páramo Reading Packet (selected articles)
• Amazon Reading Packet (selected articles)

Course Methods Content
• Quadrat and Transect Analysis of Cloud Forest Species
• Methods for Monitoring and Studying Terrestrial Birds: Mist-netting and Recorder Techniques
• Drawing Nature: Perceptions, Techniques, & Applications in the Field
• Rural Homestays: Cross Cultural Adaptation and Sensitivity Techniques, Cultural Expectations, and Reciprocity
• Sustainable and Appropriate Methods for Agriculture in Delicate Ecosystems
• Reciprocity & Sustainability Ethics and Practices
• Introduction to cross-cultural adaptation and skills building (homestay)
• Botanical Identification Field Skills
• Qualitative Data Gathering: Observation, Participant Observation, Formal and Informal Interviews
• Collecting and Preserving Plants for Botanical Study
• Field Investigation Methods & Appropriate Technology
• Field Methods: Principles, Realities, Limitations, & Tricks of the Trade
• Introduction to Field Study: Guidelines for Field Investigations in Ecuador
• Observation, Documentation, and Analysis: The Field Journal & Work Journal
• Research Design for General Ecology: Research Question, Hypothesis, and Sins to Avoid.
• Soil Profile and Analysis Field Techniques
• Techniques for Pollination Biology
• Insect Collection Methods and Applications
• GPS and Compass use: Techniques and Applications
• Forestry Techniques: Measures for DBH, Height, Coverage, and Herbivory
• Stereotypes and Cross-cultural Relations
• Field-based Education: Learning in a Cross-cultural Environment
• Working with Non-Governmental Organizations and Making Contacts
• Identifying fish families and marine ecosystem techniques
• Case Study of Neotropical Birds: Methods and Data Analysis
• Conservation Biology Methods
• Integration of Field Studies in Rural Communities: Interview Techniques, Participant Observation, and Mapping
• Gender Analysis & Natural Resource Management: Field Methods
• Ethical Considerations in Conducting Field Investigations
• Scientific and Anthropological Report Formats and Approaches
• Realities of Conducting an Independent Study Project

Student Evaluation and Grading Criteria
Assignments
• Field Investigation Project - methods and design
• Natural History Field Notebook
• Oral Presentation of Research Methods article
• Field Application Test
• Work Journal

The course is graded on a strict 100-point scale. A passing grade will be given to students that accumulate more than 70 points. To encourage creativity and individual needs, assignment format and content can be changed if previously discussed with the AD.

Field Investigation Project – oral and written 20%
Natural History Field Notebook 25%
Article Presentation 10%
Field Application Test 20%
Work Journal 20%
Participation 5%

All students must attend all lectures and activities. Any absences need to be confirmed with the Academic Director prior to the event, unless in the case of an emergency. Active participation in lectures on methodologies and field activities is expected. We work under the assumption that
students will place priority on maintaining the highest degree of academic integrity and personal ethics.

**Grading Scales and Criteria**
Grades are given both fairly and rigorously and in accordance with the system below. They will reflect a combination of absolute quality of performance, progress made, the ability to take into account and assimilate the Academic Director's and the teachers' advice in assessing the work done. An “A” letter grade reflects exceptional work, perfect combination of academic competences and personal research and analysis. It shows great ability to integrate field-based investigation and personal reflection into a structured and well argued paper. A “B” letter grade reflects serious and methodical work as well as a substantial effort at analyzing and understanding cross-cultural issues. A “C” letter grade shows the work meets the requirements but needs more in-depth reflection and personal involvement. A “D” letter grade is insufficient and clearly reflects lack of work or serious deficiencies.

The grading scale for all classes is as follows:

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<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>94-100%</td>
<td>A</td>
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<tr>
<td>90-93%</td>
<td>A-</td>
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<td>87-89%</td>
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<td>77-79%</td>
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<td>74-76%</td>
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<td>70-73%</td>
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<td>67-69%</td>
<td>D+</td>
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<tr>
<td>64-66%</td>
<td>D</td>
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<td>below 64</td>
<td>F</td>
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**Class Meetings**
Experimento de Convivencia Internacional
Hernando de la Cruz N31-37 y Mariana de Jesús
Ph: 222-9596
10:30 am-1pm daily, unless otherwise noted
Excursions will be day-long activities.

**Office Hours**
AD Xavier Silva
SIT Office (1st Floor)
10:00-10:30 daily and upon request

**Further Information**

- More detailed assignment descriptions and criteria will be distributed during orientation week.
- Lectures and educational excursion schedules will detail specific required readings, field activities and exercise, and educational objectives.
Please see the SIT Study Abroad Student Handbook for policies on academic integrity, ethics, academic warning and probation, diversity and disability, sexual harassment, and the academic appeals process.

Disability Services: Students with disabilities are encouraged to contact Disability Services at disabilityservices@sit.edu for information and support in facilitating an accessible educational experience. Additional information regarding SIT Disability Services, including a link to the online request form, can be found on the Disability Services website at http://studyabroad.sit.edu/disabilityservices.

Please Note: Course contents, lecturers, and readings may be modified as needed. Should any change of class topics or lecturers may be necessary, student will be promptly notified.