

Immersion in Ecuadorian Culture: Following in Darwin's Footsteps

This innovative course guides students along Charles Darwin's voyage of discovery on the HMS Beagle and his development of the theory of the origin of species via natural selection by combining a 5-day excursion to the Galapagos Islands with cultural immersion and prehistoric site visits in mainland Ecuador. Darwin went inland in Chile and Peru and visited various environments from the coast to the slopes of the Andes and described fossil localities and archaeological sites. We will use the visits and excursions in Ecuador as representatives for what Darwin saw in Chile and Peru. This course will integrate both social and biological science and expose participants to the idea that scientists are always living and working within specific societal contexts. The various tropical environments the program will visit and discussions with local scientific experts will expose students to ongoing issues in climate change, environmental degradation, and conservation efforts. This course is part of a Study Abroad program and does not require any prerequisites.

Instructor:

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Note: for Contact Hour calculation 'Lecture' is given a 1/1 ratio, while 'Excursion' is considered as "Experiential Learning" requiring some outside preparation and given a 2/1 ratio.

Required Texts:

- Torre, C. & Striffler, S. *The Ecuador Reader: History, Culture, Politics*. Duke University Press, 2009. Spanning the years before the arrival of the Spanish in the early 1500s to the present, this rich anthology addresses colonialism, independence, the nation's integration into the world economy, and its tumultuous twentieth century. 48 sections & more than 3-dozen images. (Paperback, 480 p., New from \$20.12 on Amazon)
- *Insight Guide Ecuador and Galápagos*. Insight Guides, 2016. A profusely illustrated overview of Ecuador and Galápagos, featuring essays on natural history, politics and culture, and hundreds of photos and maps. (Paperback, 352 p., New from \$14.62 on Amazon, comes with Walking Eye app).
- Kricher, J.C. *Galápagos, A Natural History*. Princeton University Press, 2006. A lively natural history of the islands and their role in evolutionary thought by a favorite author. Kricher includes an island-by-island synopsis and a survey of recent conservation efforts. (Paperback, 256 p., New from \$11.70 on Amazon)
- Larson, E.J.J. *Evolution's Workshop*. Basic Books, 2002. Tells the story of Darwin's explorations on the Galápagos; the fabulous Gilded Age expeditions; the struggle for control of research there; the current efforts by "creation scientists" to use the Galápagos to undercut evolutionary teaching; and many other compelling stories. (Paperback, 352 p., New from \$14.95 on Amazon)

COURSE LEARNING OBJECTIVES

The objectives of this course are to teach students to:

- **summarize and describe** simple quantitative and qualitative observations and react to such observations critically
- **develop** skills needed to be a critical consumer and ultimately user of the primary scientific literature (e.g., access and use Web of Science, critical consumption of online information).
- **analyze and synthesize** information and ideas from multiple sources to generate new insights.
- **discuss** critical events and ongoing issues in global affairs with reference to gathered contextual information.
- **demonstrate** familiarity with Charles Darwin's voyage of discovery on the HMS Beagle and his development of the theory of the origin of species via natural selection.
- **discuss** critical events and ongoing issues in Ecuador history and culture.

This course satisfies the following requirements of the **DEC**:

Category J- The World Beyond European Traditions

This course satisfies the following requirements of the **SBC**:

Understand relationships between Science or Technology and the Arts, Humanities or Social Sciences (STAS):

Learning Outcomes for STAS

1. Apply concepts and tools drawn from any field of study in order to understand the links between science or technology and the arts, humanities or social sciences.
2. Synthesize quantitative and/or technical information and qualitative information to make informed judgments about the reciprocal relationship between science or technology and the arts, humanities or social sciences.

-This course takes place in various locations and contexts in Ecuador, including the Galapagos Islands. Via lectures on biology, history, and culture, followed up by visits to local sites, students will learn to examine various topics from evolutionary biology, biological and cultural anthropology, archaeology, climatology, etc, and relate them to both the past and future. Students will learn to develop their analytical and comparative skills on a number of themes and topics, with the goal of students becoming critical information consumers and familiar with the application of these various subfields of academia in the wider world.

PREREQUISITES

This course is part of a study abroad program and there are no prerequisites. Lectures will cover the basic concepts that are required to understand the material.

COURSE REQUIREMENTS

- Pre-departure discussion session on assigned reading (10%) – students will read the text and participate in an online discussion about main themes via Blackboard
- Participation (30%) – students are expected to actively participate in the field experiences and in-class discussion.
- Immersion Reflections (40%) – students will keep notes on their cross-cultural experiences and observations/interactions, both scheduled (village visits, watching film, etc) and impromptu, and their thoughts thereupon, throughout the week in a loose journal format. These will be uploaded to Blackboard before each Friday for review. Each entry must be no less than 500 words in length.

- Quizzes (20%) – students will have 1 quiz per week to substantiate progress in learning about the cultures and environments of Ecuador and the Galapagos, and on what Darwin saw and thought.

COURSE POLICES

Student Accessibility Support Center (SASC) Statement:

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact the Student Accessibility Support Center (SASC), ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and the staff at the Student Accessibility Support Center (SASC). For procedures and information see: <http://www.stonybrook.edu/ehs/fire/disabilities>

Academic Integrity Statement:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at http://www.stonybrook.edu/commcms/academic_integrity/index.html

Critical Incident Management Statement:

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

Assessment of Student Performance:

- Homework assignments, examinations, and term papers should be evaluated and returned promptly. Written comments, explaining the instructor's criteria for evaluation and giving suggestions for improvement, should be provided.
- Instructors are responsible for providing students with appropriate and timely notification about their academic performance in a course. An examination or other assessment measure should be administered, graded, and returned to students before the end of the ninth week of classes.
- Examinations and term papers submitted at the end of the term should be graded and either returned to students or retained for one semester.
- Any change to the course grading policy during the semester must be announced and made available to all students enrolled in the course. Assigning additional work to individual students who wish to improve their grades, during or after the semester, is prohibited.
- Instructors must observe the Final Examination Schedule available at <http://www.stonybrook.edu/registrar>. Instructors of courses taught on the semester schedule may only give a unit exam in class during the last week of the semester if a final examination is also given during the Final Examination Period.
- Instructors must observe state laws, federal laws, and University policies regarding accommodations as noted in the Bulletin (e.g., student participation in University-sponsored

activities or equivalent opportunity/religious absences). Accommodations such as make-up exams, assignments, or other coursework that fall outside of the purview of these laws and policies are at the discretion of the instructor.

Professional Conduct and Interaction with Students:

- Instructors must report all suspected occurrences of academic dishonesty to the Academic Judiciary Committee (for classes in the College of Arts and Sciences, College of Business, School of Marine and Atmospheric Sciences, and School of Journalism) or the Committee on Academic Standing and Appeals (for classes in the College of Engineering and Applied Sciences).
- Instructors should always be aware that in teaching and advising they represent the University. They are bound by the University's sexual harassment policies. Instructors are also bound by University policies that prohibit any consensual relationships with students that might compromise the objectivity and integrity of the teacher-student relationship. Examples include romantic, sexual, or financial relationships.
- Instructors should strive to maintain the privacy and confidentiality of students' examinations, homework, and final grades.
- In dealing with students, instructors should be polite, helpful, and fair. They should take into account the wide range of cultural factors and physical challenges that can affect learning, and should attempt to help students overcome any disadvantages.

Syllabus

Before the Semester Begins -

Read selections from *The Ecuador Reader* and participate in online discussion in Blackboard.

Week 1 - Day 1- Arrival in Quito

Week 1 - Day 2- La Diablada de Pillaro

From January 1st to 6th, Pillaro (a small city of the Tungurahua Province) revive the magic tradition of "la diablada", this event gathers people from all around the world and Ecuador. This event was born as an act of rebellion of the natives against the Spanish people. Disguising themselves as devils, they repudiated priests' preachings, and the physical, psychological and economic abuses they received from conquerors. Nowadays, people dance and the streets are full of music. People dress as devils wearing hand-made costumes made especially for this event.

Week 1 - Day 3- Mitad del Mundo & Intiñam

Morning: Mitad del Mundo- At the center of the Mitad del Mundo stands the centerpiece of the park: a 30m-high, stone trapezoidal monument topped by a brass globe containing a viewing platform and a museum, which provides a good introduction to the indigenous groups of Ecuador through dioramas, clothing displays and photographs. On the lower floors are new interactive exhibits examining the science behind the myths of the Equator.

Afternoon: Intiñam- Located close to the Equator Monument, this onsite museum features interactive exhibits on how the Incas determined the middle of the earth. Here we will also see how the Incas lived by exhibits of the native tribes of Ecuador, including the Shuar and the Waoranis. There are some replicas of typical houses of some of the tribes, and there is also a

burial mound where the guide will explain some of the rituals that come with death for the Tsachilá people.

Week 1 - Day 4- Cotopaxi

All day: We will go to the Cotopaxi National Park. The guide will give you some information about the Cotopaxi volcano, the animals and flora around the place. We will walk to Jose Rivas shelter at 15781 feet above sea level. Then we will go to Limpiopungo lake by bike.

Week 1 - Day 5- UIDE & La Florida

Morning: lecture at UIDE about early Ecuadorian history.

Afternoon: This museum is a cemetery necropolis of ancient people of Quito. It is built in the same spot where the rests were found. La Florida shows the funerary architecture of tombs in the form of wells erected 200 A.D and 680 A.D.

Week 1 - Day 6- Mindo Valley

Morning: Site Museum Tulipe- This museum is a subtropical sanctuary where the ancient residents, the “Yumbos” honored their gods with purification rituals. Through seven structures petroglyphs were found.

Mindo- Mindo is a village in the Andes Mountains. It's known for the many bird species, butterflies and orchids found in the surrounding cloud forest, part of the Mindo- Nambillo Reserve. A tarabita (cable car) runs over the Nambillo River to a mountaintop, where trails lead to several waterfalls, including Cascada Nambillo. Zip lines run through the forest canopy.

Afternoon: Mariposario- This is a unique interactive garden, where we will learn about the 4 life stages of a butterfly. Here we can feed and admire more than 1200 butterflies of 25 different species.

Week 1 - Day 7- Flying to Galapagos / Isla Santa Cruz

Afternoon: Charles Darwin Research Station- The objectives of the Charles Darwin Foundation is to conduct scientific research and environmental education for conservation. The Station has a team of over one hundred scientists, educators, volunteers, research students, and support staff from all over the world.

Week 2 - Day 8- Santa Cruz / Isla Isabela

Las Grietas is a stretch of inland crystal clear emerald green water at the bottom of an earth fracture, it's found on Santa Cruz Island. It's over 10 meters deep, 7 meters wide and 100 meters long. It's fed underground by a river from one end and ocean water from the other. The water is cool and brackish. There are cliffs of dark volcanic rock rising up on each side, which make a dramatic contrast against the emerald green water.

Morning: we will visit German beach, where we can swim, then we will visit the salt mines, and to complete the morning adventure you can swim in the amazing Grietas.

Transfer to Isabela Island (boat 2 ½ hrs. approx.) – Check in Hotel.

Afternoon: we will visit the beautiful flamingo lagoon, where we can see the representative bird of the Island.

Week 2 - Day 9- Isla Isabela

All Day: Visit Tintoreras, a tour to watch sharks, penguins, and sea lions. In the afternoon we will hike to Galapaguera and the wetlands to see different representative species of the island.

Week 2 - Day 10- Santa Cruz

All Day: Transfer to Santa Cruz Island by fast boat. Check in Hotel. In the afternoon, we will visit the Highlands: Private ranch, where you can see "giant tortoises" in a natural setting, and walk through an incredible lava tunnel. Finally, we will visit twin craters, fantastic volcanic formations with endemic vegetation of the island. Return to the Hotel.

Week 2 - Day 11- Santa Cruz

All Day: visit the beautiful Tortuga Bay Beach, unique in the world for its landscape, we can watch marine iguanas with other animal species, return to the hotel. Free time.

Week 2 - Day 12-

Flight Back to Quito

Week 2 - Day 13-

Morning: lecture at UIDE about recent Ecuadorian history.

Afternoon: Cultural exchange time at UIDE with local students

Week 2 - Day 14-

Morning: Panecillo- This is a natural elevation at 9843 ft above sea level. Natives called it "shungoloma" meaning "heart-hill". Here natives had a temple to adore the sun but it was destroyed while Rumiñahui fought the Spanish troops. From this temple, we can see today only "La Olla" which was used as an irrigation system. The virgin of Quito statue atop the hill was created in 1975 and is the biggest aluminum figure around the world.

City Museum- (Museo de la Ciudad) was founded in 1998 and occupies the buildings of what was once the San Juan de Dios Hospital. The buildings were designated as a UNESCO Cultural World Heritage Site. The museum chronicles the history of Quito, along with 400 years of the history of the hospital. One of the permanent exhibitions offers a journey through the customs, people and traditions of Quito from the 16th to 19th centuries.

Afternoon: La Compañía- This church has been catalogued by UNESCO among the hundred most important World Heritage Site Monuments in the world.

Basilica del Voto Nacional- The basilica is the most important work of neo-Gothic Ecuadorian architecture and is one of the most representative of the Americas. It is the largest neo-Gothic basilica in the New World. The building is noted for its grotesques in the form of native Ecuadorian animals such as armadillos, iguana, and Galapagos tortoises.

Week 3 - Day 15-

Flying Home