



# Ecuador

Short-term Faculty-led Study Away Program • Fall Intersession • August 5-12, 2012

Program Name:

## **Making the Connection: Environmental Comparisons in North and South America**

Course Numbers & Names:

**BIO 597/697:**  
**Special Topics in Biology**

**CHM 597/697:**  
**Special Topics in Chemistry**

Credit hours: **3** (undergraduate or graduate)

### **Course Overview & Highlights**

This course is designed to increase awareness of global connections, specifically between North and South America. Students will be exposed to different cultures and will discover threads of commonality, from food to resource consumption. Travel to Yachana Eco-Lodge in Ecuador will allow students to:

- Experience both worlds and see connections firsthand
- See birds that live in both places and hear about specific neotropical migrants that are found here in Missouri and at Yachana
- Obtain carbon uptake data and extrapolate carbon sequestration and water quality monitoring in two different worlds

While the main focus of the course is the environmental connection, students also will experience the customs and beliefs of the Ecuadorian society, in particular those of the Quichua tribe.

**Estimated Cost: \$2,900**

**Includes:** airfare, ground transportation, lodging, most meals, program activities, tour of Quito, Quito airport exit fee; Study Away student fee. Separated costs not available.

**Excludes:** MSU tuition for 3 hours of undergraduate or graduate credit; passport fees; some meals; misc. personal expenses.

**Nonrefundable deposit due with application by Mon., April 30, 2012: \$435** (will be billed to your student account)

**Airfare due Mon., June 4, 2012: \$1,500**

**Balance due Fri. July 6, 2012: \$965**

### **Voucher Eligibility & Financial Aid**

If you entered MSU as a freshman in 2009 or 2010, you may use the **Study Away \$500 voucher**. Students who receive financial aid through MSU may apply that aid to the program, if eligible. Contact the Office of Financial Aid at 836-5262 for more information.

Informational Meeting(s): TBA

Pre-travel Class Meetings:

**Wed.-Sat., Aug. 1-4, 2012**

Depart Springfield for Quito, Ecuador:

**Sun., Aug. 5, 2012**

Depart Quito for Springfield:

**Sun., Aug. 12, 2012**

Post-travel Class Meetings: TBA

Graduate Student Presentations Due: TBA

### **Interested in going?**

Contact one of the Program Directors:

Dr. Janice S. Greene, Professor,  
Department of Biology: 836-5306  
[JaniceGreene@missouristate.edu](mailto:JaniceGreene@missouristate.edu)

Dr. Diann Thomas, Senior Instructor,  
Department of Chemistry: 836-4166  
[DiannThomas@missouristate.edu](mailto:DiannThomas@missouristate.edu)



**Missouri  
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# Study Away!

**Missouri State University Study Away Programs**

Jim D. Morris Center for Continuing Education, Suite 403

301 S. Jefferson Ave., Springfield, MO 65806

P: 417-836-6368 • E: [studyaway@missouristate.edu](mailto:studyaway@missouristate.edu)

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## Course Objectives & Activities:

By combining pre-travel field work in Missouri with research in Ecuador, participants in this program will understand many of the ways that North and South America are connected:

- Students will be able to describe the importance of both the equatorial tropics and temperate North America to neotropical migrant birds
- Students will be able to describe the relationship of rainforest to global climate
- Students will compare the carbon uptake of a typical temperate forest in North America to primary and secondary rainforests in South America

Students also will describe a watershed and how it affects water quality:

- Students will be able to define a watershed and how changes in the watershed affect run-off
- Students will be able to describe how a watershed influences water quality
- Students will compare key chemical and ecological indicators of water quality in North America (Bull Shoals Lake) and South America (Napo River)

## Course Schedule & Itinerary:

### Pre-travel Class Meetings:

**Wed., Aug. 1, 2012** - Bull Shoals Field Station: introduction, determination of data sampling areas

**Thurs., Aug. 2** - Chemistry: measure water, soil, air quality indicators: take tree measurements

**Fri., Aug. 3** - Biology: bird banding, neotropical migrants - ecology and natural history

**Sat., Aug. 4** - Biology: watershed activities - topographic maps, changes in flow

**Sun., Aug. 5** - Fly from Springfield to Quito, Ecuador

**Mon., Aug. 6** - Fly from Quito to Coca; canoe to Yachana Lodge; afternoon hike

**Tues., Aug. 7** - Hiking and bird watching in primary and secondary rainforest in AM; project introduction in PM

**Wed., Aug. 8** - Conservation of neotropical migrants: changes in rainforest and associated birds

**Thurs., Aug. 9** - Measurement of water, soil and air quality indicators

**Fri., Aug. 10** - Tree measurements; watersheds

**Sat., Aug. 11** - Travel from Yachana to Coca to Quito; Tour of Quito

**Sun., Aug. 12** - Fly Quito to Springfield

**Post-travel Class Meetings (TBA)** - Graduate Student Presentations

## Course Credit, Requirements & Assessment of Learning:

Biology majors/minors and other interested students (with permission of instructor) will enroll in **BIO 597: Special Topics in Biology** and receive 3 hours of undergraduate credit.

Biology graduate students and accelerated master's students will enroll in **BIO 697: Special Topics in Biology** and receive 3 hours of graduate credit. These students will write a formal 6-page report on a related topic, such as watershed management in North and South America, neotropical migrant conservation, food connections of North and South America, etc.

Chemistry majors will enroll in **CHM 597: Special Topics in Chemistry** and receive 3 hours of undergraduate credit.

Chemistry graduate students and accelerated master's students will enroll in **CHM 697: Special Topics in Chemistry** and receive 3 hours of graduate credit. These students will write a formal 6-page report on environmental chemistry and carbon uptake of Northern vs. Southern Hemisphere hardwood forests.

### Evaluation of 597-level students:

- a. Journal of cultural observations and experiences - 22%
- b. Lab book of collected data - 22%
- c. Quizzes over reading assignments, lectures and field trips - 22%
- d. Group participation/dynamics - 22%
- e. Attendance at presentations - 12%

### Evaluation of 697-level students:

- a. Journal of cultural observations and experiences - 20%
- b. Lab book of collected data - 20%
- c. Quizzes over reading assignments, lectures and field trips - 20%
- d. Short research paper and presentation (topics will vary according to whether the student enrolls in biology or chemistry) - 20%
- e. Group participation/dynamics - 20%

All students will receive a letter grade.

**Required texts:** None. Students will receive a packet of materials from the Program Directors to read and discuss before and during travel.



## Application & Payment Procedures:

Missouri State University students who are approved by a Program Director may apply. Instructions are included on the program application.

A **non-refundable deposit of \$435** will be billed to your student account upon application (due by **April 30, 2012**). Airfare (**\$1,500**) will be billed on **June 4, 2012**, and the balance of the program cost (**\$965**) will be billed to your account on **July 6, 2012**.

The published program cost is based on rates in effect on the publication date of this flyer and may be subject to change.

**Program participants agree to a potential increase of up to 10% in the program fee if costs increase before or during travel.**

## Cancellation & Refund Policies:

- Students who withdraw prior to **June 29, 2012**, will receive a refund of fees paid, less their deposit and any non-refundable purchases made on his/her behalf.
- If a student is forced to withdraw after **June 29, 2012**, for a bona fide medical reason, s/he will receive a refund of fees paid, less their deposit and expenses. A certificate of incapacitating illness or injury from a licensed physician is required.
- Students withdrawing voluntarily after **June 29, 2012**, or withdrawing due to medical reasons not protected under the fees refund policy, receive no refund.
- Once the program has started, students withdrawing receive no refund under any circumstances.
- All notifications of withdrawal must be made in writing and sent to the Program Director and to Elizabeth Strong at the Study Away Office, Jim D. Morris Center, Suite 403. **Non-payment of fees does not guarantee automatic withdrawal.**
- Any plans by a participant not to travel and return with the group must also be submitted in writing to the Program Director and the Study Away Office.
- The program may be cancelled if enrollment is fewer than 19 participants. In this event, students will receive a full refund.