Course Name: **Neotropical Bat Ecology: Nicaragua**

Course Number: **BIO 527/627**

Credit Hours: **3** undergraduate/graduate

**Course Overview & Objectives:**
This course is designed to give students hands on experience with ecological topics such as capture and handling, population and habitat studies, and conservation of a wide range of neotropical bat species. This will involve two weeks of work at the Maderas Rainforest Conservancy on Ometepe Island, Nicaragua. This is an area of high conservation and biodiversity concern. Activities will include netting of bat species, small mammal trapping, participation in conservation education and learning about the local culture and ecosystems as well as conducting, compiling and presenting field research.

*Rabies pre-exposure vaccine is required but will be supplied by the university at Taylor Health and Wellness. The 3 shot series must be started at least a month prior to departure.*

**Program Fee:** **$3,235**

**Program Fee Includes:** Round-trip airfare, lodging, conference registration fee, most meals, Study Away student fee, basic medical insurance, and access to private and/or public beaches; separated costs not available.

**Program Fee Excludes:** Passport, ground transportation in Springfield, some meals, incidentals/misc personal expenses, and souvenirs. $612/741 MSU tuition for 3 hours of undergraduate/graduate credit. Both Missouri residents and non-residents pay the Mo. resident per-credit-hour tuition rate, per University policy.

**Applications are due by January 20, 2014. A nonrefundable deposit of $485 will be billed to your student account. Please see Application & Payment Procedures for MSU and Visiting Students on reverse.**

**Scholarship Eligibility & Financial Aid**
Students may apply for the College of Natural and Applied Sciences Study Away scholarship. Applications are due to the Study Away office by April 11, 2014. Please see the scholarship page on the Study Away website. Additionally, students who receive financial aid may apply aid to this program. Contact the Office of Financial Aid at 836-5262 for more information.
Course Schedule & Itinerary

PRE-TRAVEL MEETINGS

February 5, 2014: Review syllabus, check passport and travel needs. Brief introduction to bats and bat handling.

March 19, 2014: Get to know each other, passport and travel requirements check. Go over itinerary, conservation of bats, and culture of Nicaragua.

April 30, 2014: Learn how to capture, handle, and identify neotropical bats.

STUDY TOUR


May 19, 2014: Transfer to Ometepe Island, Maderas Rainforest Conservancy.

May 19-29, 2014: Field studies at Maderas Rainforest Conservancy and other local areas. Daily lectures and nightly netting.

May 30, 2014: Transfer to Granada, stopping at an active volcano and a cave in which bats roost.


June 1, 2014: Depart Managua for Springfield.

POST-TRAVEL

Students will present their findings of field research in a PowerPoint presentation.

Course Credit & Requirements

Students will be graded based upon the requirements below.

a) 2 examinations will be conducted while in the field. The first will cover species captured while the second will be short answer/essay questions in regards to the daily lecture component.

b) In regards to this, students will be expected to keep a species check list and a detailed field journal, noting biological, ecological, and conservation observations made during each field excursion.

c) Each student will work in a groups of two to three to answer an ecological question. This will include conducting research and a review of the pertinent literature on that topic.

d) A written research report will be conducted (1 per group) and turned in at the meeting following the trip. At this time, an oral presentation of the research findings will also be conducted by the group.

- Participation 25%
- Field Journal 25%
- Research Report/Presentation 25%
- Exams 25%

Optional Text:

John Kricher and Mark Plotkin *A Neotropical Companion 2nd edition*

Fiona Reid *A field guide to the mammals of South America and Southeast Mexico*

Application & Payment Procedures

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

MSU Students: A non-refundable deposit of $485 will be billed to your University account upon application (deadline Jan. 20, 2014). You will receive a second billing on March 7, 2014 and a final billing on April 11, 2014, for the balance of the program fee ($2,750). MSU course tuition ($621/741) will be billed to your University account and is due according to the university payment plan.

Visiting Students: A non-refundable deposit of $485 (check or money order) must accompany your application (deadline Jan. 20, 2014). A check or money order for the balance of the program fee ($2,750) and MSU course tuition ($621/741) will be due by April 21, 2014.

IN ORDER TO ENSURE PARTICIPATION IN THIS STUDY AWAY PROGRAM, THE ENTIRE AMOUNT OF THE PROGRAM FEE MUST BE RECEIVED BY MAY 9, 2014. PAYMENT CAN BE MADE ONLINE OR AT THE BURSAR’S OFFICE. Estimated program fees are 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% if rates increase before or during travel.

Cancellation & Refund Policies

- Students who withdraw prior to April 7, 2014 will receive a refund of fees paid, less the $485 deposit and any non-refundable purchases made on his/her behalf.

- If a student is forced to withdraw after April 7, 2014 or a bona fide medical reason, s/he will receive a refund of fees paid, less the $485 deposit and expenses. A certificate of incapacitating illness or injury from a licensed physician is required.

- Students withdrawing voluntarily after April 7, 2014, or withdrawing due to medical reasons not protected under the fees refund policy, receive no refund.

- Once the program has started, no refunds will be issued under any circumstances.

- All notifications of withdrawal must be made in writing and sent to the Program Director and Director of Study Away Programs at the Study Away Office, Jim D. Morris Center, Suite 403. Non-payment of fees does not guarantee automatic withdrawal.