

Insect Natural History in Costa Rica, ENTO 3140-3140L

Maymester 2006 (May 16 - June 5, 2006)

General Course Information:

In terms of the number of described species, insects are easily the largest and most diverse group of animals, and that diversity is most conspicuous in tropical latitudes where most of the centers of insect biodiversity lie. Unfortunately, students rarely have an opportunity to experience the fauna and flora of the tropics first-hand under the instruction of a knowledgeable guide and instructor. This course designed as an interdisciplinary course involving the study of insects and discussion of their natural history in tropical terrestrial and aquatic ecosystems, combining intense lectures and field/lab work in Athens with direct field experience in Costa Rica.

Instructors:

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Facilities Visited by the Course (Estimated Dates):

Athens, GA – 426 Biological Sciences Building (May 16 – 22)
San Luis, CR – UGA's Ecolodge San Luis & Research Station (May 23 – May 31)
Puerto Viejo, CR – OTS La Selva Biological Station, Heredia (June 1 – 4)

Schedule:

May 16 – AM: Intro. to Costa Rican History, Geology and Geography/Tropical Biodiversity
May 16 – PM: Field Trip – Lake Herrick / Insect Collecting Techniques
May 17 – AM: Insect Diversity and Morphology/Insect Physiology and Development
May 17 – PM: Field Trip – Whitehall Forest / Lab: Insect Specimen Preparation
May 18 – AM: Insect Behavior and Pest Management
May 18 – PM: Lab: Insect Identification
May 19 – AM: Aquatic Entomology and Ecology/Intro. to Service Learning
May 19 – PM: Lab: Field Trip to Ben Burton
May 22 – AM: Spanish Language Primer/Scientific Method and Field Problem Development
May 22 – PM: Pre-Departure Meeting/Equipment packing and responsibilities
May 23: Travel Day (Athens, GA to Alajuela, CR)
May 24: Travel Day (InBIO to Ecolodge)
May 24 – 31: Lectures, workshops, and field problems – Ecolodge
June 1: Travel Day (Ecolodge to La Selva) [Batzer returns to U.S.]
June 1 – 4: Tour and field problems – La Selva
June 5: Travel Day (La Selva, CR to Athens, GA)

While in Costa Rica:

San Jose:

May 23 – PM: Lunch/Souvenir Shopping/Travel to hotel
May 24 – AM: Visit InBIO Museo y Parque
May 24 – PM: Lunch/Travel to Ecolodge

Ecolodge:

May 25 – AM: Natural History Guided Orientation Hike / Tropical Insect Identification Workshop
May 25 – PM: Insect Collecting, Identification, and Preparation
May 25 – AD: Intro to cloud forest ecology (Ecolodge Staff Slide Show) / Organization and Set-up of FFP 1
May 26 – AM: Plant Identification Workshop / FFP 1
May 26 – PM: Insect Collecting, Identification, and Preparation
May 26 – AD: Intro to cloud forest birds (Ecolodge Staff Slide Show)
May 27 – AM: Bird Watching (optional) / Present results of FFP 1 / Organization and Set-up of FFP 2
May 27 – PM: Insect Collecting, Identification, and Preparation
May 27 – AD: Intro to cloud forest herps (Ecolodge Staff Slide Show) / Night herp-arthropod hike (optional)

May 28 – AM: Bird Watching (optional) / FFP 2
 May 28 – PM: Trap checking / Insect Collecting, Identification, and Preparation
 May 28 – AD: Night herp-arthropod hike (optional)
 May 29 – AM: Bird Watching (optional) / Present results of FFP 2 / Organization and Set-up of FFP 3
 May 29 – PM: Trap checking / Insect Collecting, Identification, and Preparation
 May 29 – AD: Night herp-arthropod hike (optional)
 May 30 – AM: Bird Watching (optional) / FFP 3
 May 30 – PM: Final Collection Preparation & Labeling
 May 30 – AD: Night herp-arthropod hike (optional)
 May 31 – AM: Present results of FFP 3 / Discuss individual FP projects for La Selva
 May 31 – PM: Collections Due (5:00 p.m.) / Pack-up personal items and course equipment / Clean-up
 May 31 – AD: Fiesta

La Selva:

June 1 - AM: Travel Day (Ecolodge to La Selva)
 June 1 – PM: Orientation Hike
 June 1 – AD: Night herp-arthropod hike (optional)
 June 2 – AM: Bird watching (optional) / Organization and set-up of SFP
 June 2 – PM: Tour of La Selva Research Facilities and ALAS Project
 June 2 – AD: Free-time / Work on FFP and SFP reports
 June 3 – AM: SFP
 June 3 – PM: Present results of SFP
 June 3 – AD: Free-time / Work on FFP and SFP reports
 June 4 – AM: All FFP reports due
 June 4 – PM: Pack-up personal items and course equipment / Clean-up
 June 4 – AD: Fiesta
 June 5 – AM: Travel Day (La Selva to San Jose to Atlanta)

AD – After Dinner
 FFP – Faculty Field Problem
 SFP – Student Field Problem

Attendance:

Because of the intense nature of the sessions, attendance and punctuality are mandatory as is participation during in-class lectures, field trips, and lab exercises, without exception. While in Athens, we will meet from 9:00 – 12:00 and 1:00 – 4:00 Tuesday – Friday. While in Costa Rica, class will meet every day (including weekends) for longer hours (~12 hours/day). Evenings will usually be open for students as free time or to work on their reports.

Grading:

Student grades will be based on each student’s preparation of a properly-mounted, labeled, and identified collection of tropical insects, entirely identified to the family-level. In addition, they will be judged based on their ability to communicate knowledge of tropical insect natural history and behavior in oral and written reports of their faculty field problems (3 in total), which will be submitted periodically during the field component of the course.

Insect Collection	15 orders / 50 families	450 pts.
Field Problem Pres.	50 pts	50 pts.
Faculty Field Problem Write-ups	50 pts / each	<u>200 pts.</u>
TOTAL		700 pts.