

Term Information

Effective Term Spring 2014

General Information

Course Bulletin Listing/Subject Area Evol, Ecology & Organismal Bio
Fiscal Unit/Academic Org Evolution, Ecology & Org Bio - D0390
College/Academic Group Arts and Sciences
Level/Career Graduate, Undergraduate
Course Number/Catalog 5911
Course Title Tropical Herpetology
Transcript Abbreviation Trop Herp
Course Description Field course on the study of reptiles and amphibians, with emphasis on tropical species identification, field techniques and methods, population ecology, and conservation strategies. Course will be conducted at a tropical field site such as the Biological Field Station El Zota, Tapezco, Costa Rica.
Semester Credit Hours/Units Fixed: 4

Offering Information

Length Of Course 7 Week, 4 Week (May Session), 12 Week (May + Summer)
Flexibly Scheduled Course Always
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Field Experience, Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites Completion of 12 semester hours of biological sciences, at least junior standing by autumn of enrollment, and GPA minimum of 2.5, or permission of instructor

Exclusions

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 26.0701
Subsidy Level Doctoral Course
Intended Rank Junior, Senior, Masters, Doctoral

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Students will be able to identify major groups of tropical herpetofauna and will be familiar with their biology and conservation

Content Topic List

- Biology, life histories, and taxonomy of tropical herpetological fauna
- Field techniques for monitoring and surveying tropical herpetofauna
- Field identification
- Conservation strategies

Attachments

- EEOB 5911-Tropical Herpetology.docx: Discussion of credit hours
(Other Supporting Documentation. Owner: Lanno,Roman P.)
- Tropical herp 2014 syllabus.docx: Syllabus
(Syllabus. Owner: Lanno,Roman P.)
- Tropical herp 2014 syllabus-revised Oct 23.docx: Syllabus-revised
(Syllabus. Owner: Lanno,Roman P.)

Comments

- As per discussion with Chris Hadad, this new course request replaces a course change request for Field Herpetology (EEOB 5910), which was cancelled

Revised syllabus attached *(by Lanno,Roman P. on 10/29/2013 01:25 PM)*

- Please provide information about assignments, grading information, academic misconduct statement, and disability services statement. http://ascas.osu.edu/files/ASC_CurrAssess_Operations_Manual.pdf (page 13) *(by Vankeerbergen,Bernadette Chantal on 09/11/2013 01:26 PM)*

Workflow Information

| Status | User(s) | Date/Time | Step |
|--------------------|--|---------------------|------------------------|
| Submitted | Lanno,Roman P. | 09/09/2013 10:57 AM | Submitted for Approval |
| Approved | Lanno,Roman P. | 09/09/2013 10:58 AM | Unit Approval |
| Approved | Hadad,Christopher Martin | 09/09/2013 11:44 AM | College Approval |
| Revision Requested | Vankeerbergen,Bernadette Chantal | 09/11/2013 01:26 PM | ASCCAO Approval |
| Submitted | Lanno,Roman P. | 10/29/2013 01:25 PM | Submitted for Approval |
| Approved | Lanno,Roman P. | 10/29/2013 01:28 PM | Unit Approval |
| Approved | Hadad,Christopher Martin | 10/29/2013 01:31 PM | College Approval |
| Pending Approval | Vankeerbergen,Bernadette Chantal Nolen,Dawn Jenkins,Mary Ellen Bigler Hogle,Danielle Nicole Hanlin,Deborah Kay | 10/29/2013 01:31 PM | ASCCAO Approval |

Tropical Herpetology

Biological Field Station El Zota, Tapedco, Costa Rica

27 Dec 2013- 12 Jan 2014

Instructors:

Eric T. Hileman, Northern Illinois University

Kristin M. Stanford, The Ohio State University

Course Description:

Tropical Herpetology is a field course designed to introduce undergraduate/graduate students to the study of reptiles and amphibians, with emphasis on species identification, field techniques, population ecology, and conservation biology. As representative tropical herpetofauna, Costa Rican species will be examined in detail, but many of the concepts discussed are broadly applicable. This intermediate course assumes some familiarity with scientific methods, general ecological principles, and vertebrate zoology, and is intended to complement a semester-long course in herpetology or population biology. No prerequisites are required.

Required Books:

You must read Forsyth and Miyata **before** you arrive at El Zota. Doing so will immeasurably enrich your experience, plus there's going to be a quiz on it right after you arrive. Savage's book is an epic accomplishment, being both a comprehensive account of the Costa Rican herpetofauna, and a short textbook of herpetology.

Forsyth, A. and K.I. Miyata. 1984. *Tropical Nature: Life and Death in the Rain Forests of Central and South America*. Scribners, New York.

Savage, J.M. 2002. *The Amphibians and Reptiles of Costa Rica: A Herpetofauna between Two Continents, between Two Seas*. University of Chicago Press, Chicago.

Optional Books:

The following books are highly recommended:

Guyer, C. and M.A. Donnelly. 2005. *Amphibians and Reptiles of La Selva, Costa Rica, and the Caribbean Slope: A Comprehensive Guide*. Univ. Cal. Press, Berkeley. A pocket-sized book that is very useful to carry around in the field. You may well want to bring a copy.

Kricher, J. 1997. *A Neotropical Companion*. 2nd ed. Princeton University Press, Princeton, N.J. A detailed, yet straightforward, introduction to tropical biology, covering many of the same topics as Forsyth and Miyata, but not as colloquially. You really should get a copy and read it, but you may not want to bring it with you.

Vitt, L.J. and J.P. Caldwell. 2008. *Herpetology: an Introductory Biology of Amphibians and Reptiles*. Academic Press, San Diego, California (third edition). A wonderful textbook of herpetology, but a bit big and heavy to bring with. Get a copy, read it, and keep it as your standard reference on all things herpetological.

Reid, F.A. 1997. *A Field Guide to the Mammals of Central America and Southeast Mexico*. Oxford University Press, Oxford.

Stiles, F.G. & A.F. Skutch. 1989. *A Guide to the Birds of Costa Rica*. Cornell University Press, Ithaca, New York. This and Reid are excellent field guides to other vertebrate groups; if you are interested in mammals or birds, you may well wish to bring a copy along.

Journal articles:

TBA--will be provided.

Lecture Topics*

*The following list of general topics is subject to change.

- Introduction to Costa Rica
 - Safety issues
 - Tropical ecology
 - Herpetofauna (general)
- Field biology
 - Study design and sampling
 - Data collection and data management
 - Mark-recapture methods
 - Modeling population parameters (e.g., survival, population size, population growth, etc.)
- Herpetology
 - Evolutionary history
 - Reproduction and life histories
 - Physiological ecology
 - Behavioral ecology
 - Population and community ecology
 - Conservation
 - Classification and diversity
 - Amphibians
 - Caecilians
 - Salamanders
 - Anurans
 - Reptiles
 - Turtles
 - Crocodilians
 - Lizards
 - Snakes
 - Amphisbaenians

Approximate Itinerary

Day 1 Dec 27

Arrive in Costa Rica

Pick up at the Juan Santa Maria Airport. Lodging at Hotel Aeropuerto

Day 2 Dec 28

Travel from San Jose to El Zota field station

Lunch at Restaurante La cocina de Dona Lela

Stop at Braulio Carrillo National Park (cloud forest)



Primary cloud forest and rainforest covers the park, which abounds with flora and fauna species in multiple life zones, innumerable rivers and waterfalls.

Continue our trip to El Zota Field Station.

Dinner at El Zota

Introduction to El Zota



El Zota is a rain forest biological field station and it's located in the northeast part of Costa Rica in Limon province. About 2000 acres of low land rain forest makes of El Zota a great home for many species and an amazing living classroom for students from all over.

Day 3 Dec 29

Lecture and Activities plan by Professor - TBD

Day 4 Dec 30

Lecture and Activities plan by Professor - TBD

Day 5 Dec 31

Lecture and Activities plan by Professor - TBD
BBQ New Year's party

Day 6 Jan 1

Lecture and Activities plan by Professor - TBD

Day 7 Jan 2

Lecture and Activities plan by Professor - TBD

Day 8 Jan 3

Lecture and Activities plan by Professor - TBD

Day 9 Jan 4

Lecture and Activities plan by Professor - TBD

Day 10 Jan 5

Lecture and Activities plan by Professor - TBD

Day 11 Jan 6

Lecture and Activities plan by Professor – TBD

Day 12 Jan 7

Travel to Cauhita & Puerto Viejo



Cauhita National Park is small in size compared to its counterparts, yet up to par in terms of its animal, plant, and marine biodiversity.

Lodging at Pizote Lodge



El Pizote Lodge in Puerto Viejo (Costa Rica) is a beachfront hotel with different kinds of activities and accommodations. You can engage in recreational activities, sports, etc. Surrounded by extensive gardens is a safe and enjoyable place to stay.

Day 13 Jan 8

Snorkeling & Tour of Cahuita National park day



The Snorkeling House Eco-Friendly

The Snorkeling House specializes in tours with a distinctly eco-conscious approach. The owner, Fernando Davis Brown, believes that educating people about the fragile balance of the local eco systems can do more to create awareness and consciousness about the natural environment that we all live in. This approach is designed to help people to begin to think more about how everything is interconnected and we all can play a part in preserving Mother Earth's natural resources.

Lunch in Cahuita

Cahuita National park hike after lunch



Lying on Costa Rica's stunningly beautiful Caribbean coast, the Cahuita National Park is one of the most amazing national parks in the country. Created in 1970 to protect Costa Rica's biggest coral reef, this national park is located in Limon province, 42 km south of Puerto Limon.

Day 14 Jan 9

Visit the Bribri native tribe.



Iguana Farm, Medicinal plants tour, Chocolate tour and Bribri water fall makes this one of the best ways to learn and experience the Bribri Culture.

Day 15 Jan 10

Lecture and Activities plan by Professor - TBD

Day 16 Jan 11

Travel to San Jose

Lodging at hotel Don Carlos



Tin Jo has a wide and varied menu, with an assortment of Cantonese and Szechuan staples, as well as a range of Thai, Japanese, and Malaysian dishes, and even some Indian food. This is San José's only true Pan-Asian restaurant.

Lodging at Hotel Don Carlos



Located in the **oldest historical section of San José**, the 'Four Star' Hotel Don Carlos is a small, but significant part of Costa Rica's rich heritage. Once upon a time residence for two past Presidential families.

Day 17 Jan 12

Fly Home

Grading:

Student performance will be evaluated by the following items:

- **Question Packet** – 150 points. Questions from readings and field presentations due morning PRIOR to taking the final exam.
- **Quizzes** – 100 points. Expect at least two quizzes, possibly more (TBD by prof.)
- **Final Exam and Lab Practical** – 250 points. Questions will come from the question packet, lectures or from field presentations. Specimens may include any species seen during the week as well as those available for viewing in the classroom.
- **Oral presentation and written summary** – 100 points. 5-10 minute presentation on a current research paper (within last 5 years) on a native amphibian, reptile or group of these taxa. A one page written summary of this article must be turned in. Your summary should include the date of publication, title, and author(s) as well as the important methodology, results and conclusions from the paper. However, this should be **markedly more descriptive** than the abstract!!
- **Field Participation** – 400 points. This course is designed to provide you with an immense opportunity to learn and experience the study of herpetology in a field setting. It is the students responsibility to take advantage of this opportunity by listening, participating when necessary and asking intelligent questions during these trips, not at the end of the class prior to the final exam.

Make no mistake, NOT JUST ATTENDANCE BUT GOOD PARTICIPATION IS MANDATORY TO PASS THIS CLASS.

Grades will be distributed on a 1000 point system with cut-offs as follows:

| | |
|-----------|------------|
| A | 930 - 1000 |
| A- | 900 - 929 |
| B+ | 870 - 899 |
| B | 830 - 869 |
| B- | 800 - 829 |
| C+ | 770 - 799 |
| C | 730 - 769 |
| C- | 700 - 729 |
| D+ | 670 - 699 |
| D | 600 - 669 |

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (http://studentaffairs.osu.edu/info_for_students/csc.asp).

Disability Services: Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

2014) **Tropical Herpetology: Biological Field Station El Zota, Tapezco, Costa Rica (27 Dec 2013 - 12 Jan**

Instructors:

Eric T. Hileman, Northern Illinois University
Kristin M. Stanford, Ohio State University

Course Description: Tropical Herpetology is a field course designed to introduce undergraduate/graduate students to the study of reptiles and amphibians, with emphasis on tropical species identification, field techniques and methods, population ecology, and conservation strategies used in herpetology. As representative tropical herpetofauna, Costa Rican species will be examined in detail, but many of the concepts discussed are broadly applicable. Students will participate in a variety of field projects and should be prepared for hands-on experience in field collection and identification, specimen preparation, and monitoring and surveying techniques. This intermediate course assumes some familiarity with scientific methods, general ecological principles, and vertebrate zoology, and is intended to complement a semester-long course in herpetology or population ecology. No prerequisites required.

We currently have EEOB 5910 (Field Herpetology) on the books as a Stone Lab course but it is listed as a 2 semester hour course. Unfortunately, we think 2 credit hours may not be enough. Kristin's course will run 14 days (Dec 27th to Jan. 12th, with three days dedicated to travel). On average, students will spend 1 ½ hours in the classroom each day (90 minutes) and 4 ½ hours in the field/lab each day (270 minutes). It is my understanding that 750 minutes of lecture equals one semester credit hour and that 2,250 minutes in the field/lab equals 1 semester credit hour. The one-week herpetology course offered at Stone Lab (EEOB 5910) makes sense as a 2-credit hour course (750 minutes of lecture and 2250 minutes of lab/field work).....but not this 2-week long course. Over the course of two weeks Kristin's students would spend approximately 1260 minutes in lecture; 90 minutes a day for 14 days (510 more minutes than the 750 required for 1 credit hour (1.68 CH)). Additionally, Kristin's students would spend approximately 3,780 minutes in the field; 270 minutes a day for 14 days (1,530 more minutes than the 2,250 required for 1 credit hour (1.68 CH)). Kristin....please correct my estimates above if they are inaccurate.

Cory Ross indicated that if the course Kristin wants to offer is over the 2 semester hours allowed for EEOB 5910 we might be able to get creative.....listing the course as EEOB 6194 (Group Studies) or EEOB 5189 (Field Work). Cory also stated that it is too late to change the current Stone Lab EEOB 5910 from 2 semester hours to variable hours. Side note, most of the other Stone Lab courses were converted to variable and we don't know why this one was not. Sorry for the long e-mail.....just wanted to paint an accurate picture.

What needs to happen so that this course can be offered?

Christopher J. Winslow, PhD., Assistant Director
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