

Herpetology Biology 488 Spring 2017

Lecture: 1630-1745 TTH Castetter 57

Lab: M 2-6

Field trips: students are required to attend at least one of two field trips (spring break and/or April 28 weekend).

Instructor: Steven Poe anolis@unm.edu Castetter 180

Teaching Assistant: Chris Anderson cganderson@unm.edu

Office hours: after lecture, or by appointment

Office hours: to be announced

Texts:

--Pough, FH. 2013. Herpetology, 4th edition. Pearson Prentice Hall.

--Stebbins, RC. 2003. A Field Guide to Western Reptiles and Amphibians, 3rd edition.

Peterson field guide series. Houghton Mifflin Harcourt.

--Duellman, WE, L Trueb. 1994. Biology of Amphibians. Johns Hopkins University Press.

--Degenhardt, W, C Painter, A Price. 1996. Amphibians and Reptiles of New Mexico. UNM Press.

--Powell, R, JT Collins, ED Hooper. 1998. A Key to Amphibians & Reptiles of the Continental United States and Canada. University Press of Kansas.

Grading and requirements:

One of two overall grading schemes will be used

--Scheme 1: A = 90-100%, B = 80-89.99%, C = 70-79.99%, D = 60-69.99%, F = 0-59.99%

--Scheme 2: At the end of the semester we examine the distribution of points among students. We look for clumps of scores near 90, 80, 70, etc., and distributional breaks between such clumps. Scores in the top clump receive an A, in the second clump receive a B, and so on. Scores below 60 receive a failing grade.

--We will use the grading scheme that gives the most students the highest grades.

Lecture (65%)

--Three exams (1: 15%, 2: 15%, 3:15%): Exams are likely to be short answer format

--Research presentation, 20%: Class projects are completed by individual students. The project is to be an exercise in applying the scientific method to a particular herpetological question of interest to the student. At the end of the semester each student presents his or her results to the class in a 12-15 minute Powerpoint presentation, with 3-5 minutes for questions. The grade for this endeavor reflects the application of a scientific method to a question of interest. Students will meet two deadlines with regard to this project. By **February 28**, students will present a ½-1 page summary of their project background, methods, and anticipated results to Poe. BEFORE THIS TIME, IT IS IMPERATIVE THAT YOU DISCUSS POTENTIAL PROJECTS WITH TA ANDERSON, INSTRUCTOR POE, AND YOUR FELLOW STUDENTS. On **April 18**, you will turn in a summary of your project that describes, in not more than two pages, your project (including background, methods, and results). From **April 20 to April 27 students will present their work to the class.**

Positive aspects of presentations (i.e., higher grades): Student tests a hypothesis; student collects data; student analyzes data; detailed handout given to class; report is publishable; good presentation style

Negative aspects of presentations (i.e., lower grades): Book reports (no data collected, no analyses done); Wikipedia syndrome; few data; handout vague or not presented; poor presentation style: under 10 minutes, no hypothesis tested, reading slides, slides wordy or cluttered, poor organization, weak background info, use of profanity, poorly cited...

Lab (35%)

See lab syllabus (23 January) for details

Long field trips (at least one of two required):

Trip 1 Cuba

This trip is planned for spring break. We will visit Soroa and other sites to observe and collect the wonderful endemic fauna of Western Cuba. We will leave Albuquerque on approximately Friday, March 10, and return on approximately Friday, March 17. Cost of the trip is \$1450, with \$700 due on February 2. You will need to sign multiple documents regarding responsibility for the trip.

Trip 2 Hidalgo County, New Mexico

We will leave on Friday, April 28, by 1 PM and return Sunday night, April 30. We will camp at one or two sites in Hidalgo county, extreme southwestern New Mexico. Hidalgo is a legendary place for herpetology, especially snakes. Food and transportation details will be worked out as the trip date approaches.

Course Schedule

Week	Date	Lecture
1	17 Jan	Introduction; herps of Hidalgo County; herps of Cuba
	19 Jan	The study of herpetology
2	24 Jan	Tour of Division of Amphibians and Reptiles, Museum of SW Biology
	26 Jan	Evolution, phylogenetics, species, characters
3	31 Jan	Evolution, phylogenetics, species, characters// <i>trip deposit due</i>
	2 Feb	Evolution, phylogenetics, species, characters
4	7 Feb	Test 1
	9 Feb	Amphibians
5	14 Feb	Evolution of caecilians, salamanders
	16 Feb	Evolution of frogs
6	21 Feb	Reptiles; evolution of turtles
	23 Feb	Evolution of crocodylians
7	28 Feb	Evolution of nonsnake lizards// <i>preliminary project plan due</i>
	2 Mar	Evolution of snakes
8	7 Mar	Test 2
	9 Mar	To be announced
9	14 Mar	Cuba
	16 Mar	Cuba
10	21 Mar	To be announced
	23 Mar	To be announced
11	28 Mar	Testing hypotheses with trees
	30 Mar	Research Day
12	4 Apr	Reproduction
	6 Apr	Locomotion
13	11 Apr	Conservation
	13 Apr	To be announced
14	18 Apr	To be announced// <i>project writeup due</i>
	20 Apr	Student presentations
15	25 Apr	Student presentations
	27 Apr	Student presentations
	28-30 Apr	Hidalgo
16	2 May	To be announced
	4 May	Test 3