

# Herpetology (ZOO 4932C) Spring 2015

Welcome to Herpetology, the study of amphibians and reptiles. These two distantly related groups are the most poorly understood classes of vertebrates because of their creepy-crawly reputations. We will study their fascinating ecology, anatomy, physiology, evolution, systematics, natural history, and conservation. By the end of this semester you will have a good understanding of how these animals work, who they are, and their place in the evolutionary tree of life. Laboratory and field experiences will allow us to examine the herpetofauna of Florida and other regions of the world up close. This semester we will not only learn a great deal about herpetofauna, but will also gain valuable experience in herpetology research.

## Course Objectives

- To understand the biology of living and extinct reptiles and amphibians.
- To be able to conduct original herpetological research, including planning, performing, analyzing, writing, and presenting.
- To become proficient in the capture, handling, and identification of many species of reptiles and amphibians.
- To understand the relevance of reptiles and amphibians to human society and issues concerning the long-term survival of herpetofaunal species.

## Class Meetings:

Tuesday 3:00- 4:20 pm BIO 212; Thursday 12:00-4:20 pm BIO 414

**Instructor:** Dr. Tiffany M. Doan

Office: BL 439, 407-823-5424

E-mail: [Tiffany.Doan@ucf.edu](mailto:Tiffany.Doan@ucf.edu)

Twitter: @DoanTiffany, Class Hashtag: #UCFHerps

Office Hours: Tuesday 1:00-3:00 pm and Wednesday 2:00-4:00 pm (I will do my best to be in my office during those times, but things occasionally come up requiring me to be away from my office. Check office door for my location. You can always e-mail me for another meeting time.)

**Graduate Teaching Assistant:** Rhett Rautsaw

Office: BL 425

E-mail: [rautsaw.3@Knights.ucf.edu](mailto:rautsaw.3@Knights.ucf.edu)

Twitter: @ReptileRhett

Office Hours: By appointment

## Webcourses Site:

I have a course web site set up on Webcourses (<https://webcourses.ucf.edu>) that I will use to post materials for the course, including the syllabus, calendar dates, PowerPoints, assignment descriptions, readings, and grades. The course Twitter feed may also be followed on our webcourse. If you need to contact me, please do so using the Inbox Conversations function in Webcourses.

# Herpetology (ZOO 4932C) Spring 2015

## **Required Texts and Materials:**

- 1) Vitt, L. J., and J. P. Caldwell. 2014. Herpetology: An Introductory Biology of Amphibians and Reptiles, fourth edition
- 2) Conant, R., and J. T. Collins. 1998. Field Guide to Reptiles and Amphibians: Eastern and Central North America (Peterson Field Guide), revised edition. Houghton Mifflin Company, Boston.

## **Recommended Text:**

Powell, R., J. T. Collins, and E. D. Hooper. 2012. Key to the Herpetofauna of the Continental United States and Canada, second edition. University of Kansas Press, Lawrence, KS.

## **Class Policies:**

1. All students are required to attend each class meeting. Missed classes mean missed material, which is the responsibility of the student to make up, not the professor. Absences will negatively affect your participation grade.
2. Assigned readings should be completed before attending class.
3. You are encouraged to discuss any and all portions of the class with your professor. Please feel free to come to office hours or make an appointment to discuss the class, especially if you are having difficulty.
4. Respect should be given to fellow students and the instructor. Please do not arrive late to class, walk out in the middle of class, or leave early.
5. Hateful or offensive speech or writing will not be tolerated.
6. Cell phones, iPods, and other electronic devices should be turned off and put away before class starts.
7. Due dates for assignments are firm. Extensions to due dates will not be granted without documented exceptional circumstances. A penalty of 10% per day will be deducted from your assignment grade for any late work.
8. Academic dishonesty (cheating and plagiarism) is strictly prohibited and will be taken very seriously and will result at least in an "F" for that assignment (and may, depending on the severity of the case, lead to an "F" for the entire course) and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information.

## **Course Accessibility:**

It is my goal that this class be an accessible and welcoming experience for all students, including those with disabilities that may impact learning in this class. If anyone believes the design of this course poses barriers to effectively participating and/or demonstrating learning in this course, please meet with me to discuss reasonable options or adjustments. You may also contact SDS (Ferrell Commons 185; 407-823-2371; sds@ucf.edu) to talk about academic accommodations.

# Herpetology (ZOO 4932C)

## Spring 2015

### **Grading:**

The grade for this course will be based on seven aspects. Grades will be assigned according to the following scale: 93-100 = A; 90-92 = A-; 87-89 = B+; 83-86 = B; 80-82 = B-; 77-79 = C+; 73-76 = C; 70-72 = C-; 67-69 = D+; 63-66 = D; 60-62 = D-; ≤ 59 = F.

Two **Lecture Exams** will be given on the dates indicated on the schedule. The exams will not be cumulative but some of the later material depends on a basic understanding of the earlier material. Exams will consist of essays, multiple choice, short answer, matching, and the like, and may include take-home portions. Missed tests will not be allowed to be made up without a documented medical excuse that is presented within 24 hours of missing the exam. Make-up tests will likely be a different (harder) format than the original test. (32%)

Two **Lab Exams** will be given on the dates indicated on the schedule and will be practicals where you will be expected to identify organisms, be able to discuss their natural history, identify anatomy, and the like. Lists will be provided of species that will be on the practicals. All Florida species and other species from other regions of the U. S. and the world may be included. Species will be identified from preserved specimens, photographs, range maps, and natural history. (20%)

**Amphibian and Reptile Family Presentations** will be presented during class on the dates indicated on the schedule. Each student will be assigned two amphibian and two reptile families upon which he/she will conduct a 3-4-minute presentation each to teach the other students about the family. Presentations should include visuals. (12%)

**Group Projects** will be designed, implemented, analyzed, written, and presented by groups of students. These field projects will examine some aspect of the biology of Florida's herpetofauna. (18%)

**Rotation Assignments** will be associated with the project field trips. (7%)

A peer **Chapter Review** will be completed of a chapter that is scheduled to appear in a new reptile sampling methodology book. (7%)

**Effort and Participation** in the course will affect your grade. You earn effort points by completing all of the required lab activities, participating fully in discussions and field trips, and having perfect attendance. Poor attendance will negatively affect your grade. If you have more than two unexcused lab absences, miss more than a week straight of class, or fail to participate in all of the required field trips you will fail the course. (4%)

### **Field Trips:**

During the semester, we will have several field trips to capture reptiles and amphibians, to work on field projects, or to visit captive collections of herpetofauna and meet other herpetologists. Approximate dates for all field trips are indicated on the schedule but may need to be altered due to weather or other issues. Scheduled field trips will occur during class time but additional night/weekend field trips may be arranged based on student interest. You are required to attend all scheduled field trips—they will be a lot of fun!

## Herpetology (ZOO 4932C) Spring 2015

Handling of live reptiles and amphibians by the students is at the discretion of the instructor. Care must be taken to insure that the animal will not be injured or endangered. It is forbidden for any student to handle a venomous reptile and may result in a grade of F for the class. The three U. S. herpetological societies have put together guidelines for the use of live amphibians and reptiles in research and education:

<http://www.asih.org/sites/default/files/documents/resources/guidelinesherpsresearch2004.pdf>.

### **Herpetological Literature:**

Below is a suggested reading list of important herpetological books (all available at the UCF library). Journals dedicated to reptiles and amphibians include: \**Copeia*, \**Herpetologica*, \**Herpetological Conservation & Biology*, \**Herpetological Monographs*, \**Journal of Herpetology*, \**Herpetological Review* (a newsletter journal), \**Amphibia-Reptilia*, *Alytes*, *Salamandra*, *Herpetological Journal*, and several others. \*Indicates that our library maintains a subscription. *Herpetological Conservation & Biology* is free through open access online. All of the other journals are available through interlibrary loan. I have subscriptions to all of the U.S. journals and I am willing to loan individual issues to interested students. The journals are produced by different herpetological societies. Consider joining one of the societies and/or attending their annual meetings if you are serious about herpetology. Societies have discounted rates for students.

### **Suggested Reading:**

Duellman, W. E. and L. Trueb. 1986. *Biology of the Amphibians*. Johns Hopkins, Baltimore.  
Duellman, W. E., ed. 1999. *Patterns of Distribution of Amphibians*. Johns Hopkins, Baltimore.  
Heyer, W. R., M. A. Donnelly, R. W. McDiarmid, L. C. Hayek, and M. S. Foster (eds). 1994. *Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians*. Smithsonian Institution, Washington DC.  
Stebbins, R. C., and N. W. Cohen. 1997. *A Natural History of Amphibians*. Princeton University Press, Princeton.

### **Herpetological Societies and Websites:**

American Society of Ichthyologists and Herpetologists (<http://www.asih.org/>)  
Herpetologists' League (<http://www.herpetologistsleague.org/en/index.php>)  
Society for the Study of Amphibians and Reptiles (<http://www.ssarherps.org/>)  
*Amphibian Species of the World*  
(<http://research.amnh.org/herpetology/amphibia/index.php>)  
The Reptile Database (<http://www.reptile-database.org/>)  
*Checklist & Atlas of Florida's Reptiles and Amphibians*  
(<http://www.flmnh.ufl.edu/herpetology/florida-amphibians-reptiles/checklist-atlas/>)

**Herpetology (ZOO 4932C)**  
**Spring 2015**

**AMPHIBIANS AND REPTILES OF FLORIDA**

(from Krysko, K.L., K.M. Enge, and P.E. Moler. 2011. Atlas of Amphibians and Reptiles in Florida. Final Report, Project Agreement 08013, Florida Fish and Wildlife Conservation Commission, Tallahassee, USA.)

Salamanders (Caudata)

Mole Salamanders (Ambystomatidae)

- Ambystoma bishopi*, Reticulated Flatwoods Salamander
- Ambystoma cingulatum*, Flatwoods Salamander
- Ambystoma opacum*, Marbled Salamander
- Ambystoma talpoideum*, Mole Salamander
- Ambystoma tigrinum*, Tiger Salamander

Amphiumas, Congo Eels (Amphiumidae)

- Amphiuma means*, Two-toed Amphiuma
- Amphiuma pholeter*, One-toed Amphiuma

Lungless Salamanders (Plethodontidae)

- Desmognathus apalachicola*, Apalachicola Dusky Salamander
- Desmognathus auriculatus*, Southern Dusky Salamander
- Desmognathus cf. conanti*, Spotted Dusky Salamander
- Desmognathus monticola*, Seal Salamander
- Eurycea cirrigera*, Southern Two-lined Salamander
- Eurycea guttolineata*, Three-lined Salamander
- Eurycea quadridigitata* complex, Dwarf Salamander
- Eurycea wallacei*, Georgia Blind Salamander
- Hemidactylium scutatum*, Four-toed Salamander
- Plethodon grobmani*, Slimy Salamander
- Pseudotriton montanus*, Mud Salamander
- Pseudotriton ruber*, Red Salamander
- Stereochilus marginatus*, Many-lined Salamander

Mudpuppies, Olms (Proteidae)

- Necturus cf. beyeri*, Gulf Coast Waterdog

True Salamanders, Newts (Salamandridae)

- Notophthalmus perstriatus*, Striped Newt
- Notophthalmus viridescens*, Eastern Newt

Sirens (Sirenidae)

- Pseudobranchius axanthus*, Southern Dwarf Siren
- Pseudobranchius striatus*, Northern Dwarf Siren
- Siren intermedia*, Eastern Lesser Siren
- Siren lacertina* complex, Greater Siren

**Herpetology (ZOO 4932C)**  
**Spring 2015**

Frogs (Anura)

True Toads (Bufonidae)

- Anaxyrus fowleri*, Fowler's Toad
- Anaxyrus quercicus*, Oak Toad
- Anaxyrus terrestris*, Southern Toad
- Rhinella marina*, Cane Toad [NON-NATIVE]

Rain Frogs (Eleutherodactylidae)

- Eleutherodactylus planirostris*, Greenhouse Frog [NON-NATIVE]

Treefrogs (Hylidae)

- Acris crepitans*, Northern Cricket Frog
- Acris gryllus*, Southern Cricket Frog
- Hyla andersonii*, Pine Barrens Treefrog
- Hyla avivoca*, Bird-voiced Treefrog
- Hyla chrysocelis*, Cope's Gray Treefrog
- Hyla cinerea*, Green Treefrog
- Hyla femoralis*, Pine Woods Treefrog
- Hyla gratiosa*, Barking Treefrog
- Hyla squirella*, Squirrel Treefrog
- Osteopilus septentrionalis*, Cuban Treefrog [NON-NATIVE]
- Pseudacris crucifer*, Spring Peeper
- Pseudacris feriarum*, Upland Chorus Frog
- Pseudacris nigrita*, Southern Chorus Frog
- Pseudacris ocularis*, Little Grass Frog
- Pseudacris ornata*, Ornate Chorus Frog

Narrow Mouth Toads (Microhylidae)

- Gastrophryne carolinensis*, Eastern Narrowmouth Toad

True Frogs (Ranidae)

- Lithobates capito*, Gopher Frog
- Lithobates catesbeianus*, Bullfrog
- Lithobates clamitans*, Green Frog, Bronze Frog
- Lithobates grylio*, Pig Frog
- Lithobates heckscheri*, River Frog
- Lithobates okaloosae*, Florida Bog Frog
- Lithobates sphenoccephalus*, Southern Leopard Frog
- Lithobates virgatipes*, Carpenter Frog

Nearctic Spadefoot Toads (Scaphiopodidae)

- Scaphiopus holbrookii*, Eastern Spadefoot Toad

**Herpetology (ZOO 4932C)  
Spring 2015**

Turtles (Chelonia)

Marine Turtles (Cheloniidae)

- Caretta caretta*, Loggerhead Sea Turtle
- Chelonia mydas*, Green Sea Turtle
- Eretmochelys imbricata*, Atlantic Hawksbill Sea Turtle
- Lepidochelys kempii*, Kemp's Ridley Sea Turtle

Snapping Turtles (Chelydridae)

- Chelydra serpentina*, Snapping Turtle
- Macrochelys apalachicola*, Apalachicola Alligator Snapping Turtle
- Macrochelys suwanniensis*, Suwannee Alligator Snapping Turtle
- Macrochelys temminckii*, Alligator Snapping Turtle

Leatherback (Dermochelyidae)

- Dermochelys coriacea*, Leatherback Sea Turtle

Pond and Marsh Turtles (Emydidae)

- Chrysemys dorsalis*, Southern Painted Turtle [NON-NATIVE]
- Clemmys guttata*, Spotted Turtle
- Deirochelys reticularia*, Chicken Turtle
- Graptemys barbouri*, Barbour's Map Turtle
- Graptemys ernsti*, Escambia Map Turtle
- Graptemys pseudogeographica*, False Map Turtle
- Malaclemys terrapin*, Diamondback Terrapin
- Pseudemys concinna*, River Cooter
- Pseudemys nelsoni*, Florida Redbelly Cooter [NON-NATIVE in part]
- Pseudemys peninsularis*, Peninsula Cooter [NON-NATIVE in part]
- Pseudemys suwanniensis*, Suwannee Cooter
- Terrapene carolina*, Eastern Box Turtle
- Trachemys scripta*, Pond slider [NON-NATIVE in part]

Musk and Mud Turtles (Kinosternidae)

- Kinosternon baurii*, Striped Mud Turtle
- Kinosternon subrubrum*, Mud Turtle
- Staurotypus salvinii*, Pacific Coast Giant Musk Turtle
- Sternotherus minor*, Loggerhead Musk Turtle
- Sternotherus odoratus*, Eastern Musk Turtle

Tortoises (Testudinidae)

- Gopherus polyphemus*, Gopher Tortoise

Softshell Turtles (Trionychidae)

- Apalone ferox*, Florida Softshell [NON-NATIVE in part]
- Apalone mutica*, Smooth Softshell
- Apalone spinifera*, Spiny Softshell

**Herpetology (ZOO 4932C)  
Spring 2015**

Crocodylians (Crocodylia)

Alligators and Caimans (Alligatoridae)

*Alligator mississippiensis*, American Alligator

*Caiman crocodilus*, Spectacled Caiman [NON-NATIVE]

Crocodiles (Crocodylidae)

*Crocodylus acutus*, American Crocodile

Worm Lizards (Amphisbaenians)

Florida Worm Lizard (Rhineuridae)

*Rhineura floridana*, Florida Worm Lizard

Lizards (Sauria)

Dragon Lizards (Agamidae)

*Agama agama*, African Rainbow Lizard [NON-NATIVE]

*Calotes cf. versicolor*, Variable Bloodsucker [NON-NATIVE]

*Leiolepis belliana*, Butterfly Lizard [NON-NATIVE]

*Leiolepis rubritaeniata*, Red-banded Butterfly Lizard [NON-NATIVE]

Glass Lizards and Alligator Lizards (Anguidae)

*Ophisaurus attenuatus*, Slender Glass Lizard

*Ophisaurus compressus*, Island Glass Lizard

*Ophisaurus mimicus*, Mimic Glass Lizard

*Ophisaurus ventralis*, Eastern Glass Lizard

Chameleons (Chamaeleonidae)

*Chamaeleo calyptratus*, Veiled Chameleon [NON-NATIVE]

*Furcifer oustaleti*, Oustalet's Chameleon [NON-NATIVE]

*Furcifer pardalis*, Panther Chameleon [NON-NATIVE]

Helmeted Lizards (Corytophanidae)

*Basiliscus vittatus*, Brown Basilisk [NON-NATIVE]

Anoles (Dactyloidae)

*Anolis carolinensis*, Green Anole

*Anolis chlorocyanus*, Hispaniolan Green Anole [NON-NATIVE]

*Anolis cristatellus*, Puerto Rican Crested Anole [NON-NATIVE]

*Anolis cybotes*, Large-headed Anole [NON-NATIVE]

*Anolis distichus*, Bark Anole [NON-NATIVE]

*Anolis equestris*, Knight Anole [NON-NATIVE]

*Anolis garmani*, Jamaican Giant Anole [NON-NATIVE]

*Anolis porcatius*, Cuban Green Anole [NON-NATIVE]

*Anolis sagrei*, Cuban Brown Anole [NON-NATIVE]

*Anolis trinitatis*, Saint Vincent's Bush Anole [NON-NATIVE]



**Herpetology (ZOO 4932C)**  
**Spring 2015**

Typical Geckos (Gekkonidae)

*Gekko badenii*, Golden Gecko [NON-NATIVE]  
*Gekko gecko*, Tokay Gecko [NON-NATIVE]  
*Hemidactylus frenatus*, Common House Gecko [NON-NATIVE]  
*Hemidactylus garnotii*, Indo-Pacific House Gecko [NON-NATIVE]  
*Hemidactylus mabouia*, Wood Slave [NON-NATIVE]  
*Hemidactylus platyurus*, Asian Flat-tailed House Gecko [NON-NATIVE]  
*Hemidactylus turcicus*, Mediterranean Gecko [NON-NATIVE]  
*Lepidodactylus lugubris*, Mourning Gecko [NON-NATIVE]  
*Phelsuma grandis*, Madagascar Giant Day Gecko [NON-NATIVE]  
*Phelsuma laticauda*, Gold Dust Day Gecko [NON-NATIVE]

Iguanas (Iguanidae)

*Ctenosaura pectinata*, Mexican Spinytail Iguana [NON-NATIVE]  
*Ctenosaura similis*, Black Spinytail Iguana [NON-NATIVE]  
*Iguana iguana*, Green Iguana [NON-NATIVE]

Curly-Tailed Lizards (Leiocephalidae)

*Leiocephalus carinatus*, Northern Curlytail Lizard [NON-NATIVE]  
*Leiocephalus schreibersii*, Red-sided Curlytail Lizard [NON-NATIVE]

North American Spiny Lizards (Phrynosomatidae)

*Phrynosoma cornutum*, Texas Horned Lizard [NON-NATIVE]  
*Sceloporus undulatus*, Eastern Fence Lizard  
*Sceloporus woodi*, Florida Scrub Lizard

Leaf-Toed Geckos (Phyllodactylidae)

*Tarentola annularis*, Ringed Wall Gecko [NON-NATIVE]  
*Tarentola mauritanica*, Moorish Gecko [NON-NATIVE]

Skinks (Scincidae)

*Chalcides ocellatus*, Ocellated Skink [NON-NATIVE]  
*Eutropis multifasciata*, Brown Mabuya [NON-NATIVE]  
*Plestiodon anthracinus*, Coal Skink  
*Plestiodon egregius*, Mole Skink  
*Plestiodon fasciatus*, Common Five-lined Skink  
*Plestiodon inexpectatus*, Southeastern Five-lined Skink  
*Plestiodon laticeps*, Broadhead Skink  
*Plestiodon reynoldsi*, Florida Sand Skink  
*Scincella lateralis*, Ground Skink  
*Trachylepis quinquetaeniata*, African Five-lined Skink [NON-NATIVE]

Dwarf Geckos (Sphaerodactylidae)

*Gonatodes albogularis*, Yellowhead Gecko [NON-NATIVE]  
*Sphaerodactylus argus*, Ocellated Gecko [NON-NATIVE]  
*Sphaerodactylus elegans*, Ashy Gecko [NON-NATIVE]

**Herpetology (ZOO 4932C)**  
**Spring 2015**

*Sphaerodactylus notatus*, Reef Gecko

Whiptail Lizards (Teiidae)

*Ameiva ameiva*, Giant Ameiva [NON-NATIVE]

*Ameiva praesignis*, Borriguero Ameiva [NON-NATIVE]

*Aspidoscelis motaguae*, Giant Whiptail; [NON-NATIVE]

*Aspidoscelis sexlineata*, Six-lined Racerunner

*Cnemidophorus lemniscatus*, Rainbow Whiptail [NON-NATIVE]

*Salvator merianae*, Argentine Black & White Tegu [NON-NATIVE]

Monitors (Varanidae)

*Varanus niloticus*, Nile Monitor [NON-NATIVE]

Snakes (Serpentes)

File Snakes and Wart Snakes (Acrochordidae)

*Acrochordus javanicus*, Javan File Snake [NON-NATIVE]

Boas (Boidae)

*Boa constrictor*, Boa Constrictor [NON-NATIVE]

Typical Snakes (Colubridae)

*Cemophora coccinea*, Scarlet Snake

*Coluber constrictor*, Eastern Racer

*Coluber flagellum*, Eastern Coachwhip

*Drymarchon couperi*, Eastern Indigo Snake

*Lampropeltis calligaster*, Mole Kingsnake

*Lampropeltis extenuata*, Short-tailed Kingsnake

*Lampropeltis getula*, Common Kingsnake

*Lampropeltis elapsoides*, Scarlet Kingsnake

*Ophedrys aestivus*, Rough Green Snake

*Pantherophis alleghaniensis*, Eastern Ratsnake

*Pantherophis guttatus*, Eastern Corn Snake

*Pantherophis spiloides*, Gray Rat Snake

*Pituophis melanoleucus*, Pine Snake

*Tantilla coronata*, Southeastern Crowned Snake

*Tantilla oolitica*, Rim Rock Crowned Snake

*Tantilla relicta*, Florida Crowned Snake

Rear-Fanged Snakes (Dipsadidae)

*Diadophis punctatus*, Ringneck Snake

*Farancia abacura*, Mud Snake

*Farancia erytrogramma*, Rainbow Snake

*Heterodon platirhinos*, Eastern Hognose Snake

*Heterodon simus*, Southern Hognose Snake

*Rhadinaea flavilata*, Pine Woods Snake

**Herpetology (ZOO 4932C)**  
**Spring 2015**

Elapids (Elapidae)

*Micrurus fulvius*, Eastern Coral Snake

Water Snakes, Grass Snakes, and Garter Snakes (Natricidae)

*Nerodia clarkii*, Salt Marsh Snake

*Nerodia cyclopion*, Mississippi Green Water Snake

*Nerodia erythrogaster*, Plainbelly Water Snake

*Nerodia fasciata*, Southern Water Snake

*Nerodia floridana*, Florida Green Water Snake

*Nerodia sipedon*, Midland Water Snake

*Nerodia taxispilota*, Brown Water Snake

*Regina alleni*, Striped Crayfish Snake

*Regina rigida*, Glossy Crayfish Snake

*Regina septemvittata*, Queen Snake

*Seminatrix pygaea*, Swamp Snake

*Storeria dekayi*, Brown Snake

*Storeria occipitomaculata*, Redbelly Snake

*Storeria victa*, Florida Brown Snake

*Thamnophis sauritus*, Eastern Ribbon Snake

*Thamnophis sirtalis*, Garter Snake

*Virginia striatula*, Rough Earth Snake

*Virginia valeriae*, Eastern Smooth Earth Snake

Pythons (Pythonidae)

*Python bivittatus*, Burmese Python [NON-NATIVE]

*Python sebae*, African Rock Python [NON-NATIVE]

Blind Snakes (Typhlopidae)

*Ramphotyphlops braminus*, Brahminy Blind Snake [NON-NATIVE]

Vipers (Viperidae)

*Agkistrodon contortrix*, Copperhead

*Agkistrodon piscivorus*, Cottonmouth

*Crotalus adamanteus*, Eastern Diamondback Rattlesnake

*Crotalus horridus*, Timber Rattlesnake

*Sistrurus miliarius*, Dusky Pigmy Rattlesnake

# Herpetology (ZOO 4932C) Spring 2015

## **Schedule:**

The schedule is approximate as we may take more time to cover some topics and less time to cover others than indicated on the schedule. I may need to switch topics or lab periods around and will announce such changes in class. You are expected to read the assigned chapters and articles before coming to class for lecture/discussion on that topic. We will move quickly through the material. PowerPoints will be placed on Webcourses to facilitate reviewing the lectures. I will try to have them posted well before class but sometimes they may not be posted until minutes before class. There will be handouts for lab each week.

## **Readings:**

**VC** refers to the Vitt and Caldwell Text

**He** refers to Heyer et al. (found in the library and on Webcourses)

## Herpetology (ZOO 4932C)

### Spring 2015 Herpetology Schedule

| <u>Week</u> | <u>Day</u> | <u>Date</u> | <u>Lecture Topics</u>                                                     | <u>Lab/Field</u>                                                            | <u>Readings</u>  |
|-------------|------------|-------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------|
| 1           | Tu         | 13-Jan      | What is Herpetology?; Tetrapod Relationships and Evolutionary Systematics |                                                                             | VC Ch 1          |
|             | Th         | 15-Jan      | Tetrapod Relationships and Evolutionary Systematics                       | Introduction to Herpetology Lab, Keys and Field Guides, Amphibian Diversity | VC Ch 1, 15-17   |
| 2           | Tu         | 20-Jan      | Anatomy of Amphibians and Reptiles                                        |                                                                             | VC Ch 2          |
|             | Th         | 22-Jan      | Anatomy of Amphibians and Reptiles                                        | Amphibian Anatomy                                                           | VC Ch 2          |
| 3           | Tu         | 27-Jan      | <b>Amphibian Family Presentations: Near</b>                               |                                                                             | VC 15-17         |
|             | Th         | 29-Jan      |                                                                           | <b>Sampling Methods field trip (Econlockhatchee)</b>                        | He Ch 3-6        |
| 4           | Tu         | 3-Feb       | <b>Amphibian Family Presentations: Far</b>                                |                                                                             | VC 15-17         |
|             | Th         | 5-Feb       | Evolution of Ancient and Modern Amphibians and Reptiles                   | <b>Amphibian Lab Exam</b>                                                   | VC Ch 3          |
| 5           | Tu         | 10-Feb      | Reproduction and Life Histories                                           |                                                                             | VC Ch 4          |
|             | Th         | 12-Feb      |                                                                           | <b>Group Rotation Field Trip 1 (Econlockhatchee/ Econ River)</b>            |                  |
| 6           | Tu         | 17-Feb      | Reproductive Modes                                                        |                                                                             | VC Ch 5          |
|             | Th         | 19-Feb      | Water Balance and Gas Exchange                                            | Reptile Anatomy                                                             | VC Ch 6          |
| 7           | Tu         | 24-Feb      | Thermoregulation, Performance, and Energetics                             |                                                                             | VC Ch 7          |
|             | Th         | 26-Feb      | <b>Lecture Exam 1</b>                                                     | Reptile Diversity                                                           | VC Ch 1-7, 18-22 |
| 8           | Tu         | 3-Mar       | <b>Reptile Family Presentations: Near</b>                                 |                                                                             | VC 18-22         |
|             | Th         | 5-Mar       |                                                                           | <b>Group Rotation Field Trip 2 (Econlockhatchee/ Econ River)</b>            |                  |
|             |            | 10-12 Mar   | <b>Spring Break NO CLASSES</b>                                            |                                                                             |                  |
| 9           | Tu         | 17-Mar      | <b>Reptile Family Presentations: Far</b>                                  |                                                                             | VC 18-22         |
|             | Th         | 19-Mar      | Spacing, Movements, and Orientation; Communication and Social Behavior    | <b>Reptile Lab Exam</b>                                                     | VC Ch 8, 9       |
| 10          | Tu         | 24-Mar      | Foraging Ecology and Diets                                                |                                                                             | VC Ch 10         |
|             | Th         | 26-Mar      |                                                                           | <b>Group Rotation Field Trip 3 (Econlockhatchee/ Econ River)</b>            |                  |
| 11          | Tu         | 31-Mar      | Defense and Escape; Venom Evolution (Andrew Mason)                        |                                                                             | VC Ch 11         |
|             | Th         | 2-Apr       |                                                                           | <b>Reptile Discovery Center Field Trip</b>                                  |                  |
| 12          | Tu         | 7-Apr       | Defense and Escape; Ecology                                               |                                                                             | VC Ch 11-12      |
|             | Th         | 9-Apr       |                                                                           | <b>Group Rotation Field Trip 4 (Econlockhatchee/ Econ River)</b>            |                  |
| 13          | Tu         | 14-Apr      | Ecology; Biogeography and Phylogeography                                  |                                                                             | VC Ch 12-13      |
|             | Th         | 16-Apr      | Biogeography and Phylogeography; Graduate Biogeography Presentations      | Project Data Analysis                                                       | VC Ch 13         |
| 14          | Tu         | 21-Apr      | Conservation Biology                                                      |                                                                             | VC Ch 14         |
|             | Th         | 23-Apr      |                                                                           | <b>Herping Field Trip (Chuluota and Black Hammock)</b>                      |                  |
| Finals      | Th         | 30-Apr      | <b>Lecture Exam 2 (1:00-3:50 pm)</b>                                      |                                                                             | VC Ch 8-14       |