

# ZOO4926/6927 Herpetology

## ***Instructors***

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## ***Teaching Assistant***

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## ***Course Summary***

This course features lectures and laboratory sections that provide a broad introduction to the diversity, evolution, and biology of amphibians and reptiles. Topics include evolutionary history, systematics, diversity, ecology, behavior, physiology, anatomy, and natural history. Laboratory sections provide hands-on experience with amphibians and reptiles and make use of the scientific collections of the Florida Museum of Natural History. In addition to the lectures and laboratory activities, the course involves several local field trips to see living species. 4 Credit hours.

## ***Course Lectures and Laboratory Sections***

The course will meet for lecture once each week and once for laboratory each week.

Lecture: Monday, Wednesday, and Friday, Period 2 (8:30 – 9:20 am), Bartram 211

Laboratory Sections, Carr 110

Section (1), Tuesday, Periods 6 and 7 (12:50 pm – 2:45 pm)

Section (2), Wednesday, Periods 6 and 7 (12:50 pm – 2:45 pm)

## ***Required Course Materials***

Textbook: Pough, F.H., R.M. Andrews, M.L. Crump, A.H. Savitzky, K.D. Wells, and M.C. Brandley. 2015. *Herpetology*. 4<sup>th</sup> Edition. Sinauer Associates.

## ***Course Objectives***

Undergraduate students:

- (1) identify major groups of amphibians and reptiles in the United States
- (2) demonstrate familiarity with natural history of amphibians and reptiles
- (3) summarize basic biology of major groups of amphibians and reptiles
- (4) describe major research themes in herpetology

**Grading and Exams:**

Grades will be based on one term paper, attendance in class and field trips, exams, laboratory assignments, and lab practicals. Exams will include content from both lecture and laboratory assignments.

Term paper	25%
3 exams, in class	30%
Attendance (including field trip)	15%
Laboratory assignments	10%
Laboratory practical	20%
<b>Total:</b>	<b>100%</b>

Term paper

A 3-page essay (chosen in consultation with the instructors) based on a review of the scientific literature on a herpetological topic, including, for example, a summary of the biology and natural history of a specific species or genus.

**Final course grades will likely be assigned as follows: A ( $\geq 930$ ), A- (929-900), B+ (899-870 pts), B (869-830 pts), B- (829-800 pts), C+ (799-770), C (769-730), C- (729-700), D+ (699-670 pts), D (669-670 pts), D- (629-600 pts), E (<600 pts). Please note this scale could possibly be changed if justified by the overall class performance.**

### ***Laboratories***

Each week, students will participate in one of the two-hour laboratory sections. Labs will be organized taxonomically with a different focus each week (i.e., crocodilians, turtles, lizards). The labs will make use of the scientific specimens (both skeletons and preserved in alcohol) preserved in the Florida Museum of Natural History. Labs will focus on providing students with hands-on familiarity with major lineages of amphibians and reptiles around the world as well as the diversity found in Florida. Lab assignments will guide students through examination of specimens for each week's focal group and build skills in identification. The lab practical will evaluate identification skills but also important biological themes (e.g., locomotion, feeding, life history) as they relate to anatomy of preserved specimens.

### ***Class and University of Florida Policy Statements***

#### **Grades and Grade Points**

For information on current UF policies for assigning grade points, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

#### **Absences and Make-Up Work**

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

There are *no* make-up exams, unless previously arranged or an exam is missed owing to a legitimate emergency. *Exam scores are considered final two weeks after an exam is returned.*

Students are expected to attend all classes and laboratories. There will be no switching of lab sections without permission, and there are no make-up laboratories available.

#### **Online Course Evaluation Process**

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

## **Academic Honesty**

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: *“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”* You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: *“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”*

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

## **Software Use**

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

## **Campus Helping Resources**

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, [www.counseling.ufl.edu/cwc/](http://www.counseling.ufl.edu/cwc/)
  - Counseling Services
  - Groups and Workshops
  - Outreach and Consultation
  - Self-Help Library
  - Training Programs
- U Matter We Care, [www.umatter.ufl.edu/](http://www.umatter.ufl.edu/)
- Career Resource Center, First Floor JWRU, 392-1601, [www.crc.ufl.edu/](http://www.crc.ufl.edu/)

## **Services for Students with Disabilities**

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

### **Student Complaints**

Each online distance learning program has a process for, and will make every attempt to resolve, student complaints within its academic and administrative departments at the program level. See <http://www.distance.ufl.edu/student-complaint-process> for more details.

### **Sexual Harassment**

It is the policy of The University of Florida to provide an educational and working environment for its students, faculty, and staff that is free from sex discrimination and sexual harassment. In accordance with federal and state law, the University prohibits discrimination on the basis of sex, including sexual harassment. Sex discrimination and sexual harassment will not be tolerated, and individuals who engage in such conduct will be subject to disciplinary action. The University encourages students, faculty, staff, and visitors to promptly report sex discrimination and sexual harassment. If you believe you have been subjected to sex discrimination or sexual harassment please report the incident to me or any University official, administrator, or supervisor. The Office of Human Resource Services investigates all complaints. Incidents should be reported as soon as possible after the time of their occurrence ([larry-ellis@ufl.edu](mailto:larry-ellis@ufl.edu)).

## Topical Lecture and Laboratory Schedule

## Required Reading

### Weeks 1–6:

### What are they?

#### Week 1

7 January: Introduction & History

Chapter 1

9 January: Amphibian Origins

11 January: Caecilians

Chapter 2

Chapter 3

#### Week 2

14 January: Salamanders

16 January: Frogs (Part I)

Chapter 3

18 January: Frogs (Part II)

Chapter 3

LAB 1 – Introduction; Tour of FLMNH Herps

Chapter 3

#### Week 3

21 January: **\*\*NO CLASS\*\*** (UF Holiday)

23 January: Reptile Origins

25 January: Lizards (Part I)

Chapter 2

LAB 2 – Caecilians & Salamanders

Chapter 4

#### Week 4

28 January: *Guest speaker: Katie O'Donnell*  
*United States Geological Survey*

30 January: Lizards (Part II)

1 February: Snakes (Part I)

Chapter 4

LAB 3 – Frogs (Part I)

Chapter 4

#### Week 5

4 February: Snakes (Part II)

6 February: Archosaur Origins

Chapter 4

8 February: Crocodylians

Chapter 2

LAB 4 – Frogs (Part II)

Chapter 4

#### Week 6

11 February: *Guest speaker: Kevin Enge*

*Fish & Wildlife Conservation Commission*

13 February: Turtles

15 February: **EXAM 1 covers Weeks 1–6**

Chapter 4

LAB 4 – Lizards (Part I)

## **Weeks 7–9:**

### **How do they work?**

Week 7

18 February: Temperature,  
Thermoregulation, & Ectothermy (Part I)

Chapter 6

20 February: Temperature,  
Thermoregulation, & Ectothermy (Part II)

Chapter 6

22 February: Feeding & Digestion (Part I)  
LAB 6 – Lizards (Part II)

Chapters 7 and 11

Week 8

25 February: Feeding & Digestion (Part II)

Chapters 7 and 11

27 February: Locomotion

Chapter 10

1 March: Locomotion

LAB 7 – **LAB EXAM 1 covers Labs 1–6**

Week 9

**\*\*SPRING BREAK\*\***

Week 10

11 March: Respiration & Circulation (Part I)

Chapter 7

13 March: Respiration & Circulation (Part II)

Chapter 7

15 March: *Guest Speaker: Rob Ossiboff*

Chapter 15

*UF Veterinary Medicine*

Lab 8 – Snakes (Part I)

Week 11

18 March: Water Balance (Part I)

Chapter 6

20 March: Water Balance (Part II)

Chapter 6

22 March: **EXAM 2 covers Weeks 7–11**

Lab 9 – Snakes (Part II)

## **Weeks 12–14:**

### **What do they do?**

Week 12

25 March: Amphibian Reproduction & Life  
History

Chapter 8

27 March: Amphibian Communication

Chapter 13 and 14

29 March: *Guest Speaker: Ana Longo*

*UF Department of Biology*

Lab 10 – Turtles

Week 13

1 April: Reptile Reproduction & Life History

3 April: Reptile Communication

5 April: *Guest Speaker: Dan Evans*

*Sea Turtle Conservancy*

Lab 11 – Crocodylians

**Required Reading**

Chapter 9

Chapters 13 and 14

Week 14

8 April: Community Ecology

10 April: Threats to Amphibians & Reptiles

12 April: *Guest Speaker: Brad Shaffer*

*University of California, Los Angeles*

Lab 12 – **LAB EXAM 2 covers Labs 7–11**

Chapter 12 and 16

Chapter 17

Week 15

15 April: Conservation Efforts (Part I)

17 April: Conservation Efforts (Part II)

19 April: *Guest Speaker:*

*Christina Romagosa*

*UF Wildlife Ecol. & Conservation*

Lab 13 – Panel with Herpetology Grad

Students & Postdocs

Chapter 17

Chapter 17

Week 16

22 April: **EXAM 3 covers Weeks 12–14**

24 April: Course Summary & Celebration