

# **Biology of Snakes**

**ZOO 4926, 6927**

**Fall 2017**

**Instructor: Dr. Harvey Lillywhite**

Department of Biology  
Dr. Marta Wayne, Chair  
220 Bartram Hall, 392-1175

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## **GENERAL CLASS INFORMATION:**

### *Course Summary*

This course will feature lectures and discussions related to fundamental aspects of the biology of snakes. Topics will include evolutionary history, systematics, diversity, structure, function, and behavior, including treatment of field and laboratory techniques in research, and consideration of the health, welfare, and conservation of snake biota. Discussion will cover the processes and mechanisms of maintenance, activity, and integration in contexts of behavior, ecology, and evolutionary history. The course will feature attributes of snakes, but is also comparative in the sense that comparisons with other vertebrates will be important for certain topics of discussion. 2 Credit hours.

*Course Lectures* W, periods 6-7, Carr 222 (tentative)

### *Instructor*

**Prof. Harvey B. Lillywhite**, Department of Biology  
Email: hblill@ufl.edu  
Office hours: By arrangement with instructor. Office 122 Bartram Hall

### *Required Course Materials*

**Textbook:** H.B. Lillywhite, *How Snakes Work: Structure, Function and Behavior of the World's Snakes*, Oxford University Press, 2014 (available at university book stores).

**Grading and Examinations:** Grades will be based on participation in discussions, attendance, writing assignment, and quizzes according to the following approximate (and tentative) distribution of credit.

4 exams, in class:	400 points
Writing assignment:	400 points
Attendance:	100 points
Participation in discussions:	100 points

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**Total Points:** **1000 points**

## **TOPICAL LECTURES & DISCUSSION**

Evolution and Diversity of Snakes  
  Introduction to course  
  Evolutionary History  
  Phylogeny and Phylogenetic Methods  
  Taxonomy  
  Diversification and Speciation  
Feeding and Digestion  
Locomotion  
Temperature & Ectothermy  
Skin Structure & Function  
Water Balance  
Mating & Reproduction  
Respiration and Circulation  
Sound Production  
Sensory Organs and Systems  
Conservation: Impacts of Climate Change  
Conservation: Health & Disease  
Conservation: Community Assemblages  
Conservation: Ecology and Field Methods  
Conservation and Public Education  
  General Discussion

### **OTHER:**

There is no formal laboratory. However, from time to time students might participate in demonstrations or field trip to further learn about behaviors of snakes and their ecology, conservation, or reproduction.