

## Desert Snakes: Mystery and Intrigue\*

### Information

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Date/ Time: Sunday, September 29, 9:00 AM – 4:00 PM

Meet at: [Black Rock Canyon Nature Center](#) (click on the link for a map to the meeting site)  
9800 Black Rock Canyon, Yucca Valley, CA 92284

Instructor: William Hayes, Ph.D., Zoology and Physiology, Loma Linda University,  
Professor of Biology

### Overview

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Feared and respected by many for their potential to inflict harm, snakes have long captured the fascination of humanity. William Hayes will introduce participants to a remarkable variety of venomous and non-venomous snakes that inhabit Southern California's deserts in this class. Due to the usual heat of September, we will have a quick orientation and then leave the classroom to look for snakes and other reptiles. After our exploration, we will return to the classroom where Dr. Hayes will discuss the many adaptations that are essential for snakes to survive in the desert ecosystem including unique morphological, physiological, behavioral, and ecological traits. Snake venom will also be discussed in detail providing answers to the following questions. What, exactly, is venom? How is it made and how is it delivered? Can venoms be beneficial? The class will explore the surrounding desert to identify reptile habitat and hopefully see some snakes! [Click](#) to read the article printed in the Loma Linda University newspaper reviewing Dr. William Hayes' Desert Snake class.

### Itinerary

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Sunday, September 29, 9:00AM – 4:00PM

*Black Rock Visitor Center*

- Lecture
- Lunch, **bring your own food**
- Continuation of lecture
- Field session

### What to Bring to the Course

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#### **Optional Equipment**

- Hiking Poles

#### **The 10 Essentials:** *Everyday in the Desert*

- Day pack

- 4 quarts of water
- Hiking boots with traction soles
- Lunch and snacks
- Clothing layers
- Hat
- Sun glasses
- Sunscreen
- Notebook and pencil/pen
- Whistle

### **Fitness Requirements**

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Participants must be in good physical condition for courses/activities in a desert that may be hot, dry, windy, and sometimes surprisingly cold.

### **Hike Level**

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Easy to Moderate

### **Guidelines**

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- You are responsible for your safety.
- Park your car in designated areas only. Parking along the side of the road is dangerous to you and the environment.
- Rattlesnakes are present in the park. Avoid contact with wildlife. Put your hands and feet only where you can see.
- Stay with the group. If you get lost, stay put.
- Drink plenty of water. If you run out, notify the instructor or the Desert Institute Representative.
- Before leaving the class, check out with the Desert Institute Representative.

### **College Credit**

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If taking this course for 0.5 unit of Biology (X414.51) credit through the University of California Riverside Extension, your grade will be determined by participation (50%) and a topic paper (50%).

### **Instructor Biography**

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**William Hayes** PhD, Zoology and Physiology, Professor of Biology, Loma Linda University. Hayes specializes in the ecology of venoms and venomous animals, behavioral ecology and conservation of lizards, and behavioral ecology, taxonomy, and conservation of birds. He has published numerous works, taught and organized conferences and workshops, and has given multiple television contributions. Hayes currently teaches classes in behavioral ecology, herpetology, ornithology, and conservation.

## **Suggested Reading**

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*Biology of the Rattlesnakes Symposium*, by William Hayes, Kent Beaman, Michael Cardwell, and Sean Bush

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\* The Desert Institute staff/instructors will attempt to accommodate participant's needs; however we reserve the right to deny a student participation in the course due to concerns regarding health and safety issues.