



The RiverRidge Foundation for  
Environmental Research and Education

*The Academy of Environmental Sciences*

## Conservation Biology Syllabus: Research Location - Hawaii

### **Instructors:**

#### **Florian Schmitt (Instructor on Record)**

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### **The Field Research Itinerary**

**March 27<sup>th</sup> – April 2<sup>nd</sup>, 2010**

#### **Day 1, Saturday, March 27<sup>th</sup>**

12:50pm: Depart for Hawaii

Evening: Arrive in Kona, Hawaii and transfer to Keauhou Beach Resort

#### **Day 2, Sunday, March 28<sup>th</sup>**

8:00 am: Breakfast provided

9:00 am – 10:00 am: Discuss rules, expectations, itinerary, and ecological aspects of Hawaii

10:00 am: Depart for the Keauhou Bird Conservation Center and Hawaii Volcanoes National Park

11:30 am – 1:00 pm: Tour of Keauhou Bird Conservation Center (KBCC) which is part of the San Diego Zoo's CRES program. Study the endangered species being rehabilitated at KBCC. Time to eat lunch will be provided with in our visit to KBCC. Lunch not provided.

1:00 pm: Leave KBCC and travel to Hawaii Volcanoes National Park

2:30 pm – 6:00 pm: Explore Hawaii Volcanoes National Park including Halemaumau crater and learn how Hawaii was formed, discuss its ecological history, and identify several of the ecological problems facing Hawaii today. Also discuss several programs that have been implemented to address these problems.

6:00 pm – 7:00 pm: Observe active lava flows on Kilauea's eastern flank.

7:00 – 9:30: Late dinner on your own and return to hotel

### **Day 3, Monday, March 29<sup>th</sup>**

8:00 am – 8:30 am: Breakfast provided

8:30 am – 9:00 am: Students will blog a 250-word summary of the previous day's events on their student Wikispace pages.

9:00 am – 10:00 am: Travel to pockets of rainforest along Saddle Road.

10:00 am – 12:00 pm: Explore native rainforest kipukas (pockets of forest) off of Saddle Road. These areas represent how Hawaii used to be before the introduction of forest damaging ungulates and pigs. Lots of intact native flora and fauna (forest birds). Complete a biometry survey, soil survey, and meteorological survey of forest plot.

12:00 pm – 1:00 pm: Lunch on your own

1:00 pm – 3:00 pm: Tour the National Oceanic and Atmospheric Observatory. Learn about current trends in NOAA research.

3:00 pm – 6:00 pm: Explore the Wailuku River, Rainbow Waterfall and the Boiling Pots. Perform a hydrology survey and discuss the current environmental state of the Wailuku River.

6:30 pm – 7:30 pm: Dinner on your own

7:30 pm – 10:00 pm: Return to Kona

#### **Day 4, Tuesday, March 30<sup>th</sup>**

8:00 am – 8:30 am: Breakfast provided

8:30 am – 9:00 am: Students will blog a 250-word summary of the previous day's events on their student Wikispace pages.

9:00 am – 9:30 am: Complete a virtual field trip for students back in the continental U.S. Conservation Biology students will conference with high school students back in the Continental U.S. through WiZiQ and discuss the posts that have been made to the Wikispace throughout the week and explain what they have learned. High school students will be given the opportunity to have their questions answered. Conservation Biology students will learn how to serve as a primary and secondary facilitator during an online synchronous discussion.

9:45 am -11:30 am: Travel to Waipi'o Valley on the northern end of the island.

11:30 am – 12:30 pm: Lunch on your own

12:30 pm – 3:30 pm: Complete the GLOBE biometry, meteorology, and soil survey. Hike through the forest and discuss secondary succession.

3:30 pm – 6:00 pm: Travel back to Kona

6:00 pm – 7:00 pm: Dinner on your own

7:00 pm – 8:00 pm: Students will blog a 250-word summary of the day's events on their student Wikispace pages.

#### **Day 5, Wednesday, March 31<sup>st</sup>**

6:00 am: Breakfast provided

7:00 am: Depart for Sea Quest Snorkeling Adventure

8:15 am – 1:15 pm: Snorkel at three locations, explore sea caves, and lava tubes. Lunch is provided. During this time, students will assess the state of the coral reef and learn about several environmental stresses to reef communities. They will also learn about the programs that have been developed to address these issues. Students will investigate the success rate of these programs.

4:00 – 6:00 Explore Mauna Loa: The Largest Volcano on Earth. Students will investigate evolutionary trends that have allowed life to adapt to the conditions on the volcano. Students will also investigate the climatic zones associated with this landscape.

6:00 pm – 8:00 pm: Return to Hotel. Dinner on your own.

**Day 6, Thursday, April 1<sup>st</sup>**

8:00 am – 8:30 am: Breakfast provided

8:30 am – 9:30 am: Students will blog a 250-word summary of the previous day's events on their student Wikispace pages.

10:00 am – 12:00 pm: Beach hike and a review of Hawaii's endangered species. Students will complete a behavioral study on the Green Turtle.

12:00 pm – 1:00: Lunch on your own

1:00 pm: Depart for Mauna Kea Summit and participate in the evening Astronomy Tour. Dinner is provided.

10:30 pm: Return to hotel

**Day 7, Friday, April 2<sup>nd</sup>**

8:00 am – 8:30 am: Breakfast Provided

8:30 am – 9:30 am: Students will blog a 250-word summary of the previous day's events on their student Wikispace pages.

9:00 am – 10:00 am: Check out of hotel

10:00 am – 12:30 am: Beach free time

12:30 pm: Transfer to airport

3:36 pm: Board Airplane (American Airlines 7881)

**Day 8, Saturday, April 3<sup>rd</sup>**

Arrive at Dulles International Airport at 11:50 am