

## AC-5 Immersive Experience

### Arboretum

#### RAMP

**Description:** *In the fall 2010, the Arboretum developed a partnership with the UCF Research and Mentoring Program (RAMP). RAMP is designed to provide undergraduate students, who may be interested in pursuing graduate education, with research experience while working closely with a faculty mentor. In addition, the students participate in a variety of workshops designed to increase their awareness and knowledge of graduate school education. The aim of this program is to encourage more students from those populations who are traditionally underrepresented in graduate education to attend graduate school. For more information contact the UCF RAMP department.*

*Typically, RAMP students are accepted at the end of the spring or during summer semester. We will post opportunities on this page, as well as advertise through the Department of Biology, so please check back at that time.*

#### Past Projects:

- Urbanization Impact on Ecological Communities, 2014
- Sandhill Crane Project 2012-2014
- Companion Planting Project 2010-2012

**Website:** <https://arboretum.ucf.edu/programs/partnerships/ramp>

#### Urban Forestry Effects

**Description:** *Student interns have done research on the urban forest and its potential in sequestering atmospheric carbon through a research strategy called Urban Forestry Effects (UFORE). The UFORE study attempts to set the baseline carbon sequestration rate for all of campus by measuring the structure of the campus's urban and natural forests. This information has been collected by student interns and will be used in the policies and master planning processes for the future land uses on campus. This information can also be used to determine the hourly pollution removal rate and the cooling effect trees have on nearby buildings.*

**Website:** [UFORE.org](http://UFORE.org)

## **Biology Summer Institute**

**Description:** *The Biology Field Institute is a one week program for rising junior and senior high school students interested in seeking further understanding of Central Florida's diverse ecosystems, from Orlando to the east coast. This program will introduce students to field techniques and experimental approaches used in water quality assessment, vegetation monitoring, forest ecology, and studies of gopher tortoises and marine turtles. Throughout the program students will participate in hands-on experiences with professional biologists in a fun and educational setting designed to inspire a passion for studying the fields of biology, ecology, and natural resource conservation. The institute includes an overnight field trip to learn about nesting marine turtles alongside an experienced marine turtle biologist, and an opportunity to interact with both UCF graduate students, and undergraduate interns studying marine turtle ecology and conservation. In addition, students will spend one day in the lab learning basic data analysis, and the importance of communicating science. The Institute will run from 9 AM to 5 PM Monday – Wednesday with the coastal field trip leaving on Thursday morning and returning Friday afternoon. It is limited to 20 students, and requires completion with a B or higher of a general biology course, and a letter of recommendation from a recent high school teacher.*

**TA positions available for enrolled UCF Students (4 spots)**

**Website:** <http://siucf.cs.ucf.edu/biology-overview/>

## **UCF Study Abroad**

### **SIT Study Abroad Panama/Costa Rica: Tropical Ecology, Marine Ecosystems, and Biodiversity Conservation**

**Description:** *Major topics include contemporary environmental and sociocultural issues shaping Panama, environmental research methods and ethics, development and conservation, interdependent tropical ecosystems, poverty and the environment, and Indigenous cultures and conservation.*

**Offered:** *18 credit hour semester long program offered in fall or spring.*

**Website:**

[https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program\\_ID=10261](https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program_ID=10261)

### **The School for Field Studies- Sustainable Development Studies**

**Description:** *The program examines different development and resource management models that Costa Rica uses to protect the biodiversity of its ecosystems while promoting socioeconomic benefits for its people. Students will examine the effects of globalization on development issues such as agriculture, biodiversity protection, economic development, urban sprawl, population growth, waste management, and water quality.*

*Visits to cloud forests, dry forests, volcanoes, lowland rainforests, farms, and plantations offer opportunities to examine management schemes, identify benefits of protected areas, and determine which systems offer the best options for economic development, the maintenance of cultural norms, and the preservation of biodiversity.*

**Offered:** 18 credit hour semester long program offered in fall or spring

**Website:** [https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program\\_ID=10236](https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program_ID=10236)

### **The School of field Studies- Sustaining Tropical Ecosystems: Biodiversity, Conservation, Development**

**Description:** *Students explore and address key features of sustainable development strategies including the most pressing challenges occurring at the intersection of conservation and economic progress. Through coursework, students gain an understanding of the complex interrelations between economic development, land-use, the provision of ecosystem services, and global climate change from socioeconomic, ecological and natural resources management perspectives.*

**Offered:** Summer

**Website:** [https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program\\_ID=10237](https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program_ID=10237)

### **The School of field Studies- Marine Resource Studies**

**Description:** *Snorkeling and scuba diving in the waters surrounding South Caicos, students learn field research and monitoring techniques to identify and assess the health of a wide range of marine organisms and habitats. Students learn to identify and observe the behavior of marine species, assess coastal and marine habitats, quantify fisheries resources, and analyze implications of fishery policies. Students evaluate the concept and practice of marine protected areas (MPAs) as a resource management tool.*

**Offered:** 16 credit hour semester long program offered in fall or spring

**Website:** [https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program\\_ID=10321](https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program_ID=10321)

## STI Study Abroad: Iceland and Greenland: Climate Change and the Arctic

**Description:** Major topics of study in the program include the impact of climate change on Arctic ecosystems and human communities, climate modeling and trends, renewable energy in Iceland, carbon management, indigenous knowledge of changes in climate, communicating climate change and science

**Offered:** 18 Credit hour semester long program offered in fall or spring.

**Website:** [https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program\\_ID=10267](https://studyabroad.ucf.edu/index.cfm?FuseAction=Programs.ViewProgram&Program_ID=10267)

## Alternative Break Program

### Community Development in Guatemala

**Description:** During our trip, our English classes will help give students an advantage to combating illiteracy. Our work in gardens, as well as the building of tilapia ponds will directly provide food, as well as goods to sell for extra income. Our work building stoves will help replenish the forest, as the type of ecological stoves we will build use 65% less wood than standard stoves. Our health course will help families with basic hygiene, as the doctor-to-citizen ratio hits a low value of 0.0009:1. Our overall focus is sustainability through these various social issues and how we as a group can directly contribute to the overall well-being of the local population of Santa Catarina Barahona.

**Program Duration:** One week (Spring Break)

**Website:** <http://osi.ucf.edu/abp/trips/>

### Hunger and Health in Nashville

**Description:**

During our time there, we will help maintain their gardens and prepare food that will go out to the homeless. In the afternoon, we will head over to The Boys and Girls Club. This organization strives to give children a safe place to learn skills that will help them in the future. Our group will teach elementary/middle school students about nutrition and other health related topics. Our goal is to also make connections on the effects that hunger has on health. We will also partake in a community wide meal to interact with the locals. The last day of the trip will serve as a free day to explore the music filled streets of downtown Nashville.

**Program Duration: One Week** (Spring Break)

**Website:** <http://osi.ucf.edu/abp/trips/>

## Environment in Key West

**Description:** *During this trip we will be working with Reef Relief, a nonprofit organization dedicated to improving and protecting our coral reef ecosystem, where we will be cleaning up our shoreline by removing marine debris and stenciling storm drains. Alongside this organization we will be learning about the coral reef ecosystem and gaining a new found appreciation for the coral reef and marine life. Additionally, we will be camping out during this trip to appreciate our surrounding areas and adventuring into the water to snorkel and explore the beauty of our ocean.*

**Program Duration:** One Week (Spring Break)

**Website:** <http://osi.ucf.edu/abp/trips/>