



### UCR Summer Program 2020

Session 1: February 3<sup>rd</sup> - 28<sup>th</sup>, 2020 Session 2: July 6<sup>th</sup> - August 7<sup>th</sup>, 2020

**Applications start in August!** 

## Biodiversity and Conservation in the Tropics



#### Description

The course provides an approach to learn about Biodiversity and Conservation, by not only using Costa Rica as an example but also comparing this little country with other areas of the World. The course will have lectures made by the professor or invited lecturers. Readings will be assigned for discussion during the last week and two main fieldtrips will be organized to evaluate different biodiversity and conservation projects.

#### Credits

6 (4 Biodiversity and Conservation,2 Spanish as a Foreign Language)

#### Objectives

Introduce the concept of biodiversity and understand its distribution; discuss the major threats to biodiversity, introduce basic concepts of conservation biology, discuss the strategies for biodiversity conservation and learn about biodiversity and conservation in Costa Rica.

#### Methodology

The course will include general classes and lectures, readings to be discussed and fieldtrips during which projects are meant to be carried out.

Duration

90 hours

## **Fieldtrips**

#### Veragua

A really nice and touristic place located in the lower Caribbean slopes of the Talamanca mountain range (about 300 m). The site has a good mature and secondary forest and is surrounded by indigenous people and La Amistad International Park (Costa Rica and Panama). The place has been identified as the Costa Rican most diverse locality for some groups of organisms, especially with amphibians, to which a lot of effort has been devoted. It is an adventure park that has wonderful facilities for one day tourism visits. In courses like this, we have the advantage of also staying in rustic lodging facilities, dedicated mostly to scientists. Especially during the night it can be a little chilly.

#### Ostional

It is located within the National Wildlife Refuge of the same name, within a dry-to-wet forest transition zone in the lowlands of the Pacific side of the country. The refuge was created to protect what possibly is the most important nesting beach for the Olive Ridley sea turtle in the world. There are also Leatherback and Black sea turtles nesting in the place, the second turtle being a subspecies of the Green sea turtle or a valid species in its own right, depending on the author. There are people living within the reserve. Ostional villagers, through its Developmental Association, are allowed to harvest turtle eggs of the Olive Ridley. These turtles nest massively in Ostional, which means that more or less once a month thousands of turtles come together to nest on the beach, a phenomenon called "arribada" (by its Mexican name, meaning arrival), even in the English literature. An "arribada" can last from few to several days, two weeks being the maximum. Because eggs laid in the first days have a large probability of being destroyed by turtles arriving later, the local people are allowed to harvest eggs during the first two days of the "arribada".

# Week 1

## Activities

- Welcome session
- ★City tour around San José
- Fieldtrip to Veragua
  Rainforest
- Visit to UCR Atlantic
  Regional campus
- Visit to Guayabo
  National Monument
- ★Guest speaker

#### Topics

- Definition of
  biodiversity and species
  richness
- Measurement of biological diversity
- Distribution on biodiversity: number of species worldwide and estimates
- Examples of biodiversity in the tropics
- Spanish as a
  Foreign Language



# Week 2

## Activities

- ★ Visit to Museo Nacional
- Latin American
  Dancing Lessons
- 🖈 Visit to Museo de Oro
- 🖈 Guest speaker



## Topics

- Extinction rates in the past and present
- Estimates of extinction rates
- Endemic species and island biogeography
- Examples of biodiversity in the tropics
- ★Spanish as a Foreign Language

# Week 3

### Activities

- ★ Tour Nacientes de Palmichal
- ★ Fieldtrip to Ostional

## Topics

- Vulnerability to extinction
- Habitat destruction and fragmentation
- Definition of
  Conservation Biology
- Postulates of
  Conservation Biology
- ★Contributions of Conservation Biology
- ★Spanish as a Foreign Language

## Ex situ conservation strategies

- In situ conservation strategies
- Managing protected areas
- ★Sustainable development



#### Activities

★Visit to Poás National Park

Visit to Zarcero and Sarchí towns **Topics \***Discussion of papers

★Spanish as a Foreign Language

## Program Fee: USD \$3,500

#### What is included?

**Tuition fees** 

Homestays with Costa Rican families: breakfast and dinner included on week days, and two meals on weekends. Laundry service included.

#### What is not included?

Meals other than specified

Mandatory health insurance

- ★4 guided tours (lunch included)
- ★2 optional activities on Friday afternoons
- ★2 fieldtrips over the weekend

Plane tickets

Transportation from and to the airport

## **Contact Information**

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#### Credits

Edition

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