



# Environmental Science Field Course (EES C16 & EES D07) COSTA RICA



May 3<sup>rd</sup> to May 14<sup>th</sup>, 2020

## COURSE DESCRIPTION:

Costa Rica is one of the most geologically active areas in the world. Active subduction, explosive volcanism, large magnitude earthquakes, landslides and other geological hazards. Forming part of the land bridge between North and South America, Costa Rica is a country of vast bio-geographical importance supporting innumerable coastal ecosystems, wetlands, mangroves, coral reefs and lush tropical forests which sustain several species of exotic flora (e.g. > 1300 species of orchids) and fauna (monkeys and other larger mammals such as the jaguar).

The May, 2020 Costa Rica field course will introduce various field techniques used in the Environmental Sciences and include: scientific observation and recording, rock and mineral identification, flora and fauna identification, techniques for logging and mapping sediments, use of GPS and compass-clinometers, field note taking & field sampling techniques. Also: the pleasures of soaking in hot springs!

## Tentative Itinerary:

**May 3:** Arrive in San Jose, Capital City of Costa Rica from where we will explore and “get up close and personal” with some of Costa Rica’s and the world’s most active volcanoes.

**May 4:** Irazu Volcano (3432 meters). Highest volcano in Costa Rica.

**May 5:** Poas Volcano (2704 meters).



**May 6:** Arenal Volcano. **One of most ACTIVE volcanoes in the WORLD!** Tabacon geothermal hot springs. Chato (Arenal’s “little” brother) volcanic deposits.



**May 7: SPELUNKING** at Venado Caves.

**May 8:** Monteverde Montane Tropical **CLOUD FOREST.**



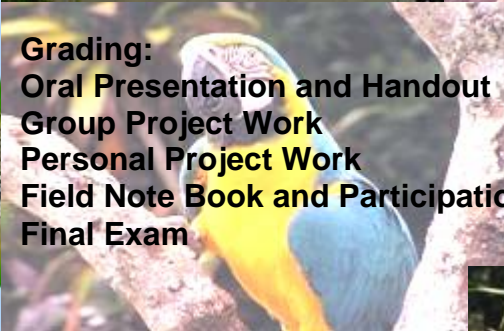
**May 9:** Travel to Manuel Antonio's breathtaking beaches on the emerald blue Pacific Ocean. Various stops en-route will set the stage for debates on modern and ancient environments, the plate tectonic evolution of Costa Rica and human impacts on fauna and flora.



**May 10:** Manuel Antonio – Coastal Aquifers & Mapping on **WHITE SAND BEACHES!**

**May 11:** Venture deep into Manuel Antonio's lush Lowland Tropical Wet Forest. Only spot in Costa Rica and the world where you will see the rare mono tití (squirrel monkey). Only 1500 left in the world! Explore the estuary & mangrove forests at Islas Damas known for its **COLOURFUL** birds.

**May 12 & 13:** Dominical – Mapping & Stratigraphic Logs at the best **SURFING** spot in Costa Rica!  
Final Exam in pm.



	EES C16	EES DO7
Grading:		
Oral Presentation and Handout	25%	30%
Group Project Work	20%	20%
Personal Project Work	15%	10%
Field Note Book and Participation	10%	10%
Final Exam	30%	30%



**Costs:** \$750 (estimated) and covers park fees, all accommodation and transport in Costa Rica. Airfare and course fee paid separately. Any funds remaining will be returned. \$250 deposit due now!! 15 students max!



**Experience field work at its best!**

**Pre-requisites:** EESC16 – one EESB level course & Permission of Instructor; EESD07 - EESC16 & Permission of Instructor

**Additional Information & Contact: Professor Ken Howard**  
Room ESC-348 ken.howard@utoronto.ca