



EES 3865: Field Investigations

VOLCANOES, CAVES, BEACHES, AND FORESTS OF BRAZIL

Guil Gualda, Earth & Environmental Sciences

SCOPE: Be an Earth scientist for a month! This course focuses on making critical observations to understand how geology shapes our Earth. We will study Earth and Environmental processes and systems in the field, with an emphasis on field observations as the primary tool, often asking *how* and *why* geologic processes occur. The course will be held in Brazil, giving us the opportunity to study past super-volcanic activity, surface landscape evolution, cave geology, and human dimensions of conservation, among other topics, while travelling through various ecosystems of the Brazilian Atlantic forest. Part of the fieldwork performed during the course will directly contribute to active research projects focusing on the evolution of supereruption-forming magma bodies being pursued by Gualda’s research group.

PROGRAM: The course will start in *Florianópolis* on May 5 and finish in *São Paulo* on May 29, 2020. Visited areas include:

- FAROL DE SANTA MARTA (Santa Catarina): Field methods, landscape evolution, sedimentary systems, magmatism
- SERRA GERAL (Santa Catarina and Rio Grande do Sul): Geologic environments through time, volcanism and the opening of the South Atlantic, research of supereruption deposits
- FLORIANÓPOLIS (Santa Catarina): Free days mid-course at a island city with beautiful beaches and plenty of activities
- CURITIBA (Paraná): Construction of a supercontinent, rain forests, magmatism
- ALTO RIBEIRA CAVE DISTRICT (São Paulo): Cave evolution, subterranean water systems, environmental conservation

EVALUATION: Course evaluation is based on participation, field exercises, short project reports

REQUISITES: No pre-requisites. Students with all levels of expertise in geology are encouraged to apply. Activities will be adjusted to take into account prior experience and course-work. **CREDITS:** 3 (Listed as MNS in AXLE)

EXPENSES: Course fee includes tuition, lodging, transportation, occasional meals (depending on location), and entrance fees to National and State Parks. It does not include airfare, transportation from and to airports, regular meals in major cities, and incidental expenses.



CONTACT INFO: Guil Gualda (g.gualda@vanderbilt.edu) **WEBSITE:** <https://my.vanderbilt.edu/ees210fieldinvestigations/>

APPLICATION & FINANCIAL AID: <https://www.vanderbilt.edu/geo/maymasters/> **MORE INFO:** <https://forms.gle/SdC7bQveBQ9LUCF67>