EES 110: Earth Systems

Course Description:

This course examines some of the basic processes that shape our planet, from the extraterrestrial collisions that helped it form to forces within the atmosphere & ocean that affect the climate across its surface. Some of the topics covered include the following:

1. **Plate Tectonics** - How is the earth put together?
2. **Volcanoes** - Why do some erupt explosively while others don’t erupt at all?
3. **Earthquakes** - Can we determine when and where the next big one will hit?
4. **Climate** - What processes control our weather?
5. **Fossil Fuels** - Where do our primary sources of energy come from?

The course includes laboratory exercises that cover map reading skills, rock and mineral identification, and earthquake risk assessment, among other topics. There are also two field trips (held during normal laboratory meeting times):

1. **Rocks & Minerals of Upstate SC**: A chance to explore the great outdoors of the upstate and apply rock and mineral identification skills to your local surroundings.

2. **Geologic History of the Upstate**: Building upon the first trip, this time out you’ll identify additional rocks, minerals, geologic structures and surface features that allow you to piece together events that have shaped the region over the past 500 million years.