

GEOGRAPHY 331

Natural Hazards



Summer 2024 | Session I (June 6-July9) | University of Tennessee, Knoxville

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This course is fully online, asynchronous.

Course description:

Natural disasters occur every day. We hear about them on the news and sometimes experience them firsthand. Do you want to learn more about natural disasters? For example, why did Hurricane Matthew kill hundreds of people in Haiti and a fraction of that in the U.S.? What caused the April 2011 super outbreak of tornadoes? Why do landslides frequently disrupt travel through Great Smoky Mountains National Park? These are a few of the questions we will explore in this class.

What will you learn?

We will learn the physical mechanisms of the Earth that cause specific natural hazards. These mechanisms include plate tectonics, magmatic processes, weather systems, climate patterns, erosion, and weathering—all processes that shift, modify, and break down Earth's surface.

We will highlight significant natural hazard events that have led to major disasters, loss of life, and displacement of affected peoples. For certain disasters, we will focus on human errors that exacerbated the impacts of the hazard, both environmental and societal, and attempt to better understand methods required to mitigate and recover from the disaster event.

We will emphasize that natural hazards defy international boundaries and can affect large portions of the Earth's surface in a single event. For example, a tsunami, major earthquake, or single hurricane can affect many countries with varying levels of development, requiring trans-national cooperation to focus recovery efforts where they are needed most.

Connections Packages:

Geography 331 is part of three Connections Packages that satisfy degree requirements in the College of Arts and Sciences: (1) Environment and Society, (2) Humans Living on a Dynamic Earth, and (3) Understanding Climate Change. These packages allow students to undertake a focused educational experience that complements in-depth study in their chosen major field.

VolCore: GEOG331 satisfies Natural Science without a lab.

If you have any questions, feel free to contact me!