

Course Description for AscI 4030

Human activity is transforming the Earth's environment and climate in profound and potentially irreversible ways. The influence we now exert on the planet is so immense that some scientists and scholars argue that we have entered a new geological epoch: the Anthropocene. The Anthropocene is defined by humanity's influence over the Earth's biosphere, atmosphere, hydrosphere, cryosphere, and geosphere, and the resulting impacts on the environments and climates in which all species live.

The evidence of profound and devastating changes surrounds us everywhere: biodiversity loss, resource depletion, food insecurity, rising sea levels, carbon emissions, pollution, extreme weather, droughts, and wildfires. Inequities in wealth, power, and education exacerbate these impacts, disproportionately affecting marginalized communities. Indeed, the Anthropocene and climate change are inexorably connected.

In this course, students will investigate the interrelationship between the Anthropocene and climate change to better understand their origins and impacts on society and the environment. Drawing insights from the environmental and marine sciences, climatology, sociology, geography, history, and the environmental humanities, this course will explore five (5) key questions:

- 1) How have humans conceptualized, experienced, modified, and exploited the environment in the past and present?
- 2) What are the local and global impacts of climate change? What political, economic, social, cultural, and environmental factors shape those impacts?
- 3) What are the physical and emotional consequences of climate change? How can we help others?
- 4) What role has science and technology played in creating the Anthropocene and exacerbating climate change? How can they contribute to sustainable development and climate change mitigation in the future?
- 5) In what ways can interdisciplinary skills be leveraged to make a difference for the future?