

ATMOSPHERIC SCIENCE (ATS)

ATS 201: Climate Science (4)

Earth's climate is influenced by the interactions of physical, chemical, and biological processes on land and in the atmosphere, ocean, and cryosphere. This introductory course surveys aspects of the Earth's energy budget, the greenhouse effect, characteristics and budgets of important greenhouse gases, as well as the influence of various other physical, chemical, and biological (including human) processes. Past, present, and potential future climate changes are assessed and compared using a variety of observations and climate models. Future climate impacts projected to result from the human influence on Earth's climate will be explored along with technical and policy alternatives for mitigation and adaptation. The certainty (or uncertainty) of each aspect will be considered.

Registration-Enforced Prerequisite: MTH 095 or higher.

Terms Typically Offered: Winter