EESC 2300: Global Climate Change

Tues/Thurs 8:30am – 10:00am
Spring 2023
Instructor: Dr. Michael E. Mann
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How certain are we that human activity is altering Earth's climate? How much more warming might we expect over the next century? What will the impacts be on severe weather events such as hurricanes, tornados, floods and drought? How might climate change impact water availability in arid and semi-arid regions already stressed for water resources? What is the threat to coastal regions? How might climate change impact natural ecosystems? Are there winners and losers? This course will explore the scientific evidence underlying each of these questions, reviewing the most recent international assessments of the science.

Global Climate Change will introduce natural and anthropogenic processes that impact the global climate, address current climate observations, and highlight estimates of future climate projections. Students will become familiar with the current state of understanding human-caused climate change including the science, impacts, and sociopolitical dimensions of the climate crisis. As public perceptions and attitudes regarding the causes and importance of climate change deviate, students will develop effective written and oral arguments which challenges them to think about some of the major issues facing the world today, and the role that science and technology play in defining and addressing these issues.

Course Textbook: The course textbook is: "*Dire Predictions: Understanding Climate Change*" (2nd edition) by Mann & Kump.