

GEOG 2032 Global climate change: science, impacts and policy

Professor Mary Edwards

In a nutshell

Global climate change is a key global issue, and today's geographers should be aware of the science behind it, the major implications it has for natural and social systems, and the challenge to society of creating appropriate responses to the scientific projections. This course provides such an overview. It is based on your own reading, on lectures that guide you through the main ideas, and an assignment about impacts of climate change that you will research and write up. There is also the chance to initiate more informal discussions linked to key ideas. The module comprises three parts: the science of climate change, impacts and adaptation, and climate policy, each taught by a staff member currently conducting research in the field.

Impacts/adaptation

Prof Steve Darby

- Impacts of climate change on river flows
- Riverine sediment systems and flood risk
- Climate change and Asian mega-rivers



Climate policy

Dr Emma Tompkins

- International climate policy
- National climate policy – UK case study
- Mitigation
- Adaptation
- Winners and losers and political ideologies



Climate science

Prof Mary Edwards

- The nature of climate and climate data
- Climate as a system/feedbacks
- Basics of climate modelling
- Downscaling
- IPCC science: detection of climate change and attribution of causes
- Biodiversity and climate change



Skills/employability

* Data visualization and interpretation * Climate-change awareness * Producing a concise briefing for an organization.