

## MOD. VI – ENVIRONMENTAL ECONOMICS, SUSTAINABLE DEVELOPMENT AND GOVERNANCE

Course Title: **Climate Change**

Instructor: Francesco Salustri ([francesco.salustri@uniroma3.it](mailto:francesco.salustri@uniroma3.it))

### Course Description:

This course is structured around four pillars: what climate change is; why economics is the central analytical toolkit; why LMICs bear a disproportionate burden; and how the One Health framework reveals the full health consequences of ecosystem destabilisation. The course also include practical tasks using Stata or other statistical software.

### Learning Objectives:

By the end of the course, students will be able to:

1. Explain the physical and social science basis of climate change and appraise planetary boundaries;
2. Evaluate the main economic tools for climate policy and their limitations;
3. Identify the economic paradox of fossil fuel subsidies;
4. Analyse the disproportionate climate burden on LMICs across agriculture, land, and migration;
5. Apply the One Health and Planetary Health frameworks to climate-health pathways;
6. Use Stata for climate-economic data analysis.

### Exam:

The final assessment consists on a take-home exam, where students are asked to produce a short report (no more than 2800 words) discussing the link between climate change and development. The report should be based on what discussed during the lectures, and students can work in groups.

### Readings:

- IPCC Climate Change 2023 AR6, <https://www.ipcc.ch/assessment-report/ar6/>
- Stern, N. (2006). Stern Review: The economics of climate change.
- Raworth, K. (2018). Doughnut economics: Seven ways to think like a 21st century economist. Chelsea Green Publishing.
- Romanello, M., Di Napoli, C., Green, C., Kennard, H., Lampard, P., Scamman, D., ... Costello, A. (2023). The 2023 report of the Lancet Countdown on health and climate change: the imperative for a health-centred response in a world facing irreversible harms. The Lancet, 402(10419), 2346-2394.

More references will be given during the lectures