

PLAN DOCENTE

Economía política del cambio climático

Máster en Sostenibilidad

Curso 2026-2027

FICHA IDENTIFICATIVA

DATOS DE LA ASIGNATURA

CÓDIGO	486347
NOMBRE	Economía política del cambio climático
CARÁCTER	Obligatoria
MODALIDAD	Presencial
PERÍODO	Segundo cuatrimestre: 29 de marzo 2027 – 23 de abril de 2027
HORARIO	Martes y Jueves 16h – 18h, Viernes 15h – 17h* *Alguna sesión puede cambiar de día y hora.
IDIOMA	
CRÉDITOS ECTS	3.0

COORDINACIÓN

DOCENTE NOMBRE Y CARGO:

PROFESORADO

DOCENTE NOMBRE Y CARGO:

OBJETIVOS DE LA ASIGNATURA

Climate change has economic and distributive consequences. This course uses the elements of economic analysis to study the economical and socio-political challenges represented by climate change. The course offers a theoretical and practical background on climate mitigation and adaptation policies, to help the

students understand the main trade-offs inherent to the policymaking of climate change.

RESULTADOS DE APRENDIZAJE DE LA ASIGNATURA

Students will acquire an understanding of:

1. the relationship between economic activity and climate change;
2. the array of climate mitigation economic policy instruments available to policymakers; and
3. examples of the application of climate policy instruments in different parts of the world.

These topics will be explored by applying an equality lens throughout the course, to give students an appreciation of the distributional implications of climate change and climate change policies.

HORARIO Y PROGRAMA DE LAS SESIONES DE LA ASIGNATURA

The course consists of twelve 2-hour sessions. Each session will focus on a specific issue related to the fundamental aspects of climate change.

	TÍTULO Y RECURSOS DE LA SESIÓN	FECHA Y HORA
WEEK 1: PROBLEM STATEMENT		
1	Introduction to the course. Problem Statement: Economic activity and climate change (I) Profesor/a: M. Silvi Mandatory supporting material: - Resources for the Future. 2025. The social cost of carbon 101. Retrieved from https://www.rff.org/publications/explainers/social-cost-carbon-101/ - European University Institute. 2018. "Market equilibrium with externalities Fabien Roques." YouTube video, length 05:05. https://www.youtube.com/watch?v=ux0v8Ls_RkQ Optional supporting material: - Nordhaus, W. 2019. "Climate Change: The Ultimate Challenge for Economics" American Economic Review 109:1991–2014. https://www.nobelprize.org/uploads/2018/10/nordhaus-lecture.pdf - Smith, N. 2021. "Why has climate economics failed us?" Noahpinion Blog. April 13. https://www.noahpinion.blog/p/why-has-climate-economics-failed - Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: The Great Acceleration. The	30th March 2027

	<i>Anthropocene Review</i>, 2(1), 81-98. Retrievable at: https://www.bpb.de/system/files/dokument_pdf/Steffen2015ThetrajectoryoftheAnthropoceneTheGreatAcceleration.pdf	
2	Problem Statement: Economic activity and climate change (II) Profesor/a: M. Silvi Mandatory material: - Stern, D. I. 2014. "The Environmental Kuznets Curve: A Primer." Working Paper, Centre for Climate & Energy Policy, Crawford School of Public Policy, The Australian National University. http://www.sterndavidi.com/Publications/EKC.pdf - O'Neill. 2018.a. "What Is Ecological Economics?." YouTube video, length 14:47. https://www.youtube.com/watch?v=ux0v8Ls_RkQ Optional material: - Haberl, H., et al. 2020. A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, Part II: Synthesising the insights. <i>Environmental Research Letters</i>, 15(6), 065003. https://doi.org/10.1088/1748-9326/ab842a - O'Neill. 2018.b. "The Laws of Thermodynamics and the Economy" YouTube video, length 07:36. https://www.youtube.com/watch?v=h6Clz8DQvIk - Actuaries Institute. 2020. "The Kaya Identity." http://www.actuaries.org.uk/system/files/field/document/Kaya%20Identity_FINAL%2014052020.pdf	1st April 2027
3	Problem Statement: Measures of sustainability and alternatives to GDP Profesor/a: M. Silvi Mandatory material: - Material to be shared before class.	2nd April 2027
WEEK 2: SOLUTIONS, CLIMATE POLICY INSTRUMENTS		
4	Evaluation activity 1: test on the contents of the 1st week. Overview of climate mitigation policy instruments Profesor/a: M. Silvi Mandatory material: - Goulder, L. H. & Parry, I. W. H. 2008. "Instrument Choice in Environmental Policy." <i>Review of Environmental Economics and Policy</i> 2(2): 152–174. DOI:10.1093/reep/ren005 - Hannah Ritchie. 2024. "I Thought Most of Us Were Going to Die From the Climate Crisis. I Was Wrong." <i>The Guardian</i>. 2 Jan. https://www.theguardian.com/environment/2024/jan/02/hannah-ritchie-not-the-end-of-the-world-extract-climate-crisis Optional material: - Dechezleprêtre, A., Fabre, A., Kruse, T., Planterose, B., Sanchez Chico, A. & Stantcheva, S. 2022. "Fighting Climate Change: International Attitudes	6th April 2027

	<i>Toward Climate Policies." OECD Economics Department Working Papers No. 1714, OECD Publishing, Paris. https://doi.org/10.1787/3406f29a-en</i>	
5	Policy instruments: carbon pricing instruments Profesor/a: E. Padilla Mandatory material: - Baranzini, A., J. C.J.M. van den Bergh, S. Carattini, R. B. Howarth, E. Padilla, J. Roca. 2017. "Carbon Pricing in Climate Policy: Seven Reasons, Complementary Instruments, and Political Economy Considerations." Wiley Interdisciplinary Reviews: Climate Change 8 (4). https://doi.org/10.1002/wcc.462. - van den Bergh, J. C.J.M., A. Angelsen, A. Baranzini, W. J.W. Botzen, S. Carattini, S. Drews, T. Dunlop, et al. 2020. "A Dual-Track Transition to Global Carbon Pricing." Climate Policy 0 (0): 1–13. https://doi.org/10.1080/14693062.2020.1797618.	8th April 2027
6	Policy instruments: global carbon pricing Profesor/a: E. Padilla Mandatory material: - Same as session above.	9th April 2027
WEEK 3: SOLUTIONS, CLIMATE POLICY INSTRUMENTS		
7	Policy instruments: voluntary approaches, information-based policies and nudges Profesor/a: M. Silvi Mandatory material: - Silvi, Mariateresa, (2024). "Ch. 15 Behavioral economics and climate policies" in the Edward Elgar Encyclopedia of Climate Policy. Edward Elgar Publishing. - Weber, E. U. 2017. "Breaking cognitive barriers to a sustainable future." Nature Human Behaviour 1(1): 0013. https://doi.org/10.1038/s41562-016-0013 Optional material: - Intergovernmental Panel on Climate Change (IPCC). 2022. "Chapter 5: Demand, services and social aspects of mitigation." In Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/report/ar6/wg3/wg3-report-chapter-5.pdf	13th April 2027
8	Climate policy in action: the European Green Deal Profesor/a: M. Silvi Mandatory material: - Claeys, Gregory; Tagliapietra, Simone; Zachmann, Georg. 2019. "How to make the European Green Deal work". Bruegel Policy Contribution, No.	15th April 2027

	2019/13, Bruegel, Brussels https://www.econstor.eu/bitstream/10419/237632/1/168713524X.pdf	
9	Inequality and climate policy Profesor/a: J. Teixidó Mandatory material: - Bel, G., and Teixidó, J. J. 2020. "The political economy of the Paris Agreement: Income inequality and climate policy." Journal of Cleaner Production, 258, 121002. https://doi.org/10.1016/j.jclepro.2020.121002 - Jakob, M. et al. 2020. The future of coal in a carbon-constrained climate. Nature Climate Change, 10(8), 704–707. https://doi.org/10.1038/s41558-020-0866-1 - Roy, J. et al. 2018. Chapter 5: Sustainable Development, Poverty Eradication and Reducing Inequalities. In Global Warming of 1.5 °C an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change. Retrieved from https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_Chapter_5_LR.pdf	16th April 2027
WEEK 4: CLIMATE POLICY IN ACTION		
10	Evaluation activity 2: test on the contents of the 2nd and 3rd weeks. Climate policy in action: the Inflation Reduction Act (USA) Profesor/a: M. Silvi Mandatory material: - Fiorino, D.J. 2025. "What Does a Second Trump Term Mean for US Environmental Policy?" Policy Quarterly 21 (1). Retrieved from https://ojs.victoria.ac.nz/pq/article/view/9725/8584 Optional material: - Narassimhan, E., Koester, S.; Gallagher, K.S. 2022. "Carbon Pricing in the US: Examining State-Level Policy Support and Federal Resistance." Politics and Governance 10, no. 1: 1–16. https://doi.org/10.17645/pag.v10i1.4857	20th April 2027
11	Climate policy in action: China and India Profesor/a: M. Silvi Mandatory material: - Material to be shared before class	21st April 2027
12	Evaluation activity 3: students group presentations and European Council voting simulation. Conclusions Profesor/a: M. Silvi	22nd April 2027

CONOCIMIENTOS PREVIOS

RELACIÓN CON OTRAS ASIGNATURAS DE LA MISMA TITULACIÓN

OTRO TIPO DE REQUISITOS

METODOLOGÍA DOCENTE

The course will be a combination of frontal lectures, in-class exercises and student-led presentations/discussions.

SISTEMA DE EVALUACIÓN

The evaluation system is presented as follows:

1. Two 30-minutes written tests at the start of the 2nd and 4th week on the content of the previous weeks **(60%)**
2. Final group policy brief and simulated participation in a voting session of the European Council simulation in the last session **(30%)**
3. Attendance and participation **(10%)**

El curso basado en un modelo de evaluación continua consistirá en la elaboración de un caso práctico de un modelo empresarial inclusivo y sostenible a defender en la última sesión.

Esta asignatura contempla las opciones de evaluación única y continua. El alumnado podrá acogerse a la modalidad que desee dentro de los plazos fijados por la normativa propia del CEI a través de la formalización de un formulario disponible en la Secretaría del centro adscrito. La asistencia mínima obligatoria para las dos evaluaciones es del 80% de las sesiones. En ningún caso el valor de una única prueba de evaluación será de más de 60% de la calificación final de la asignatura, con la excepción del alumnado que haya optado por la evaluación única; en ese caso, el valor de la prueba de evaluación continua será de un 100% de la nota final.

Prueba evaluativa 1 (%)	Prueba evaluativa 2 (%)	Prueba evaluativa 3 (%)	Prueba evaluativa 4(%)	% total
				100%

REEVALUACIÓN

El alumnado que haya concurrido a la evaluación ordinaria (ya sea continua o única), haya cumplido con el requisito de asistencia y cuya nota global haya quedado suspendida, tendrá derecho a concurrir a la prueba de reevaluación.

Ésta consistirá en...

En caso de que la nota resultante de la reevaluación sea inferior a la nota de la evaluación ordinaria, se conservará la mayor de las dos.

Prueba reevaluativa 1 (%)	% total
	100%

VOLUMEN DE TRABAJO

HORAS DE DEDICACIÓN

TOTALES	75
CLASES TEORICO PRÁCTICAS	25
TRABAJO DIRIGIDOS	25
TRABAJO AUTÓNOMO	25

BIBLIOGRAFÍA BÁSICA

- Chancel, L., Bothe, P., Voituriez, T. 2023. "Climate Inequality Report 2023". World Inequality Lab Study 2023/1. <https://wid.world/document/climate-inequality-report-2023/>
- Fanning, A.L. & Hickel, J. 2023. Compensation for atmospheric appropriation. *Nature Sustainability* 6, 1077–1086. <https://doi.org/10.1038/s41893-023-01130-8>
- Padilla and Ramos-Martín eds.(2023) Edward Elgar Encyclopedia of Ecological Economics. <https://www.e-elgar.com/shop/gbp/elgar-encyclopedia-of-ecological-economics-9781802200409.html>

- Oxfam. 2023. Carbon Inequality in 2030. Joint Agency Briefing Note. <https://oxfamlibrary.openrepository.com/bitstream/handle/10546/621305/bn-carbon-inequality-2030-051121-en.pdf>
- Roemer, J. E. (2011). The Ethics of Intertemporal Distribution in a Warming Planet. *Environmental and Resource Economics*, 48(3), 363–390. <https://doi.org/10.1007/s10640-010-9414-1>
- Stavins, R.N. 2011. "The Problem of the Commons: Still Unsettled after 100 Years" *American Economic Review* 101:81-108. https://heep.hks.harvard.edu/files/heep/files/dp22_stavins.pdf
- Tietenberg, T.H. & Lewis, L., 2024. *Environmental and natural resource economics*. 12th ed. New York: Routledge.