

Doctoral Program in Economics



Academic year 2025/26

HAPPINESS, SUSTAINABILITY AND WELLBEING

Period:

First Term: November /December 2025

Course hours: 20

Teachers:

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Prerequisites:

No

Course overview

The course explores how the transition to sustainability hinges on social cohesion and behavioral adaptability. These two dimensions are interlinked through a complex set of behavioral, institutional, and systemic conditions. The transition to sustainability can be interpreted as a large-scale collective action problem that challenges social cooperation and coordination mechanisms. This collective action unfolds within a context of profound macroeconomic transformations that entail structural changes and redistributive impacts on income and wealth—factors that may threaten the very feasibility of the transition itself. Not only do these transformations require adaptive behavior at the individual and collective level, but they also call for new institutional arrangements capable of balancing economic, social, and environmental objectives.

The willingness of individuals and groups to adapt their behavior represents a necessary condition for success, yet understanding the drivers of such change—and the policy levers capable of fostering it—remains an open challenge. Its success depends not only on technological innovation or policy design but also on the social and behavioral foundations that sustain cooperation, trust, and adaptive capacity across societies. At the same time, social and economic institutions shape the context in which cooperation and adaptation occur, determining the extent to which societies can align well-being with sustainability. The transition thus entails structural transformations and non-linear dynamics that affect the capacity of economic systems to maintain widespread well-being within planetary boundaries.

The course aims to integrate these perspectives through an operational approach that studies the interaction between behavioral dynamics, social cohesion, and macroeconomic structures. In particular, it explores how behavioral and experimental economics can interact with recent developments in Integrated

Assessment and ecological macro-modeling to identify conditions under which transitions become both socially and ecologically viable.

To pursue this objective, the course proposes a set of themes to be developed in group projects across both modules. Building on insights from the literature on happiness and the drivers of well-being, students will examine four key social conditions that are believed to influence social cohesion and, consequently, the feasibility of a just and sustainable transition. These conditions interact with one another and generate both micro- and macro-level dynamics. For each, students will be invited to investigate hypotheses on how social arrangements may foster cooperation, adaptive behavior, and collective capacity for change, as well as how institutional settings and policy design can sustain equitable access to well-being in a context of structural macroeconomic transformation.

The four conditions are the following:

1. Time affluence – The ability to exercise control over one's time may influence how individuals and groups adapt to environmental and social change. Having sufficient time for rest, learning, care, and civic engagement could enhance reflection, empathy, and cooperation, supporting the emergence of pro-social norms and intentional behavioral change. Students are encouraged to explore under what institutional and cultural conditions time affluence can foster sustainable lifestyles and strengthen collective action, including its potential effects on cognitive resources, social trust, and the quality of democratic participation.

2. Social capital – Networks of trust and reciprocity can facilitate coordination and the diffusion of cooperative norms. Higher levels of social capital may reduce status competition and the pursuit of positional consumption, contributing to lower aggregate resource use and environmental pressure. Projects may explore how social capital is built or eroded through institutions, policies, and shared experiences, and how its presence can amplify or constrain the capacity of societies to adapt to transition policies.

3. Access to basic goods and services – Ensuring universal and equitable access to essential services such as housing, healthcare, education, mobility, and digital inclusion can mitigate the distributive tensions generated by structural change. From a macroeconomic perspective, access to these goods shapes consumption patterns, stabilizes demand, and provides a safety net that allows individuals and communities to engage in the transition without falling into vulnerability. The course invites students to examine how the provision of basic services can offset the regressive impacts of ecological and technological transitions and reduce inequalities in exposure to environmental and economic risks.

4. Decent jobs – Employment conditions—encompassing income, autonomy, security, and meaning—remain central to both personal well-being and macroeconomic stability. Transformations in production systems, automation, and decarbonization may generate asymmetries across skill groups, sectors, and regions. Students will investigate how policies ensuring decent jobs and fair transitions in the labor market can balance these effects, support equitable income distribution, and maintain social cohesion while reducing dependence on growth-oriented employment for well-being.

Taken together, these four conditions provide the conceptual framework for the course and the foundation for the group projects that will connect behavioral evidence with macroeconomic and policy analysis. While each condition emphasizes specific mechanisms, they are deeply interrelated:

improvements in one domain can strengthen others, while deficits can amplify vulnerabilities. The course therefore encourages students to treat these interdependencies as open hypotheses—to be explored empirically, experimentally, or through simulation—toward the broader aim of understanding how societies can sustain collective well-being and social cohesion within planetary boundaries.

Module 1

Behavioral foundations of sustainability and collective action

This first module focuses on the behavioral mechanisms underlying collective action and adaptation in the context of sustainability transitions, with particular attention to the conditions of time affluence and social capital. The module explores how social cohesion emerges from individual interactions and how it can sustain cooperation and adaptive behavior in the face of ecological and socio-economic challenges.

Students will engage with the behavioral and experimental literature that examines collective action through the standard framework of the public good game and the common-pool resource game. They will also review research on the drivers of pro-environmental behavior and on how individuals and groups react to policy interventions intended to promote such behavior, including incentive schemes, nudges, and informational tools. In this way, the module provides a foundation for investigating the behavioral conditions that underlie social cohesion and for understanding its role in fostering cooperation, trust, and collective adaptation to transition policies.

To address these topics, students will be introduced to experimental and behavioral studies that analyze the role of social norms and group identity, social relationships and trust, inequality and participation, and time pressure and (collective) deliberation in shaping cooperation and prosociality. On this basis, each group will focus on one specific strand of this literature, with the aim of understanding one of the channels through which the two social-cohesion conditions under study—time affluence and social capital—can sustain collective action and behavioral adaptation.

The proposed experimental designs will then be presented and discussed in semi-structured sessions involving the entire class, to refine research questions, identify methodological challenges, and connect micro-behavioral insights to the broader themes of the course. This activity will constitute the main reference for the final evaluation of Module 1 (see below for details on assessment).

Module 2

Macroeconomic modeling of sustainable transitions

This second module provides a macroeconomic perspective on the sustainability transition, focusing on the social and institutional dynamics that determine its feasibility and distributional outcomes. In continuity with Module 1, it investigates how the conditions of access to basic goods and services and decent jobs – as pillars of social cohesion – can contribute to a feasible and just transition at the systemic level. The module explores how these dimensions shape macroeconomic stability, income distribution, and the capacity of an economy to sustain widespread well-being while remaining within ecological boundaries.

Students will engage with the literature on Integrated Assessment Models (IAMs) and ecological macroeconomics, which provides complementary tools to study the interactions between environmental limits, production structures, and social outcomes. Within this framework, we will discuss how traditional IAMs (e.g., DICE, IMAGE, WITCH, GCAM) have progressively evolved to include social and distributional mechanisms, and how post-Keynesian ecological macro-models and system dynamics approaches offer richer representations of inequality, labor markets, and structural change. Particular attention will be given

to the recent debate on social tipping dynamics, on the incorporation of non-economic drivers of well-being into macro-simulation frameworks, and on models that integrate behavioral adaptation and social feedback loops within transition scenarios.

Drawing on this literature, students will be introduced to the system-mapping methodology, which will be used in class to identify causal links and feedbacks between social cohesion conditions, distributional structures, and ecological constraints. Through this approach, the module aims to connect theory and modeling practice, helping students visualize how access to basic services and job quality interact with production, consumption, and policy instruments to shape transition pathways.

Each group will work on one of these two social conditions – either access to basic goods and services or decent jobs – and will use system mapping to elaborate a simplified analytical framework linking it to macroeconomic variables such as inequality, employment, demand, resource use, and emissions. These maps will serve as the basis for a discussion of feasible policy scenarios and for identifying potential leverage points that can make transitions more socially inclusive and politically viable.

The in-class laboratories dedicated to this work, together with the presentation and discussion of the group outputs, will constitute the main reference for the final evaluation of Module 2 (see below for details on assessment).

Exam / Assessment

The final assessment is based exclusively on the work and presentations carried out during class sessions, both when each group is directly involved and through the active participation of all students in the collective laboratory discussions that follow. Continuous engagement in these sessions is therefore essential, as learning in this course relies on shared inquiry and critical dialogue.

Specific modalities for each module and the corresponding schedule will be presented in class. Evaluation is individual, but it will reflect both the student's direct contribution to group work and their participation in the collective discussions. The work completed in each module will count for half of the final grade, ensuring a balanced evaluation of the behavioral and macroeconomic components of the course.

In Module 1, assessment will focus on the quality and originality of the proposed experimental design, the ability to connect it to the behavioral mechanisms of cooperation and adaptation, and the clarity and coherence of its presentation and discussion in class.

In Module 2, assessment will be based on the system-mapping exercise and the accompanying presentation, evaluating how effectively students identify and represent the causal relationships between social cohesion conditions, macroeconomic variables, and transition policies, as well as their ability to articulate the implications for a feasible and just transition.

Overall, the assessment aims to reward analytical rigor, conceptual creativity, and collaborative engagement in the joint exploration of how behavioral and macroeconomic processes interact to sustain social cohesion and collective well-being within planetary boundaries.

Bibliographical References

Note: This list provides the core references offering conceptual and methodological overviews on behavioral and experimental economics and on integrated assessment modeling. The specific readings for the group projects will be identified and assigned during the course.

Behavioral and Experimental Economics

Buccioli, A., Tavoni, A., & Veronesi, M. (Eds.). (2023). *Behavioural Economics and the Environment: A Research Companion*. Edward Elgar Publishing.

Cartwright, E. (2018). *Behavioral Economics* (3rd ed.). Routledge.

Dhami, S. (2016). *The Foundations of Behavioral Economic Analysis*. Oxford University Press.

Gatersleben, B., & Murtagh, N. (Eds.). (2023). *Handbook on Pro-Environmental Behaviour Change*. Edward Elgar Publishing.

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press.

Integrated Assessment Models and Ecological Macroeconomics

D'Alessandro, S., Cieplinski, A., Distefano, T., & Dittmer, K. (2020). Feasible alternatives to green growth. *Nature Sustainability*, 3(4), 329–335. <https://doi.org/10.1038/s41893-020-0484-y>

Fanning, A. L., O'Neill, D. W., Hickel, J., & Roux, N. (2022). The social shortfall and ecological overshoot of nations. *Nature Sustainability*, 5(1), 26–36. <https://doi.org/10.1038/s41893-021-00799-z>

Gambhir, A., Butnar, I., Li, P. H., Smith, P., & Strachan, N. (2019). A review of criticisms of integrated assessment models and proposed approaches to address them. *Energy*, 172, 385–394. <https://doi.org/10.1016/j.energy.2019.01.055>

Hardt, L., & O'Neill, D. W. (2017). Ecological macroeconomic models: Assessing current developments. *Ecological Economics*, 134, 198–211. <https://doi.org/10.1016/j.ecolecon.2016.12.027>

van Beek, L., Hajer, M., Pelzer, P., van Vuuren, D., & Cassen, C. (2020). Anticipating futures through models: The rise of Integrated Assessment Modelling in the climate science–policy interface since 1970. *Global Environmental Change*, 65, 102191. <https://doi.org/10.1016/j.gloenvcha.2020.102191>