UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Sustainability Transitions

2324-1-F4901N123

Learning objectives

The objective of the course is to provide adequate knowledge to understand the current global ecological crasis, so that students can can acquire a general perspective on sustainability transitions.

Contents

The global ecolocial crisis: Socio-economic impacts of global ecological challenges.
The drivers of unsustainability.
Transitioning to sustainability.

Detailed program

The course addresses the follwing issues:

- Polycrisis;
- Climate crisis as a threat multiplier;
- The limits of sustainability;
- Governance challenges;
- Global commodity chains;
- Extractivism;
- Critical minerals;
- Fossil fuels;
- Meat and dairy;
- Responsibility for the climate crisis and reparations;

- Phase out and phase in sustainability transitions;
- Social change towards sustainability;
- Example of the transition of a socio-energy system;
- Tourism and sustainability transitions.

Such issues are dealt with in an interdisciplinary perspective and using case studies.

Prerequisites

Knowledge of the theoretical and methodological foundations of social sciences and good writing and communication skills.

Teaching methods

Lectures.

Collective analysis and comment of the relevant scholarly literature.

Seminars by Key-informants.

The course is in English and the study material is in English.

Assessment methods

Written exam. Short essay (critical work based on the argument addressed in the classes throughout the course)

It requires students to develop a critical argument about an issue that covers and connects different topics analysed in the course. This modality is the most appropriate for assessing the critical skills developed by students in relation to the interdisciplinary nature of the course.

Textbooks and Reading Materials

Part I – Unsustainability: Socio-economic impacts of global ecological challenges
Lesson 1 – Polycrisis
WEF Global Risk Report 2023 ¬– Executive summary: pp. 6-12
https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf

Lesson 2 – Climate crisis as a threat multiplier
Cernev, T. (2022). Global sustainability targets: Planetary boundary, global catastrophic risk, and disaster risk reduction considerations. Progress in Disaster Science, 16, 100264.
https://www.sciencedirect.com/science/article/pii/S2590061722000515

Part II – The drivers of unsustainability

Lesson 3 – The limits of sustainability
Biermann, F., Hickmann, T., Sénit, C. A., Beisheim, M., Bernstein, S., Chasek, P., ... and Wicke, B. (2022). Scientific evidence on the political impact of the Sustainable Development Goals. Nature Sustainability, 5(9), 795-800.
https://www.nature.com/articles/s41893-022-00909-5

Lesson 4 – Governance challenges
Lopez-Claros, A., Dahl, A., and Groff, M. (2020). Responding to Global Environmental Crises. Global Governance and the Emergence of Global Institutions for the 21st Century, 360-378.
https://www.cambridge.org/core/books/global-governance-and-the-emergence-of-global-institutions-for-the-21st-century/responding-to-global-environmental-crises/23C66FA03FB2C6A4D2C44A2DB14DA374#CN-bp-16

Lesson 5 – Global commodity chains
Wenar, L. (2015). Blood Oil: Tyrants, Violence, and the Rules That Run the World. Oxford University Press.
pp. ix-xvi; xix-xxiv
https://unimib.on.worldcat.org/search/detail/922887143?queryString=leif%20wenar&clusterResults=false&groupVariantRecords=false&stickyFacetsChecked=true&sortKey=BEST_MATCH

Lesson 6 – Extractivism
Chagnon, C. W., Durante, F., Gills, B. K., Hagolani-Albov, S. E., Hokkanen, S., Kangasluoma, S. M., ... and Vuola, M. P. (2022). From extractivism to global extractivism: the evolution of an organizing concept. The Journal of Peasant Studies, 49(4), 760-792.
https://www.tandfonline.com/doi/full/10.1080/03066150.2022.2069015

Lesson 7 – Critical minerals
Hernandez, D. S., and Newell, P. (2022). Oro blanco: assembling extractivism in the lithium triangle. The Journal of Peasant Studies, 49(5), 945-968.
https://www.tandfonline.com/doi/full/10.1080/03066150.2022.2080061?journalCode=fjps20
Levin, L. A., Amon, D. J., and Lily, H. (2020). Challenges to the sustainability of deep-seabed mining. Nature Sustainability, 3(10), 784-794.
https://www.nature.com/articles/s41893-020-0558-x

Lesson 8 – Fossil fuels
Grasso, M. (2019). Oily politics: A critical assessment of the oil and gas industry's contribution to climate change. Energy Research & Social Science, 50, 106-115.
https://www.sciencedirect.com/science/article/pii/S2214629618306376

Lesson 9 – Meat and dairy
Lazarus, O., McDermid, S., and Jacquet, J. (2021). The climate responsibilities of industrial meat and dairy producers. Climatic Change, 165, 1-21.
https://link.springer.com/article/10.1007/s10584-021-03047-7

Part III – Transitioning to sustainability
Lesson 10 – Responsibility for the climate crisis and reparations
Grasso, M., ND Heede, R. (2023). Time to pay the piper: Fossil fuel companies' reparations for climate damages. One Earth, 6(5), 459-463.
https://www.cell.com/one-earth/fulltext/S2590-3322(23)00198-7

Lesson 11 – Phase out and phase in sustainability transitions
Paterson, M. (2021). 'The end of the fossil fuel age'? Discourse politics and climate change political economy. New Political Economy, 26(6), 923-936.
https://www.tandfonline.com/doi/full/10.1080/13563467.2020.1810218

Lesson 12 – Social change towards sustainability
Material provided by the instructor.

Lesson 13 – Example of the transition of a socio-energy system
Delatin Rodrigues, D. Grasso, M. (2023). Social tipping processes in the transformation of Civitavecchia's socio-energy system. In J. D. Tàbara, A. Flamos, D. Mangalagiu (Eds.) Positive Tipping Points towards Sustainability, Springer.

Lesson 14 – Tourism and sustainability transitions
Fennell, D. A., and Bowyer, E. (2020). Tourism and sustainable transformation: A discussion and application to tourism food consumption. Tourism Recreation Research, 45(1), 119-131.
https://www.tandfonline.com/doi/full/10.1080/02508281.2019.1694757

Sustainable Development Goals

AFFORDABLE AND CLEAN ENERGY | REDUCED INEQUALITIES | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION | CLIMATE ACTION | LIFE BELOW WATER | PEACE, JUSTICE AND STRONG INSTITUTIONS