



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Sustainability Transitions

2324-1-F4901N123

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#### Learning objectives

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

#### Contents

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

#### Detailed program

The course addresses the following 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](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](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](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

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