



# LTH

FACULTY OF  
ENGINEERING

*Course syllabus*

## Degrowth and Socio-ecological Transformation Nerväxt och socio-ekologisk omvandling

**FMIA15, 5.0 credits, G1 (First Cycle)**

**Valid for:** 2025/26

**Faculty:** Faculty of Engineering LTH

**Decided by:** PLED W

**Date of Decision:** 2025-03-03

**Effective:** 2025-05-05

### General Information

**Depth of study relative to the degree requirements:** First cycle, has only upper-secondary level entry requirements

**Elective for:** TILLF1

**Language of instruction:** The course will be given in English

### Aim

This course aims to foster thinking on how our societies can be transformed towards ecological sustainability, social justice and wellbeing for all, whilst not being dependent on perpetual economic growth.

### Learning outcomes

#### *Knowledge and understanding*

For a passing grade the student must

- Demonstrate theoretical knowledge on degrowth from various academic disciplines, from limits to growth to alternatives for socio-ecological transformation independent from growth
- Identify how socio-technical systems of production and consumption, energy and materials, work and welfare,

technology and governance can be rethought through degrowth scholarship

- Locate examples of real-life practices aligned with degrowth, as well as challenges and potentialities they face in bringing about socio-ecological transformation

#### *Competences and skills*

For a passing grade the student must

- Be able to summarise and evaluate scientific literature within the field of the course
- Be able to formulate a relevant study problem that is followed up in an analysis and presented orally
- Be able to write a well-structured text in English, with a satisfactory use of course literature and other relevant sources

#### *Judgement and approach*

For a passing grade the student must

- Assess economic and technological solutions to environmental issues through a degrowth perspective
- Evaluate major developments in degrowth research for rethinking socio-technical systems
- Reflect upon the complexity of socio-ecological transformation from a degrowth perspective

## Contents

In the context of climate emergency, there is an increasing demand from society and students to learn how societies can function well without economic growth. This course offers this by engaging with scholarship on degrowth, which emphasises the need for absolute reduction of biophysical throughput, whilst ensuring wellbeing for all, within and across societies, in the Global South and the Global North.

This course gives an overview of degrowth as both a critique of growth and a vision for socio-ecological transformation of societies, putting the principles of ecological sustainability and social justice at the forefront. It also provides insights into rethinking socio-technical systems in the fields of production and consumption, energy and materials, work and welfare, technology, and governance.

Drawing on multidisciplinary knowledge and cross-faculty collaboration, this course shows how addressing some of the pressing ecological issues can be enhanced by the degrowth perspective. Theoretically informed whilst empirically anchored, this course highlights complexities, multiple scalar dimensions, as well as strategies for building sustainable and just societies.

## Examination details

**Grading scale:** UG - (U, G) - (Fail, Pass)

**Assessment:**

Each course participant concludes the course by completing a written and oral assignment. The assignment is written as a popular science article, which draws on course literature and engages with the degrowth perspective. The oral assignment is a prior presentation of the argument of this article.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

### **Modules**

**Code:** 0125. **Name:** Degrowth and Socio-ecological Transformation.

**Credits:** 5.0. **Grading scale:** UG - (U, G).

## **Admission**

**The number of participants is limited to: 5**

**Selection:** Completed university credits within the programme. Priority is given to students enrolled on programmes that include the course in their curriculum.

**Kursen överlappar följande kurser:** TFRE60

## **Reading list**

- Chertkovskaya, Ekaterina: Handbook of critical environmental politics - Chapter 7. Degrowth. Cheltenham, UK : Edward Elgar Publishing, 2022, ISBN: 1839100664.
- Hickel, Jason and Giorgos Kallis: Is green growth possible?. *New Political Economy* 25 (4): 469-86, 2019.  
<https://doi.org/10.1080/13563467.2019.1598964>
- Islar, Mine, Max Koch, Riya Raphael and Alexander Paulsson: Degrowth: A path to transformative solutions for socio-ecological sustainability. *Global Sustainability* 7 (2024): e20, 2024.  
<https://doi.org/10.1017/sus.2024.13>
- Dengler, Corinna and Lisa M. Seebacher: What about the Global South? - Towards a feminist decolonial degrowth approach. *Ecological Economics*, Volume 157: 246-252, 2019.  
<https://doi.org/10.1016/j.ecolecon.2018.11.019>
- Gräbner-Radkowitz, Claudius and Birte Strunk: Degrowth and the Global South - The twin problem of global dependencies. *Ecological Economics*, 213: 107946, 2023.  
<https://doi.org/10.1016/j.ecolecon.2023.107946>
- Lang, Miriam: Degrowth, global asymmetries, and ecosocial justice - Decolonial perspectives from Latin America. *Review of International Studies* 50(5): 921-31, 2024.  
<https://doi.org/10.1017/S0260210524000147>
- Fuchs, Doris and Silvia Lorek: Strong sustainable consumption governance e precondition for a degrowth path?. *Journal of Cleaner Production*, 38, 36e43, 2013.  
<https://doi.org/10.1016/j.jclepro.2011.08.008>
- Guerrero Lara, Laura, Leonie van Oers, Jacob Smessaert, Julia Spanier, Guilherme Raj and Giuseppe Feola: Degrowth and agri-food systems - A research agenda for the critical social sciences. *Sustainability Science*, 18: 1579-1594, 2023.  
<https://doi.org/10.1007/s11625-022-01276-y>
- Hinton, Jennifer: Five key dimensions of post-growth business - Putting the pieces together. *Futures*, 131, 102761, 2021.  
<https://doi.org/10.1016/j.futures.2021.102761>
- Gunderson, Ryan, Diana Stuart, Brian Petersen and Sun-Jin Yun: Social conditions to better realize the environmental gains of alternative energy - Degrowth and collective ownership. *Futures*, 99: 36-44, 2018.  
<https://doi.org/10.1016/j.futures.2018.03.016>
- Kallis, Giorgos: Radical dematerialization and degrowth. *Philosophical Transactions of the Royal Society A*:

Mathematical, physical and engineering sciences, 37520160383, 2017.

<http://doi.org/10.1098/rsta.2016.0383>

- Slameršak, Aljoša, Giorgos Kallis and Dan W. O'Neill: Energy requirements and carbon emissions for a low-carbon energy transition. *Nature Communications* 13, 6932, 2022.  
<https://doi.org/10.1038/s41467-022-33976-5>
- Kerschner, Christian, Petra Wächter, Linda Nierling and Melf-Hinrich Ehlers: Degrowth and technology - Towards feasible, viable, appropriate and convivial imaginaries. *Journal of Cleaner Production* 197(Part 2): 1619–36, 2018.  
<https://doi.org/10.1016/j.jclepro.2018.07.147>
- Kostakis, Vassilis, Vassilis Niaros and Christos Giotitsas: Beyond global versus local - Illuminating a cosmological framework for convivial technology development. *Sustainability Science*, 18: 2309–2322, 2023.  
<https://doi.org/10.1007/s11625-023-01378-1>
- Roscam Abbing, Roel: This is a solar-powered website, which means it sometimes goes offline - A design inquiry into degrowth and ICT. *LIMITS '21: Workshop on Computing within Limits*, June 14–15, 2021.  
<https://computingwithinlimits.org/2021/papers/limits21-abbings.pdf>
- Vetter, Andrea: The matrix of convivial technology - assessing technologies for degrowth. *Journal of Cleaner Production* 197(Part 2): 1778–86, 2018.  
<https://doi.org/10.1016/j.jclepro.2017.02.195>
- Towards a political economy of degrowth [Elektronisk resurs] - Chapter 10. "An alternative worth fighting for": Degrowth and the liberation of work. London : Rowman & Littlefield International, 2019, ISBN: 9781786608970.
- Dengler, Corinna and Miriam Lang: Commoning care - Feminist degrowth visions for a socio-ecological transformation. *Feminist Economics*, 28(1): 1–28, 2021.  
<https://doi.org/10.1080/13545701.2021.1942511>
- Saave, Anna and Barbara Muraca: *The Palgrave handbook of environmental labour studies* - Chapter 32. Rethinking labour/work in a degrowth society. Basingstoke: Palgrave Macmillan, 2021, ISBN: 9783030719081.
- Büchs, Milena and Max Koch: Challenges for the degrowth transition - The debate about wellbeing. *Futures*, 105: 155–165, 2019.  
<https://doi.org/10.1016/j.futures.2018.09.002>
- Lee, Jayeon, Max Koch and Johanna Alkan-Olsson: Deliberating a sustainable welfare-work nexus. *Polit Vierteljahresschr* 64, 825–844, 2023.  
<https://doi.org/10.1007/s11615-023-00454-6>
- Vogel, Jefim, Julia Steinberger, Dan W. O'Neill, William Lamb and Jaya Krishnakumar: Socio-economic conditions for satisfying human needs at low energy use - An international analysis of social provisioning. *Global Environmental Change*, 69:102287, 2021.  
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- Chertkovskaya, Ekaterina: Degrowth & strategy : how to bring about social-ecological transformation - Chapter 2. A strategic canvas for degrowth: In dialogue with Erik Olin Wright. [S.l.] : Mayfly Books, 2022, ISBN: 1906948607.  
<https://mayflybooks.org/degrowth-strategy/>
- Fitzpatrick, Nick, Timothée Parrique and Inês Cosme: Exploring degrowth policy proposals - A systematic mapping with thematic synthesis. *Journal of Cleaner Production*, 365: 132764, 2021.  
<https://doi.org/10.1016/j.jclepro.2022.132764>

- Koch, Max: State-civil society relations in Gramsci, Poulantzas and Bourdieu - Strategic implications for the degrowth movement. *Ecological Economics*, 193: 107275, 2022.  
<https://doi.org/10.1016/j.ecolecon.2021.107275>

## Contact

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**Course homepage:**

<https://www.tos.lth.se/english/education/undergraduate-education/>