# FMJ3388 Sustainability Perspectives for Assessing and Designing Research, Projects and Policies 6.0 credits

**Hållbarhetsperspektiv för att utvärdera och utforma forskning, projekt och policyer**

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

On 2020-12-08, the Dean of the ITM School has decided to establish this official course syllabus to apply from spring semester 2021, registration number: M-2020-0530.

## Grading scale

P, F

## Education cycle

Third cycle

## Specific prerequisites

Admitted to postgraduate education

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

The course focuses on the main interlinkages between their student's research and broader Sustainable Development. The course will be composed of a mix of lectures and hands-on exercises to relate the student's research topic to the Sustainable Development Goals. One of the course output will be on applying tools to evaluate the sustainability implications of the participant's own PhD topic.

After the completion of this course, the course participants will be able to:

1. Explain different interpretations of Sustainable Development (and sustainability) and the key international agreements in the field
2. Explain relevant sustainable development challenges in relation to specific research areas
3. Critically reflect on how the student's research field relates to the Agenda 2030 and the Sustainable Development Goals
4. Map, explain and evaluate how the PhD student's research relates to sustainability paradigms and contextualise it within its synergies and trade-offs with the Sustainable Development Goals
5. Present a plan to further integrate sustainability aspects in the student´s research topic

## Course contents

The course will be composed of a mix of lectures and hands-on exercises to relate the student's research topic to aspects of the Sustainable Development Goals. One of the course output will be on applying methods to evaluate the sustainability implications of the participant's own PhD topic.

Seminars will include key concepts on sustainability, the Sustainable Development Goals, and international agreements on sustainable development, and relate key research areas at KTH with sustainability. For instace, seminars will relate to how climate change, social justice and gender equality, energy and industrial transitions and economic transition relate to broader Sustainable Development.

Students will learn how to map and evaluate their research in relation to the Sustainable Development Goals, both to produce the course final presentation and report, but also to fill the dedicated section on Sustainable Development in their eISP

Subjects and concepts that are brought up in the course include:

- Information on global international sustainable development agreements and their link to national policy.
- Global competence and key competencies in sustainability education
- Social justice and gender equality in the SDGs
- Industrial transitions and sustainability transitions

- Energy systems and the SDGs.
- Climate change and the SDGs
- Sustainable transport systems
- Sustainable production and consumption, circular economy
- Economic and sustainable development - substitutes or complements?
- Artificial Intelligencefor sustainable development

## Examination

- SEM1 - Seminars, 2.0 credits, grading scale: P, F
- INL1 - Written assignments, 4.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Other requirements for final grade

Attendance at 75% of course meetings Absence at a maximum of one physical meeting can be compensated by a supplementary task.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.