# MJ2693 Sustainable Development in Theory and Practice 6.0 credits

**Hållbar utveckling i teori och praktik**

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

## Establishment

Course syllabus for MJ2693 valid from Autumn 2007

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

## Specific prerequisites

At least three years of academic studies in a program of engineering, or natural science.

## Language of instruction

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

## Intended learning outcomes

The overall objective in this course is to give a deeper insight in the science of sustainability (ecological, economic and social sustainability). After concluding this course the student should be able to:

- Give a historical background to the concept of “sustainable development”. Describe the different aspects of sustainable development.
- Explain the concepts of Carrying Capacity, Resilience, Ecological Footprint, IPAT-equation, Environmental Kuznets Curve, Weak and Strong Sustainability. Describe different capital stocks and their contents.
- Describe the ecological, economic and social situation in the developing world. Describe and analyse the Millennium Development Goals and their prerequisite.
- Search for scientific literature in the subject areas of the course from the Internet and in libraries and use it as reference materials for a written report / case study.
- In a written report / case study analyse and discuss different implementations of “sustainable development” in respective native country or development problems related to the developing world.
- Use footnotes and bibliography in a written report / case study.
- Give an oral presentation to a written case study.

## Course contents

In this course the concepts of sustainable development, resilience, ecosystem services, resource scarcity and carrying capacity are being analysed. We will also try to give an introduction to different methods, which analyse "sustainable development" from different research fields: economic growth, strong and weak sustainability, the Environmental Kuznets Curve, ecological footprints and the Millennium Development Goals. A case study and a literature- and discussion seminar are included.

## Course literature

Course book. Papers published in scientific journals, downloadable from the Internet and a course compendium

## Examination

- ÖVN1 - Seminars, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- ÖVN2 - Seminars, 3.0 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.

## 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.