COURSE SYLLABUS
Sustainable Production, 6 credits

Hållbar produktion, 6 högskolepoäng

Course Code:	THPS28	**Education Cycle:**	Second-cycle level
Confirmed by:	Dean Dec 11, 2017	**Disciplinary domain:**	Technology (95%) and social sciences (5%)
Valid From:	Jan 1, 2018	**Subject group:**	IE1
Version:	1	**Specialised in:**	A1F
Reg number:	JTH 2017/5111-313	**Main field of study:**	Production Systems

Intended Learning Outcomes (ILO)

After completing the course, the student shall

Knowledge and understanding
- Demonstrate knowledge of how a business can take into account environmental and other sustainability aspects of industrial activities, such as product development and production
- Demonstrate knowledge of how environmental and other sustainability aspects are linked to activities performed in a supply chain
- Have knowledge of methods and tools that can be used to take into account environmental and other sustainability aspects of industrial activity

Skills and abilities
- Demonstrate the ability to describe sustainability and life cycle concepts
- Demonstrate the ability to describe different environmental strategies and business models, and how these relate to a company's operations

Judgement and approach
- Demonstrate an ability to understand and analyze empirical and theoretical material relating to sustainability in industrial activity
- Demonstrate the ability individually or in groups to execute and present projects and seminar assignments, both orally and in writing and to critically and constructively provide feedback on such reports.

Contents

The course covers how environmental and other sustainability issues affect and can be managed in a company's operations, especially in product development and production activities.

The course includes the following topics:
- Sustainability and life cycle concepts
- Environmental strategies and business models
- Sustainable supply chains

- Sustainable work systems
- Consideration of environmental and other sustainability aspects in product development and production
- Return logistics and remanufacturing

Type of instruction

The teaching is implemented by seminars and a project assignment.

The teaching is conducted in English.

Prerequisites

Passed courses at least 90 credits within the major subject Mechanical Engineering, Industrial Engineering and Management or Civil Engineering, and 21 credits in Mathematics, and completed course Production Development I, Strategy and System, 7,5 credits and Production Development II, Methods and Tools, 7,5 credits. Proof of English proficiency is required (or the equivalent).

Examination and grades

The course is graded 5,4,3 or Fail.

The grade is decided from the results of the project assignment and passed grade for all other tests.

Registration of examination:

Name of the Test	Value	Grading
Project Work[I]	3.5 credits	5/4/3/U
Seminars/Exercises	2.5 credits	U/G

[I] Determines the final grade of the course, which is issued only when all course units have been passed.

Other information

Exemption from entry requirement allowed according to the selection groups of the program, where the course is included.

Course literature

Literature

The literature is preliminary until one month before the course starts.
Scientific articles listed at the beginning of the course.