



## COURSE SYLLABUS

### Innovation för hållbarhet Innovation for Sustainability 5 credits (5 högskolepoäng)

**Course code:** SL2540

**Main field of study:** Strategic Leadership towards Sustainability

**Disciplinary domain:** Technology

**Education level:** Second cycle

**Specialization:** AIF - Second cycle, has second cycle course/s as entry requirements

**Subject area:** Industrial Engineering and Management

**Language of instruction:** English

**Applies from:** 2018-08-01

**Approved:** 2018-04-26

#### 1. Decision

This course is established by Dean 2018-04-26. The course syllabus is approved by Head of Department of Strategic Sustainable Development 2018-04-26 and applies from 2018-08-01.

#### 2. Entry requirements

Students must have taken the Strategic Sustainable Development course, 12.5 credits and passed 5 individual credits in it.

#### 3. Objective and content

##### 3.1 Objective

The purpose of the course is for the student to (1) develop deepened knowledge about and understanding of how innovation can support society's transition to sustainability, and (2) develop practical skill in this area, for example, how to critically assess current products and processes and how to apply creativity methods and creativity tools to innovate for sustainability.

##### 3.2 Content

The course integrates (1) strategic approaches to lifecycle assessment of environmental and social impacts of product-service systems (PSS) and (2) ideation and design for strategic sustainable development.

The analysis related content includes learning about LCA (ISO standard lifecycle assessment) from a whole systems perspective. Students develop skills in doing lifecycle analysis based on sustainability principles in support of establishing creative tension for innovation.

The ideation and design related content includes innovation theories as well as PSS implications for sustainability, creativity methods and creativity tools, including process facilitation, and sustainable design strategies.

#### 4. Learning outcomes

The following learning outcomes are examined in the course:

##### 4.1 Knowledge and understanding

On completion of the course, the student will be able to:

- be able to read, interpret and compare LCA results (ISO standard)
- be able to explain sustainable design strategies.

##### 4.2 Competence and skills

On completion of the course, the student will be able to:

- be able to apply sustainability principles to analyse and compare product systems from a lifecycle perspective
- be able to design an ideation session to apply sustainable design strategies, creativity methods and creativity tools.

##### 4.3 Judgement and approach

On completion of the course, the student will be able to:

- be able to explain benefits and challenges of a given sustainable design strategy, including both business and sustainability benefits and challenges
- be able to justify choices regarding depth and breadth in a lifecycle analysis

- be able to justify design choices for an ideation session to apply sustainable design strategies, creativity methods and creativity tools.

## 5. Learning activities

The course is partly project-oriented. Lectures, supervision, dialogue, teacher feedback, peer-student feedback, and facilitated reflection support project group work as well as the individual work.

## 6. Assessment and grading

Modes of examinations of the course

Code	Module	Credits	Grade
1810	Written assignment 1	0.5 credits	GU
1820	Project assignment 1	1.5 credits	GU
1830	Project assignment 2	2.5 credits	GU
1840	Written assignment 2	0.5 credits	GU

The course will be graded G Pass, UX Fail, supplementation required, U Fail.

Two opportunities to fulfil failed examination items are given during the ordinary academic year of the student. All submission deadlines are outlined in the Course PM, which is handed out at the beginning of the course. Further opportunities to perform examination items are provided at the next offerings of the course.

The course information for each course revision should include the assessment criteria and make explicit in which modes of examination that the learning outcomes are assessed.

## 7. Course evaluation

The course evaluation should be carried out in line with BTH:s course evaluation template and process.

## 8. Restrictions regarding degree

The course can form part of a degree but not together with another course the content of which completely or partly corresponds with the contents of this course.

## 9. Course literature and other materials of instruction

The literature is provided on the learning platform.

## 10. Additional information

This course replaces the course SL2535