

Resource Recovery II **Resursåtervinning II**

7.5 credits

7.5 högskolepoäng

Ladok Code: A515TA

Version: 1.0

Established by: Committee for Education in Technology 2019-11-13

Valid from: Autumn 2019

Education Cycle: Second cycle

Main Field of Study (Progressive Specialisation): Resource Recovery (A1N)

Disciplinary Domain: Technology

Prerequisites: Accepted for MSc in Resource Recovery (or equivalent).

Subject Area: Environmental Science

Grading Scale: Seven-degree grading scale (A-F)

Content

This course focus on research and trends within resource recovery and new material recovery processes for example for bio materials, textiles, etc. how to make technique and society to work together, different incentives to get the changes needed and how knowledge and economical resources best could be used to reach a circular society. Ethical, social, legal and economic issues are discussed in connection to material recovery and a circular society and are important parts of this course.

Learning Outcomes

Upon completion of the course the student must be able to:

1 Knowledge and Understanding

- 1.1 describe different incentives available for decision makers to reach social goals for resource recovery and resource saving
- 1.2 explain the reasons behind and the motives for new sustainable processes
- 1.3 describe how different types of recycled materials can be processed and re-used for new products
- 1.4 describe and explain how different tools as LCA can be used in the development of a circular society
- 1.5 present tendencies within research and development in the areas of material and resource recovery

2 Skills and ability

- 2.1 critically evaluate and compare different circular systems in economic, environmental and social aspects
- 2.2 explain and discuss how we can reach a circular society

3 Critical judgement and Evaluation

- 3.1 evaluate and reflect on and problematize about different target conflicts when switching from linear to circular economics
- 3.2 reflect on the need for multidisciplinary research to develop a circular society

Forms of Teaching

Lectures, exercises, study visits and project work (written report and oral presentation).

Tutorial language: English

The language of instruction is English.

Forms of Examination

Examination of the course occurs through:

- Written Exam (TE)
Learning outcome: 1.1-1.4, 2.1-2.2
Credits: 4.0
Grading scale: E7
- Project work (IN1)
Learning outcome: 2.1-2.2, 3.1
Credits: 2.0
Grading scale: Passed or failed
- Project work (IN2)
Learning outcome: 1.4, 2.1-2.2, 3.2
Credits: 1.0
Grading scale: Passed or failed
- Study visit (ST1)
Learning outcome: 1.2-1.3
Credits: 0.5
Grading scale: Passed or failed

When all parts of the course have been passed the grade of the written examination determines the course grade.

If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

Provided during the course.

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

It is possible to improve the grade by re-writing a scheduled exam or re-exam under the condition that at least one student that has not yet passed the course also is registered for the occasion.