



Resource Recovery Resursåtervinning

5 credits

Ladok Code: 42RR05

Version: 1.0

Established by: Education Committee 2014-11-21

Valid from: Autumn 2015

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

- Waste minimization
- Resource recovery for sustainable development
- Feeding the waste streams: sources of materials in the environment
- Managing material waste: technologies for separation and recycling
- Drivers and barriers for material recycling: social, legal and economic factors
- Environmental impacts of waste and recycling
- Hazardous waste-classification, Reach
- Ethical issues

The Course is made up out of the following parts:
, **credits**

Learning Outcomes

Upon completion of the course this student must be able to

1 Knowledge and Understanding

- 1.1 Describe different instruments available for decision makers to reach their goals
- 1.2 Explain the reasons behind and the motives for resource recovery
- 1.3 Describe the steps in the recycling process including
 - collection
 - sorting
 - dismantling

- identification

1.4 Describe available material recovery techniques, such as crushing, melting, pyrolysis

2 Skills and ability

2.1 Evaluate different available recovery techniques from an economic, environmental and social perspective

2.2 Explain and discuss how waste management can be made Climate smart

3 Critical judgement and Evaluation

3.1 Plan and explain how the waste system in a given environment should take account of sustainability, society and ethics

Forms of Teaching

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

Forms of Examination

The course will be examined through the following examination elements:

Exam

Learning outcomes:

Credits: 3

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

Project work

Learning outcomes:

Credits: 1.5

Grading scale: Fail (U) or Pass (G)

Study visit

Learning outcomes:

Credits: 0.5

Grading scale: Fail (U) or Pass (G)

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

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 head of department and course coordinator have the responsibility to systematically and regularly monitor the students' assessments of the course. These assessments form the foundation for the course development.

Miscellaneous

Tutorial language: English or Swedish