



## Resource Recovery Resursåtervinning

5 credits

5 högskolepoäng

**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**

Examination of the course occurs through:

- Exam 3 Grading scale: E7
- Project work 1.5 Grading scale: UG
- Study visit 0.5 Grading scale: UG

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 Methods**

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