# **Linnæus University**



# Course syllabus

Faculty of Technology

Department of Built Environment and Energy Technology

2BT312 Energi och hållbar utveckling, 7.5 credits Energy and sustainable development

Main field of study Energy Technology

Subject Group Energy Technology

**Level of classification** First Level

**Progression** G2F

**Date of Ratification** Approved by Faculty of Technology 2019-11-08 The course syllabus is valid from spring semester 2020

**Prerequisites** 60 credits in any academic subject and English B/6.

# Objectives

After the course the student should be able to:

- understand and make use of simpler Science and Professional articles in the field of Energy and Environmental Science
- selected from available literature and in written present information relevant to a given sub-problem in the field of Energy and Environmental Science
- explain and critically discuss various aspects of Sustainable Development and, for example, the value of simplified sustainability measures
- describe in a general way different aspects of modern society and industrial production from a sustainability point of view.

### Content

The course contains the following:

- Earth as a closed system
- Living conditions and diversity
- · Earth's biome, eco-services and its production capacity
- materials and chemicals, such as bioaccumulation
- Resources and resource utilization
- Energy and energy use
- Economic and Sustainable Social Development
- Sustainable production, consumption and waste
- Environmental Management and Environmental Management Systems
- Information retrieval and report writing

#### Type of Instruction

Lectures, practical work, seminars and assignments.

#### Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Assessment of student performance is made through project work, practical work, assignments and written exam. Examination takes place both in writing and orally, the student must participate in 3/4 of the exercises. All parts must recive a passing grade before the final grade is set. The final assignment of the course has more weight and gives the final grade.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

#### **Course Evaluation**

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

#### Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: 1ZT001, 7.5 credits, 1ZT006, 7.5 credits och 1BT301, 7.5 credits.

#### Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

# Required Reading and Additional Study Material

#### **Required Reading**

Relevant reports and articles for the topics in the course, approximately 700 pages, which are provided via digital sources.

#### **Referens litteratur**

Environmental Science, Michael L McKinney, Robert M Schoch, Logan Yonavjak, Grant Mincy Jones and Bartlett Publishers, Inc, 2017. ISBN: 9781284091700; ISBN-10: 1284091708 (latest edition, 500 pages)