Linnæus University

Course syllabus

Faculty Board of Science and Engineering School of Engineering

1BT001 Biobränslekunskap, 7,5 högskolepoäng Fuel science, 7.5 credits

Main field of study

Bioenergy Technology

Subject Group

Energy Technology

Level of classification

First Level

Progression

G₁N

Date of Ratification

Approved by Organisational Committee 2009-12-15

The course syllabus is valid from autumn semester 2010

Prerequisites

General entry requirements and Chemistry A, Mathematics D and Physics B (Field-specific entry requirements 8).

Expected learning outcomes

After completing the course the student is expected to have a knowledge of

- basic biofuel properties, the way these are characterised/checked and the economic and environmental consequences of their differences
- the way the treatment of biofuels, such as processing, drying, storing and transportation, affects the properties,

the economy and the environment

- what different biofuel supplies are available, locally, regionally and globally
- the level of supply of and demand for various biofuels, currently as well as historically
- literature/information search
- written and oral presentation, individually as well as in groups

Content

The course comprises the following elements related to biofuels:

Supply/demand

- History
- Felling
- Transportation
- Storing
- Drying
- Processing
- Combustion
- Environmental impact
- Characterization methods
- Properties
- Literature search
- Report-writing

Type of Instruction

Lectures, guest lectures, laboratory work, study visits and projects. Information on compulsory elements is given at the course start.

Examination

The course is assessed with the grades U,3,4 or 5.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The assessment of student performances usually takes place during special examination periods and may take the form of

project work, laboratory work, written assignments and written examinations. The examination can be both written and oral.

Course Evaluation

A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

Credit Overlap

The course entirely overlaps BTA902.

Other

Some course elements may entail costs defrayed by the course participant.

The course is offered in English, if there are international participants.

On request, a Swedish University course certificate will be awarded upon successful completion of the course.

Required Reading and Additional Study Material