

# HALMSTAD UNIVERSITY

Phone +46 35 16 71 00 - www.hh.se School of Business and Engineering

# SYLLABUS

-translated from Swedish Page I (I) Course Code: ER2002 / I

## **Bioenergy 3 credits**

Bioenergy 3 hp

First cycle Progression: 1-30 Main field: Energy Engineering, First cycle, has only upper-secondary level entry requirements (G1N) Syllabus is adopted by the School of Business and Engineering (2006-12-05) and is valid for students admitted for the spring semester 2007.

#### **Placement in the Academic System**

Kursen är en fristående kurs.

#### **Prerequisites and Conditions of Admission**

Basic eligibility requirements. The requirement for Swedish language is waived for students who otherwise fulfil eligibility requirements by virtue of previous studies outside Sweden.

#### **Course Objectives**

The student will:

- get an overview of available bioenergy resources.
- get knowledge of basic methods of bioenergy use.

- be able to do basic calculations in bioenergy technology.

- be able to give suggestion and example of how we can implement bioenergy sources in different sectors.

- get understanding and knowledge of the possibilities for bioenergy use today and in the future.

- get knowledge about how we can analyse the environmental, economical and technical aspects on -

bioenergy.

- be able to judge how bioenergy can contribute to a longterm sustainable development.

#### **Primary Contents**

Overview of bioenergy Understanding the basis of biomass assessment methodology Biofuel from the forest

#### Other biofuel and biogas

Techniques for biomass supply, transportation and combustion

Aspects on environment and health of bioenergy use Economics of bioenergy use.

#### **Teaching Formats**

The teaching consists of lectures, laboratory work and study tours. Parts of the course can be studied as a project.

#### Examination

The overall grades of Fail, Pass or Pass with distinction will be awarded for the course.

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The overall grades of fail, pass and pass with distinction will be awarded for the course.

Upon completion of a course, the student has the right to sit an examination up to a maximum of four times.

#### **Course Evaluation**

Course evaluation is part of the course. This evaluation should offer guidance in the future development and planning of the course. Course evaluations should be documented and made available to the students.

### **Course Literature**

Frank Rosillo-Calle et al, The Biomass Assessment Handbook, Earthscan, 2006

Complementary photo copies.