

**Course Syllabus:** 

# Environmental Science BA (A), Technology and Society from an Environmental Perspective, 7,5 credits

#### **General data**

Code	MX012G
Subject/Main field	Environmental Science
Cycle	First cycle
Progression	A
Credits	7.50
Progressive specialisation	First cycle, has only upper-secondary level entry requirements
Answerable department	Faculty of Science, Technology and Media
Established	2007-03-29
Date of change	2015-03-04
Version valid from	2014-08-15

#### Aim

The objective of the course is that the student should acquire knowledge on concepts and perspectives in environmental science related to technology and society, and development of technical systems. The student should in general understand how antropogenic systems for sustainable use of natural resources could be constructed. The aim is also that the student will master scientific methodology, with focus on systems thinking and basic analysis relevant to environmental science.

# Content

The course gives an overview of different technical systems, their infrastructure and development, in an environmental systems perspective and the driving forces behind their development. The basic theory and approaches of systems analysis are also included, and current technical systems are used for applications. Examples are studied of systems/infrastructures that include buildings, energy, industry and transport.

# Entry requirements

Proven proficiency in English, equal to the English course B level from Swedish Upper Secondary School (Gymnasium). Special proficiency in English can also be proven by for example the following international tests:

- TOEFL with a minimum score of 550 on paper based test and not below 4.0 on the TWE

- IELTS Academic Training with a minimum overall score of 6.0 and a minimum score on the specific parts of at least 5.0

## Selection rules and procedures

The selection process is in accordance with the Higher Education Ordinance and the local order of admission.

# **Teaching form**

The teaching is given as lectures, field-work, seminars, excursions, and various excercises. Computer applications may be included. The students are expected to work thematically and problem-based in study groups with tasks of increasing difficulty. Attendance may be compulsory for some of the teaching.

## Grading system

The grades A, B, C, D, E, Fx and F are given on the course. On this scale the grades A through E represent pass levels, whereas Fx and F represent fail levels.

## **Course reading**

<b>Required literature</b>	
Author:	Goldemberg, José
Title:	World Energy Assessment - Energy and the challenge of sustainability
Edition:	2000
Publisher:	United Nations Development Programme (UNDP)
URL:	http://www.undp.org/energy/activities/wea/drafts-frame.html
Author:	Graedel, T.E. and B.R. Allenby.
Title:	Industrial Ecology and Sustainable Engineering
Edition:	2009 or 2010 edition (1st ed.)
Publisher:	Pearson Education
Author:	Middleton, Nick
Title:	The global casino: an introduction to environmental issues
Edition:	2013 (5:th ed.)
Publisher:	Hodder Education

Dessutom tillkommer ett urval av artiklar, rapporter och filmer.

### Other information

Examination by this curriculum must be made within one year of registration on the course. A student which have not passed within this time should contact the examiner.

Costs for travel, meals and accommodation related to excursions etc., will not be covered by the university.