



LUND UNIVERSITY
Faculty of Science

SYLLABUS

Date
15 February 2016

Reg. Nr.
U 2016/89

Syllabus for the course Applied land remote sensing, NAGE003 *Swedish title: Tillämpad fjärranalys*

The course syllabus was confirmed by the Faculty board for graduate studies 15 February 2016. The course is in the third cycle and amounts to 3 credits.
The course syllabus is formally approved in Swedish. This is a translation.

Learning outcomes

Knowledge and understanding

Upon completion of this course, the students shall be able to:

- Understand and describe how remote sensing can be applied for vegetation studies in terrestrial environments
- Account for basic principles of remote sensing and applications

Skills and abilities

Upon completion of this course, the students shall be able to:

- Understand and apply basic time series analysis of remotely sensed data
- Understand and apply basic light use efficiency models

Judgement and Approach

Upon completion of this course, the students shall be able to:

- Demonstrate understanding of how data uncertainties influence applications
- Evaluate pros and cons of various earth observation systems

Course content

- Basic foundation of remote sensing of vegetation
- Sensors and sensor systems
- Remote sensing applications
- Biodiversity, high spectral and spatial remote sensing
- Time series and phenology
- Light use efficiency

Teaching

Teaching includes lectures, seminars, student exercises and presentations by the students.

Assessment

Assessment is based on participation, exercises and on the oral presentation.

Grading scale

Possible grades are Pass and Fail. To pass the course, the student shall take part in all scheduled events, pass all excercises and pass the oral exam.

Language of instruction

The course is given in English.

Entry requirements

[NGEA03 \(Remote Sensing for Landscape Studies\)](#), [NGEA05, \(GIS and Remote Sensing with focus on the Environment\)](#) or [NGEN08 \(Satellite Remote Sensing\)](#) or other courses at similar level or having equivalent experience.