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 exercises 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.