



HÖGSKOLAN I GÄVLE

Remote Sensing 7.5cr

Fjärranalys 7,5hp

Set by Board of Technology and Built Environment

Version

Set at

Valid from

9/26/07

HT2007

Level	A1N
Education level	Second cycle
Course identifier	SB211D
Credits	7.5cr
Main field of study	Geomatics
Subject group	Geographic Information Technology and Surveying
Disciplinary domain	Technology 100.0%

Learning outcomes Upon completion of the course, the student should be able to:

- describe basic theories of electromagnetic radiation and influence of atmosphere
- select appropriate sensors for different types of studies
- demonstrate a deep understanding of analysis methods in remote sensing
- classify satellite images and evaluate the results
- summarise and evaluate scientific literature over a specific topic
- perform a project work reported through a scientific paper.

Course content

- Electromagnetic radiation and influence of atmosphere
- Spatial and spectral properties of airphotos and satellite images
- Different sensors and satellites
- Different application areas
- Rectification and image enhancement techniques (incl. PCA, tasseled cap, fourier transform)
- Digital image interpretation
- Landuse classification of images
- Evaluation methods of classification

Teaching

Lectures, assignments, seminars, project.

Prerequisites	Remote sensing and GIS analysis in land management, 7.5 hp, or a Bachelor of Science in a geomatics related field, or equivalent (e.g. appropriate courses in photogrammetry and GIS).		
Examination	Written examination, Assignments, Seminars and Project work.		
	To pass the course, all assignments, seminar[s], project work[s], written examination[s], etc. must receive a passing grade.		
Grade	A, B, C, D, E, Fx, F		
Limitations	Note that Remote sensing D replaces large parts Remote sensing C, which cannot be credited for if taken parallel.		
Other regulations	Certificate of the course is only awarded after completed course and only upon request. In order to satisfactory complete the course, the student is expected to input a workload corresponding to 5 weeks of full time studies.		
Sustainable environment	A minor part of the course content deals with sustainable development.		
Module			
	0010	Written examination	2.5cr Grade: AF
	0020	Assignments, seminars etc	2cr Grade: AF
	0030	Project work	3cr Grade: AF