AG2148 Governance of Land and Water 7.5 credits

Förvaltning av mark- och vattenresurser

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for AG2148 valid from Spring 2021

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Built Environment,Environmental Engineering

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

The course intends to deepen the students' knowledge and understanding in administration and control of soil and water resources in a global context that brings up cross cutting questions in control e.g. water as social power, human rights, gender, public/private debate and corruption. On completion of the course, students are expected to: - Understand key concept and the frames for governance of land and water, such as water governance, property rights of land use and accessibility, customary law, resource ownership, the EU: Water Directive (WFD), Integrated Water Resources Management (IWRM), land reform, acquisition and compensation; water utilities management models. Be aware about that soil and water are not merely physical resources that can be exploited for human benefit using appropriate technologies, but there is need to conceptualize them as 'social' resources that need to be 'governed' & 'managed' sustainably in a fast changing world; - Identify main issues/factors, roles, and actors underlying the processes of land and water governance and understand the various operational challenges in different societal settings; - Understand the complexity of land and water governance processes through analysing its connection with political, socio-economic, environmental and ecological aspects and also recognising cross cutting issues such as poverty, gender, social inequality, culture and climate change; - Learn from concrete case studies & reflect upon sustainable approaches for land & water governance processes and goals. - Examine the land and water linkages and demonstrate through practical examples and project work opportunities and challenges in integrated land and water planning approach for creative and efficient uses of resources in relation to socio-economic and environmental aspects;

Course contents

The course applies an integrated approach of theoretical and practical knowledge and examples from different contexts. The course will focus on a wide range of land and water governance issues and provide students with theoretical perspectives and practice oriented experiences and aspects. The course does not focus on technical questions in itself, but technical aspects may be included in a socio-technical analysis through case studies. Land use governance is an important field of politics that can promote economic, environmental and social aims. Planning and regulation of land use are the most important factors for land use connected to housing, transport, energy, water, agriculture, tourism and economic development - all these sectors set requirements on land and influence how it is used. This constitutes a complex challenge between sectors, but also at different levels of governance since many sectoral questions are divided into national, regional and local public authorities. An efficient governance of land use requires new planning methods that promote an efficient and innovative land use. Land use and water resources are intrinsically united with one another. Land use for agriculture and food production are very dependent on the access to water. At the same time, land use and land development have large impacts on both the quality and quantity of the water resources. Types of land use that influence water resources include agriculture, forestry, urbanisation, recreation and industrialisation. Climate change and access to food and water are among the most important challenges we face today. Systems for the protection of water sources should however be efficient by integrated planning of land use and catchment areas. Therefore, planning and regulation of land use should take into consideration natural water cycles, the functions of water, water quality and -quantity at different scales and planning mechanisms that promote the integration of land use and water management.

Specific prerequisites

180 credits in Built Environment or social sciences

Examination

- DEL1 - Lectures, 0.5 credits, grading scale: P, F
- PRO1 - Project work, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- SEM1 - Seminar, 4.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

The project work (PRO1) is carried out in groups. To pass DEL1, 75% attendance of lectures and participation in study visits is required

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.