HÖGSKOLAN I GÄVLE

Geodesign and Scenario Planning 5 cr

Geodesign och scenarioplanering 5 hp

Set by Faculty of Engineering and Sustainable Development

Version	**Set at**	**Valid from**
	2/26/18	**HT2018**

Level	A1N
Education level	Second cycle
Course identifier	SBA054
Credits	5 cr
Main field of study	Spatial Planning, Geospatial Information Science, Geography
Subject group	Physical Planning
Disciplinary domain	Technology 100.0 %

Learning outcomes

After completion of the course the student shall be able to
1. describe and evaluate scenario planning and geodesign and how they can contribute to sustainable planning objectives
2. create and test planning scenarios
3. evaluate the results of planning scenarios and geodesign solutions against community goals, legal requirements, and ethical frameworks
4. explain and evaluate how the public can be included in the scenario planning an geodesign procedure.

Course content

The Scenario Planning and GeoDesign course is a planning methods course. Scenario planning and geodesign are data rich, analytical urban planning methods for assessing how well existing or proposed plans will meet local and regional goals. Scenario planning and geodesign help decision makers compare planning options and to understand how communities can benefit from refinements to existing plans.

The objective of the course is introduce students to the subject and to provide hands-on experience with software tools that can help identify sustainable land use strategies. The course will summarize the origins of scenario planning, the logic of this planning strategy, its contribution to sustainable planning, and the requirements and limitations of the method. The

course will address the organization of base-line spatial data and the identification of planning assumptions; the creation and testing of different planning scenarios based on potential land uses, desired population densities, and urban form; the interpretation and visualization of the impacts of different development scenarios; and the improvement of selected scenarios through iterative feedback.

• Sustainability and land use planning
• The purpose, structure, benefits and limitations of scenario planning
• Specifying land uses and planning assumptions
• Creating and applying scenarios
• Testing, comparing and evaluating scenarios
• Enhancing scenario design through feedback

Teaching Lectures, exercises, and seminars

Prerequisites Completed courses of 30 hp in the Master Programme in Geospatial Information Science, including: Theory and practice of urban planning, 5 credits, and GIS data structures and algorithms, 5 credits, or equivalent

Examination Assignments (exercises), seminars and written examination. How the learning outcomes are examined are stated in the course's grading criteria.

Grade A, B, C, D, E, Fx, F

Other regulations Criteria for final grade will be given by examiner or course responsible latest at the beginning of the course.

Sustainable environment A minor part of the course content deals with sustainable development.

Module

0010	Written assignments and Seminars	2.5 cr	Grade: UG
0020	Written exam	2.5 cr	Grade: AF