AG2420 Mass Valuation with GIS 7.5 credits

Mass Valuation with GIS

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

Establishment

Course syllabus for AG2420 valid from Autumn 2007

Grading scale

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

Education cycle

Second cycle

Main field of study

The Built Environment

Specific prerequisites

Language of instruction

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

Intended learning outcomes

The aim of this course is to explore the fundamental concepts and methods of geographic information system (GIS) and how GIS can be used as decision support system within taxation sector. At the end of the course, the students are expected to be able to:

- Have a good understanding of the basic GIS theory and methods, such as raster and vector data structure, information searching, and simple analysis.

- Have a good understanding of how the Swedish taxation and real estate databases are structured. This includes the logical structure of economic and legal aspects in the handling of real estate information.

- Be able to use the information from taxation and real estate databases to perform mass valuation, as well as to carry out market analysis, real estate valuation and credit assessment, with the support of GIS.

Course contents

The course consists of three main parts: basic knowledge of GIS, the Swedish taxation and real estate database structure, and various GIS analyses using information from these databases to perform mass valuation as well as market analysis, real estate valuation and credit assessment.

The first part of the course deals with raster and vector data structure, relational database structure for handling geographic information, map projections and reference systems, and simple GIS analysis. The second part of the course deals with different ways to model real estate information with focus on the Swedish taxation and real estate databases, as well as different standards for handling real estate information. In addition, the legal and economic aspects concerning building and maintaining a real estate database is also included. In the last part of the course, GIS is used for mass valuation, market analysis, real estate valuation and credit assessment.

Disposition

Lectures 20 h

Laboration 36 h

Course literature

The course literature will be posted on the course'e homepage at least four weeks before the course starts.

Examination

- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 3.0 credits, grading scale: P, 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.

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

Other requirements for final grade

Examination, TEN1, 4.5 credits, A-F
Lab exercises, LAB1, 3.0 credits, P/F

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.