F1A5035 Scientific Theory and Research Methodology in Architecture 7.5 credits

Vetenskapsteori och forskningsmetodik inom arkitektur

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 F1A5035 valid from Autumn 2013

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

In order to follow the course a student must have completed a Masters´ degree in architecture or adjoining fields, or have an equivalent level of education. Priority is given to students enrolled at KTH or as doctoral students in architecture at other universities.

Language of instruction

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

Intended learning outcomes

After the course, the student should be able to

- Give account of the basis of scientific thinking
- Give an overview description of the field of scientific theory including larger traditions and theoretical fields, as well as define differences and similarities them in between
- Give an overview description of different research methodologies including their strengths and weaknesses
- Identify and discuss the relations between different research traditions and their counterparts in the field of architecture.
- Describe the relations beween research question, theory, method, and research practice
- Critically reflect over ones´own methods from the perspective of scientific theory
- Independently author research projects for the purpose of grant applications

Course contents

Scientific theory and research methodology within architecture aims at giving an introduction to basic questions in scientific theory and methodology as well as develop the doctoral student´s understanding of the relations between epistemology, ontology and methodology. This framework includes both practise based research and artistic research, and more traditional theories and methods, as well as both qualitative and quantitative traditions. The student will on the one hand develop understanding for how different fields approach and formulate research questions, and on the other hand develop an increased understanding of their own field in a scientific context. In addition, the course addresses the interplay between research question, method, and result.

After the course, the doctoral student should be able to on the one hand position their own project in a scientific and theoretical context, and on the other hand have an understandig of how other fields operate and reason, and perform research work. The course hereby supports interdisciplinary understanding and development. In addition, the student should have basic knowledge of the relation between research question and methodology, as well as between strengths and weaknesses of different methodological approaches.

The theoretical and methodologiacal focus of the course vary between the occasions the course is run, which is described in each individual course announcement, but the aim is always to give a wide understanding that includes the different theoretical and methodological fields within the School of architecture as well as architecture reseeach in a wide, international perspective.

Examination

- DEL1 - Participation, 2.5 credits, grading scale: P, F
- INL1 - Homework, 2.5 credits, grading scale: P, F

- SEM1 - Seminars, 2.5 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.

Other requirements for final grade

Examination
The course is examined through participation in seminars as well as through hand-in assignments, presentations, and essay writing. All components of the course must be completed for a grade to be awarded. Specific layout and requirements are defined in the announcement each time the course is run. The course is graded P/F. Examiner for each iteration of the course is defined in the course PM.

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.