



A11REA Representation 1: Drawing and Descriptive Geom- etry 3.0 credits

Representation 1: Ritteknik och deskriptiv geometri

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 A11REA valid from Autumn 2011

Grading scale

P, F

Education cycle

First cycle

Main field of study

Architecture

Specific prerequisites

Language of instruction

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

Intended learning outcomes

After completing this course, students should be able to:

- move between analog and digital presentation techniques;
- communicate with two- and three-dimensional drawings and models in both analog and digital format;
- use projections (plans, sections, elevations, axonometrics, isometrics, perspectives), intersections (stereotomics, sections), and geometric modeling to describe and manipulate alternative spatial relations;
- use graphic notations in combination with drawings to express sensory qualities and atmospheres (e.g. light, pattern, texture, rhythm);
- apply drafting and geometric modeling techniques for analysis (analytical drawings), design, and manufacturing processes; and
- reflect on the role of drafting technologies in the architectural discipline and professional practice.

Course contents

This course introduces students to the fundamentals of geometry, drafting, and descriptive geometry for spatial visualization in architecture—both analog and digital methods. Students explore the potential of drafting in contemporary architecture and, from a historical perspective, how the role of drawings has changed since the Renaissance, especially since the twentieth-century introduction of digital representational tools for design (2D drafting and 3D modeling, or CAD) and manufacturing (CAM). In addition to lectures, the course is divided into three exercises:

Exercise 1: From physical object and analog notation to digital drawing;

Exercise 2: Manipulation of drawings and 3D models;

Exercise 3: Atmosphere in architectural presentations.

(Tools: AdobeCreative Suite, Rhino, AutoCAD, laser cutter. Can vary from year to year.)

Course literature

Information will be given at the start of the course.

Examination

- MOM1 - Moment 1, 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.

Other requirements for final grade

The learning outcomes are examined through the records of the design process, and through the outcomes of the course specified assignments. To achieve the approved level (pass) students must have approved tasks, including 80% attendance at lectures, seminars, tutorials and reviews.

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.