



# AK2036 Vetenskapsteori och vetenskaplig metodik med tillämpningar (naturvetenskap) 7,5 hp

Theory and Methodology of Science with Applications (Natural and Technological Science)

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Kursplan för AK2036 gäller från och med HT10

**Betygsskala:** A, B, C, D, E, FX, F

**Utbildningsnivå:** Avancerad nivå

**Huvudområde:** -

## Lärandemål

The course provides an introduction to the theory and methodology of science and is intended for the Master student or beginning PhD student. One aim is to supply the basic concepts needed for placing the techniques and knowledge acquired in the student's other courses in the wider context of the natural sciences. Another aim is to provide the basic intellectual tools that allow for a reasoned and critical assessment of results and methods from the wide variety of disciplines that the student is likely to encounter during his or her continued career in research and/or in professional life.

## Kursens huvudsakliga innehåll

- Scientific knowledge
- Hypothesis testing
- Causes and correlations
- Observations and measurements
- Experiments
- Models
- Law and explanations
- Science for societal decision-making
- The development of science
- Research ethics

## Kursupplägg

Lectures and seminars.

## Undervisningsspråk

Undervisningsspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

## Behörighet

120 ECTS credits university studies. Proficiency in English corresponding to English B in Swedish *gymnasium*.

## Litteratur

## Examination

- PRO1 - Projekt, 3,0 hp, betygsskala: P, F
- SEM1 - Seminarier, 1,5 hp, betygsskala: P, F
- TENA - Tentamen, 3,0 hp, betygsskala: A, B, C, D, E, FX, F