

## Advanced Academic Studies

Akademiska studier på avancerad nivå  
3 credits

Programme course

732A60

Valid from: 2024 Autumn semester

<b>Determined by</b>	<b>Main field of study</b>	
The Quality Board at the Faculty of Arts and Sciences	Statistics	
<b>Date determined</b>	<b>Course level</b>	<b>Progressive specialisation</b>
2017-02-03	Second cycle	A1N
<b>Revised by</b>	<b>Disciplinary domain</b>	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences	Social sciences	
<b>Revision date</b>	<b>Subject group</b>	
2024-04-09	Statistics	
<b>Offered first time</b>	<b>Offered for the last time</b>	
Autumn semester 2017		
<b>Department</b>	<b>Replaced by</b>	
Institutionen för datavetenskap		

## Course offered for

- Master's Programme in Statistics and Machine Learning

## Entry requirements

- Bachelor's degree equivalent to a Swedish Kandidatexamen of 180 ECTS credits in one of the following subjects:
  - statistics
  - mathematics
  - applied mathematics
  - computer science
  - engineering
- Passed courses in
  - calculus
  - linear algebra
  - statistics
  - programming
- English corresponding to the level of English in Swedish upper secondary education (Engelska 6)  
Exemption from Swedish

## Intended learning outcomes

After completion of the course, the students should be able to:

- write a disposition of written technical/scientific reports
- summarize scientific publications
- correctly indicate and use citations and references in written reports
- account for the principles of reviewing the technical/scientific reports
- account for the opportunities and limitations of Statistics and research and discuss responsible usage of Statistics
- reflect on equality and diversity perspectives
- reflect on global sustainability goals
- account for and follow the basic rules and regulations for advanced studies at Swedish universities, especially at LiU
- plan and carry out course work within given time frames

## Course content

The aim of the course is to prepare the students for advanced academic studies and also to let the students learn the academic culture in general. A basic ambition is to supply essential tools to the students on the master´s level in Sweden. The course should facilitate the transition from the consumption of science to the production of science.

The course covers the following topics:

- Academic writing
- Statistics and research, their role in society and responsible usage of statistics
- Review of scientific works
- Constructive criticism
- University rules, organization and ethical rules
- Rules on citation and reference
- Academic culture
- Equal opportunities
- global sustainability goals
- Introduction to LiU
- Library facilities

## Teaching and working methods

The course has scheduled lectures, seminars and project works. Homework and independent study are a necessary complement to the course.

Language of instruction: English.

## Examination

The course is examined through:

- active participation in seminars, grading scale: UG
- individually written report, grading scale: UG
- active participation in discussion of written reports, grading scale: UG

For Pass (G) as the final grade, all parts of examination must be passed.

Detailed information about the examination can be found in the course's study guide.

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

## Grades

Two-grade scale, U, G

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.