

## **Language and Computers**

Språk och datorer

9 credits

Programme course

729G49

Valid from: 2026 Spring semester

<b>Determined by</b>		<b>Main field of study</b>	
Course and Programme Syllabus Board at the Faculty of Arts and Sciences		Cognitive Science	
<b>Date determined</b>		<b>Course level</b>	<b>Progressive specialisation</b>
2018-11-13		First cycle	G1N
<b>Revised by</b>		<b>Disciplinary domain</b>	
Chairman of the Course and Programme Syllabus Board at the Faculty of Arts and Sciences		Technology	
<b>Revision date</b>		<b>Subject group</b>	
2024-12-18; 2025-04-24		Informatics/Computer and Systems Sciences	
<b>Offered first time</b>		<b>Offered for the last time</b>	
Spring semester 2019			
<b>Department</b>		<b>Replaced by</b>	
Institutionen för datavetenskap			

## Course offered for

- Bachelor's Programme in Cognitive Science

## Entry requirements

General entry requirements for undergraduate studies  
and

Social Studies, English and Mathematics corresponding to the level in Swedish  
upper secondary education (Samhällskunskap 1b or 1a1 and 1a2, Engelska 6,  
Matematik 2a/2b/2c or Matematik B)

## Intended learning outcomes

On completion of the course, the student should be able to:

- describe and explain basic concepts within linguistics, especially from morphology, syntax, and semantics
- perform basic linguistic analyses such as part-of-speech analysis and dependency analysis
- use computer-based tools and programming to collect, analyse and validate linguistic data sets (corpora)
- plan and carry out simple corpus studies, and present and critically assess the results

## Course content

The course covers:

- Introduction to linguistics. Theoretical overview of basic concepts with a focus on morphology, syntax, and semantics. Basic analysis techniques such as part-of-speech analysis and dependency analysis.
- Computer-based processing and analysis of linguistic data sets (corpora). Introduction to data formats, computer tools and programming techniques. Computer labs with linguistically annotated text.
- Corpus studies. Introduction to methodology and validation measures. Synthesis of theoretical knowledge and practical skills by their application to a limited-size computer-based corpus study.

## Teaching and working methods

The course is given in the form of lectures, teaching sessions, lab sessions and seminars. The student is also expected to study independently, both individually and in groups.

## Examination

The course is examined by:

- individual written examination, grading scale: UV
- laboratory assignments, grading scale: UG
- a written assignment in connection with the corpus study, grading scale: UV

Final grades for the course are based on the individual written examination and the written assignment, assuming that the practical design work have been passed.

Detailed information can be found in the 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

Three-grade scale, U, G, VG

## 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.

### About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is “Swedish”, the course as a whole could be given in Swedish, or partly, or as a whole, in English. Examination language is Swedish, but parts of the examination can be in English.
- If teaching language is “English”, the course as a whole is taught in English. Examination language is English.
- If teaching language is “Swedish/English”, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English depending on teaching language.