

## Language Technology

Språkteknologi

6 credits

Single subject and programme course

729G86

Valid from: 2022 Spring semester

|  |                                  |                                       |
|--|----------------------------------|---------------------------------------|
| <b>Determined by</b>   | <b>Main field of study</b>       |                                       |
| Course and Programme Syllabus Board<br>at the Faculty of Arts and Sciences | Cognitive Science                |                                       |
| <b>Date determined</b>   | <b>Course level</b>              | <b>Progressive<br/>specialisation</b> |
| 2020-02-03   | First cycle                      | G1N                                   |
| <b>Revised by</b>  | <b>Disciplinary domain</b>       |                                       |
| Course and Programme Syllabus Board<br>at the Faculty of Arts and Sciences | Technology                       |                                       |
| <b>Revision date</b>   | <b>Subject group</b>             |                                       |
| 2021-12-14   | Other Interdisciplinary Studies  |                                       |
| <b>Offered first time</b>  | <b>Offered for the last time</b> |                                       |
| Spring semester 2020   |                                  |                                       |
| <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 3b/3c or Matematik C)

## Intended learning outcomes

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

- explain basic methods for the processing of natural language
- practically apply language technology methods and systems to realistic problems
- evaluate language technology components and systems with appropriate methods
- assess the difficulty of language technology problems and which resources are needed to solve them

## Course content

Language technology develops methods for making human language accessible to computers. The goal of this course is to provide an introduction to language technology as an application area, and to some of its basic methods. The course focuses on methods based on machine learning.

The course is examined by:

- basic methods and techniques for the analysis and interpretation of natural language
- relevant machine learning methods
- validation methods
- applications of language technology
- tools, software libraries, and data

## Teaching and working methods

The teaching consists of lectures, computer labs, and supervision in connection with a project done in small groups.

## Examination

The course is examined by:

- Individual digital written exam, betygsskala: EC
- Oral presentation of laboratory work in group, betygsskala: EC
- Individual project assignment report, betygsskala: EC

Passing with distinction requires distinctions in at least two of the examining modules.

Detailed information can be found in the study guidelines.

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

ECTS, EC

## 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.