



DEPARTMENT OF PHILOSOPHY, LINGUISTICS AND THEORY OF SCIENCE

LT2212 Statistical methods, 7.5 credits

Statistiska metoder, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Philosophy, Linguistics and Theory of Science on 2018-05-29 to be valid from 2018-06-10, autumn semester of 2018.

Field of education: Science 100%

Department: Department of Philosophy, Linguistics and Theory of Science

Position in the educational system

The course is part of the 'Master's in Language Technology' programme (H2MLT). It can also be offered as a freestanding course.

Main field of studies

Language Technology

Specialization

A1F, Second cycle, has second-cycle course/s as entry requirements

Entry requirements

Admission to the course requires either a pass in both the courses:

- LT2001 Introduction to programming, 7.5 credits
- LT2002 Introduction to formal linguistics, 7.5 credits

or equivalent language technology skills.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- account for basic notions of probability theory and statistical theory,
- give examples of how statistical methods have been applied in language technology systems,

Skills and abilities

- apply statistical techniques to the development of language technology systems,
- evaluate language technology applications using standard statistical tests,

Judgement and approach

- choose the appropriate statistical method for a particular task,
- evaluate the significance of statistical results

Course content

The purpose of this course is to give an introduction to probabilistic modeling, statistical methods and their use within the field of language technology. Possible topics include:

- probability theory
- information theory
- statistical theory (sampling, estimation, hypothesis testing)
- language modelling
- part-of-speech tagging
- syntactic parsing
- word sense disambiguation
- machine translation
- evaluation

Form of teaching

There are laboratory exercises that require attendance for a passing grade.

Language of instruction: English

Assessment

The examination consists of participation in laboratory exercises, assignments, and/or a written exam. Obligatory attendance may be required for some components. A student

who has failed a test twice has the right to change examiner, unless weighty argument can be adduced. The application shall be sent to the board of the department and has to be in writing. The total number of exam sessions is five, when feasible. Completion of examined student achievement is admitted.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

Course evaluation

Students participating in, or having completed the course, are given the chance to anonymously submit their opinions of and suggestions for the course in a course evaluation. A short version of the course evaluation, together with the reflections of the course coordinator, is published and made available to the students within a reasonable time after the course has finished. The next time the course will be given, a short version of the course evaluation will be presented together with any measures implemented..

Additional information