UNIVERSITY OF GOTHENBURG

DEPARTMENT OF PHILOSOPHY, LINGUISTICS AND THEORY OF SCIENCE

LT2203 Computational semantics, 7.5 higher education credits

Komputationell semantik, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by The Faculty of Arts on 2011-01-17 and was last revised on 2017-06-01 by Department of Philosophy, Linguistics and Theory of Science to be valid from 2017-08-28, autumn semester of 2017.

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 be offered as an elective course in the Applied Data Science masterprogramme (N2ADS). It can also be offered as a freestanding course.

The course is part of the 'Master's in Language Technology' programme (H2MLT) and Applied Data Science masterprogramme (N2ADS).

The course can be part of the following programmes: 1) Applied Data Science Master's Programme (N2ADS) and 2) Master in Language Technology (One year or Two years) (H2MLT)

Main field of studies	*Specialization*
Language Technology	A1F, Second cycle, has second-cycle course/s as entry requirements

Entry requirements

Admission to the course requires either successful completion of the course

- LT2113 Natural Language Processing, 15 hecr

or successful completion of the two courses

- LT2103 Natural Language Processing, 7.5 hecr
- LT2104 Programming for NLP, 7.5 hecr

or equivalent language technology skills and knowledge.

Learning outcomes

After completion of the course the students are expected to be able to:

Knowledge and understanding

- account for the differences between the types of semantic analysis covered in the course
- write semantic interpretation rules for basic semantic constructions in English and at least one other language

Skills and abilities

- implement semantic grammars using tools provided by programming languages and/or grammar development systems

Judgment and approach

- make informed judgments about selecting the type of semantics needed for particular language technology applications
- evaluate particular implemented semantic grammars and construct evaluation materials such as test suites

Course content

The course gives a basic introduction to model theoretical semantics for natural language (as developed for example in Montague semantics and Discourse Representation Theory) and its implementation using suitable programming techniques. It also introduces theorem proving and its application to reasoning in natural language applications.

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 a written exam.

A student who has failed an examination twice has the right to change examiners if it is feasible. A written application should be sent to the board of the department.

Grades

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

Course evaluation