# **Linnæus University**

# Course syllabus

Faculty Board of Science and Engineering School of Computer Science, Physics and Mathematics

4DV009 Språkteknologi II, 7,5 högskolepoäng Language Technology II, 7.5 credits

#### Main field of study

Computer Science

#### **Subject Group**

Informatics/Computer and Systems Sciences

#### Level of classification

Second Level

#### Progression

A1F

#### Date of Ratification

Approved by Organisational Committee 2009-09-08

The course syllabus is valid from spring semester 2010

#### Prerequisites

A course in Language Technology, 7,5 ECTS at level 2 or equivalent.

### Expected learning outcomes

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

- account for stochastic n-gram models and their use in language technology
- account for the most common techniques for lexicalized and stochastic parsing
- design and implement a parser based on dynamic programming
- account for central concepts of lexical semantics and word sense disambiguation
  @@design and implement a simple system for stochastic word sense disambiguation
- account for central concepts within information retrieval, discourse modeling, dialogue systems and machine translation.

#### Content

The course content consists of a complementary overview of areas of language technology not covered in the course Language Technology (DA3053) and of an indepth study of lexicalized and stochastic methods for natural language analysis.

#### Type of Instruction

Teaching consists of lectures, seminars and self studies.

#### Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction

(VG)

Written examination and/or assignments which are presented orally and/or in written form. The assessment method will be decided at the start of the course.

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

### Course Evaluation

A written course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The course evaluation will be filed at the department.

## Required Reading and Additional Study Material

#### Required reading

Jurafsky, D. and Martin, J. H, Speech and Language Processing. Prentice-Hall, 2000. Pages 400 (934).