



DEPARTMENT OF PHILOSOPHY, LINGUISTICS AND THEORY OF SCIENCE

LT2309 Dialogue Systems 2, 7.5 higher education credits

Dialogsystem 2, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Philosophy, Linguistics and Theory of Science on 2015-06-29 and was last revised on 2017-06-01 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 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

Language Technology

Specialization

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

Entry requirements

For admission to the course, passed result is required on

- Dialogue systems

or the equivalent.

Learning outcomes

On successful completion of the course the student is expected to be able to:

Knowledge and understanding

- account for how linguistic theory in pragmatics is relevant to, and can be implemented in, dialogue systems
- explain the basic functionality of the components of a typical (multimodal) dialogue system, and how these relate to each another in various architectures
- account for methods of collection and processing of data relevant to the development of dialogue systems
- account for the basic principles of some advanced frameworks for dialogue management that go beyond simple state-based or form-based dialogue management
- account for various types of multimodality in dialogue systems
- account for methods of analysis and evaluation of dialogue systems both "glass-box" and "black-box" methods

Skills and abilities

- analyse and evaluate an existing dialogue system based on knowledge about function and design
- implement a dialogue system application in one of the advanced dialogue management frameworks discussed in the course
- within the frame of a project, using sound methodology for design, implementation and evaluation, in groups develop a larger (possibly multimodal) dialogue system application

Judgement and approach

- problematise and scientifically evaluate design choices in dialogue systems development, e g concerning error handling, dialogue management and multimodality

Course content

The course gives in-depth knowledge about theories and methods for the design, implementation and evaluation of dialogue systems, focusing particularly on:

- Semantics and pragmatics for dialogue systems
- Data collection and analysis

- Advanced dialogue management
- Multimodality
- Evaluation of dialogue systems
- Advanced implementation techniques

Form of teaching

The course includes obligatory elements.

Language of instruction: English

Assessment

The course is examined through labs, a project report, an oral presentation of the project, and either an individually written project diary or a written exam (decided by the course coordinator).

A student who has failed an examination twice on a course is entitled to have another examiner appointed, if it is possible. The application shall be sent to the board of the department and has to be in writing.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).
For the grade Pass is required:

- submitted labs, submitted project (including report) and written examination with grade of Pass or submitted individually written project diary where the contribution of the student to the project as a whole is clear.

To pass with distinction is required furthermore:

- that the submitted project (including report) has high quality, written examination with grade Pass with distinction or a project diary where it appears that the individual effort of the student has contributed to the high quality of the project.

Course evaluation

The director of studies or the equivalent is responsible to ensure that the result of the course evaluations of the students is compiled, is made available and forms the basis for the development of the course.

