



UNIVERSITY OF GOTHENBURG  
PHILOSOPHY, LINGUISTICS & THEORY OF SCIENCE

Course Syllabus: Reading course on **Topics in Deep Machine Learning, 7.5 hp.**

**Confirmation:** The course syllabus was confirmed by The Department of Philosophy, Linguistics and Theory of Science on **20XX-XX-XX**.

**Department:** Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg

**Education Cycle:** Third cycle (Ph.D. Education)

**Entry requirements:** General and specific entry requirements for third-cycle education according to Admissions Regulations and the general study syllabus for the subject area in question.

**Course content:** An introduction to the basic concepts of deep machine learning as applied to problems in natural language processing

**Learning outcomes:** After finishing the course the students should be able to

- demonstrate knowledge and understanding in the subject areas of the course (see above) that goes beyond the knowledge and understanding that the student has received through previous studies,
- construct a detailed account for key theories and issues in one or more of the subject areas of the course,
- construct a detailed analysis of some issues, lines of arguments or methods that exist in the literature,
- select and define issues, lines of arguments or methods in the literature which is suitable for a short critical essay or a conference paper,
- critically discuss, orally or in writing, any questions, lines of arguments or methods that exist in the literature,
- critically assess the plausibility of the studied lines of argument.

**Course literature:** Ian Goodfellow, Yoshua Bengio, and Aaron Courville (2016), *Deep Learning*, MIT Press, Cambridge, MA, Parts 1 and 2.

**Form of teaching:** Teaching is conducted in the form of individual reading tasks, exercises, and regular discussions

**Language of instruction:** English

**Assessment:** The course is assessed individually through a course project that implements the ideas and methods studied in the course

**Grading:** The grading scale for courses in third-cycle programmes comprises pass (G) and fail (U).

**Course evaluation:** The course is evaluated by a written questionnaire or an oral evaluation.



UNIVERSITY OF GOTHENBURG  
PHILOSOPHY, LINGUISTICS & THEORY OF SCIENCE

Course Syllabus: Reading course on **Topics in Advanced Deep Machine Learning,**  
**7.5 hp.**

**Confirmation:** The course syllabus was confirmed by The Department of Philosophy, Linguistics and Theory of Science on 20XX-XX-XX.

**Department:** Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg

**Education Cycle:** Third cycle (Ph.D. Education)

**Entry requirements:** General and specific entry requirements for third-cycle education according to Admissions Regulations and the general study syllabus for the subject area in question.

**Course content:** Advanced applications of deep machine learning as applied to problems in natural language processing and artificial intelligence

**Learning outcomes:** After finishing the course the students should be able to

- demonstrate knowledge and understanding in the subject areas of the course (see above) that goes beyond the knowledge and understanding that the student has received through previous studies,
- construct a detailed account for key theories and issues in one or more of the subject areas of the course,
- construct a detailed analysis of some issues, lines of arguments or methods that exist in the literature,
- select and define issues, lines of arguments or methods in the literature which is suitable for a short critical essay or a conference paper,
- critically discuss, orally or in writing, any questions, lines of arguments or methods that exist in the literature,
- critically assess the plausibility of the studied lines of argument.

**Course literature:** Ian Goodfellow, Yoshua Bengio, and Aaron Courville (2016), *Deep Learning*, MIT Press, Cambridge, MA, Part 3.

**Form of teaching:** Teaching is conducted in the form of individual reading tasks, exercises, and regular discussions

**Language of instruction:** English

**Assessment:** The course is assessed individually through a course project that implements the ideas and methods studied in the course

**Grading:** The grading scale for courses in third-cycle programmes comprises pass (G) and fail (U).

**Course evaluation:** The course is evaluated by a written questionnaire or an oral evaluation.