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# **ID1214 Artificial Intelligence and Applied Methods 7.5 hp**

## **Artificiell intelligens och tillämpningar**

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## **Establishment**

Course syllabus for ID1214 valid from Autumn 2016

## **Grading scale**

A, B, C, D, E, FX, F,P, F

## **Education level**

First cycle

## **Main field of study**

Technology

## **Language of instruction**

The language of instruction is specified in the course offering information in the course catalogue.

## **Intended learning outcomes**

After passing the course, the students should be able to:

â€ account for artificial intelligence and its application fields

â€ know and account for artificial intelligence methods and technologies  
â€ formulate and carry out a well delimited and qualified assignment that applies artificial intelligence techniques.

## Course contents

The following fields are treated within the scope of the course:

- Fundamental AI problems and solutions including search algorithms and planning, knowledge representation forms and knowledge including reasoning strategies, decision support and heuristics.
- Intelligent agents and multi-agent systems
- Automatic analysis and generation of natural language.
- Machine learning and neural networks.

Focus is on artificial intelligence for knowledge-based systems, agent system and strategies.

## Specific prerequisites

- ID1018 Programming I
- ID1019 Programming II or ID1213 Logic programming

or the equivalent.

## Examination

- INL1 - Written assignment, 4.0 credits, grading scale: P, F
- TEN1 - Examination, 3.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Written examination. Written assignment that is presented in groups.

## Other requirements for final grade

## Course literature

Published articles from several different books such as:

Artificial Intelligence: David Poole & Alan Mackworth: Foundations of Computational Agent, Cambridge University Press, 2010.

The Cambridge Handbook of Artificial Intelligence.

The Quest left Artificial Intelligence.

# Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.