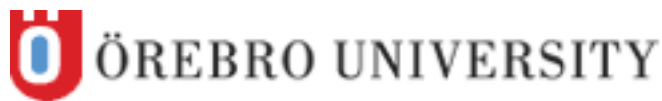

This course syllabus is discontinued or replaced by a new course syllabus.



Course Syllabus

School of Science and Technology

Artificial Intelligence, 7.5 Credits

Course Code:	DT112G	Subject Area:	Field of Technology
Main Field of Study:	Computer Science	Credits:	7.5
Education Cycle:	First Cycle	Subject Group (SCB):	Computer Science
Established:	2015-12-02	Progression:	G1F
Valid from:	Spring semester 2019	Last Approved:	2018-09-28
		Approved by:	Head of School

Aims and Objectives

General aims for first cycle education

First-cycle courses and study programmes shall develop:

- the ability of students to make independent and critical assessments
- the ability of students to identify, formulate and solve problems autonomously, and
- the preparedness of students to deal with changes in working life.

In addition to knowledge and skills in their field of study, students shall develop the ability to:

- gather and interpret information at a scholarly level
- stay abreast of the development of knowledge, and
- communicate their knowledge to others, including those who lack specialist knowledge in the field.

(Higher Education Act, Chapter 1, Section 8)

Course Objectives

Knowledge and comprehension

After completed course the student shall be able to

- explain the principles behind intelligent systems and solutions,
- discuss the relevance of problem- and knowledge modelling,
- apply and assess solutions based on search, planning, knowledge representation and reasoning and other classical areas of Artificial Intelligence, and
- formulate problems and analyze solutions in modern areas such as Intelligent Agents, Probabilistic Reasoning or Machine Learning.

Proficiency and ability

After completed course the student shall be able to:

- model simple problems for the application of intelligent problem solving methods,
- apply intelligent algorithms in an appropriate programming language and suitable problem context, and
- discuss and evaluate which is the best intelligent method for solving particular problems.

Values and attitude

After completed course the student shall have a professional relation to the context, usage and implementation of intelligent methods.

Examination Methods

Theory, 4.5 Credits. (Code: 0100)

Written examination

A retake will be scheduled to take place within eleven weeks of the regular examination

Laboratory Work, 3 Credits. (Code: 0200)

Oral and written presentation of project work, written assignment on selected ethical issues. Project tasks and assignments are presented individually or in groups according to the teacher's instructions.

For further information, see the university's local examination regulations (in Swedish).

Grades

According to the Higher Education Ordinance, Chapter 6, Section 18, a grade is to be awarded on the completion of a course, unless otherwise prescribed by the university. The university may prescribe which grading system shall apply. The grade is to be determined by a teacher specifically appointed by the university (an examiner).

According to regulations on grading systems for first- and second-cycle education (vice-chancellor's decision 2010-10-19, reg. no. CF 12-540/2010), one of the following grades is to be used: fail, pass, or pass with distinction. The vice-chancellor or a person appointed by the vice-chancellor may decide on exceptions from this provision for a specific course, if there are special reasons.

Grades used on course are 3, 4, 5 or Fail (U).

Theory

Grades used are 3, 4, 5 or Fail (U).

Laboratory Work

Grades used are Fail (U) or Pass (G).

The course grading is translated to the ECTS grading scale.

As a grade of the course, the grade from the theory part is given, given that the laboratory tests are approved.

For further information, see the university's local examination regulations (in Swedish).

Specific entry requirements

Data Structures and Algorithms, 7.5 Credits, Object-Oriented Programming, 7.5 Credits.

For further information, see the university's admission regulations (in Swedish).

Transfer of Credits for Previous Studies

Students who have previously completed higher education or other activities are, in accordance with the Higher Education Ordinance, entitled to have these credited towards the current programme, providing that the previous studies or activities meet certain criteria.

For further information, see the university's local credit transfer regulations (in Swedish).

Reading List and Other Teaching Materials

Required Reading

Russell, Stuart; Norvig, Peter (Senaste upplagan)
Artificial Intelligence, A Modern Approach
Pearson Education