UNIVERSITY OF SKÖVDE

COURSE SYLLABUS

Avancerad artificiell intelligens A1N
Advanced Artificial Intelligence A1N
7.5 credits

Course Code: IT733A
The Course Syllabus is valid from: 1 July 2018
Date of Approval: 8 February 2018
Version Number: 2

Subject: Informatics
Main Field of Study: Informatics
Disciplinary Domain: Technology
Academic Level: Advanced level

1 Name, Scope and Level of the Course

The course is provided by the School of Informatics at the University of Skövde and is named Advanced Artificial Intelligence A1N. It comprises 7.5 credits and is on advanced level, the level of progression of the course is A1N.

2 Objectives

After completed course the student should be able to:

- on an advanced level describe current challenges within the area of artificial intelligence,
- critically reflect and discuss ethical and philosophical questions within artificial intelligence,
- on an advanced level describe how artificial intelligence is related to other research and application areas within Data Science and
- on an advanced level critically describe how artificial intelligence techniques can contribute to automated decision support.

3 Course Content

The course gives an introduction to artificial intelligence and then focuses on artificial intelligence as a central component within the data science. It presents and discusses how artificial intelligence relates to other areas within data science as, for example, data mining, information fusion, and decision support systems.

In the course current challenges and projects within artificial intelligence will be presented and discussed. Furthermore, ethical and philosophical questions in relation to research in and application of artificial intelligence are addressed.

4 Forms of Teaching

The teaching comprises lectures and seminars/group discussions.

The teaching is conducted in English.

5 Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

Registration of examination results:

Name of examination	Credits	Grading
Supervised written examination[1]	4.5 credits	A/B/C/D/E/F
Seminar assignment	1 credits	G/U
Group assignment	2 credits	G/U

[1] Determines the final grade of the course.

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.

6 Admission Requirements

A Bachelor degree of at least 180 higher education credits (equivalent to 180 ECTS) within the fields of informatics or computer science or similar.

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as English course 6 / English course B (or the

equivalent). This is normally demonstrated by means of an internationally recognized test, e g IELTS, TOEFL.

7 Subject, Main Field of Study and Disciplinary Domain

The course forms a part of the academic subject area of Informatics. The course is a part of the main field of study in Informatics at the University of Skövde. The disciplinary domain of the course is Technology.

Every course at the University of Skövde belongs to a *subject*. The division of subjects is used for follow-up and quality assurance. A *main field of study* is an area in which a degree can be awarded. *Disciplinary domain* is a division which is used by the government for the allocation of resources for studies at basic level and advanced level.

8 Approval of Course and Course Syllabus

The course was approved by the Curriculum Committee for Informatics on 8 February 2018. This course syllabus was approved by the Curriculum Committee for Informatics on 8 February 2018. It is valid from 1 July 2018.

9 Overlapping with Another Course

This course cannot constitute a part of a degree also containing a course, the content of which is totally or partly equivalent to the content of this course.

10 Additional Information

Further information will be available on the university's website before a course is provided.

National and local regulations for higher education are available on the university's website.

Upon completion of the course there will be a follow-up. The main purpose of this follow-up is to contribute to improvements of the course. The students' experiences and views constitute one of the criteria for the follow-up and are gathered by means of course evaluations. The students will be informed of the results of the follow-up and any decisions regarding actions that are to be taken.

11 Course Literature and Other Educational Materials

Russel, S. & Norvig, P. (2010). *Artificial Intelligence. A modern approach.* Boston: Pearson Education. ISBN 0132071487.

Articles according to a reference list on the learning platform.