



LUND UNIVERSITY  
Faculty of Science

## SYLLABUS

Date  
21 December 2020

Reg. No.  
U 2021/20

### **Syllabus for the course Artificial Intelligence in Medicine and Life Sciences – Introduction, NTF014F**

*Swedish title: Artificiell intelligens inom medicin och livsvetenskap – Introduktion*

The course syllabus was confirmed by the Faculty board for graduate studies 21 December 2020. The course is in the third cycle and amounts to 1.5 credits.  
*The course syllabus is formally approved in Swedish. This is a translation.*

#### **Learning outcomes**

On completion of the course, participants shall be able to:

##### *Knowledge and understanding*

- Describe key concepts within the area of artificial intelligence
- Describe data types and sources in medicine and life sciences
- Exemplify uses for artificial intelligence in medicine and life sciences
- Understand ethical, societal and legal issues related to the application of artificial intelligence in medicine and life sciences.

##### *Skills and abilities*

- Conceive and plan an artificial intelligence project in their research area
- Present and discuss ideas for artificial intelligence projects in medicine and life sciences.

##### *Judgement and approach*

- Evaluate opportunities and risks associated with the use of artificial intelligence in the area of medicine and life sciences
- Evaluate AI approaches most appropriate for different research tasks.

#### **Course content**

The course introduces artificial intelligence and its applications within the areas of medicine and life sciences. The lectures, discussions and the practical work address:

- key concepts within the area of artificial intelligence,
- applications of artificial intelligence in medicine and life sciences,
- data types and sources in medicine and life sciences,
- ethical, societal and legal issues related to the application of artificial intelligence in medicine and life sciences,
- practicalities related to conducting artificial intelligence projects.

#### **Teaching**

The course consists of overview lectures, discussions, project work (at home) and presentations of the project works.

**Assessment**

Assessment is based on active participation and on the presentation of the final project work.

**Grading scale**

Possible grades are Pass and Fail. To pass the course, the student must actively take part in the course and pass the project presentation.

**Language of instruction**

English.

**Entry requirements**

Basic knowledge of medicine, life sciences, computer sciences, or related fields is required to be able to follow the course.

**Additional information**

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