**FACULTY
OF SCIENCE**

Date
7 March 2022

Reg. no
U2022/112

NMS001F, Introduction to R, 1,5 credits
Introduktion till R, 1,5 högskolepoäng
Third Cycle/Forskarnivå

Confirmation

This course syllabus was confirmed by The Research Programmes Board at the Faculty of Science 7 March 2022. 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
- explain basic functions and data structures in R

- describe how functions in R are organised into different packages

- explain and exemplify how R can be used for a simple data analysis task, including visualization

Competence and skills
- import data to R from different sources

- use R to analyse and visualize a data material

- use an integrated development environment (IDE) to structure an R data analysis

Judgement an approach
- have a basic understanding for when R is a suitable tool to use

Course content

The course covers the basics of R with a focus on basic functions, different data structures, import and export of data between R and other programs, data visualization, functions to summarise and manipulate data, Rstudio –

an integrated development environment (IDE), as well as basic statistics functions in R.

Forms of instructions

Teaching consists of a mix of lectures and mandatory practical sessions. During the practical sessions the students will work with R to understand relevant functions and analyse given data sets. In case of absence, results from the affected practical sessions shall be presented afterwards, either orally or as a written report. A majority of the practical sessions should be done in the classroom.

Forms of examination

The assessment is based on active participation in all practical sessions and regular discussion of the results with the teacher. If the student misses practical sessions, a subsequent presentation either oral or written, of the tasks shall be done.

Grades

Possible grades are Pass and Fail. For a grade of Pass, the student must take part in, and present, all practical tasks.

Language of instruction

The course is given in English.

Necessary prior knowledge

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Additional information

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