

## Department of Public Health Science

# **Syllabus**

for course at advanced level Statistical data modelling Statistisk datamodellering

2.5 Higher Education Credits
2.5 ECTS credits

 Course code:
 PH10A0

 Valid from:
 Spring 2022

 Date of approval:
 2019-08-27

 Changed:
 2021-11-23

**Department** Department of Public Health Sciences

Main field: Public Health

Specialisation: A1N - Second cycle, has only first-cycle course/s as entry requirements

#### **Decision**

This course plan is determined by the Board of the Department of Public Health Sciences.

## Prerequisites and special admittance requirements

A degree comprising at least 180 credits, including an independent thesis comprising at least 15 credits, as well as English proficiency equivalent to English 6.

## **Course structure**

**Examination code**1011

Name
Higher Education Credits
Examination I: Individual written assignment
2.5

#### **Course content**

The purpose of the course is to give the student a practical introduction to advanced statistical analysis and modelling. The course gives an overview of statistical concepts, methods, and models used for the analysis of associations between multiple variables. After the course, the student will have a basic understanding of, for example, confounding, mediation, and interaction, and will be able to perform analyses of associations using multiple variables.

## **Learning outcomes**

In order to receive a passing grade on the course, students are expected to be able to:

## Knowledge and understanding

- 1. Argue around the development of statistical models grounded in scientific research questions.
- 2. Interpret results from analyses of associations between multiple variables.

## Skills and abilities

- 3. Apply advanced statistical methods of analysis.
- 4. Investigate and describe associations between multiple variables.

## Judgement and approach

5. Reflect on the scientific process in relation to their own competence development in the field of Public Health Sciences.

## **Education**

The teaching will be based on lectures and seminars.

The course will be taught in English.

See the course description for more detailed information. The course description will available at least one month before the course starts.

#### Forms of examination

### a) Forms of examination

### Examination I. Individual written assignment

Learning outcomes 1-4 are examined through an individual written assignment. Grading will be based on a two-point grading scale (U=Fail, G=Pass).

## Other grading components

Learning outcome 5 is examined through active participation in the master's programme's seminar series. In case of absence from or insufficient participation in the seminar, the student will be given a compensatory assignment.

#### Language

The examination will be in English.

## Certificate of special pedagogical support

If the student has a certificate from Stockholm University that recommends special pedagogical support, the examiner has the right to offer the student alternative forms of examination.

## b) Course grade

The course grade will be given as follows:

G=Pass

U=Fail

#### c) Grading criteria

The grading criteria will be presented to the students in writing when the course begins.

## d) Final grade

In order to receive a passing grade in the course, the student must receive a passing grade for Examination I and other grading components.

The final grade is determined by the grading of Examination I.

## e) Examinations

Two examinations are offered each time course is taught. For terms when the course is not taught, one examination is offered.

Students who receive a failing grade two consecutive times from the same examiner have the right to request a different examiner to grade the examination. This request should be made to the Director of Studies.

## f) Supplementary revisions

Supplementary revisions should be submitted within a week after the examiner has announced the need for revisions.

#### Examination I

It is possible to make a revision of a U grade to a passing grade, if the student is close to passing.

#### Interim

Students may request an examination in accordance with this syllabus up to three semesters after the course has ceased or changed significantly.

#### Limitations

The content of this course overlaps with the course "Method II: quantitative methods in public health sciences" (course code: PH3001) to the extent of 2.5 credits and, therefore, cannot be part of a degree in which "Method II: quantitative methods in public health sciences" is also included.

#### Misc

Plagiarism, cheating, and self-plagiarism is prohibited in all parts of the course. Suspicion of such cases is reported to the Disciplinary Board at Stockholm University.

This course is given as part of Term 2 of the Master's programme in public health sciences: Societal and individual perspectives. The course is also offered as a single-subject course to the extent there are available resources.

## Required reading

The current course literature will be published on the department's website (www.su.se/publichealth/PH10A0), at least two months before the course begins.