

Syllabus

for course at advanced level

Method II: quantitative methods in public health sciences

7.5 Higher Education

Metod II: kvantitativa metoder med inriktning mot folkhälsovetenskap

Credits

7.5 ECTS credits

Course code:	PH3001
Valid from:	Spring 2019
Date of approval:	2009-07-01
Changed:	2018-11-26
Department	Department of Public Health Sciences
Main field:	Public Health
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

The syllabus was approved by the board for Centre for Health Equity Studies (CHES), Stockholm University/Karolinska Institutet 2009-07-01. Latest revised 2018-11-26.

Prerequisites and special admittance requirements

Bachelor's degree (180 ECTS) in Sociology, Psychology, Public Health Sciences, Medicine or similar. English proficiency equivalent to English Course B/English 6.

Course structure

Examination code	Name	Higher Education Credits
T311	Method II	7.5

Course content

The aim of the course is to provide the student with an overview a variety of quantitative methods used in public health sciences. The course includes (1) an overview of how to document and archive work with data and how to protect data; (2) an overview and discussion of techniques for data entering, cleaning, and management, as well as use of exploratory and descriptive methods; (3) a thorough review of linear and logistic regression, which includes discussing the issues of confounding, mediation, and interaction as well as the ways of assessing model fit; (4) a review of advanced methods such as survival analysis, factor analysis, and structural equation modeling; and (5) a discussion of choice of quantitative methods with respect to study design.

Learning outcomes

At the end of this course the student should be to be able to:

- Apply relevant techniques of data entering, cleaning, and management.
- Perform exploratory and descriptive data analysis.
- Apply linear and logistic regression models for data analysis.
- Present results from data analysis using tables and figures as well as interpret these results.
- Demonstrate understanding of the issues of confounding, mediation, and interaction.
- Motivate the choice of methods of data description, analysis, and presentation.
- Recognise, understand, and critically assess quantitative methods used by others.
- Reflect on the scientific process demonstrating competence development in the field of public health sciences.

Education

The teaching will be based on lectures and practical seminars in computer rooms.

Participation in the seminars is mandatory. In case of absence, the student will be given compensatory assignments.

The course will be taught in English.

For more detailed information, see the course description. The course description will be available at least one month before the course starts.

Forms of examination

a) The course examination consists of a classroom exam, active participation in the seminars and four assignments. The assignments are not mandatory but can add scores to the scores from the classroom exam.

The classroom exam will be graded on a goal-based scale of A to F. The active participation in the seminars and the assignments will be graded as U (fail) or G (pass). The principles for weighting each part of the examination are presented in the grading criteria.

The examination will be in English.

b) The grade on the course will be given as follows:

A = Excellent
B = Very good
C = Good
D = Adequate
E = Sufficient

Fail grades

Fx = Inadequate
F = Wholly inadequate

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

d) In order to receive a passing grade in the course, the student must receive at least the grade E on the classroom exam, and passing grades on participation in the mandatory seminars.

e) Each time the course is taught, two examinations are offered. 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.

Students who receive an E or higher grade may not be further examined for the purpose of improving the grade received.

f) It is possible to complement a failing grade (U) to a passing grade (G) for the seminars 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.

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.

Required reading

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