



DEPARTMENT OF GLOBAL PUBLIC HEALTH

K9F5315 Fundamentals of Stata Language, 1.5 credits (hec)

Grundläggande Stata språk, 1,5 högskolepoäng

Third-cycle level / Forskarnivå

Approval

This syllabus is approved by the The Committee for Doctoral Education on 2023-12-08, and is valid from Spring semester 2024.

Responsible department

Department of Global Public Health, Faculty of Medicine

Prerequisite courses, or equivalent

No prerequisite courses, or equivalent, demanded for this course.

Purpose & Intended learning outcomes

Purpose

This course aims at introducing students to the fundamental elements of the statistical software Stata. Motivating examples arising from health-related research will be used to demonstrate how to use the programming language. Learning activities will give students the possibility to learn Stata the hard yet easier way – that is – problem, code, and run.

Intended learning outcomes

After successfully completing this course you as a student should be able to:

- describe quantitative, categorical, and string data
- recode existing variables
- explain how to work with time and space variables
- select an appropriate visualization according to the data
- illustrate how to control and automatize code
- draw random variables from realistic mechanisms
- compare distributions of statistics under repeated sampling
- write do-files for preparing and analysing research data
- create well-structured do-files to facilitate reproducible research

Course content

This course is providing the basics to import, and describe common forms of data; create tables of descriptive statistics eventually stratified; generate new variables; recode existing variables; and visualize either empirical data or theoretical data. Advanced topics include define a new function; avoid replication of code by looping; and simulate a plausible data generating mechanism. Learning activities will be based on real or hypothetical studies arising in health-related research.

Forms of teaching and learning

Lectures, group work, exercises, and individual coding workout using Stata®.

Language of instruction

The course is given in English.

Grading scale

Pass (G) /Fail (U)

Compulsory components & forms of assessment

Compulsory components

The individual examination (summative assessment) is compulsory.

Forms of assessment

Individual written examination. Students who do not obtain a passing grade in the first examination will be offered a second chance to resubmit the examination within two months of the final day of the course. Students who do not obtain a passing grade at the first two examinations will be given top priority for admission the next time the course is offered.

Course literature

Useful link: <http://www.stata.com/links/resources-for-learning-stata/>