SGR005F Introduction to Quantitative Methods, 7.5 credits, third cycle

The course was adopted by the Board of the Lund University Faculty of Social Sciences 22 November 2018 and the syllabus was approved by the Research Studies Council 30 January 2019.

The syllabus is valid from spring semester 2019.

A. General information

The course is offered by the Faculty of Social Sciences as an interdisciplinary third-cycle methods course in social sciences.

The language of instruction is English.

B. Learning outcomes

Knowledge and understanding

Upon completion of the course, the student shall:

• demonstrate an understanding of basic concepts and fundamental principles associated with quantitative methods.

Competence and skills

On completion of the course the students shall, independently and with proficiency, show ability to:

• Perform basic statistical analysis
• Demonstrate a working knowledge of SPSS
• Select the appropriate method, interpret the outcome and report the results
• Formulate and in an appropriate way examine a hypothesis about a causal relationship

Judgement and approach

On completion of the course the students should be able to:

• Assimilate and reflect on texts (reports or scientific papers) where the argument is based on basic statistical analysis in a knowledgeable, independent and theoretically informed way
• Critically and independently reflect on methodological aspects of such analysis
C. Course content
The aim of this course is for students with little prior knowledge of quantitative methods to develop an understanding of the basic concepts and fundamental principles guiding the use of quantitative methods, acquire basic practical skills with regard to the performance of statistical analysis and develop the ability to critically assess quantitative research.

The participants formulate a research question that includes a hypothesized causal relationship and that can be addressed using an available dataset. During the course different techniques for processing and analyzing data will be introduced and the participants will, mainly under teacher supervision, work on answering their own research question using the tools presented to them in the lectures.

Participants will also learn to assimilate and evaluate existing quantitative social science research as it is presented in scientific journals and/or reports.

D. Course design
Teaching includes lectures, teacher assisted exercises in practical statistical analysis (computer lab work) and seminars. The course is teaching intensive and requires a high degree of participation.

E. Assessment
The learning outcomes will be examined through two papers, the first presenting results of applied analysis, and the second providing a critical assessment of quantitative research studies.

Three opportunities for examination are offered in conjunction with the course: a first examination and two re-examinations. Within a year of the conclusion of the course, two further re-examination opportunities on the same course content are to be offered. After this, further reexamination opportunities are offered but in accordance with the then current course syllabus.

F. Grades
The grading scale consists of Pass and Fail. A grade of Pass requires that the doctoral student fulfils the stated learning outcomes for the course.

The grading is based 75% on the first paper (applied analysis) and 25% on the second paper (assessment of quantitative research.)

At the start of the course students are informed about the learning outcomes stated in the syllabus and about the grading scale and how it is applied in the course.

G. Entry requirements
To be admitted to the course, students must have been admitted to third cycle studies. Doctoral students from the Faculty of Social Sciences at Lund University have precedence if a selection process for applicants is required.