



## DEPARTMENT OF POLITICAL SCIENCE

### **SF2324 Introduction to Applied Research Design and Quantitative Research Methods for Social Scientists, 15 credits**

Introduktion till tillämpad forskningsdesign och kvantitativa forskningsmetoder för samhällsvetare, 15 högskolepoäng

*Second Cycle*

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#### **Confirmation**

This course syllabus was confirmed by Department of Political Science on 2017-12-13 and was last revised on 2019-12-06 to be valid from 2020-11-03, autumn semester of 2020.

*Field of education:* Social Sciences 100%

*Department:* Department of Political Science

#### **Position in the educational system**

The course is given as either a single subject course or as part of a Master's Programme within the Faculty of Social Sciences. The course is a method course in the second cycle.

The course can be part of the following programmes: 1) Master's Programme in Political Science (S2PSC), 2) Programme for Master in Sociology (S2SOC), 3) Master's Programme in Criminology (S2KRI), 4) Master's Programme in European Studies (S2EUS) and 5) Master's Programme in International Administration and Global Governance (S2IAG)

#### *Main field of studies*

Criminology

Political Science

Media and Communication Studies

International Administration and Global Governance

#### *Specialization*

A1F, Second cycle, has second-cycle course/s as entry requirements

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European Studies	A1F, Second cycle, has second-cycle course/s as entry requirements
Sociology	A1F, Second cycle, has second-cycle course/s as entry requirements

### **Entry requirements**

To be eligible for the course the student should have obtained a pass grade on a 15 credits from a second cycle core course in the social sciences, or the equivalent.

Applicants must prove their knowledge of English: English 6/English B from Swedish Upper Secondary School or the equivalent level of an internationally recognized test, for example TOEFL, IELTS.

### **Learning outcomes**

A student who has passed the course will be able to:

#### *Knowledge and understanding*

- Demonstrate comprehensive knowledge of fundamental problems within theory of science, relevant for various fields of science.
- Display comprehensive knowledge about the power and limitations of quantitative research methods and large N comparative research.
- Evaluate the validity and reliability of secondary data and various data sources.
- Evaluate and independently design data collection methods such as surveys, field experiments or text data.
- Evaluate and argue for the suitability of different research designs that fit particular research questions.

#### *Competence and skills*

- Specify, evaluate and test hypotheses and explanatory models applying quantitative methods.
- Understand and apply quantitative methods such as multivariate regression analysis.
- Independently produce text in accordance with good academic practice, including proper citation technique and use of references.
- Communicate clearly and proficiently in English both orally and in writing.
- Present and clearly interpret results from quantitative analyses.
- Confidently deploy and use statistical packages/software for analyzing data.

*Judgement and approach*

- Identify and assess ethical issues related to research on human behavior.
- Design and plan an independent research project using quantitative methods.

**Course content**

The course offers theoretical explanation and practical training in quantitative methodology relevant to the fields of study. The course begins with an overview of issues of general relevance to research design in the social sciences, covering issues of epistemology, theory, research ethics, and an overview of the quantitative methods that are the researchers' disposal. The second part of the course, focuses on the learning and application of quantitative methods and the software required to complete various tasks and analyses. The course consists of both lectures, seminars and instructor led hands on training in the use of quantitative research methods. To the extent possible, course assignments employ data relevant to all fields of study in order to familiarize students with the content, the potential and limitations of existing data.

**Form of teaching**

The course consists of both lectures, compulsory seminars and instructor led hands on training.

*Language of instruction:* English

**Assessment**

Assessment will be based on oral and written coursework that will come in two main forms. Seminar and lab reports are formative assessments aimed to gauge students' progress regarding the learning outcomes, and the final paper is the summative assessment. Progress on the learning outcomes related to *Knowledge and understanding* as well as those related to *Judgment and approach* will be evaluated through oral and written assignments that entail, among other things, evaluating existing research designs and data collection efforts and sources, related to the fields of study. Proposing and planning original data collection will also be part of these exercises. Learning outcomes related to *Competence and skills* will be evaluated via oral and written assignments related to independent development of a research design, carrying out specific analyses and presenting quantitative research results, among others. These will be done individually or in groups of two to three students.

The coursework will culminate into the production of a final paper that will combine research design and quantitative analytical skills. This will be done individually and students will present their final paper in a compulsory separate seminar.

Completion of examined assignments are permitted. If the student does not submit the completion on time, the student will be failed on the assignment.

A student who is not able to attend a compulsory part of the course can do an alternative assignment. The assignment will be described in the course guide

If a student, who has failed the same examined component twice, wishes to change examiner before the next examination, a written application shall be sent to the department responsible for the course and shall be granted unless there are special reasons to the contrary (Chapter 6, Section 22 of Higher Education Ordinance).

At least five occasions shall be offered the students to pass a course or part of a course (Chapter 6, Section 21 of Higher Education Ordinance).

In cases where a course has been discontinued or has undergone major changes, the student shall normally be guaranteed at least three examination occasions (including the ordinary examination) during a period of at least one year from the last time the course was given. This may not be in conflict with Chapter 6 Section 21 of Higher Education Ordinance.

### **Grades**

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

In order to receive a passing grade (G) on the course, students must complete and receive a passing grade (G) on all compulsory assignments in the course. In order to receive a pass with distinction (VG) students must complete and receive a passing grade (G) on all compulsory assignments in the course and a Pass with Distinction (VG) in the final paper.

### **Course evaluation**

The student will be given the opportunity to do a course evaluation. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.