

## **Master in Social Science**

### **Course. Research Design**

**Professor Rickard Sandell**

#### **Course Purpose**

The purpose of this course is to provide a formal introduction and overview of research design and its place in the research process. Research design is broadly understood as the link between theory and methods. Course content is designed to cater for a general understanding of the preliminary considerations that go into selecting and implementing a research design. Students will learn how to independently choose a research question and an appropriate research design. The conceptual bases of Social Science research are discussed and described, along with criteria for concept definition and assessment. The difference between description and causality designs will be discussed and explored. A large emphasis is put on the implementation of research designs to real world social science problems. Thus, students will actively design research on real life problems using non fictitious empirical data from a wide variety of contexts (Sociology, Political Science, and Economics). For this, the students will receive a brief repetition to basic descriptive analysis along with an introduction to data management with the statistical software Stata. Common sources of error in existing data sets are discussed and investigated. A variety of statistical analysis techniques will be used with emphasis on interpretation of results and assessment of different designs effectiveness.

Interaction and cooperation among students are central elements of the course. Group work and participation in group work/discussions is mandatory. In addition to group exercises, students are requested to hand in a set of individual assignments as well as a final exam in terms of a review of a scientific article. The article is chosen after consultation with the course instructor. On the concluding seminar will present the reviewed article.

#### **Course Objectives**

A total of 9 units of Research Design issues will be covered theoretically as well as practically during the course implementation

- Unit 1 RESEARCH BUILDING BLOCKS: Introduction to Social Science Research
- Unit 2 RESEARCH BUILDING BLOCKS: Arguments: Descriptive, Causal, and Others
- Unit 3 RESEARCH BUILDING BLOCKS: Concepts and Measures

- Unit 4 RESEARCH BUILDING BLOCKS: Analyses
- Unit 5 CAUSALITY: Causal Frameworks
- Unit 6 CAUSALITY: Causal Hypotheses and Analyses
- Unit 7 CAUSALITY: Experimental Design
- Unit 8 CAUSALITY: Large N Observational Design
- Unit 9 CAUSALITY: Case Study Design

Once completed students will be able to

- Describe the conceptual aspects of research methods
- Describe the process of conducting a literature review
- Compare and contrast the use of theory in qualitative, quantitative, and mixed methods research
- Compare and contrast the use of theory in Economics, Sociology, and political Science
- Identify ethical concerns to anticipate in research
- Integrate knowledge of qualitative, quantitative, and mixed methods approaches into developing a research design
- Draft an article review.

## Expectations

In order to gain maximum benefits from this course, students should

1. Participate fully in class by

- reading assigned mandatory material **prior to** class sessions
- attending class regularly
- contributing enthusiastically and meaningfully to class discussions

2. Take responsibility for their own learning by

- relating course content and projects to their own professional interests
- monitoring their own understanding

- seeking clarification and assistance when necessary

3. Demonstrate respect and consideration for others by

- listening when others are speaking
- provide review feedback on others work
- being present for the entire class period

## Course Requirements and Evaluation Methods

This course will use the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Group Hand-Ins:** Written responses to a set of Research Design Problems. A total of 7 hand ins are planned. Grading as follows.

- 10 = All hand-ins attended and Uploaded in Aula Global
- 9 = 1 missing hand-in
- 8 = 2 missing hand-ins
- 7 = 3 missing hand-ins
- 6 = 4 missing hand-ins
- 5 = 5 missing hand-ins

Hand-ins will be verified, and incomplete hand-ins can be considered as missing.

**Individual Home Assignment:** Consisting of an elaborated individual response to a set of Research design Problems. Maximum score = 10, grade equals score.

**Scientific Article Review:** – Students will choose a scientific article in consultation with the Professor in charge. The review will be assessed as follows:

### Criterion referenced assessment

Criteria	Discussion of Concepts and Basic Assumptions	Research Design: account of the link between	Discussion of Results and Conclusions	Approach to the Litterature

		<b>Theory and Methods</b>		
<b>Good</b>	Very Clear detailed, and critical	Very Clear, detailed and critical account	Very Clear and critical discussions	Independent approach
<b>Passable</b>	Clear and critical	Clear, critical account	Clear and critical discussion	Partially Independent approach
<b>Insufficient</b>	Unclear lack criticism.	Unclear and or non-critical account	Unclear and or non-critical discussion	Lacks an independent approach

Grades for the review will be calculated as follows:

- 10 = Good on all Criteria
- 9 = Good on 3
- 8 = Good on 2
- 7 = at least Passable on all
- 6 = Insufficient on 1 criterion
- 5 = Insufficient on 2 criteria

### Total Grade Matrix

Grading Instrument	Total
Group hand-in's	30%
Individual Home Assignment	35%
Article Review	35%
<b>Total</b>	<b>100%</b>

### Make-Ups and Late Work

Make-ups will be given only in emergency situations. If you must miss an assignment or task, make arrangements with me **prior to the due date**.

**Note regarding students with disabilities:** Students with disabilities should contact me in the beginning of the course, to discuss special needs.

### **Basic Texts used:**

Gerring, J, Christenson, D. (2017) *Applied Social Science Methodology. An introductory guide.* Cambridge University Press.

Lawrence C. Hamilton (2013) *Statistics with STATA: Updated for Version 12 Eighth Edition.* Brooks/Cole Boston, MA

Achen, C. H. (1982), *Interpreting and Using Regression.* London: Sage Publications.

### **Recomended Readings**

Becker, H.S. (1998). *Tricks of the Trade: How to think about your research while you're doing it.* Chicago: University of Chicago Press.

Long, J. S. (2009). *The Workflow of Data Analysis Using Stata.* Stata Press

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: Sage.

Andrew Gelman and Jeronimo Cortina. *A Quantitative Tour of the Social Sciences.* California University Press. 2009