

Survey Methodology, 7.5 ECTS credits

Course contents

The course covers the steps in the type of statistical investigations called surveys. A survey aims at making inference regarding population parameters such as totals and averages. The populations might comprise humans, businesses, farms, etc and the characteristics we study include attitudes, income, employment, revenues, crop yields, and many other things. Such information is used for decision-making and it is therefore important that the survey results have good quality. The course provides an overview of the steps of the survey lifecycle, where each step is a potential error source. The main error sources are the specification of the research problem, coverage of the population under study, nonresponse, interviewer errors and other data collection issues such as questionnaire design, and data processing. Methods that are considered “best practice” for controlling the error sources will be described and the total survey error paradigm is emphasized as the main survey planning instrument. The ideas of continuous quality improvement are promoted as a means toward the development of ideal processes. Various kinds of surveys are described. One bulk of surveys is what is known as official statistics. Another is international surveys. Examples and exercises are drawn from such settings. The course also contains some discussions about current research topics and where the field of survey methodology is heading. Examples of such topics include big data, nonprobability sampling and new data collection technologies.

Learning goals

After the course the student is expected to be able to

- Critically assess the quality of a survey as described in official documents and in newspaper releases
- Describe best methods used in quality assurance and quality control of survey operations
- Discuss trade-off situations in the planning of surveys
- Critically assess the quality of published and ongoing work in the survey field

- Discuss some of the recent developments and discussions that take place in survey methodology
- Perform activities such as simple questionnaire design, choosing data collection mode, and calculating interviewer effects
- Identify potential research topics in survey methodology

Teaching format

There will be 8 three-hour lectures. See a separate schedule document. The first hour of the first lecture is mandatory (3/10). Also the last lecture (28/10) is mandatory since the students will present some of their home-assignments at that time. The teaching consists of lectures and discussions about assignments. All teaching is in English.

Lecturer

Lars Lyberg lars.lyberg@stat.su.se

Teaching assistant

Marcus Berg marcus.berg@stat.su.se

Information during the course

The Mondo website will be used for general communication. However, do not hesitate to write emails if need be.

Literature

Biemer, P. and Lyberg, L. (2003). Introduction to Survey Quality. Wiley.

DeLeeuw, E., Hox, J., and Dillman, D. (2008). International Handbook of Survey Methodology. Psychology Press.

Groves, R. and Lyberg, L. (2010). Total survey error: Past, present and future. Public Opinion Quarterly, 74, 5, 849-879.

Biemer, P. (2010). Total Survey Error: Design, Implementation, and Evaluation. Public Opinion Quarterly, 74, 5, 817-848.

Couper, M. (2011). The Future of Modes of Data Collection. Public Opinion Quarterly, 75, 5, 889-908.

Groves, R. (2011). Three Eras of Survey Research. Public Opinion Quarterly, 75, 5, 861-871.

The Public Opinion Quarterly articles can be downloaded free of charge from http://www.oxfordjournals.org/our_journals/poq/special.html

Lyberg, L. (2012). Survey Quality. *Survey Methodology*, 38, 2, 107-130.

The Survey Methodology article can be downloaded from <http://www.statcan.gc.ca/pub/12-001-x/2012002/article/11751-eng.pdf>

Other literature in connection with the student assignments.

The grading process

The grade is based on four parts. There are two home assignments, each worth a maximum of 25 points. There is one literature assignment where students work together in pairs or individually. A published article or work in progress is handed to the students who perform a critical review according to guidelines given on the Mondo site. The review should be turned in at a time decided no later than September 1, 2014 and a sample of assessments is presented at the mandatory lecture. This assignment is worth a maximum of 50 points. The written exam is worth 100 points. All course materials can be brought to the written exam. Thus the grading can give a maximum of 200 points. Grades are given on the following seven-point scale:

A	Excellent	180-200 points
B	Very good	160-179 points
C	Good	140-159 points
D	Satisfactory	120-139 points
E	Pass	100-119 points
Fx	Inadequate	80-99 points
F	Totally inadequate	Less than 80 points

Students with grades A-E pass the course. Students with grades Fx or F have a right to be reexamined to obtain at least grade E. Students who have passed do not have the right to ask for a reexamination to get a higher grade.

Constraints

The course cannot be part of a degree if combined with the course Introduction to Survey Quality.

To be able to pass the student must get at least 50 points on the written exam.