

**CEU Political Science Department
PhD Program
2010/2011 Fall**

Survey Methodology

Instructor: Tamas Rudas

Instructor e-mail: rudas@tarki.hu
Office hours: by appointment
Class meets: Mondays 5:20-7:00

Course description

Every empirical investigation in political science (and in the social sciences, in general) requires valid and reliable data, and the application of carefully selected statistical methods. The typical form of data collection is conducting a survey, and well designed surveys can provide the researcher with good data, even if they are based on surprisingly small sample sizes. The course will discuss the most important concepts and techniques in survey design and analysis. A clear understanding of these methods is necessary for the political scientist who is engaged in data collection, but it is also useful for the researcher who analyses or interprets data. In addition to the textbook material, many real surveys will be discussed. The mathematical background of this class will be kept at about high school level.

Learning goals and outcomes

Ability to critically interpret survey data; to judge the quality of a survey; to design and conduct simple surveys, including questionnaire design, sampling, organization and analysis; to be able discuss aspects of design of more complex surveys with survey professionals.

Topics to be covered (timing subject to change):

Week 1: Surveys and censuses

- Probability versus non-probability samples
- Reliability and validity

Week 2: Role of the sample size, accuracy of estimates

- Sampling and nonsampling errors
- Margin of error and its use in evaluating survey quality

Week 3: Questionnaire design
Demography
Sensitive questions

Week 4: Main sampling techniques
simple random sampling
stratified sampling
cluster sampling

Week 5: Weighting
Weights in estimates
Population weights
Post-stratification

Week 6: Midterm test

Week 7: No class – national holiday

Week 8: Modes of data collection
Face to face surveys
The interview situation
Mail surveys
Phone surveys
Internet surveys

Week 9: Missing data
Unit and item nonresponse
Imputation
Multiple imputation

Week 10: Combination of data from different sources
Record matching
Data fusion

Week 11: Organization of surveys
Allocation of resources

Week 12: Review

Texts:

Freedman, Pisani, Purves: Statistics 3rd ed, Norton 1997.

Hansen, Hurwitz, Madow: Sample Survey Methods and Theory, Vol 1, Wiley, 1993.

Grading:

Midterm test – 40%

Final take-home assignment – 60%