

## Ph.D. program in Life Course Research - Socio-demographic curriculum -

Academic Year 2024-2025

### Survey methodology (April 7-10, 2025)

#### Survey errors, methods of data collection, and questions and answers in surveys

**Instructor: Prof. Stefano De Cantis**

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#### Objectives

Over the past decades, a set of theories and principles has evolved that offer a unified perspective on the design, conduct, and evaluation of surveys. This perspective is mostly labelled the "Total Survey Error" paradigm. The course aims to describe the basic principles of survey design discovered in methodological research over the past years and the guidance they offered for decisions that are made in the execution of good-quality surveys. The critical components of the Total Survey Error paradigm are presented, and examples of error components are provided by referencing the example surveys.

#### Program

**Monday (April 07):** Introduction to Survey Methodology; examples of error components; a classification of survey errors; classroom discussion and icebreaker activities; Discussion of PhD students' research projects from a survey methodology perspective (10:00-13:00).

**Tuesday (April 08):** Theory construction: from theory to data. Inference and error in surveys. Target populations, sampling frames, and coverage error. Sample design and sampling error (10:00-13:00). Preparation and discussion of the attendees' presentations (13:30-14:30).

**Wednesday (April 09):** The Total Survey Errors paradigm: Inference and errors in survey. Examples of social and demographic surveys (10:00-13:00). Preparation and discussion of the attendees' presentations (13:30-14:30)

**Thursday (April 10):** Presentations of the attendees. Discussion and Q&A session (10:00-13:00)

#### Final assignment

With reference to the topic chosen for your doctoral dissertation project, identify a relevant data source that you plan to use for your thesis. Describe the nature of the source, the data collection methods, and its main methodological characteristics. Then, analyze the potential errors that may affect data quality using the "Total Survey Error" paradigm, considering aspects such as coverage errors, sampling errors, measurement errors, and nonresponse errors.

Organize everything into a 12-minute presentation and present it on the final day (Thursday, April 10). Be prepared to answer questions and respond to comments on your work.

Actively participating in and discussing your colleagues' presentations is an essential component of the final assignment.

This process not only fosters your personal growth but also contributes to the collective success of the group

The final presentation must be submitted by email to [stefano.decantis@unipa.it](mailto:stefano.decantis@unipa.it) by Wednesday, April 09, 2025.

#### Reference Manuals

Groves R. M., Fowler Jr F. J., Couper M. P., Lepkowski J. M., Singer E., & Tourangeau R. (2011). **Survey methodology**, (Vol. 561). John Wiley & Sons.

Weisberg, H. F. (2009). **The total survey error approach: A guide to the new science of survey research**. University of Chicago Press.

#### Requirements

Statistical inference; general competences in sampling and sampling design; data collection methods; sampling error.