

## MASTER IN WEBDATAMETRICS: WEB-BASED DATA COLLECTION AND ANALYSIS

### **ES9. Representatives Issues in Web Surveys**

Annamaria Bianchi, University of Bergamo, via dei Caniana 2, 24127 Bergamo, Italy  
email: annamaria.bianchi@unibg.it

5 ECTS

■ **Objectives** Introduce the concept of representativity and provide a theoretical and practical description to techniques able to improve the representativity of web surveys.

■ **Competences:** basics

■ **Programme:** The course will provide insights into the possible use and reliability of web surveys for data collection, tackling theoretical and practical aspects. Special attention will be devoted to the concept of representativity. The definition of representativity will be given and an overview of possible phenomena undermining it will be provided. The consequences of such phenomena for the survey results will be discussed. Some techniques will be introduced that may be able to improve the representativity of a web survey. In this framework, various weighting techniques will be described (e.g. poststratification, linear weighting, multiplicative weighting, calibration, and propensity score adjustments). It will be explored if and when such techniques can be effective for improving survey estimates. Indicators of representativity, called R-indicators, will be defined and illustrated. Finally, the problem of representativity for web panels will be tackled. The theoretical presentation of the aforementioned issues will be supported by practical sessions using a statistical software.

**REMARK:** I will decide which statistical software to use afterwards, depending on the software used in the other courses.

■ **Expected learning outcomes** Students will learn how to evaluate the representativity of web surveys and how to improve it.

■ **Methodology:** 16 hours of face to face teaching (theoretical + practical sessions) + 4 hours using the live video class system. Online supervision

■ **Evaluation system:** written exam (with PC)

■ **Remarks:** Students need to have passed the exams of courses C2 and C4

■ **Bibliography:** Bethlehem, J., and Biffignandi, S. (2012), Handbook of Web Surveys, Wiley, Hoboken