UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Statistical Methods for Tourism Services Evaluation

2526-2-F7601M007-F7601M036M

Learning objectives

At the end of the course, the student will be able to:

- Acquire advanced knowledge of the main statistical methods for evaluating the quality of tourism services, with particular focus on measuring customer satisfaction and loyalty, analyzing latent variables, using Servqual models, performing item analysis, conducting analysis of variance (ANOVA), and applying data reduction techniques (e.g., PCA).
- Critically and appropriately apply the statistical techniques learned to the design and implementation of empirical research in the tourism sector, using statistical software tools (particularly SPSS) for data management, processing, and interpretation. The student will be able to carry out a data analysis project with methodological autonomy and scientific rigor, including group comparisons through ANOVA.
- Develop the ability to critically select, combine, and interpret statistical tools suitable for the analysis context, formulating well-grounded judgments on service quality and the reliability of the results obtained. The student will be able to critically assess the methodological choices made—such as variable selection and model validation—and adapt them based on the objectives of the research.
- Effectively and professionally communicate the results of statistical analyses, using appropriate technical language, graphical representations, and clear, comprehensive reports. The student will be able to present the results of group work both orally and in writing, also in multidisciplinary and international contexts.
- Develop independent and continuous learning skills in the field of statistics applied to tourism, with particular reference to critically reviewing scientific literature and staying updated on methodological developments. The student will be able to transfer and adapt the acquired skills to new professional and research contexts.

Contents

For the course of *Statistical methods for the evaluation of tourism services* the main methods for assessing the quality of services and related quantities (satisfaction, loyalty) will be introduced. The course will outline the models

for the measurement of expected and perceived quality and, therefore, will focus on the methods to deal with the latent variables The methodological part will be followed by the discussion and the resolution of case studies through the use of SPSS software.

1) Introduction to the course.

2) Item analysis

3) Servqual and possible extensions.

4) Methods of data reduction.

5) Analysis of variance

Detailed program

a) INTRODUCTION and ITEM ANALYSIS
Veal (2018) Research methods for Leisure and Tourism, Pearson (Fifth edition), chapters 1, 2, 5, 10, 13

b) SERVQUAL
Zeithaml, Parasuraman and Berry (1990 or others) , Delivering Quality Service - Balancing Customer Perceptions and Expectations, The Free Press, New York, chapters 1, 2, Appendix A.

c) PRINCIPAL COMPONENT ANALYSIS
Bartholomew D.J., Steele F., Moustaki I., Galbraith J.I. (2008). Analysis of Multivariate social science data, CRC Press (2nd ed.), Chap 5

d) Analysis of Variance
Veal (2018) Research methods for Leisure and Tourism, Pearson (Fifth edition), chapter 17

Prerequisites

Knowledge of Descriptive Statistics.

Teaching methods

The module includes 20 hours of traditional classroom teaching (lectures) and 8 hours of interactive activities in the statistics lab (using SPSS).

If the physical laboratories are unavailable due to building renovations, part of the lab activities will be conducted remotely using the virtual lab environment.

Assessment methods

The assessment includes:

- a personal written test on the theoretical knowledge of the topics;
- a group project, which includes an oral presentation and a report on an original investigation on the topic of tourism.

The final grade for the module will be a weighted average of the personal test (30% weight) and the group project (70% weight).

Textbooks and Reading Materials

- Zeithaml, Parasuraman and Berry (1990 or others) , Delivering Quality Service - Balancing Customer Perceptions and Expectations, The Free Press, New York,
- Agresti A. (2007) An Introduction to Categorical Data Analysis, John Wiley & Sons.
- Bartholomew D.J., Steele F., Moustaki I., Galbraith J.I., Analysis of Multivariate social science data, CRC Press (Second Edition).
- Veal (2018) Research methods for Leisure and Tourism, Pearson (Fifth edition)

Semester

Second semester

Teaching language

English

Sustainable Development Goals

SUSTAINABLE CITIES AND COMMUNITIES