

# SO243-15 Practice and Interpretation of Quantitative Methods

**22/23**

**Department**

Sociology

**Level**

Undergraduate Level 2

**Credit value**

15

**Module duration**

10 weeks

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

The aim of this module is to introduce students to the use of quantitative methods for sociologically relevant research. By the end of this module, students will be able to critically engage with published quantitative sociological research and undertake elementary quantitative data analysis independently. Students will be introduced to the use of statistical software for the analysis of large-scale quantitative data. We will build on research design skills acquired in other modules and we will aim to develop practical research skills related to quantitative methods. This module does not require any mathematical knowledge: we will aim to principally focus on substantive understanding of quantitative methods and how they fit within the wider discipline.

[Module web page](#)

### Module aims

This module provides an introduction to the use of quantitative methods in sociology. The main principles of statistical inference will be covered and students will learn to conduct descriptive and bivariate inferential analyses by using SPSS software

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

1. Introduction to the Module
2. Descriptive Statistics / Measurement
3. Bivariate Associations: The Chi-Square Test
4. Introduction to Correlation and Sampling/Representativeness
5. Deciphering Multivariate Analysis I
6. Deciphering Multivariate Analysis II
7. Longitudinal and Life Course Research
8. Selected Topics on Operationalization and Measurement
9. Contemporary Challenges in Social Survey Research

## **Learning outcomes**

By the end of the module, students should be able to:

- Understand the principles of statistical inference
- Be able to conduct simple statistical analyses on existing large-scale datasets
- Have an understanding of the biases surrounding large-scale survey data
- Have familiarity with the basic functions of SPSS software including keeping syntax for data management purposes
- Have familiarity with simple linear regression and the use of multivariate statistical methods to answer sociological questions
- Think critically about the quality of published research in the field of quantitative sociology
- Appreciate the role of quantitative methods in substantive social science
- Confidently read published research using bivariate and multivariate quantitative methods;
- Plan the development of a quantitative project.

## **Indicative reading list**

Agresti, A, Finlay, B (2014) Statistical Methods for the Social Sciences. Pearson Education: Essex, UK.

Field, Andy (2013) Discovering statistics using IBM statistics: (and sex, and drugs, and rock n'roll) Sage: London, UK

Gilbert, N (2008) Researching Social Life London: Sage

Schaeffer, N. C. & Presser, S. (2003). 'The science of asking questions'. Annual Review of Sociology, 29: 65-88.

Argyrous, G. (2011). Statistics for research: with a guide to SPSS. London: SAG

[View reading list on Talis Aspire](#)

## **Research element**

This is a quantitative methods module. As such, it provides hands-on-experience on statistical analysis and consistently engages with issues surrounding data collection, data quality, and data interpretation.

## Subject specific skills

knowledge and critical understanding of the well-established principles of the area(s) of study, and of the way in which those principles have developed

knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study

an understanding of the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge.

Typically, holders of the qualification will be able to:

use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis

undertake further training, develop existing skills and acquire new competences that will enable them to assume significant responsibility within organisations.

## Transferable skills

ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context  
effectively communicate information, arguments and analysis in a variety of forms  
to specialist and non-specialist audiences and deploy key techniques of the discipline effectively  
qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making

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## Study

### Study time

Type	Required
Lectures	6 sessions of 1 hour (4%)
Seminars	6 sessions of 2 hours (8%)
Practical classes	3 sessions of 2 hours (4%)
Private study	126 hours (84%)
Total	150 hours

### Private study description

Private study and independent learning include: preparation for computer labs, reading textbooks, conducting own analysis in preparation for computer labs, presentation and writing of summative technical report and essay.

## Costs

No further costs have been identified for this module.

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## Assessment

You must pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

### Assessment group A2

	Weighting	Study time
Technical Report (1500 words)	40%	
This technical report asks students to conduct their own bivariate analysis of an association of interest using a large-scale database available through the UK Data Archive.		
Essay (2000 words)	60%	
This essay asks students to conduct a methodological review of a published journal article using multivariate statistical methods.		

### Feedback on assessment

Feedback will be provided throughout computer labs. One computer lab will focus on providing feedback on students' work for their first summative which involves data analysis. Summative Detailed written feedback will be provided on summative assessments.

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## Availability

### Courses

This module is Core for:

- USOA-L301 BA in Sociology
  - Year 2 of L301 Sociology
  - Year 2 of L301 Sociology
  - Year 2 of L301 Sociology
  - Year 2 of L305 Sociology with Specialism in Cultural Studies
  - Year 2 of L303 Sociology with Specialism in Gender Studies
  - Year 2 of L304 Sociology with Specialism in Research Methods
  - Year 2 of L302 Sociology with Specialism in Social Policy

This module is Core optional for:

- Year 2 of ULAA-ML34 BA in Law and Sociology (Qualifying Degree)

- Year 2 of UHIA-VL13 Undergraduate History and Sociology
- Year 2 of UHIA-VL15 Undergraduate History and Sociology (with a term in Venice)
- Year 2 of ULAA-ML33 Undergraduate Law and Sociology
- Year 2 of UPOA-ML13 Undergraduate Politics and Sociology
- Year 2 of UCEA-Y205 Undergraduate Social Studies (Full-time)
- Year 2 of UIPA-L3L8 Undergraduate Sociology and Global Sustainable Development

This module is Optional for:

- Year 2 of USOA-L314 Undergraduate Sociology and Criminology

This module is Option list A for:

- Year 2 of ULAA-ML33 Undergraduate Law and Sociology

This module is Option list B for:

- Year 2 of UPOA-ML13 Undergraduate Politics and Sociology

This module is Option list G for:

- UPHA-V7ML Undergraduate Philosophy, Politics and Economics
  - Year 2 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 2 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 2 of V7ML Philosophy, Politics and Economics (Tripartite)