

# sociology

UNIVERSITY OF LIMERICK



Module Code:	SO5041
Module Title:	Quantitative methods for MA research
Academic Year:	2021/2
Semester:	Autumn
Lecturer(s):	Dr Brendan Halpin
Lecture Locations:	Class: Mon 10-12 A1015; Lab: Mon 13-15 A0060a
Lecturer(s) Contact Details:	brendan.halpin@ul.ie, Phone: ext 3147
Lecturer(s) Office Hours:	15:00-18:00

## Short Summary of Module:

An introduction to quantitative research methods in sociology.

## Aims and Objectives of Module:

- Course focus:
  - The role of empirical reasoning in sociology, using quantitative data
  - Quantitative social science data collection, especially the survey
  - Handling quantitative data: coding it onto a computer, organising it, presenting it
  - Statistical analysis: making claims about the world using quantitative data – *sampling* and *inference*
- Practical focus:
  - Using software to analyse data and prepare findings
    - \* Stata: statistical software package
    - \* Microsoft Excel: spreadsheet
  - Carrying out questionnaire-based research
  - Becoming a critical consumer of quantitative research

## Learning Outcomes:

- Apply quantitative methods to real research problems
- Critically assess published research using quantitative methods
- Choose appropriate research methods for MA research
- Use software effectively and reproducibly to manage, present and analyse social science data

## Detailed Module Plan

- Introduction to quantitative method – using number to represent information, simple descriptive statistics and presentations. Using Stata to enter data and report it
- Samples, surveys and probability – the *theory* of how a sample can be used to describe a population, some elementary probability theory, basic questionnaire design and survey implementation. Manipulating data in Stata, more presentation.
- Statistical inference – the *practice* of using a sample to describe a population. Statistically informed use of Stata: testing difference of means, analysing association in tables.
- Linear regression and correlation
- Regression analysis with multiple explanatory variables?
- In parallel, reading and discussion of a small number of quantitative research reports

## Detailed lecture sequence

- [Week 1] General introduction
- [Week 2] (1) Introducing Quantitative Social Research, (2) Surveys, Questionnaires and Sampling
- [Week 3] (3) Numbers as Information – Data, (4) Bivariate analyses
- [Week 4] (4) Bivariate analyses continued, (5) More on types of variables
- [Week 5] Bank holiday
- [Week 6] (6) Sampling, (7) Distributions
- [Week 7] (8) More on Distributions, (9) Sampling Distributions and the Central Limit Theorem
- [Week 8] (10) Sampling and confidence intervals, (11) Two new distributions:  $t$  and  $\chi^2$
- [Week 9] (12) Questionnaire Design
- [Week 10] (13) Hypothesis testing, (14) More  $t$ -tests,
- [Week 11] (15) Correlation, (16) Regression
- [Week 12] (16) Further Regression, review

## Lab sequence (subject to change)

- [Week 1] Logging on, running Stata, general intro (short lab)
- [Week 2] Univariate analysis, simple data entry
- [Week 3] Bivariate analysis
- [Week 4] Editing data in Stata, missing values
- [Week 5] Bank holiday
- [Week 6] Using the Normal Distribution (by hand, spreadsheet)

- [Week 7] Confidence intervals for means and proportions (by hand, Stata)
- [Week 8] Understanding the standard deviation (spreadsheet exercises)
- [Week 9] Chi-squared test (spreadsheet and Stata)
- [Week 10] Hypothesis test on a mean (spreadsheet and Stata)
- [Week 11] More hypothesis tests; correlation
- [Week 12] Regression analysis using Stata

## Texts

- Main text: Agresti, *Statistical Methods for the Social Sciences* – good introduction to formal statistical methods, very clear and accessible (will use more extensively in second semester course)
- For Stata:
  - Robson and Pevalin, *The Stata Survival Manual*
  - Kohler and Kreuter, *Data Analysis using Stata*
  - Acock, *A Gentle Introduction to Stata*
- Dip into Alan Bryman, *Social Research Methods*
- Also David de Vaus, *Surveys in Social Research*: good on survey methodology
- Other occasional readings
- Software: We will have access to Stata in the PC-Lab. You may also decide to buy a six-month student licence for Stata/IC at <https://www.stata.com/order/new/edu/gradplans/student-pricing/>.

## Details of Module Assessment:

Assessment will be by means of four assignments, worth 25% each. These will involve a range of activities, including use of Stata, online exercises on statistical concepts, and short essay-style questions. These will be due at ends of weeks 5, 9, 12 and 15. The fourth assignment will take the place of a formal exam.

### Note on assignments

- Cooperation between students is encouraged but assignments must be the student's own work
- Please refer to Dept Plagiarism Policy below.
- Please use the Dept Assignment Declaration form with all assignments (except online) <http://www.ul.ie/sociology/> (under "Student Resources")
- Note the Dept's policy on deadlines <http://www.ul.ie/sociology/> (under "Student Resources")

## Details of Annual Repeats:

- Repeat assessment: 100% exam, August 2021

## **SULIS and Other Classroom Technologies:**

The module will use SULIS for submission of assignments, and <http://teaching.sociology.ul.ie/so5041> for provision of materials.

## **FEEDBACK:**

Written feedback will be provided after each assignment during the semester.

## **PLAGIARISM:**

In writing a research project you will make reference to ideas, theories, concepts and research findings that others have developed. It is essential to acknowledge the work of other writers/researchers in the field.

Plagiarism is a serious academic offence. Plagiarism will result in an automatic fail grade being awarded.

The Department of Sociology treats plagiarism with the utmost seriousness. You are strongly advised to read the department's Policy Document on Plagiarism – copies of which may be downloaded from the Department's website at [www.ul.ie/sociology](http://www.ul.ie/sociology) under the heading 'Student Resources'.

## **LATE SUBMISSION OF WORK:**

Students are required to submit assignments by the due deadline set by the Department of Sociology, using the submission procedure specified for that assignment.

### **What penalties are imposed if this deadline is missed?**

Where an extension has not been agreed in advance, or where a student submits an essay after the agreed extensions has expired, the Department will impose a penalty for late submission. For the first day that elapses between the expiration of the deadline and the receipt of the work by the Department, 5 percentage points will be deducted from the student's mark for that assignment. Assignments received after the 24 hour period has lapsed will attract a mark of zero.

### **How can students apply for an extension?**

The Department may at its discretion and for good cause sanction an extension to individual students. In order to be granted an extension, students will be required to present a medical certificate or other evidence of a compelling reason for late submission. This must be in writing.

In the first instance, students seeking an extension should contact the staff member who is convenor of the relevant module. On submission of the assignment, the written authorisation for an extension should be attached to any such late assignments.

### **When should students apply for an extension?**

Students can apply for an extension a minimum of 24 hours in advance of the deadline by submitting a written request by e-mail for such an extension. This is so that students can be informed in writing prior to the assignment deadline whether or not the extension has been granted.

### **What about further extensions?**

On a discretionary basis, the department may allow further extensions.

## **CONTACTING YOUR LECTURERS:**

Please don't hesitate to make contact should you have any questions or difficulties regarding the course content, tutorials or assignments.

**Office Hours: See cover page**

### **Email Etiquette:**

- Please ***use your UL e-mail account only*** to e-mail us as spam filters may block e-mails from other accounts.
- State clearly the purpose of your email in the Subject Header Line
- Do not email using 'Text Speak'.

**Emails are replied to during working hours 9-5pm (Monday to Friday only).**

## **Your Responsibilities As A Student:**

**As a student on this module (and all other ones) you have certain responsibilities.**

**You have a responsibility to:**

- **Attend lectures, tutorials and labs**
- **Keep up to date with your reading**
- **Check your UL Student email at least once a day**
- **Submit all work by the agreed deadlines**
- **Keep copies of your course assignments by saving them and keeping a back-up version**

## GRADING SCALE FOR ASSIGNMENTS AND EXAMS

Letter	Award Equivalent	Quality Point Value (QPV)	Percentage Equivalent	Remarks
A1	First Honours	4.00	75+	Answers should address the question posed, and provide excellent coverage, explanation, examples, and clarity. Presents a credible supported argument, which is apparent throughout the paper. The answer will reflect a wide range of reading. An A1 answer as well as fulfilling the above criteria, should demonstrate very good critical reflection, theoretical insight, and originality. Answers reflect an accurate and detailed understanding. The submission is exceptional for the level of the module.
A2	First Honours	3.60	70-74	Answers should address the question posed, and provide excellent coverage, explanation, examples, and clarity. Presents a clear and supported argument. Answers reflect an accurate and somewhat detailed understanding. The answer will reflect a wide range of reading. The submission is excellent for the level of the module.
B1	Honours 2.1	3.20	65-69	Answers should address the question posed. Above the average standard with some very minor errors. Presents a credible argument, which may be more evident in the opening and closing sections. The position is largely supported. Answers should include evidence of reading beyond the mandatory textbooks. Answers reflect an accurate understanding.
B2	Honours 2.1	3.00	60-64	Answers should address the question posed. Answers reflect a largely accurate understanding. Presents a credible argument, which may be more evident in the opening and closing sections. Position is

				supported in part. Above the average standard with some minor errors. Answers should include evidence of reading beyond the mandatory textbooks.
B3	Honours 2.2	2.80	55-59	Answers should address the question posed. Answers reflect a core understanding. The argument within the paper may appear as disconnected sections, rather than part of a coherent whole. Generally good work with a number of omissions or minor errors. Answers should evidence appropriate level of understanding of the mandatory textbooks, and additional materials.
C1	Honours 2.2	2.60	50-54	Answers should address the question posed. The sections within the paper may appear disconnected, rather than part of a coherent argument. Generally good work with a number of noticeable omissions or errors. Answers should include evidence of understanding of the mandatory textbooks, and some reading of additional materials. Answers in this category show an acceptable level of competence.
C2	Third Honours	2.40	45-49	Fair but with significant shortcomings. Answers should evidence study of the module text. These answers may not answer the question directly but do recognise what is being asked of them. Unlikely to present an argument. Answers reflect a limited understanding.
C3	Third Honours	2.00	40-44	Answers should address the question posed. Answers reflect a very limited understanding. Unlikely to present an argument or argument lacks credibility. Answers only evidence study of the module text. In essence these answers do not answer the question directly but do recognise what is being asked of them.
D1	Compensating Fail	1.60	35-39	The answer may not address the question posed. An attempt at the question but



				seriously lacking in content. Answers will show limited evidence of coherent thinking, reading prescribed material, and a lack of argument. They will suffer from poor writing, and very poor theoretical competence.
D2	Compensating Fail	1.20	30-34	The answer may not address the question posed. Answers may reflect a misunderstanding of key concepts and ideas. An attempt at the question but seriously lacking in content. Answers will show limited evidence of reading prescribed material, and a lack of argument. They will suffer from poor writing, and very poor theoretical competence.
F	Fail	0.00	Less than 30 No credit	Considerable further work required. Answer does not address the question posed and presents inadequate information in an incoherent manner.
NG	No Grade	0.00		No credit

### ASSESSMENT GRADING SCALE:

Letter	Award Equivalent	Quality Point Value (QPV)	Percentage Equivalent	Remarks
A1	First Honours	4.00	75+	
A2	First Honours	3.60	70-74	
B1	Honours 2.1	3.20	65-69	
B2	Honours 2.1	3.00	60-64	
B3	Honours 2.2	2.80	55-59	
C1	Honours 2.2	2.60	50-54	
C2	Third Honours	2.40	45-49	
C3	Third Honours	2.00	40-44	
D1	Compensating Fail	1.60	35-39	
D2	Compensating Fail	1.20	30-34	
F	Fail	0.00	Less than 30	no credit awarded
NG	No Grade	0.00		no credit awarded