

sociology

UNIVERSITY OF LIMERICK



SO5032 Spring 2023/4 – Module outline

| | |
|------------------------------|------------------------------------------------|
| Module Code: | SO5032 |
| Module Title: | Quantitative Research Methods II (MA) |
| Academic Year: | 2023/4 |
| Semester: | Spring |
| Lecturer(s): | Dr Brendan Halpin |
| Lecture Locations: | Lec Mon 09-1100 P1006, Lab Weds 12-1400 A0060a |
| Lecturer(s) Contact Details: | brendan.halpin@ul.ie |
| Lecturer(s) Office Hours: | Mon 1100-1300 |

Short Summary of Module:

Intermediate quantitative research methods for sociology, following on from SO5041.

Aims and Objectives of Module:

- A continuation of SO5041 – builds on what was learnt there
- A deeper look at methods already covered, especially regression
- Related methods more suited to social science data: methods for categorical and ordinal variables, including logistic regression
- Further use of Stata:
 - Use in a production environment – do-files, logging, reproducibility
 - More complex data handling
 - Further analytic procedures
- Secondary analysis: real research with existing data sets

Learning Outcomes:

- Deeper understanding of methods for analysis of categorical data
- Understanding of the nature of multivariate causality

- Understanding of the theory and practice of multiple linear regression
- An understanding of some methods for regression with categorical dependent variables
- Deeper understanding of sampling practice and theory
- Practical skills for accessing and analysing large-scale data sets
- An ability to read quantitative social research
- Greater competence in Stata, particularly for handling larger projects

Course Structure:

One two-hour lecture per week, one two-hour lab per week.

Detailed outline

- Revisit χ^2 , look at methods for more complex analysis of categorical (nominal *and* ordinal) data (chapter 8, Agresti)(1-2 weeks)
- Multivariate causality (chapter 10 from Agresti) (1 week)
- Multiple regression (chapters 11, 14 from Agresti) (3 weeks plus)
- More sampling theory: clusters, strata, weighting (1 week)
- Data sets, data archives and secondary analysis (1 week, ongoing in labs)
- Logistic regression: regression where the dependent variable is binary (or multinomial) rather than continuous (chapter 15 from Agresti) (3 weeks plus)
- Reading statistical research – what gets published and how to read it (1-2 weeks/on-going)

Lecture topics by week

| Week | Topic | Lecture | Lab |
|------------|--------------------------------------------|-------------|-------------|
| beginning | | Mon 09-1100 | Wed 12-1400 |
| 1: Jan 29 | Categorical data, association in tables | ✓ | ✓ |
| 2: Feb 05 | Association in ordinal data | X | ✓ (lecture) |
| 3: Feb 12 | Understanding multidimensional causality | ✓ | ✓ |
| 4: Feb 19 | Introducing multiple regression | ✓ | ✓ |
| 5: Feb 26 | Further multiple regression | ✓ | ✓ |
| 6: Mar 04 | Multiple regression: residuals & influence | ✓ | ✓ |
| 7: Mar 11 | Regression with logged dependent variables | ✓ | ✓ |
| 8: Mar 18 | Introducing logistic regression | X | ✓ (lecture) |
| 9: Apr 01 | Further logistic regression | X | ✓ (lecture) |
| 10: Apr 08 | Multinomial regression | ✓ | ✓ |
| 11: Apr 15 | Multinomial and ordinal regression | ✓ | ✓ |
| 12: Apr 22 | Ordinal regression continued | ✓ | ✓ |

Texts

- Main text: Agresti, *Statistical Methods for the Social Sciences* – particularly chapters 8, 10, 11, 14 and 15
- Supplementary texts:
 - de Vaus, *Surveys in Social Research*: good on survey methodology
 - Agresti, *Introduction to Categorical Data Analysis*
 - Pevalin and Robson, *The Stata Survival Manual*

Details of Module Assessment:

- Three assignments, weeks 6, 11 and 15.
- The first two assignments are worth 20% each.
- The final assignment is a project, worth 60%, and should be worked on throughout the semester (see below).

Details of Annual Repeats:

A 100% assignment, to be submitted in the examination period.

BrightSpace and Other Classroom Technologies:

- The module will use BrightSpace for submission of assignments and for provision of materials.
- <http://teaching.sociology.ul.ie/so5032> will also be used

IN TERM ASSIGNMENT(S):

- Assignment 1: Homework exercises relating to linear regression.
 - Marks: 20%
 - Deadline: End week 6
- Assignment 2: Homework exercises relating to categorical data analysis.
 - Marks: 20%
 - Deadline: End week 11
- Assignment 3: A project This will involve the use of large-scale survey data, and require the formulation of a research question, and its addressing using statistical analysis.
 - Marks: 60%
 - Deadline: End week 15.

FEEDBACK:

Detailed feedback on assignments 1 and 2 will be given in weeks 8 and 13, by e-mail and on request face-to-face. Feedback on assignment 3 will be provided on request after 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 departmental website 'Student Resources' section: <https://www.ul.ie/artsoc/sociology/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

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 | QPV | Marks |
|--------|-------------------|------|-------|
| 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 | <30 |
| NG | No Grade | 0.00 | |

- Remarks
 - A1: 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: 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: 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: 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: 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 include evidence appropriate level of understanding of the mandatory textbooks, and additional materials.
- C1: 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: Fair but with significant shortcomings. Answers should include evidence of 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: Answers should address the question posed. Answers reflect a very limited understanding. Unlikely to present an argument or argument lacks credibility. Answers only include evidence of 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: 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: 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: No credit. Considerable further work required. Answer does not address the question posed and presents inadequate information in an incoherent manner.
- NG: No credit.