Course Organiser:
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Aims and Objectives
After completing this paper, students will:
- Have learned about a range of quantitative and qualitative methods used in empirical research
- Be able to read critically, and comment on, published research using these methods
- Know how to apply these methods correctly using appropriate software packages, and how to apply statistical tests to assess the validity of results
- Appreciate the limitations of the methods taught, and common mistakes which may be made in empirical research
- Understand the importance of documentation and replicability
- Have experience of writing up the results of empirical research
- Know where to go to find information on more complex research methods

Paper content
The course is organised into three modules. The first covers **statistical methods**: descriptive statistics; bivariate correlation; multivariate linear regression, and factor analysis. Students will read published work employing each of the methods; learn how to implement the method in SPSS with “real” data, and how to test whether results are statistically valid.

The second module covers **sampling and survey design**: different ways in which a sample may be selected; the importance of careful sample selection; the implications of samples based on different designs; structured surveys and questionnaire design; sampling and non-sampling error; challenges of using secondary data; issues of comparability; where to find survey data; weighting.

The third module covers topics in qualitative research methods: techniques in interviewing, the principles of ethnography, and visual methods.

Prerequisites: none

Mode of teaching
________________________
Quantitative methods 12 two-hour lectures
8 two-hour lab sessions
4 one-hour supervisions
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Survey design 4 one-hour lectures
1 supervision
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Qualitative methods 4 one-hour lectures
1 supervision
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Revision 2 supervisions

Mode of assessment: one 3-hour examination
# Lecture List

## Quantitative methods

<table>
<thead>
<tr>
<th></th>
<th>MT, Week</th>
<th>Lecturer</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Week 1</td>
<td>Dr M Iacovou</td>
<td>Introduction/overview: types of data, graphs &amp; frequencies</td>
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<tr>
<td>2</td>
<td>Week 2</td>
<td>Dr M Iacovou</td>
<td>Descriptive statistics: distributions, central limit theorem</td>
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<td>3</td>
<td>Week 3</td>
<td>Dr M Iacovou</td>
<td>Introduction to inferential statistics: hypothesis testing, statistical significance, confidence intervals</td>
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<td>4</td>
<td>Week 4</td>
<td>Dr M Iacovou</td>
<td>Correlation analysis and chi-square: scatterplots and correlation coefficients , cross-tabulations, causation</td>
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<tr>
<td>5</td>
<td>Week 5</td>
<td>Dr M Iacovou</td>
<td>Simple linear regression: ordinary least squares, principles,</td>
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<tr>
<td>6</td>
<td>Week 6</td>
<td>Dr M Iacovou</td>
<td>Multivariate linear regression: principles, assumptions, interactions</td>
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<td>7</td>
<td>Week 7</td>
<td>Dr M Iacovou</td>
<td>Logistic regression I</td>
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<tr>
<td>8</td>
<td>Week 8</td>
<td>Dr M Iacovou</td>
<td>Logistic regression II</td>
</tr>
<tr>
<td>9</td>
<td>Week 1</td>
<td>Dr M Iacovou</td>
<td>Factor Analysis I</td>
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<tr>
<td>10</td>
<td>Week 2</td>
<td>Dr M Iacovou</td>
<td>Factor Analysis II</td>
</tr>
<tr>
<td>11</td>
<td>Week 3</td>
<td>Dr M Iacovou</td>
<td>Other methods: (multinomial) logistic regression</td>
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<tr>
<td>12</td>
<td>Week 4</td>
<td>Dr M Iacovou</td>
<td>Intelligent inference from quantitative methods</td>
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## Qualitative methods

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<tr>
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<tbody>
<tr>
<td>1</td>
<td>Week 1</td>
<td>Dr D Weinberg</td>
<td>Science, Logic and the Real</td>
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<tr>
<td>2</td>
<td>Week 2</td>
<td>Dr D Weinberg</td>
<td>On Natural Sciences and Social Sciences</td>
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<tr>
<td>3</td>
<td>Week 3</td>
<td>Dr D Weinberg</td>
<td>What are Qualitative Research Methods?</td>
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<tr>
<td>4</td>
<td>Week 4</td>
<td>Dr D Weinberg</td>
<td>Qualitative Interviewing, Life History and Narrative Analysis</td>
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## Survey design and methods

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<th>LT, Week</th>
<th>Lecturer</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Week 5</td>
<td>Dr M Soffia</td>
<td>Collecting your own data: challenges and opportunities</td>
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<tr>
<td>2</td>
<td>Week 6</td>
<td>Dr M Soffia</td>
<td>Questionnaire design</td>
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<tr>
<td>3</td>
<td>Week 7</td>
<td>Dr M Soffia</td>
<td>Using secondary data</td>
</tr>
<tr>
<td>4</td>
<td>Week 8</td>
<td>Dr M Soffia</td>
<td>Finding secondary data resources</td>
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Reading list

Quantitative Methods

The main reference book for this section of the course is *Discovering Statistics Using IBM SPSS Statistics*, by Andy Field (Sage 2013). There are many older editions of this book, which are also fine to use.

The course also draws on a range of published materials available online; these sources will be given out in the course of the lectures.

Qualitative Methods


Survey design and methods

General Readings:


Smith, Emma. 2008 Pitfalls and Promises: The Use of Secondary Data analysis in educational research in British Journal of Education 56(3) 323-339.


Survey exemplars:


European Social Survey, http://www.europeansocialsurvey.org/docs/findings/ESS1_5_select_findings.pdf

