<h1 class="pageTitle">POL40950 Introduction to Statistics</h1>
<h2>Academic Year 2019/2020</h2>

Introduction to the use of data for statistical analysis in political science and related disciplines (sociology, public policy, international relations, etc.). The module will introduce concepts such as measurement, variables, statistical data, and provide an introduction to basic descriptive statistics summarizing numerical data, both graphically and numerically. The core of the module will be an introduction to applied multiple regression analysis, discussing the purpose, implementation, and interpretation of standard regression models, for both continuous and dichotomous variables. It will introduce the basics of statistical inference, drawing conclusions about populations on the basis of sample data, and apply this to the regression context. Foundational knowledge of frequentist statistical inference will be provided and the end result will be basic ability to perform, interpret, and report on multiple regression analysis.

Curricular information is subject to change

What will I learn?

Learning Outcomes:
- basic understanding of working with R and RStudio
- being able to summarize and describe statistical data
- basic understanding of (frequentist) statistical inference
- basic understanding of executing and interpreting multiple regression
- preliminary understanding of logistic regression

Indicative Module Content:
Accessing and visualising data
Simple regression
Descriptive statistics
Multiple regression
Categorical independent variables
Writing up regression results
Interaction models
Sampling distribution & Central Limit Theorem
Hypothesis tests & confidence intervals in regression
Model specification and fit / statistical vs causal inference
Logistic regression

How will I learn?

Student Effort Hours:

Student Effort Type	**Hours**
Lectures	12
Computer Aided Lab	12
Autonomous Student Learning	200
Total	**224**

Am I eligible to take this module?

Requirements, Exclusions and Recommendations

Not applicable to this module.

Module Requisites and Incompatibles

Not applicable to this module.

How will I be assessed?

Assessment Strategy

Description	Timing	Open Book Exam	Component Scale	Must Pass Component	% of Final Grade
Continuous Assessment: Homework assignment	Week 3	n/a	Graded	No	25
Continuous Assessment: Homework assignment - preparation for course paper	Week 10	n/a	Graded	No	20
Essay: Course paper	Coursework (End of Trimester)	n/a	Graded	No	30
Continuous Assessment: Homework assignment	Week 7	n/a	Graded	No	25

Carry forward of passed components
Yes

What happens if I fail?

Resit In	Terminal Exam
Spring	No

Assessment feedback

Feedback Strategy/Strategies
* Feedback individually to students, post-assessment

How will my Feedback be Delivered?
Feedback will be provided within 20 days from submission, as per university guidelines. Feedback on Homework 3 in particular will also count as formative assessment in preparation of the course paper.

Reading List

<nav class="white-box no-left-arrow zero-top-margin">
<h1 class="printOnly"><img src="https://www.ucd.ie/t4cms/ucdcollegesandschools_logo.png"> UCD Course Search
Introduction to Statistics (POL40950) </h1><h3 class="printOnly">Academic Year 2019/2020</h3> The information contained in this document is, to the best of our knowledge, true and accurate at the time of publication, and is solely for informational purposes. University College Dublin accepts no liability for any loss or damage howsoever arising as a result of use or reliance on this information.
<h4 class="noPrint">Introduction to Statistics (POL40950)</h4>
<dl>
<dt>Subject:</dt>
<dd>Politics</dd>
<dt>College:</dt>
<dd>Social Sciences & Law</dd>
<dt>School:</dt>
<dd>Politics & Int Relations</dd>
<dt>Level:</dt>
<dd>4 (Masters)</dd>
<dt>Credits:</dt>
<dd>10.0</dd>

<dt>Trimester:</dt>
<dd>Autumn</dd>

<dt>Module Coordinator:</dt>
<dd>Assoc Professor Jos Dornschneider-Elkink</dd>
<dt>Mode of Delivery:</dt>
<dd>Blended</dd>
<dt>Internship Module:</dt><dd>No</dd>

<dt>How will I be graded?</dt>
<dd>Letter grades </dd>

</dl>
<button class="menubutton" onclick="window.print()"><i class="fa fa-print fa-fw"> Print Page</button>
(Google Chrome is recommended when printing this page)

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