RESEARCH METHODS IN IR

IE University
Professor: **HENRY PASCOE**
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Academic year: 23-24
Degree course: SECOND
Semester: 1º
Category: BASIC
Number of credits: 6.0
Language: English

PREREQUISITES

There are no prerequisites for this course. Prior exposure to statistics and computer programming will be helpful but is by no means necessary.

SUBJECT DESCRIPTION

This course provides an overview of quantitative research methods in the study of International Relations. You will learn key concepts in interpreting, evaluating, and implementing data analysis and statistical methods. You will gain the skills to conduct quantitative analysis using the R statisical programming language.

This course will involve in-class activities and interactive lectures. Students are expected to come to class having read and carefully thought about the material we will cover beforehand. The material we cover will come from a variety of sources – not just the main textbook – so lecture and lecture notes are an important source of information on which you will be examined.

Statistics and programming can be intimidating subjects, and the course will be challenging. The lectures and sections are designed to give you all of the tools that you will need, but each of these skills requires significant time outside of class. I am here to help you succeed and encourage students to ask questions whenever they are in doubt –in class, in office hours, over email, etc. – and to participate in class-room activities. Lastly, the course website should be checked regularly for materials posted, announcements, e-mails and discussions.

OBJECTIVES AND SKILLS

By the end of this course, you should:

1. Acquire the literacy for understanding International Relations research based on quantitative data and reasoning.
2. Be critical consumers of statistics, and to identify the misuse of statistics and data in arguments, be they academic, political, or popular.
3. Be able to define and understand important statistical concepts and methods (simple hypothesis testing, ordinary least squares regression, uncertainty, causality).
4. Be able to demonstrate basic programming and data analysis skills with R, a statistical computing language.

METHODOLOGY

The main activities of this course include: readings, lectures, in-class activities, problem sets, and computational sessions. Lectures will cover key concepts in statistics and quantitative social science. We will also work through example problems and show you how to use R to analyze data.

Completing the assigned readings prior to attending class is required. An important component of the course is in-class activities in which students will work in small groups to discover and highlight principles and topics.

In the computational sessions students will be instructed how to use R, a statistical computation software which is freely available and open source. Students will gain competence coding in R through problem sets, which will also reinforce course concepts.

The primary textbook for this course will be *Data Analysis for Social Science: A Friendly Introduction* by Elena Llaudet and Kosuke Imai. I will refer to this as DSS on the course schedule. The textbook is not yet publicly available, but the authors have generously granted this class advanced access. The textbook can be accessed for free online at: https://www.dropbox.com/s/clx08yr9dbn03h5/dss_final_manuscript_january17_2022_not_downloadable.pdf?dl=0

Please do not circulate this link beyond this class. Please note that it cannot be downloaded or printed at this time.

We will also on occasion supplement this textbook with selections from other sources. In addition, the professor may assign additional readings in the form of short news, policy, and academic articles. These readings will be made available on Blackboard.

Note that in addition to in-person class discussions, we will establish a course discussion board where students and the instructor can interact with one another. You are not required to participate, but it can be an effective way to quickly receive a response to your question and to see if others are asking similar ones. I will monitor the discussion board and respond, but I also encourage you to help your classmates by responding to questions when you know the answer or other helpful information. Questions should generally be directed toward the discussion board, unless your question is of a personal nature or specific to you.

Teaching methodology	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	23.33 %	35 hours
Discussions	6.67 %	10 hours
Exercises	33.33 %	50 hours
Group work	6.67 %	10 hours
Other individual studying	30.0 %	45 hours
TOTAL	100.0 %	150 hours

PROGRAM

SESSIONS 1 - 2 (LIVE IN-PERSON)

Course introduction: Statistics and Data in International Relations

R + R Studio Introduction

Reading:

Book Chapters: DSS 1.1-1.7 (Required) (Book) (See Bibliography)

SESSIONS 3 - 4 (LIVE IN-PERSON)

Causality Intro and Randomized Experiments

Reading:

Book Chapters: DSS 2.1-2.5 (Required) (Book) (See Bibliography)

SESSIONS 5 - 6 (LIVE IN-PERSON)

Learning from Samples and Surveys

Reading:

Technical note: DSS 3.1-3.2 (Required) (Book) (See Bibliography)

SESSIONS 7 - 8 (LIVE IN-PERSON)

Descriptive statistics and Univariate visualization

Reading:

Book Chapters: DSS 3.3-3.4 (Required) (Book) (See Bibliography)

SESSIONS 9 - 10 (LIVE IN-PERSON)

Bivariate Relationships and Regression

Reading:

Book Chapters: DSS 3.5; 4.1-4.3 (Required) (Book) (See Bibliography)

SESSIONS 11 - 12 (LIVE IN-PERSON)

Regression

Reading:

Technical note: DSS 4.4-4.6 (Required) (Book) (See Bibliography)

SESSIONS 13 - 14 (LIVE IN-PERSON)

In-class exercises and midterm review

Problem Set 1 Due

SESSION 15 (LIVE IN-PERSON)

Midterm Exam

SESSIONS 16 - 17 (LIVE IN-PERSON)

Causality and Observational Data

Reading:

Book Chapters: DSS 5.1-5.6 (Required) (Book) (See Bibliography)

SESSIONS 18 - 19 (LIVE IN-PERSON)

Probability Intro and Random Variables

Reading:

Book Chapters: DSS 6.1-6.4 (Required) (Book) (See Bibliography)

SESSIONS 20 - 21 (LIVE IN-PERSON)

Large samples and sampling distributions

Reading:

Book Chapters: DSS 6.5, 7.1 (Required) (Book) (See Bibliography)

SESSIONS 22 - 23 (LIVE IN-PERSON)

Confidence intervals

Reading:

Book Chapters: DSS 7.2 (Required) (Book) (See Bibliography)

Problem Set 2 Due

SESSIONS 24 - 25 (LIVE IN-PERSON)

Hypothesis testing and statistical significance

Reading:

Book Chapters: DSS 7.3-7.3.1 (Required) (Book) (See Bibliography)

SESSIONS 26 - 27 (LIVE IN-PERSON)

Regression uncertainty

Reading:

Book Chapters: DSS 7.3.2 (Required) (Book) (See Bibliography)

SESSIONS 28 - 29 (LIVE IN-PERSON)

Course wrap-up and final review

Problem Set 3 Due

SESSION 30 (LIVE IN-PERSON)

Final exam

BIBLIOGRAPHY

Compulsory

- Elena Llaudet and Kosuke Imai. *Data Analysis for Social Science: A Friendly and Practical Introduction.* Preprint. Princeton University Press. ISBN 9780691199436 (Digital)

You do not need to buy this book - it has been provided to us free of cost by the authors (see Methodology section).

Recommended

- Kosuke Imai. *Quantitative Social Science: An Introduction.* Princeton University Press. ISBN 9780691175461 (Printed)

E-book or paper copy available.

EVALUATION CRITERIA

Problem sets:

We will have three problem sets, which will offer you opportunities to apply what you have learned. The assignments will contain a combination of analytic problems and data analysis in R. Problem sets will be due at 23:59 the night before the session indicated on the course schedule. No late problem sets will be accepted.

I encourage you to attempt to solve the problems on your own before consulting others. That said, you can work together on assignments, but you must write your own solutions and code. Under no circumstances sohuld you copy-and-paste another student's code. For each assignment, I will ask that you tell me the names of any individuals with whom you collaborated. This includes friends, classmates, and course staff.

Participation (in-class and on virtual discussion board):

Three main criteria will be used in assessing your class participation:

1. Depth and quality of contribution: This is the most important criterium and centers on what you say when you participate. A high quality comment is relevant to the course material and moves learning forward - for yourself and probably for others.
2. Engaging with and helping classmates: High quality participation also requires that ideas are communicated clearly and concisely so that others may engage with and benefit from the ensuing discussion. It also requires that contributions are well-timed, relevant, and thoughtful.
3. Frequency: More contributions does not necessarily mean better participation. Sometimes, less is more. However, you must contribute with sufficient frequency that your contributions can be assessed. You should strive to be a regular and productive participant in class discussions.

Note that in addition to in-person class discussions, we will establish a course discussion board where students and the instructor can interact with one another. You are not required to participate, but it can be an effective way to quickly receive a response to your question and to see if others are asking similar ones. I will monitor the discussion board and respond, but I also encourage you to help your classmates by responding to questions when you know the answer or other helpful information. Questions should generally be directed toward the discussion board, unless your question is of a personal nature or specific to you.

Midterm exam

There will be one in-class, open-book/open-note midterm exam. We will hold an in-class review the session before the midterm exam.

Final exam

There will be one in-class, open-book/open-note final exam. We will hold an in-class review the session before the final exam.

Criteria	Percentage	Comments
Class Participation	10 %	
Problem Sets	30 %	
Midterm Exam	25 %	
Final Exam	35 %	

GENERAL OBSERVATIONS:

Each student has four attempts over two consecutive academic years to pass this course.

For every BIR Program mandatory class aside from the IR Unplugged and BIR Electives, students are required to obtain the minimum grade of 5 required to pass the course. Students whose grade in the Final Exam (or the largest assignment) is below 5 will fail the course. The rule applies to whichever assignment carries the greatest weight to the final grade. Dates and location of the final exam will be posted in advance and will not be changed.

Students must attend at least 70% of the sessions. Students who do not comply with the 70% attendance rule will receive a 0.0 on their first and second attempts and go directly to the third one (they will need to enroll in this course again the following academic year).

Students who are in the third or fourth attempt must contact the professor during the first two weeks of the course.

The Bachelor's in International Relations pursues to develop the knowledge, skills and attitudes for bringing transformative and sustainable change in today´s world. Therefore, all the courses follow the principles of sustainability and diversity. Firstly, this course considers the agenda 2030 and builds upon the Sustainable Development Goals 8, 16 & 17. Secondly, this course is committed to an inclusive learning environment and looks to be enriched and enhanced by diversity along numerous dimensions, including race, ethnicity and national origins, gender and gender identity, sexuality, class and religion.

ATTENDANCE:

In-person attendance is mandatory at IE University, as it is an essential factor of IE´s learning methodology. While we do closely monitor attendance in each course, we also consider our students responsible for their own agenda and commitments, as adult university students. With that in mind, each student may miss up to 30% of the sessions within a given course and still maintain the possibility of passing that given course. This 30% “buffer” is to be used for any absences, such as: illnesses, personal emergencies, commitments, official/governmental matters, business and/or medical appointments, family situations, etc. Students should manage their various needs, and situations that may arise, within that 30% buffer. If a student is absent to more than the allowed 30% of the sessions (regardless of the reason), s/he will obtain a 0.0 grade for that course in both the ordinary and extraordinary calls of the current academic year, and s/he will have to retake the course during the following academic year.

Please pay close attention to your attendance. The program strongly encourages attending 100% of the sessions as it will improve your learning outcomes, it will increase the class performance and it will benefit your participation grade. Noncompliance with deadlines for Non-Classroom Learning activities or assignments will result in an absence for the session.

Extreme cases involving emergencies such as: extended hospitalizations, accidents, serious illnesses and other cases of force majeure, are to be consulted with the Program Management (bir.biemadrid@ie.edu) for assessment of the situation and corresponding documentation, in order to support and guide each student optimally.

For more information about the university attendance policy, please check; https://www.ie.edu/student-guide/bir/policies-and-guidelines/attendance/

RETAKE POLICY:

Any student whose weighted final grade is below 5 will be required to sit for the retake exam to pass the course (except those not complying with the attendance rules, whom are banned from this possibility).

Grading for retakes will be subject to the following rules:

- The retakes will consist of a comprehensive exam or equivalent assignment. The grade will depend only on the performance on this exam; continuous evaluation over the semester will not be taken into account.
- Dates and location of the retakes will be posted in advance and will not be changed.
- The exam/assignment will be designed bearing in mind that the passing grade is 5 and the maximum grade that can be attained is 8 out of 10.

PLAGIARISM / ACADEMIC HONESTY:

Plagiarism is the dishonest act of presenting another person's ideas, texts or words as your own. This includes in order of seriousness of the offense:

- providing faulty sources;
- copy-pasting material from your own past assignments (self-plagiarism) without the instructor's permission;
- copy-pasting material from external sources even while citing them;
- using verbatim translations from sources in other languages without citing them;
- copy-pasting material from external sources without citing them;
- and buying or commissioning essays from other parties.

IEU students must contact the professor if they don't know whether the use of a document constitutes plagiarism. For help with your academic writing, contact the Writing Center (writingcenter@faculty.ie.edu). The professor will also advise the student on how to present said material. All written assignments must be submitted through Turn-it-in, which produces a similarity report and detects cases of plagiarism. Professors are required to check each student's academic work in order to guarantee its originality. If the originality of the academic work is not clear, the professor will contact the student in order to clarify any doubts. Students using external tutorial support should report it to the professor and the BIR Program from the moment they began receiving this support. In the event that the meeting with the student fails to clarify the originality of the academic work, the professor will inform the Director of the Bachelor Program about the case, who will then decide whether to bring the case forward to the BIR Academic Review Panel. Very high similarity scores will be automatically flagged and forwarded to the Academic Review Panel. Plagiarism constitutes a very serious offense and may carry penalties ranging from getting a zero for the assignment to expulsion from the university depending on the severity of the case and the number of times the student has committed plagiarism in the past.

PROFESSOR BIO

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Henry Pascoe received a PhD in Government from the University of Texas, where he also received a Masters degree in Statistics. His research focuses on interstate counterterrorism cooperation and the strategic relationships between foreign aid, economic sanctions, and political violence and has been published in a number of internationally recognized, peer-reviewed, outlets. His research has been supported by grants from the AidData Center for Development Policy and has been presented at the annual meetings of the American Political Science Association, The Peace Science Society, The European Political Science Association, and The Midwest Political Science Association, inter alia.

OTHER INFORMATION

Office hours: to be determined and by appointment (hpascoe@faculty.ie.edu)

CODE OF CONDUCT IN CLASS

1. Be on time. Students arriving more than 5 minutes late will be marked as "Absent". Only students that notify in advance in writing that they will be late for a specific session may be granted an exception (at the discretion of the professor). Students attending online must always have their cameras on during the session or risk being marked absent.

2. If applicable, bring your name card and strictly follow the seating chart. It helps faculty members and fellow students learn your names.

3. Do not leave the room during the lecture: Students are not allowed to leave the room during lectures. If a student leaves the room during lectures, he/she will not be allowed to re-enter and, therefore, will be marked as “Absent”. Only students that notify that they have a special reason to leave the session early will be granted an exception (at the discretion of the professor).

4. Do not engage in side conversation. As a sign of respect toward the person presenting the lecture (the teacher as well as fellow students), side conversations are not allowed. If you have a question, raise your hand and ask it. It you do not want to ask it during the lecture, feel free to approach your teacher after class. If a student is disrupting the flow of the lecture, he/she will be asked to leave the classroom and, consequently, will be marked as “Absent”.

5. Use your laptop for course-related purposes only. The use of laptops during lectures must be authorized by the professor. The use of Social Media or accessing any type of content not related to the lecture is penalized. The student will be asked to leave the room and, consequently, will be marked as “Absent”.

6. No cellular phones: IE University implements a “Phone-free Classroom” policy and, therefore, the use of phones, tablets, etc. is forbidden inside the classroom. Failing to abide by this rule entails expulsion from the room and will be counted as one absence.

7. Escalation policy: 1/3/5. Items 4, 5, and 6 above entail expulsion from the classroom and the consequent marking of the student as “Absent.” IE University implements an “escalation policy”: The first time a student is asked to leave the room for disciplinary reasons (as per items 4, 5, and 6 above), the student will incur one absence, the second time it will count as three absences, and from the third time onward, any expulsion from the classroom due to disciplinary issues will entail 5 absences.