Instructor: Dr. Umberto Mignozzetti  
Email: umbertomig@ucsd.edu  
Office Hours: Fridays, from 04:00 PM to 06:00 PM  
Office Hours Sign-Up: https://calendly.com/umbertomig/office-hours  
GitHub for the class: https://github.com/umbertomig/POLI30

**Objective**

In this course, we will guide you through the process of logical reasoning and number-based analysis in Political Science. We will cover topics such as how to build hypotheses, how to assess data critically, and how to employ statistical software for data interpretation. By the end of the course, you will have the skills to carefully examine the strength of evidence, either supporting or challenging a claim. Additionally, you will become proficient in using R, a leading software for data analysis in scientific research.

**Learning Outcomes**

By the end of this course, students will be able to:

1. Apply the principles of logical reasoning and number-based analysis to political science.
2. Construct and test hypotheses effectively, honing their skills in posing relevant research questions and formulating meaningful predictions.
3. Critically assess and interpret data, developing a discerning approach to various forms of information and statistical evidence.
4. Demonstrate proficiency in using the R software for data analysis.

This is an introductory and applied course. We will learn the techniques with a focus on how to use them. We will discuss the nuts and bolts of each method, some more in-depth than others, but the focus will be on how to put them to work for us. I may recommend great books if you want to become an expert on the tools.

**Location, hours, and credits**

Credits: 4  
Location: Online course  
Hours: MoTuWeTh 6:30 PM - 7:50 PM  
Zoom Link: https://ucsd.zoom.us/j/98538670509
Prerequisites
Curiosity and hard work.

Books and Readings

Required Readings

I expect you to read the materials before each class since you can ask questions about things you do not understand. Also, the materials cover more content than the class, allowing you to learn the content even further.

Other Readings

Whenever you want to go deep into a subject, please get in touch with me regarding further readings.

Grading and Evaluations

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
<th>Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes x 8</td>
<td>10</td>
<td>40 %</td>
<td>Two every week, starting next week (will remove the lowest grade)</td>
</tr>
<tr>
<td>Problem Sets x 2</td>
<td>10</td>
<td>40 %</td>
<td>PS 1 – End of Week 02 PS 2 – End of Week 04 (no make-up)</td>
</tr>
<tr>
<td>Final Project</td>
<td>10</td>
<td>20 %</td>
<td>Aug 05</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>100%</strong></td>
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Participation
Active participation is essential. The main form of participation is showing up. By showing up, you will ensure you are in the right place at the right time. This is mostly enough to guarantee you will ask great questions and participate further.

Quizzes
Starting on Week 02, one quiz every two lectures. The two lowest grades will be dropped.

Problem-Sets
We will have two problem sets in total. For the problem sets, I will provide an R markdown layout with pre-coded answers to help you get started. Your job will be to finish up the text and coding. Look out for the example video on how to do the problem set.

Final Project
I will provide a few datasets; you have to pose a question and analyze the data to answer it.

Grading Scale
At the end of the course, all grades are converted to a 0-100 scale, and your final letter grade is assigned using the following table:

- A+: $\geq 97$
- A : [93, 97)
- A- : [90, 93)
- B+: [87, 90)
- B : [83, 87)
- B- : [80, 83)
- C+: [77, 80)
- C : [73, 77]
- C- : [70, 73)
- D : [60, 70)
- F : < 60

Note that there is no rounding. For example, a final grade of 89.99 is a B+, not an A-.

Academic Integrity
Here is the statement on Academic Integrity from the UCSD Academic Integrity Office:

"Academic Integrity is expected of everyone at UC San Diego. This means that you must be honest, fair, responsible, respectful, and trustworthy in all of your actions. Lying, cheating, or any other forms of dishonesty will not be tolerated because they undermine learning and the University’s ability to certify students’ knowledge and abilities. Thus, any attempt to get, or help another get,
a grade by cheating, lying or dishonesty will be reported to the Academic Integrity Office and will result in sanctions. Sanctions can include an F in this class and suspension or dismissal from the University. So, think carefully before you act by asking yourself: a) is what I’m about to do or submit for credit an honest, fair, respectful, responsible & trustworthy representation of my knowledge and abilities at this time and, b) would my instructor approve of my action? You are ultimately the only person responsible for your behavior. So, if you are unsure, don’t ask a friend—ask your instructor, instructional assistant, or the Academic Integrity Office. You can learn more about academic integrity at academicintegrity.ucsd.edu” (Source: Academic Integrity Office, 2018)

To clarify a few things, collaborations are welcome and encouraged. Doing problem sets with your peers is fun and saves time. You can ask questions to your friends and learn with them or answer your friends' questions and reinforce your acquired knowledge. You can save time searching things on the internet on websites such as stackoverflow.com and others. However, these are not substitutes for hard work. This means that your answers should be yours only.

Please read UC San Diego’s Policy on Integrity of Scholarship and take the integrity pledge!

Instructors

Dr. Umberto Mignozzetti
My name is Umberto Mignozzetti. You can find information about my work and research interests at http://www.umbertomig.com. My email is umbertomig@ucsd.edu.

Communication Expectations
To sign in for my office hours, please use the following Calendly webpage: https://calendly.com/umbertomig/office-hours

If you have any questions, please feel free to drop by during office hours or email me.

About email: I will try to respond to your email within 12-24 hours. Be mindful that I receive more than 300 emails daily, so sometimes, this period may be violated. In this case, please resend the email.

One valid answer for your email could be: please post your question on the Canvas Discussions webpage. If I reply to you this, it is not to avoid your question; it is just because your question is so good that other students may benefit from it and my answer.

I do not answer emails during the weekend.

Finally, I want to say that we are here for you! The TAs and I are committed to your learning experience, and if you have any questions or concerns, please let us know!
Yeilim Cheong (she/her)
Email: yecheong@ucsd.edu
Calendly link: TBA
Office hours: TBA

**Syllabus Changing Policy**
The syllabus is a plan, not a contract. It is subject to change throughout the semester. However, I will inform you about any changes or adjustments in any part of the syllabus.

**Resources for Support and Learning**
You have many resources at your disposal at UCSD. Please make sure that you check them up.

<table>
<thead>
<tr>
<th>Learning and Academic Support</th>
<th>Support for Well-being and Inclusion</th>
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| **Ask a Librarian: Library Support**  
Chat or make an appointment with a librarian to focus on your research needs | **Basic Needs at UCSD**  
Any student who has difficulty accessing sufficient food to eat every day, or who lacks a safe and stable place to live is encouraged to contact: foodpantry@ucsd.edu | basicneeds@ucsd.edu | (858) 246-2632 |
| **Course Reserves, Connecting from Off-Campus and Research Support**  
Find supplemental course materials | **Community and Resource Centers**  
Office of Equity, Diversity, and Inclusion  
As part of the Office of Equity, Diversity, and Inclusion the campus community centers provide programs and resources for students and contribute toward the evolution of a socially just campus |
| **First Gen Student Success Coaching Program**  
Peer mentor program that provides students with information, resources, and support in meeting their goals | **Supplemental Instruction**  
Peer-assisted study sessions through the Academic Achievement Hub to improve success in historically challenging courses |
| **Office of Academic Support & Instructional Services (OASIS)**  
Intellectual and personal development support | **Tutoring – Content**  
Drop-in and online tutoring through the Academic Achievement Hub |
| **Writing Hub Services in the Teaching + Learning Commons**  
One-on-one online writing tutoring and workshops on key writing topics | **Tutoring – Learning Strategies**  
Address learning challenges with a metacognitive approach |
Counseling and Psychological Services
Confidential counseling and consultations for psychiatric service and mental health programming

Triton Concern Line
Report students of concern: (858) 246-1111

Office for Students with Disabilities (OSD)
Supports students with disabilities and accessibility across campus

(858).822-3542 | diversity@ucsd.edu

Get Involved
Student organizations, clubs, service opportunities, and many other ways to connect with others on campus

Undocumented Student Services
Programs and services are designed to help students overcome obstacles that arise from their immigration status and support them through personal and academic excellence

Course Schedule
Week 1: Intro to Political Methodology; Intro to R ([DSS] Chapters 01 and 02)

Week 2: Experimental Political Science; How to measure political science concepts; R Graphs; R Summary Stats ([DSS] Chapters 02 and 03)

Week 3: Prediction in Political Methodology; Causal Effects with Observational Data; Regression Analysis in R ([DSS] Chapters 04 and 05)

Week 4: Causal Effects with Observational Data; Probability; Data Wrangling in R ([DSS] Chapters 05 and 06)

Week 5: Quantifying Uncertainty; How to Analyze Data; Hypothesis Testing in R ([DSS] Chapter 07)

Typical Week for this Course
1. Come to (or watch later) four (4) synchronous lectures (Zoom Link: https://ucsd.zoom.us/j/98538670509)

2. Watch two (2) R videos, trying up the suggested exercises for extra training.

3. Complete two (2) quizzes

4. Get done about one-half (0.5) of the homework.

5. Get 20%-25% (roughly) of the final project done.