## POLS529 - Methods and Scope of Political Analysis

**Instructor:** Mert Moral

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Office Hours: By appointment only. M 1-2:00pm and R 2-3:00pm, FASS2109 or via Zoom.<sup>1</sup>

**Lecture:** R 3:40-6:30pm, FASS G048.

Discussion/Lab: R 6:40-7:30pm, FASS G048.

**Teaching Assistant:** Şeyma Topçu.<sup>2</sup> By appointment only. W 10:30-11:59am.

## Course Description

There are many ways to obtain scientific knowledge about social and political phenomena that political scientists are interested in better understanding and explaining. The main goal of this course is not to provide you with all such tools at our disposal but with a survey of those and the necessary knowledge and basic skills to understand, evaluate, and conduct scientific research. Having been introduced to *qualitative and quantitative* reasoning and political science methodology will help you develop the required skillset to *critically* and *constructively* evaluate other scholarly research as well as a sense of how your future research agenda, including but not limited to your M.A. thesis/Ph.D. dissertation should look like.

Throughout the semester, you will work on a number of short assignments that will eventually form your final research project. You will first familiarize yourself with the current state of the political science literature, then identify a novel research question, inform your theoretical expectations by previous research on the topic, derive a testable hypothesis, construct an appropriate research design, collect your own data, and conduct a simple hypothesis test.

Since research design constitutes the "nuts and bolts" of scientific research and, as political scientists, we should all be able to communicate "what we think we know" to our audience, this course will focus extensively on research design and communicating "how we came to know what we think we know." Following a general introduction to the epistemology of science in the first part, you will therefore spend the second part of the semester thinking about how to approach puzzling social and political phenomena, conceptualize and operationalize various factors (that may or may not be) influencing them, design appropriate theoretical and empirical models, and communicate those to your audience (and write) effectively.

Albeit very limited in scope, we will cover some more technical concepts in the third and last part of the semester.<sup>3</sup> Starting with Week 10, using a statistical software package (Stata), we will apply what you will have learned in the first two parts of the semester to observational data. By the end of this semester, you will thus not only be introduced to research design, measurement, and causal

<sup>&</sup>lt;sup>1</sup>Please click on the hyperlink (in blue color) to set up an appointment with me. If you would like to have an online meeting, please inform me using the Calendly link. You may then connect to the virtual office-hour meeting for which the login information will be (re)sent via Calendly.

<sup>&</sup>lt;sup>2</sup>Seyma Hoca is a Ph.D. candidate with great software, methodological, and teaching skills. Please try to benefit from her experience and skills as much as possible, especially when you have questions about course requirements or experience software issues.

<sup>&</sup>lt;sup>3</sup>This course assumes no background in econometrics or formal theory but high school-level knowledge about linear and matrix algebra and probability theory. If you do not remember the simple mathematical concepts we will touch upon this semester, please let me know as soon as possible.

inference as the three major topics in political methodology but also be able to evaluate scholarly works and design your own independent research.

### Course Outline and Short Assignments

05.10	Introduction and overview	
12.10	Science and epistemology	O1. Prominent political science research
19.10	Political science	
26.10	Theory and knowledge	F1. Identifying a research topic/question <sup>4</sup>
02.11	Causality and causal inference	
	Lab Session – Introduction to $\LaTeX$	
09.11	Experimental research	F2. Literature review and puzzle
16.11	Fundamentals of research design	
	Lab Session – Latex Lab II	
23.11	Case selection and sampling	F3. Research design
30.11	Measurement	
	Lab Session – Introduction to Stata	
07.12	Variables and distributions	O2. Introduction to Stata
	Lab Session – Graphing in Stata	
14.12	Introduction to hypothesis testing	O3. Drawing a histogram and a scatterplot
	Lab Session – Stata Lab II	
21.12	Correlation and bivariate regression	F4. Collecting and understanding your data
	Lab Session – Stata-LATEX Integration	
28.12	Wrap-up and presentations	O4. Analyzing Turkish Election Study data
04.01	Research design presentations	
TBA	Final Exam	
11.01	Final Research Paper (11:59am)	

### Textbooks<sup>5</sup>

There are two required textbooks for POLS529. You should have hard or soft copies of::

- Kellstedt, Paul M. and Guy D. Whitten. 2018. *The Fundamentals of Political Science Research*. 3<sup>rd</sup> Edition. New York: Cambridge University Press.
- King, Gary, Robert O. Keohane, and Sidney Verba. 1994. Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton, NJ: Princeton University Press.
- Assigned chapters from two other (text)books that will also be used in POLS530 in Spring are available online at the "Resources" section of the course page.
  - Acock, Alan C. 2018. A Gentle Introduction to Stata. 6<sup>th</sup> Edition. College Station, TX: Stata Press.
  - Wooldridge, Jeffrey M. 2019. *Introductory Econometrics: A Modern Approach*. 7<sup>th</sup> Edition. Mason, OH: South-Western, Cengage Learning.

<sup>4</sup>The short assignments with the prefix "F" will eventually constitute the related parts of your final paper.

<sup>&</sup>lt;sup>5</sup>Older editions of three of our four textbooks are available at the Information Center. You can prefer cheaper, earlier editions than the most up-to-date ones. In that case, however, you will be responsible for finding out any omissions, revisions, or additions.

– All required readings for each week are listed below.<sup>6</sup> While you can click on the hyperlinks indicated with blue color for the journal articles,<sup>7</sup> conference papers and book chapters are uploaded to the "Resources" section of the course page.

## Required Readings

### \* Week 2 (12.10) - Science and epistemology

- Kuhn, Thomas S. 1996. *The Structure of Scientific Revolutions*. 3<sup>rd</sup> Edition. Chicago, IL: University of Chicago Press. [Chapters 1-10: pp.1-110].
- Popper, Karl R. 2002. *The Logic of Scientific Discovery*. New York: Routledge Classics. [Chapters 1-4, and 10, and Appendix \*i: pp.3-73, 248-82, 312-18].

### $\star$ Week 3 (19.10) - Political science

- Kellstedt and Whitten. [Chapters 1-2: pp.1-55].
- King, Keohane, and Verba. [Chapters 1-2: pp.3-74].

### \* Week 4 (26.10) - Theory and knowledge

- Clarke, Kevin A., and David M. Primo. 2012. A Model Discipline: Political Science and the Logic of Representations. New York: Oxford University Press. [Chapters 1-4, and 6: pp.1-103, 134-67].
- Rundlett, Ashlea, and Milan W. Svolik. 2016. "Deliver the Vote! Micromotives and Macrobehavior in Electoral Fraud." American Political Science Review 110(1): 180-97.

#### For the first quiz:

- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2007. "Are African Party Systems Different?". Electoral Studies 26: 315-23.
- Mozaffar, Shaheen, James R. Scarritt, and Glen Galaich. 2003. "Electoral Institutions, Ethnopolitical Cleavages, and Party Systems in Africa's Emerging Democracies." *American Political Science Review* 97(3): 379-90.
- Mylonas, Harris, and Nasos Roussias. 2008. "When Do Votes Count? Regime Type, Electoral Conduct, and Political Competition in Africa." *Comparative Political Studies* 41(11): 1466-91.
- Ordeshook, Peter C., and Olga V. Shvetsova. 1994. "Ethnic Heterogeneity, District Magnitude, and the Number of Parties." American Journal of Political Science 38(1): 100-23.

<sup>&</sup>lt;sup>6</sup>You should get used to reading –a lot... Because especially technical and applied readings assigned for this course will be quite different from those you have so far encountered, while doing so, please keep in mind what you are trying to accomplish by reading –i.e., understanding the main argument(s) the article/book makes, why it is novel or interesting, how the author/s assess/es empirical evidence, and what the evidence tells. In addition to being knowledgeable about previous literature and political methodology, evaluating scholarly research requires thinking (thoroughly) about what the author/s does (and does not) say/s. It may thus require reading the same text multiple times. Sometimes, even after doing so, you may not fully understand it. It is normal and should not discourage you from (re)reading and, more importantly, asking questions.

<sup>&</sup>lt;sup>7</sup>You should be connected to the University (wireless or virtual private) network to do so. Please get in touch with Şeyma Hoca if you experience any problems with accessing the assigned articles.

# $\star$ Week 5 (02.11) - Causality and causal inference

- Kellstedt and Whitten. [Chapter 3: pp.51-66].
- King, Keohane, and Verba. [Chapter 3: pp.75-114].
- Fearon, James D. 1991. "Counterfactuals and Hypothesis Testing in Political Science." World Politics 43(2): 169-95.
- King, Gary, and Langche Zeng. 2007. "When Can History Be Our Guide? The Pitfalls of Counterfactual Inference." *International Studies Quarterly* 51(1): 183-210.

## $\star$ Week 6 (09.11) - Experimental research

- Shadish, William R., Thomas D. Cook, and Donald T. Campbell. 2002. Experimental and Quasi-Experimental Designs for Generalized Causal Inference. Boston, MA: Houghton-Mifflin. [Chapters 1-3, 14.1: pp.1-102, 456-84].

For the second quiz:

- Anderson, Sarah E., Mark T. Buntaine, Mengdi Liu, and Bing Zhang. 2019. "Non-Governmental Monitoring of Local Governments Increases Compliance with Central Mandates: A National-Scale Field Experiment in China." *American Journal of Political Science* 63 (3):626-43.
- Gaines, Brian J., James H. Kuklinski, and Paul J. Quirk. 2007. "The Logic of the Survey Experiment Reexamined." *Political Analysis* 15(1): 1-20.
- Hangartner, Dominik, Elias Dinas, Moritz Marbach, Konstantinos Matakos, and Dimitros Xefteris. 2019. "Does Exposure to the Refugee Crisis Make Natives More Hostile?" *American Political Science Review* 113 (2):442-55.
- Huff, Connor, and Joshua D. Kertzer. 2018. "How the Public Defines Terrorism." American Journal of Political Science 62 (1):55-71.

### $\star$ Week 7 (16.11) - Fundamentals of research design

- Kellstedt and Whitten. [Chapter 4: pp.77-103].
- King, Keohane, and Verba. [Chapter 4: pp.115-49].
- King, Gary. 1986. "Replication, Replication." PS: Political Science and Politics 28(3): 444-52.
- King, Gary. 1995. "How not to Lie with Statistics: Avoiding Common Mistakes in Quantitative Political Science." American Journal of Political Science 30(3): 666-87.
- Moral, Mert. 2019. A Comparative Study of the Individual and Contextual Determinants of Invalid Votes in Europe. In SAGE Research Methods Cases doi:10.4135/9781526478733.

#### \* Week 8 (23.11) - Case selection and sampling

- Geddes, Barbara. Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics. 2003. Ann Arbor, MI: University of Michigan Press. [Chapters 3-4: pp. 89-173].
- Wooldridge. [Appendix B: pp.684-711].

For the third quiz:

– Arel-Bundock, Vincent, and Krzysztof J. Pelc. 2018. "When Can Multiple Imputation Improve Regression Estimates?" *Political Analysis* 26 (2):240-5.

- Iacus, Stefano M., Gary King, and Giuseppe Porro. 2019. "A Theory of Statistical Inference for Matching Methods in Causal Research." *Political Analysis* 27 (1):46-68.
- Pepinsky, Thomas B. 2018. "A Note on Listwise Deletion versus Multiple Imputation." *Political Analysis* 26 (4):480-8.

### $\star$ Week 9 (30.11) - Measurement

- Kellstedt and Whitten. [Chapter 5: pp.104-24].
- King, Keohane, and Verba. [Chapter 5: pp.150-207].
- Wooldridge. [Chapter 1: pp.1-17].

## $\star$ Week 10 (07.12) - Variables and distributions

- Acock. [Chapters 5-6: pp.131-195].
- Kellstedt and Whitten. Chapter 6 [pp.125-42].

### $\star$ Week 11 (14.12) - Introduction to hypothesis testing

- Acock. [Chapters 7-8: pp. 196-276].
- Kellstedt and Whitten. [Chapter 7: pp.143-60].
- Rainey, Carlisle. 2014. "Arguing for a Negligible Effect." American Journal of Political Science 58 (4):1083-91.

#### \* Week 12 (21.12) - Correlation and bivariate regression

- Kellstedt and Whitten. [Chapter 8: pp.161-87].
- Wooldridge. [Chapter 2: pp.19-65].
- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." American Journal of Political Science 44(2): 347-61.

#### Course Requirements

#### • Final Research Paper

- \* You may study any topic/research question that falls within the (broad) boundaries of political science. However, you must meet with me at least once <u>before</u> November 16, 2023, to determine the research design of your study and discuss what you will be able to do with what you will learn this semester.
- \* Your working hypothesis should take a "cause and effect" form, and your final research paper should be organized as follows:
  - Introduction approximately 2 pages, where you briefly state your research question and explain why it should be studied (i.e., the relevance of your study), how and in

what regards your research contributes to the main debate(s) in literature, and your main *point* (theoretical argument).

- Literature review approx. 2-3 pages, where you discuss the state of previous research and rival and/or conflicting explanations for your phenomenon of interest, and explain how and in what regards your study differs from previous literature (i.e., the novelty of your study).
- Theoretical expectations approx. 2 pages, where you clearly explain your theoretical expectations informed by the previous literature, explain the direction of the causal relationship between your outcome of interest and main explanatory variable/s, and deduct at least one testable hypothesis.
- Research design approx. 2-3 pages, where you provide conceptual and operational definitions of your dependent and main explanatory/independent variable/s, describe how you will look into the problem –e.g., hypothesis testing (and/or model specification and estimator), ruling out rival explanations, decision rules, important assumptions, and potential econometric problems and their solutions.
- Empirical findings approx. 3-4 pages, presentation and graphical illustration of (at least) a bivariate relationship, and careful interpretation of your empirical findings in statistical and substantive terms.
- Conclusion approx. 2 pages, a summary of what you have done and why you have done that, along with a short discussion of the significance of your findings for the related literature, strengths, and limitations of your study, and how your research does and further research would improve our understanding of the topic.
- Appendix (Stata do file)

#### • Research Presentation

- Using Beamer, I expect you to prepare a professional presentation covering the motivation, research question, hypothesis, research design, empirical findings, conclusions, and limitations of your research in about 10-12 slides.
- Each presentation will be randomly assigned a discussant responsible for reading the presenter's all short assignments and providing an informed critique of their research.
- Your presentation grade will be based on your discussion question/s, your presentation, and your answers to the questions that your classmates and I will ask during the Q&A session.

#### • Final Exam

- At the end of the semester, you will have a three-hour, open-book final exam for which you will be responsible for all assigned readings and lecture slides.
- In addition to three short essay questions, I will ask you to evaluate the research design of a recent article published in a prominent political science journal.

## Grading

- To receive a passing grade from the course, you **must** complete all course requirements.

- Grades will be given on a 101-point scale. Cumulative final grades will then be converted to letter grades at the end of the semester as follows: 85-100=A, 80-84=A-, 75-79=B+, 74-70=B, 65-69=B-, 60-64=C+, 55-59=C, 50-54=C-, 45-49=D+, 40-44=D, 0-39=F.
- Assignments, in turn, constitute 25% (final exam), 20% (final research paper), 10% (research presentation), 35% (short assignments), 10% (attendance and participation) of your final grade.

#### **Software**

- In addition to our regular lectures, we will have weekly discussion and recitation sessions. In six of those (see the course outline above), we will instead have software lab sessions<sup>9</sup> that are intended to introduce you to  $\LaTeX$  and Stata.
- After our first lab session, all remaining assignments (including your research presentation) should be compiled in LATEX and submitted (either via email or to Turnitin) as PDF documents.
- There are many free or paid editors for TEX documents and compiling PDF files. I suggest using MikTeX on Windows and MacTeX on Mac, but you are free to use any other one.
- The "LATEX Package" folder on SU Course+ provides you with various templates, examples, and helpful tips. You can also find answers for most of your questions about LATEX and other helpful tips on its online forum.
- You will quickly realize that you need to (learn how to) use a statistical software package for your graduate training, independent research, and future academic and/or professional endeavors.
- Unless you are (very) familiar with another statistical software, <sup>10</sup> you will use Stata in both POLS529 and POLS530. Learning a new *language* is not easy but crucially important, especially if you are in the Ph.D. program or would like to apply for one in the future.
- Before our first Stata session, you should have its most recent version (i.e., Stata 18 SE) installed on your computer. Installation instructions for both Windows and macOS are available on the IT Department's website.

#### Course Meetings Policy and Attendance

- You must complete all assigned readings and have your questions ready before the lectures.
- Since most topics we will cover in this course are technical, assigned readings will likely require further explanation and clarification. We will thus follow a traditional lecture format, but you are strongly advised and will be frequently encouraged to ask any and all questions you might have.
- Not attending the lectures will have detrimental consequences later on. Nonetheless, stuff happens. Should scheduling conflicts arise, please inform me before they happen and note that, except for very rare, serious, and documentable instances, as graduate students, you should attend all lectures and discussion/recitation, lab, and additional sessions with a well-informed assessment of

<sup>&</sup>lt;sup>8</sup>The short assignment with the lowest grade will be dropped when calculating your final grade.

<sup>&</sup>lt;sup>9</sup>Note that, if necessary and upon prior notice, we may schedule additional sessions.

<sup>&</sup>lt;sup>10</sup>You are free to use R as well. However, Şeyma Hoca and I will not answer your software-related questions or provide software-specific solutions for the problem sets for other statistical software.

all assigned readings. Otherwise, each missed week will result in a 2.5-point grade penalty on your final grade.

- You must turn off your cell phones during lectures and discussions. You may use your computer (or tablet) only for course-related activities. I may ask those violating these two simple rules to put their electronic devices away or leave the classroom.

### **Syllabus**

- This syllabus includes essential information and administrative requirements about when, how, and what you should do to pass this course with a good grade. Please read it carefully and reread it before you email your teaching assistant or instructor.
- The PDF version of the syllabus on SU Course+ is the official syllabus for this course as it is updated periodically.<sup>11</sup> Please visit the course page to view its most recent version.

## Course Page and e-mails

- After each lecture, I will post the lecture slides and weekly problem sets, if any, to the course page. 12
- I will use your Sabancı University email to communicate administrative and other course-related issues with you. Please check your email regularly and, if necessary, reply in a timely manner.
- The fastest way to contact me is always via email. Please feel free to email me anytime about any **relevant** academic or non-academic issue.

# Formatting, Writing, Late Submission, and Grade Appeals

- There will be a written assignment every two weeks in the first two parts and each week in the last part of the semester, for which a tentative schedule is provided above. The exact schedule is, however, contingent on our progress and subject to change upon prior notice.
- There are no margin or font requirements for written assignments. You should, however, turn in stapled and professional-looking papers (i.e., with your name, page numbers, proper citations, a properly formatted bibliography, and professional-looking tables and/or graphs).
- Please proofread your assignments for spelling, grammatical, and typographical errors.
- Note that I pay particular attention to writing and the correct use of terminology. Şeyma Hoca or I will provide you with annotated copies of your written assignments to improve your writing in both form and content, and you are expected to take our comments into account in your remaining assignments.<sup>13</sup>
- Late submissions for all written assignments will be penalized by 1 (one) point for each hour they are late. You will receive 0 (zero) if your final research paper is over 1 hour late!

<sup>&</sup>lt;sup>11</sup>Course content, requirements, and policies are subject to change at the instructor's discretion.

<sup>&</sup>lt;sup>12</sup>Any content published on SUCourse+ was created to be used and distributed within Sabancı University. The intellectual property rights of the content belong to the instructor and Sabancı University without any limitations. It cannot be used, copied, or reproduced by third parties without the prior written permission of the instructor and Sabancı University.

<sup>&</sup>lt;sup>13</sup>The "How to Write Package" folder on SU Course+ includes many helpful tips on writing for social scientists.

– If you are unsatisfied with the grade you received, you may write a formal memorandum explaining your concerns and requesting that your grade be reviewed. I will respond to your inquiry in writing and not discuss your grade in person.

### **Academic Honesty**

- As its Research Misconduct Policy suggests, Sabancı University expects students to do their own work and acknowledge others when presenting their work.
- As a scholar-in-training, it is your responsibility to do your own work<sup>14</sup> and properly cite your sources using an appropriate format. Please refer to the APSA's Style Manual for the preferred citation format for this class, especially if you are unsure about what to or how to cite.
- Minor penalties for citation and bibliographical errors will accumulate in the case of a consistent pattern, and any case of plagiarism or other sorts of academic dishonesty will not be tolerated.
- Note that all written assignments for this course are written take-home exams according to the YÖK regulations. Therefore, plagiarism in take-home exams will be considered cheating and pursued to the limits of the University and YÖK rules.

#### Accommodation

– Extra time for assignments and other necessary arrangements for students with special needs will be made in conjunction with the Center of Individual and Academic Development and the instructor.

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<sup>&</sup>lt;sup>14</sup>You are encouraged to study with your classmates, especially for the short assignments that require using Stata. However, this does not mean you can submit the same work with no or minor modifications. You must always submit your **own work** and explain your code and/or findings in your own words.