



Colloquium on Research in Government and Politics

Department of Political Science
John Jay College of Criminal Justice
The City University of New York

POL 409, Section 03, Spring 2016,
Room: L2.72.06 NB, Mondays, 10:50 am - 1:30 pm.

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Office Hours by appointment only.

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Course Description:

This course offers the opportunity for students to design and conduct their own independent research. As such, this course reverts the traditional instructor-student relationship. Instead of the professor being the main driver of the learning experience, students are expected to take the lead in their own learning and research process while the professor serves as a guide. The readings and assignments will guide the students through the challenges of formulating analytical research questions, proposing plausible arguments, evaluating scholarly research, developing concepts, identifying valid ways to measure them and assessing the advantages and limitations of different methodological approaches. Since both the policy and academic sectors rely heavily on quantitative analysis to support their claims and engage in evidence-based debates, this course will help students to acquire skills to conduct and interpret basic quantitative research. The final research paper will demonstrate the student's familiarity with relevant literature in the subfield, capability to engage in relevant academic or policy debates, mastery of basic concepts in the discipline, competence in advancing convincing explanations and providing solid empirical support, and capability to communicate effectively.

Course Objectives:

The readings and assignments in this course are designed to help students make initiate, conduct, write and present their own research in political science. After successfully completing this course, students will be able to:

1. Evaluate scholarly research in political science
2. Formulate explanatory research questions
3. Effectively formulate arguments
4. Formulate empirically testable hypotheses
5. Conduct analytical literature reviews
6. Formulate clear conceptual constructs
7. Find valid and effective measures for such concepts
8. Conduct and interpret descriptive quantitative analysis
9. Conduct and interpret basic explanatory quantitative analysis

10. Effectively present their research in oral and written forms
11. Provide positive feedback to other's research
12. Develop technological skills
13. Become effective problem solvers

Prerequisites:

English 102 or 201, Political Science 101, successful completion of a 300-level course in Political Science, a declared Political Science major, senior standing.

Students who usually do well in my 409 course tend to have the following characteristics:

1. Have strong analytical skills
2. Are capable of expressing their ideas in a clear and effective manner in oral and written form
3. Are particularly passionate about a specific political topic
4. Are more interested about learning than about their grade
5. Have a strong sense of discipline and self-direction
6. Have taken statistics or economics courses
7. Are not afraid of pushing their own limits

Students are strongly encouraged to conduct their research on topics related to concentration D (International and Comparative Politics). Given my area of expertise, I will be better equipped to help you if your research interests are located in this concentration. If you have a strong preference for conducting research on topics related to concentrations A (Law, Courts, and Politics), C (Urban Politics and Public Policy) and D (American Politics), you might consider taking other sections of POL 409 with Professor Cauthen or Professor Mak who are specialists in concentrations A, C and D.

Units: 3.

Required Texts:

There are not required texts books. The students will be able to find the assigned readings in Blackboard.

Required Software:

In this course we will be using R, a programming language for statistical computing and graphics. We will primarily rely on RStudio, an integrated development environment that facilitates using R. Both R and RStudio are free software and are already available in the College's computer classrooms and labs.

At the beginning, you might find R a little bit challenging as it does not have an easy "click-and-play" interface as other statistical analysis software. This will require a lot of attention to detail from you and a fair amount of practice. However, once you master the basic logic of R, you will be able to unleash the power of this highly flexible and convenient software.

You are strongly advised to install R and RStudio in your personal computer. You can find R at <https://www.r-project.org/> and RStudio at <https://www.rstudio.com/>. These programs

work on Windows, Mac or Linux operating systems.

In addition to the readings and assignments in this course, you will discover that there is a vast R community offering a variety of help resources. As part of objectives 8, 9, 12 and 13, you are expected to become familiar with the main functionality of R. Here are a few R help websites that you will find useful during the semester:

- <http://www.ats.ucla.edu/stat/r/>
- <http://www.statmethods.net/>
- <http://dss.princeton.edu/training/>

Some of you might be familiar with SPSS or other statistical analysis programs and would like to use it instead of R. Before making a decision, take a look at this link to find out why you should consider using R (<http://r4stats.com/articles/popularity/> pay special attention to Figure 2d). If you decide to work with a program different than R, you are free to do so. However, I will not be able to help you and you will be graded according to the same quality standards as students using R.

If you have limited computer skills, you are strongly required to take advantage of the variety of professional development and training options that Classroom Lab Support Services (CLSS) have available for you. Take a look at this link to find the type of training that best fits your needs <http://www.jjay.cuny.edu/professional-development-and-training-services>

Computers, tablets and cell phones policy

- You can use your computer or tablet in the classroom exclusively for the purposes of completing class activities.
- Do not surf social media applications, send emails, watch videos, read the news, or text message while in class.
- Please turn off your cell phone.
- In case you need to take a phone call or respond to a text message, you will be asked to leave the classroom to do so.

Course Requirements:

1. Class attendance

- You are expected to attend to ALL classes and arrive ON TIME.
- Students are required to sign the attendance sheet at the beginning of each class.
- It is the student's responsibility to sign in when present in class.
- If you come to class extremely late or if you are recurrently late, I reserve the right to mark you as absent even if you sign in the attendance. The same policy applies for leaving before the end of the class.
- I do not grant "excused" absences except for religious observances (please send me an email in advance if that is the case).
- In case of unforeseeable circumstances, students can miss up to (3) classes.
- If you miss four (4) class sessions during the semester, your *final grade* will be deducted by 10%. For each additional absence your *final grade* will be deducted an additional 10%.

- Missing eight (8) or more classes for any reason will result in the student automatically failing the course.

2. Readings

- You are expected to complete all the required readings before class. This is an absolutely non-negotiable requisite for a seminar.
- While preparing for class, make sure you engage in active reading. This is more than simply passing your eyes over words. The key is to *understand* the reading. You might find useful these active reading strategies <https://www.princeton.edu/mcgraw/library/for-students/remember-reading/active-reading.pdf>
- You are required to bring the assigned reading to class as well as your notes so you can refer directly to them.
- If I realize you did not do the assigned reading, I reserve the right to ask you to go to the library to write a summary for the reading and hand it to me at the end of the class.
- In addition to the assigned readings, you are expected to conduct a substantial amount of independent reading on your own topic of interest.

3. Blackboard and email

- You will be able to find the syllabus, assigned readings and other relevant materials in Blackboard. You are responsible for checking Blackboard regularly.
- You are required to have an active email account registered in Blackboard as it will be a main way of communication.
- You are also required to upload a picture of you in your Blackboard profile. This will largely help me to get to know you better. You can change or delete your Blackboard profile picture after the end of this course if you wish so.
- You are required to use your John Jay email account to send me an email. When you do so, please observe the following guidelines:
 - How not to write an email: <https://www.youtube.com/watch?v=zSNc8F9tqzY>
 - How to write an email: http://www.wikihow.com/Email-a-Professor#Composing_an_Email_to_a_Professor_sub
- It is likely that some of your questions about the course are already answered in the syllabus. Please read it before sending me an email. I reserve the right not to respond an email asking about something already stated in the syllabus. At best, you might get something like this: <http://www.phdcomics.com/comics.php?f=1583>.

4. Assignments

Your grade for this course will come from the assignments indicated below. These concatenated assignments are structured according to a “scaffolding” principle. The successful completion of each of these assignments will serve as building blocks to help students acquire research skills as they progressively move through the different stages of their research project.

Date	Assignments	Percentage
	Participation	10 %
Feb 22 nd	1. Research question and argument	5 %
Feb 29 th	2. Identify sources	5 %
Mar 14 th	3. What others say	5 %
Mar 28 th	4. Literature review	10 %
Apr 4 th	5. Refine your argument	5 %
Apr 11 th	6. Operationalization	5 %
Apr 18 th	7. Descriptive statistics	5 %
May 9 th	8. Regression analysis	5 %
May 16 th	9. Poster presentation	15 %
May 23 rd	10. Final paper	30 %

5. Class participation

- Attending class does not count towards your class participation grade.
- As a student, you are expected to participate in class by asking questions, criticizing and providing informed opinions about the assigned readings and your topic of expertise.
- You should complete all readings before the class session for which they are assigned.
- Students are encouraged to provide critical yet positive feedback to their peers.

6. Poster presentation

- Students will prepare an individual poster for their research and present its content to the instructor and the rest of the class.
- This activity will help you to gain experience for presenting your research in academic conferences.
- Students are expected to attend the poster presentation of their peers. Failing to do so will be sanctioned with the deduction of one full letter grade (e.g. from A to B) of the missing student.

7. Final paper

- The final paper will be 15 pages maximum, double-spaced, normal margins (1" per side) and font Times New Roman 12pt.
- The 15 pages limit does not include bibliography or graphs.
- Students are responsible for making sure the instructor receives the paper.

8. Late assignment policy

- All assignments are due on time via Blackboard. The system will automatically close each assignment window at the deadline. In consequence, late assignments will not be accepted under any circumstances and will receive a grade of 0%. This policy also applies for the poster presentations and final papers.
- Due to the concatenated nature of the assignments in the course, it is important for you to conduct each assignment to the best of your ability. In that way, you will be able to build up your research project throughout the semester.

- Learning is a continuous process that requires constant updating of our reasoning and arguments. As such, I expect some students to redefine and even change some important components of their research projects. Feel free to do so with the confidence that such modifications will not penalize your grade. However, I will not provide retrospective feedback in written manner to redefined assignments.

9. Writing quality

- In line with objective 10 of this course, the assignments require students to pay close attention to their writing in every assignment.
- To ensure high quality writing, consider the following **five errors policy**:
 - I reserve the right to stop reading your essay after I find five writing errors (typos, grammar, syntax, punctuation marks, logical sequence, and similar mistakes).
 - I will send the assignment back to the student and deduct a full letter grade (e.g. from A to B).
 - The student will have 24 hours to fix the writing in the assignment and send it back to me by email.
 - Failing to submit the revised assignment within 24 hours will cause the assignment to receive a grade of 0%.
 - If the revised version still has writing errors, the assignment will receive a grade of 0%.
- Consider the following recommendations to improve the quality of your writing:
 - Proofread your paper at least three times
 - Read your paper out loud at least twice
 - Make an appointment at the Writing Center
 - Rely on friends or family to proofread your paper

Letter Grade Distribution:

Expectation	Grade	Range
Excellent performance	A	[93.0 - 100]
	A-	[90.0 - 92.9]
Good performance	B+	[87.1 - 89.9]
	B	[83.0 - 87.0]
	B-	[80.0 - 82.9]
Satisfactory performance	C+	[77.1 - 79.9]
	C	[73.0 - 77.0]
	C-	[70.0 - 72.9]
Basic performance	D+	[67.1 - 69.9]
	D	[63.0 - 67.0]
	D-	[60.0 - 62.9]
Below basic performance	F	[0 - 60.0]

Incomplete Grade Policy:

Incompletes are not allowed in this course, so plan accordingly.

Citation Style:

Students are required to use the American Political Science Association (APSA) citation style in their written assignments. If you are not sufficiently familiar with the use of this citation style let me know and I will write you a referral for the Writing Center so they help you on that.

For further information on the APSA citation style consult:

The APSA Style Manual: <http://www.apsanet.org/files/APSASStyleManual2006.pdf>

Scott, G. M. and Garrison, S. M. (2006). *The Political Science Student Writer's Manual*. Pearson Pertinence Hall, Upper Saddle River, 5 edition p. 58-73.

Managing your sources:

Students are required to open an account on Mendely, a free reference manager available at: <http://www.mendeley.com/>. For further information on how to use Mendeley use these resources:

<http://www.mendeley.com/features/>

<http://www.mendeley.com/videos-tutorials/>

Academic Integrity:

1. John Jay College Policy on Academic Integrity:

- Each student in this course is expected to abide by the John Jay College Policy on Academic Integrity, which is available at <http://www.jjay.cuny.edu/academic-integrity-0>.
- Plagiarism is the presentation of someone else's ideas, words, or artistic, scientific or technical work as one's own creation. Using the ideas or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations require citations to the original source.
- Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility of plagiarism.
- It is the student's responsibility to recognize the difference between statements that are common knowledge (which do not require documentation) and restatements of the ideas of others. Paraphrase, summary, and direct quotation are acceptable forms of restatement, as long as the source is cited.
- Students who are not sure about how and when to provide documentation are advised to consult with the instructor. The Library has free guides designed to help students with problems of documentation
- Any work submitted by a student should be the students own work.

2. Authorship:

- Students must clearly establish authorship of a work. Referenced work must be clearly documented, cited, and attributed, regardless of media or distribution. Even in the case of work licensed as public domain or Copyleft, the student must provide attribution of that work in order to uphold the standards of intent and authorship.

3. Declaration:

- Online submission of, or placing one's name on an exam, assignment, or any course document is a statement of academic honor that the student has not received or given inappropriate assistance in completing it and that the student has complied with the Policy on Academic Integrity in that work.

4. Avoiding Plagiarism:

- Consider the advice provided by Scott, G. M. and Garrison, S. M. (2006). *The Political Science Student Writer's Manual*. Pearson Pertinence Hall, Upper Saddle River, 5 edition, p. 73-76.

5. Plagiarism Detection Software:

- Students must submit the literature review and the final paper using SafeAssign, a plagiarism detection software endorsed by the College.

6. Plagiarism Sanction:

- The detection of intentional or unintentional plagiarism will cause the student to automatically get an F in the course.
- Cheating or altering data, results or graphs will cause the student to automatically get an F in the course.
- In the event of plagiarism detection, I will issue an Academic Integrity Violation Form to the Office of the Provost.

Americans with Disabilities Act (ADA) Policies:

Qualified students with disabilities will be provided reasonable academic accommodation if determined eligible by the Office of Accessibility Services (OAS). Prior to granting disability accommodations in the course, the instructor must receive written verification of a student's eligibility from the OAS which is located at 1233N (212-237-8144). It is the student's responsibility to initiate contact with the office and to follow the established procedures for having the accommodation notice sent to the instructor.

Students with special needs are required to contact the Professor to discuss a concrete action plan for the successful completion of the assignments during the semester and achievement of the course objectives.

Advising in the Political Science, Law and Society, and Legal Studies majors and in the Political Science and Human Rights minors:

Advisers are available to meet with students to discuss degree requirements, academic planning, graduate study and careers after graduation. Please contact the adviser to schedule an appointment. The Political Science major and minor adviser is Prof. Samantha Majic (Room 9.65.13, smajic@jjay.cuny.edu, 212-237-8439). The Law and Society major adviser is Prof. Monica Varsanyi (Room 9.65.10, mvarsanyi@jjay.cuny.edu, 212-237-8232). The Legal Studies major adviser is Prof. Alexandra Moffett-Bateau (Room 9.65.37, amoffett-bateau@jjay.cuny.edu, 212-237-8244). The Human Rights minor adviser is Prof. George Andreopoulos (Room 09.65.09, gandreopoulos@jjay.cuny.edu, 212-237-8190). All majors and minors also can schedule an appointment with the Political Science Department chairperson, Prof. James Cauthen (Room 9.65.08, jcauthen@jjay.cuny.edu, 212-237-8193).

Course Outline:

The following table presents the course structure.

Section	Topic
1. Introduction to Research	The search for causal explanations; research questions Answering a research question; parts of empirical research
2. Scholarly Literature	Finding literature; grouping literature Analyzing literature
3. Explanations and Measures	Hypotheses; causality Causal Mechanisms Conceptualization; Case selection Types of Variables; Operationalization
4. Quantitative analysis	Descriptive statistics Normal and Sampling Distributions; Correlation Regression analysis

Depending on my overall assessment of the class progress during the semester I might modify some readings or assignments in order to improve your learning experience.

Course Content:

- **February 1st**

Introduction

The Search for Causal Explanations

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 33-50.
- Brians, C. L., Willnat, L., Manheim, J. B., and Rich, R. C. (2010). *Empirical Political Analysis. Quantitative and Qualitative Research Methods*. Longman, London, p. 16-29.

Part 1. Introduction to Research

- **February 8th**

Research questions

- Booth, W. C., Colomb, G. G., and Williams, J. M. (1995). *The Craft of Research*. University of Chicago Press, Chicago, p. 35-45.
- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 74-77.

Answering a research question

- Booth, W. C., Colomb, G. G., and Williams, J. M. (1995). *The Craft of Research*. University of Chicago Press, Chicago, p. 94-106.
- Duke Writing Studio (2015). Developing a Central Claim.

- **February 15th**

College closed, no class.

- **February 22th**

Assignment 1 due: Research question and argument

Bring two academic articles to class.

Parts of empirical research

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 102-108.

- Brians, C. L., Willnat, L., Manheim, J. B., and Rich, R. C. (2010). *Empirical Political Analysis. Quantitative and Qualitative Research Methods*. Longman, London, p. 1-15
- Kellsted, P. M. and Whitten, G. D. (2008). *The Fundamentals of Political Science Research*. Cambridge University Press, Cambridge, p. 273-278.

Suggested readings:

Collier, D., Seawright, J., and Munk, G. L. (2004). The Quest of Standards: King, Keohane, and Verba's Designing Social Inquiry. In Brady, H. E. and Collier, D., editors, *Rethinking Social Inquiry. Diverse Tools, Shared Standards*, pages 36–44. Rowman & Littlefield Publishers, Maryland.

Part 2. Scholarly Literature

• February 29th

Assignment 2 due: Identify sources

Bring two additional academic articles to class. Make sure you read them in advance.

We will learn how to use Mendeley in this session. Make sure you have an active account.

Finding literature

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 77-84.
- Booth, W. C., Colomb, G. G., and Williams, J. M. (1995). *The Craft of Research*. University of Chicago Press, Chicago, p. 64-81.
- Scott, G. M. and Garrison, S. M. (2006). *The Political Science Student Writer's Manual*. Pearson Pertinence Hall, Upper Saddle River, 5 edition, p. 97-99.

Grouping literature

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 93-100.
- Brians, C. L., Willnat, L., Manheim, J. B., and Rich, R. C. (2010). *Empirical Political Analysis. Quantitative and Qualitative Research Methods*. Longman, London, p. 66-70.
- Kellsted, P. M. and Whitten, G. D. (2008). *The Fundamentals of Political Science Research*. Cambridge University Press, Cambridge, p. 278-281.

• March 7th

Analyzing literature

- Knopf, J. W. (2006). Doing a Literature Review. *Political Science & Politics*, (1):127–132.
- Kellsted, P. M. and Whitten, G. D. (2008). *The Fundamentals of Political Science Research*. Cambridge University Press, Cambridge, p. 32-34.
- Read one of these two articles:

- Finkel, S. E., Pérez-Liñán, A., and Seligson, M. A. (2007). The Effects of U.S. Foreign Assistance on Democracy Building, 1990-2003. *World Politics*, 59(3):404–439.
- Huddy, L., Feldman, S., Taber, C., and Lahav, G. (2005). Threat, Anxiety, and Support of Antiterrorism Policies. *American Journal of Political Science*, 49(3):593–608.

Part 3. Explanations and Measures

- **March 14nd**

Assignment 3 due: What others say

Hypotheses

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 109-119.
- Brians, C. L., Willnat, L., Manheim, J. B., and Rich, R. C. (2010). *Empirical Political Analysis. Quantitative and Qualitative Research Methods*. Longman, London, p. 29-34.

Causality

- Shively, P. W. (2012). *The Craft of Political Research*. Pearson Pertinence Hall, Upper Saddle River, 9 edition, p. 12-29, 80-85.
- Gerring, J. (2012). *Social Science Methodology: A Unified Framework*. Cambridge University Press, Cambridge, p. 197-218.

Suggested readings:

Holland, P. W. (1986). Statistics and Causal Inference Author. *Journal of the American Statistical Association*, 81(396):945–960.

Causal Mechanisms

- Hedstrom, P. (2008). Studying Mechanisms to Strengthen Causal Inference in Quantitative Research. In Box-Steffensmeier, J., Brady, H. E., and Collier, D., editors, *The Oxford Handbook of Political Methodology*, pages 319–335. Oxford University Press, Oxford.

Suggested readings:

Falleti, T. G. and Lynch, J. F. (2009). Context and Causal Mechanisms in Political Analysis. *Comparative Political Studies*, 42:1143–1166.

- **March 21st**

Conceptualization

- Goertz, G. (2005). *Social Science Concepts: A User's Guide*. Princeton University Press, Princeton, New Jersey, p. 1-10, 27-53.
- Gerring, J. (1999). What Makes a Concept Good? A Criterial Framework for Understanding Concept Foundation in the Social Sciences. *Polity*, 31(3):357–393.

Suggested readings:

Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 119-124.

Collier, D., Laporte, J., and Seawright, J. (2008). Typologies: Forming Concepts and Creating Categorical Variables. In Box-Steffensmeier, J., Brady, H., and Collier, D., editors, *The Oxford Handbook of Political Methodology*. Oxford University Press, Oxford.

Case selection

- Geddes, B. (2003). How the Cases You Choose Affect the Answers You Get. In *Paradigms and Sand Castles. Theory Building and Research Design in Comparative Politics*, chapter 3, pages 89–129. University of Michigan Press, Ann Arbor, MI, Chapter 1.

• March 28th

Assignment 4 due: Literature review

Types of Variables

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 144-149.

Operationalization

- Carmines, E. G. and Zeller, R. A. (1979). *Reliability and Validity Assessment*. SAGE Publications, Beverly Hills, CA, p. 9-27.
- Adcock, R. and Collier, D. (2001). Measurement Validity: A Shared Standard for Qualitative and Quantitative Research. *The American Political Science Review*, 95(3):529–546.
- Salkind, N. J. (2014). *Statistics for People Who (Think They) Hate Statistics*. SAGE Publications, Thousand Oaks, 5 edition, p. 339-341.

Suggested readings:

Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 127-144.

Part 4. Quantitative analysis

• April 4th

Assignment 5 due: Refine your argument

Workshop: intro to R

Topic: using R and Rstudio; data types; data input.

- Field, A., Miles, J., and Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications, Thousand Oaks. Selected pages: 63-82.
- Kabacoff, R. J. (2011). *R in Action*. Manning Publications, Shelter Island. Selected pages: 22-44.

Topic: using R and Rstudio; data input; package countrycodes; subsetting datasets; and merging data.

- Field, A., Miles, J., and Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications, Thousand Oaks. Selected pages: 103-106.
- Horton, N. J. and Kleinman, K. (2015). *Using R and RStudio for Data Management, Statistical Analysis, and Graphics*. Taylor & Francis, New York, 2 edition. Selected pages: 19-23.
- Kabacoff, R. J. (2011). *R in Action*. Manning Publications, Shelter Island. Selected pages: 85-89.

Topic: creating and recoding variables; transformations and functions; and missing data.

- Horton, N. J. and Kleinman, K. (2015). *Using R and RStudio for Data Management, Statistical Analysis, and Graphics*. Taylor & Francis, New York, 2 edition. Selected pages: 11-19.
- Fox, J. and Weisberg, S. (2011). *An R Companion to Applied Regression*. SAGE Publications, Thousand Oaks, 2 edition. Selected pages: 62-74, 126-133.

• April 11th

Assignment 6 due: Operationalization

Descriptive statistics

- Freedman, D., Pisani, R., and Purves, R. (2007). *Statistics*. W. W. Norton & Company, New York, 57-77.
- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 355-376.

Suggested readings:

Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 376-381.

Booth, W. C., Colomb, G. G., and Williams, J. M. (1995). *The Craft of Research*. University of Chicago Press, Chicago, p. 175-198.

Correlation

- Freedman, D., Pisani, R., and Purves, R. (2007). *Statistics*. W. W. Norton & Company, New York, p. 119-140.
- Check out this website: <http://www.tylervigen.com/>

Suggested readings:

Rowntree, D. (2000). *Statistics Without Tears. An Introduction for Non-Mathematicians*. Penguin Books, London, p. 155-176.

Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 430-435.

R reference readings

Topics: graph parameters; histograms; scatter plots; bar plots; box plots; density lines; and line graphs.

- Chang, W. (2013). *R Graphics Cookbook*. O'Reilly, Sebastopol. Selected pages: 7-19.

- Field, A., Miles, J., and Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications, Thousand Oaks. Selected pages: 116-154.
Topics: mean and standard deviation; and correlation.
- Horton, N. J. and Kleinman, K. (2015). *Using R and RStudio for Data Management, Statistical Analysis, and Graphics*. Taylor & Francis, New York, 2 edition. Selected pages: 51-55.
- Field, A., Miles, J., and Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications, Thousand Oaks. Selected pages: 205-223.
- Freedman, D., Pisani, R., and Purves, R. (2007). *Statistics*. W. W. Norton & Company, New York, 57-77, 119-140.
- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 355-376.

- **April 18th**

Assignment 7 due: Descriptive statistics

OLS regression – intuition

- Freedman, D., Pisani, R., and Purves, R. (2007). *Statistics*. W. W. Norton & Company, New York, p. 158-179, 202-213.
- Salkind, N. J. (2014). *Statistics for People Who (Think They) Hate Statistics*. SAGE Publications, Thousand Oaks, 5 edition, p. 169-187.

Suggested readings:

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 490-510.
- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 527-568.

Logistic regression - intuition

- Johnson, J. B. and Reynolds, H. T. (2012). *Political Science Research Methods*. SAGE Publications, Thousand Oaks, 7 edition, p. 568-590.
- Long, S. J. and Freese, J. (2006). *Regression Models for Categorical Dependent Variables Using Stata*. Stata Press, College Station, TX, Chapter 3, p. 75-98.

Suggested readings:

- Long, S. J. (1997). *Regression Models for Categorical and Limited Dependent Variables*. SAGE Publications, Thousand Oaks, Chapter 3, p. 34-84.

R reference readings

Topic: Ordinary Least Squares fundamentals; univariate regression analysis; and basic interpretation of results.

- Fox, J. and Weisberg, S. (2011). *An R Companion to Applied Regression*. SAGE Publications, Thousand Oaks, 2 edition. Selected pages: 149-155.
- Field, A., Miles, J., and Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications, Thousand Oaks. Selected pages: 245-260.

- Freedman, D., Pisani, R., and Purves, R. (2007). *Statistics*. W. W. Norton & Company, New York, p. 158-179, 202-213.
- Salkind, N. J. (2014). *Statistics for People Who (Think They) Hate Statistics*. SAGE Publications, Thousand Oaks, 5 edition, p. 169-187.
Topic: multivariate regression; interpretation; and model fit.
- Fox, J. and Weisberg, S. (2011). *An R Companion to Applied Regression*. SAGE Publications, Thousand Oaks, 2 edition. Selected pages: 155-171.
- Field, A., Miles, J., and Field, Z. (2012). *Discovering Statistics Using R*. SAGE Publications, Thousand Oaks. Selected pages: 261-298.

- **April 25th**

College closed, no class.

- **May 2nd**

Regression – practice

- **May 9th**

Assignment 8 due: Regression analysis

Individual consultations

- **May 16th**

Assignment 9: Poster presentation

- **May 23rd**

Assignment 10: Final paper due.

No class.