

Quantitative Analysis of Political Problems
POL 434, Spring 2011
University of Arizona



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“Office hours”: since this is an online course, there are no formal office hours because, well, there is no office. However, I will be available on Skype to talk about any class-related issues, both on Tuesdays and Fridays, from 1:00 to 3:00 pm (Arizona time). My Skype username is: “ramiro.berardo” You’ll need to add me as a contact if you want to have a talk.

Course Description.

The main goal of this course is to instruct students on how to utilize available quantitative techniques to enhance their understanding of political problems. The course will emphasize the role of statistics as a tool to achieve this goal. Students will be trained on how to state ideas clearly, precisely distinguish the variables in their analyses, present sound and properly elaborated hypotheses, describe and analyze data, and present results in an unambiguous and concise way. A main objective is to accomplish these tasks while avoiding the all-too-common obscure use of statistics in the social sciences.

IMPORTANT NOTE:

The course’s website is anchored in D2L (Desire to Learn) at www.d2l.arizona.edu.

There you will find access to the readings and materials for this course. **Please check the website DAILY** for changes and updates of this syllabus and other course-related material.

Required Text

There is one required text for this class.

Le Roy, Michael K., and Michael Corbett. *Research Methods in Political Science* (7th edition). Thomson Wadsworth.

From this point forward, I will refer to this book as “LR&C”.

There's two ways you can get the book:

1. Buy a paper copy online (the obvious place is Amazon for about U\$ 78),
2. Go to the publisher's website and download the book there (you can get downloadable copies that you can read in your computer for about U\$46).

To do this, point a browser to

http://www.coursesmart.com/9780495502838?__professorview=false&__instructor=1185570

As soon as you get the book, install the software and make sure everything seems to work fine. Do this as soon as possible!

IMPORTANT: DO NOT BUY A USED COPY OF THIS BOOK. DON'T DO IT!!! IF YOU BUY A USED COPY, THE SOFTWARE WILL BE ALREADY INSTALLED IN ANOTHER COMPUTER AND YOU WON'T BE ABLE TO INSTALL IT IN YOURS. AT THAT POINT YOU WON'T BE ABLE TO COMPLETE THE ASSIGNMENTS. BUYING A USED COPY WILL BE A HUGE WASTE OF WHATEVER MONEY YOU SPEND.

Other recommended readings

Buttolph Johnson, Janet, and H. T. Reynolds. 2007. *Political Science Research Methods* (6th Ed.). Washington, D.C.: CQ Press.

Caldwell, Sally. 2009. *Statistics Unplugged* (3rd edition). Thomson Wadsworth.

Manheim, Jarol B., Richard C. Rich, Lars Willnat, and Craig Leonard Brians. 2007. *Empirical Political Analysis. Research Methods in Political Science* (7th Ed.). New York, NY: Pearson-Longman.

These other recommended readings are just provided for guidance in case you want to complement the weekly required readings. You don't need to buy any of these books!!

Course Requirements

- **Exams.**

There will be two exams. They will be cumulative and designed to evaluate the student's ability to understand the material covered in class.

Exams are scheduled for the following dates:

Exam #1: March 9 (15% of your final grade).

Exam #2: May 4 (15% of your final grade).

- **Class Assignments (worksheets).**

There are 14 worksheets to be completed during the course. Each of them weights 5% of your final grade and together they add to 70% of your final grade, so in a sense, you are sitting for an exam every single week of the semester. Be careful when you fill out the worksheet, AND MAKE SURE YOU SUBMIT EACH OF THESE WORKSHEETS PROPERLY TO THE D2L DIGITAL DROPBOX (more detail on this below in the “class schedule” section). IF YOU FAIL TO MAKE A SUBMISSION, YOU MISS THE WHOLE FIVE POINTS THE ASSIGNMENT GIVES YOU FOR THE FINAL GRADE. Be careful and you’ll be fine.

Grading System

A: 90 or more points.

B: 80 to 89.9 points.

C: 70 to 79.9 points.

D: 60 to 69.9 points.

F: 59.9 or less points.

Discussion Forums

In the D2L website you’ll find 16 discussion forums (one for each week of our semester). You can post questions and comments about any issues related to this class, and also respond to other questions and comments. I check the website several times a day and will visit these forums often.

Code of Academic Integrity

Students are expected to observe the rules contained in the Code of Academic Integrity. Please be aware that any form of cheating in exams or assignments will not be tolerated and will result in a failing grade (F) for the course. For more information on the Code of Academic Integrity, point a browser to <http://dos.web.arizona.edu/uapolicies/cai1.html>.

Students with Disabilities.

Students with disabilities needing academic accommodations must be registered in the Disability Resources Center (DRC). If you have still not registered, please call 621-3268, or visit <http://drc.arizona.edu>. We will then work out the necessary accommodations for you in this class.

Policy on Rescheduling Exams.

Exams or assignments will be rescheduled ONLY for health-related issues. The student who needs to reschedule an exam will provide medical proof of her/his ailment to the instructor (in the form of a scanned doctor's note), and take the exam at a date established by the instructor. This date is not subject to negotiation. The instructor sets it, and the student takes it or leaves it.

A Note on Online "Etiquette".

Our communications should mimic classroom dynamics or face-to-face interaction. This means a number of things. First, you always call a person by their name. Second, you refrain from ridiculing the contributions or questions of your classmates in discussion forums. Third, you thank each other for responding to requests for favors. When communicating with me, you can call me Ramiro, Dr. Berardo, or Professor Berardo. I'm indifferent.

When you send an email, make sure that you indicate in the subject heading that your message relates to this class (POL 434). Always sign your email with your name, and always be nice to others. I will check my email twice a day 9am and 3 pm, as well as monitor the discussion list. Keep that in mind when you are waiting for an answer to a question. If you email me at 3:30 PM, you will likely have to wait until the next day to get an answer. I'm currently living in Argentina, and I'm 4 hours ahead of Arizona time. So if you email me at 3:30, that will be 7:30 my time.

I CANNOT STRESS THIS ENOUGH: CHECK THE D2L WEBSITE AND YOUR EMAIL DAILY, as I may post or send you information about the class that you should know (changes in the schedule, availability of reading material, etc.). **Once I post the information on D2L, it is the student's obligation to be acquainted with it.**

Disclosure: The instructor retains the right to modify the syllabus as needed at any point during the semester.

Class Schedule (Subject to change)

January 12.

Overview of Research Methods in Political Science

Your activities for the week are:

1. Read this syllabus CAREFULLY.
2. Introduce yourself to your classmates and instructor. To do this go to the blue navigation bar in D2L and click on "Discussions" Once you are in this area, find the forum "Introduce Yourself (First Week)" and make a post there. Just share your name, what is your major, etc. Any information that you usually share with others when you introduce yourself in a class. Do this before January 12th is over.
3. Make sure you forward your D2L email to whatever email account you use most often. You need to do this because I will eventually send you emails with important information (for example, if one student has an important question about how the class works in general, I want to send an answer to everyone), but that information will not reach you if you don't check your D2L email account. So like I said, make sure you forward it to another account. To do this, go to the red navigation bar that you see on top of the screen on D2L. Click on "D2L Email" and then just below the blue bar that says "Email: Message Folder: Inbox", find "settings" and click on it. Scroll down to "Forwarding Options" and click on the square that says "Forward incoming messages to an alternate email account". Then, in "Email Address", enter the email address that you use more often. Make sure after you do this that you hit the button "Save" at the lower right corner of the screen. You are done! Now all emails I send you through D2L will get to whatever account you use the most.
4. Read the lecture notes posted online. Available under the "content" tab in the blue navigation bar in D2L (look for the module "lecture notes").
5. Read the Section "Getting Started" in LR&C (remember, this is the acronym for the book). Install the software as soon as you can!!!
6. Read chapter 1 in LR&C.
7. Complete the first work sheet. Read the following lines carefully: the LR&C book has a worksheet at the end of each chapter that you'll need to fill out each week of the semester (except when there are exams scheduled). Since this is an online class, you cannot fill it out and then hand it to me. Instead, you'll pick up an electronic version of the worksheet in the D2L website, fill it out electronically in your computer, and then send it to me. This is how you do it (pay attention because you'll need to do it every week):
 - go to the content section on the blue navigation bar in D2L and click on "worksheet_1.doc"
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: "worksheet_1_yourname" and save it preserving your answers
 - Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "worksheet #1" and upload your file "worksheet_1_yourname" there. The deadline is January 18th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of

tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Important: this is the only week in the semester when you'll have until the following week to complete the worksheet. This means that the second week of the semester is particularly busy: you need to turn two assignments (check the list of activities that follow)

January 19.

Fundamentals of Research Design: Measurement I.

Your activities for the week are:

1. Read LR&C (Chapters 2).
2. Complete the second work sheet.
 - go to the content section on the blue navigation bar in D2L and click on "worksheet_2.doc"
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: "worksheet_2_yourname"
 - Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "worksheet #2" and upload your file "worksheet_2_yourname" there. The deadline is January 19th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Recommended reading:

Manheim et al. (Chapter 5).

January 27.

Fundamentals of Research Design: Measurement II.

Your activities for the week are:

1. Read LR&C (Chapters 3).
2. Complete the third work sheet.
 - go to the content section on the blue navigation bar in D2L and click on "worksheet_3.doc"
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: "worksheet_3_yourname"
 - Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "worksheet #3" and upload your file "worksheet_3_yourname" there. The deadline is January 27th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file

between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Recommended reading:

Manheim et al. (Chapter 5).

February 3.

Fundamentals of Research Design: Variables.

Your activities for the week are:

1. Read the lecture notes posted online. Available under the “content” tab in the blue navigation bar in D2L (look for the module “lecture notes”).
2. Read LR&C (Chapter 4).
3. Complete the fourth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_4.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_4_yourname”
 - Drop your file in the digital "Dropbox". To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #4” and upload your file “worksheet_4_yourname” there. The deadline is February 3rd at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

February 10.

Fundamentals of Research Design: Hypotheses.

Your activities for the week are:

1. Read the lecture notes posted online. Available under the “content” tab in the blue navigation bar in D2L (look for the module “lecture notes”).
2. Read LR&C (Chapters 5).
3. Complete the fifth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_5.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_5_yourname”
 - Drop your file in the digital "Dropbox". To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #5” and upload your file “worksheet_5_yourname” there. The deadline is February 10th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file

between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Recommended reading:

Manheim et al. Chapter 2.

February 17. Sampling Data.

Your activities for the week are:

1. Read the lecture notes posted online. Available under the “content” tab in the blue navigation bar in D2L (look for the module “lecture notes”).
2. Read LR&C (Chapter 6).
3. Complete the sixth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_6.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_6_yourname”
 - Drop your file in the digital “Dropbox”. To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #6” and upload your file “worksheet_6_yourname” there. The deadline is February 17th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Recommended reading:

Caldwell (pp. 89-94),

Buttolph Johnson and Reynolds (Chapter 9).

February 24. Data Management

Your activities for the week are:

1. Read LR&C (Chapter 7).
2. Complete the seventh work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_7.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_7_yourname”
 - Drop your file in the digital “Dropbox”. To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #7” and upload your file “worksheet_7_yourname” there. The deadline is February 24th at 8:00 pm (Arizona time).

I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

March 3

Measures of Central Tendency and Dispersion.

Your activities for the week are:

1. Read the lecture notes posted online. Available under the “content” tab in the blue navigation bar in D2L (look for the module “lecture notes”).
2. Read LR&C (Chapter 8).
3. Complete the eight work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_8.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_8_yourname”
 - Drop your file in the digital “Dropbox”. To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #8” and upload your file “worksheet_8_yourname” there. The deadline is March 3rd at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.
 - We’ll check out the Rice Virtual Lab in Statistics (RVLS) simulation on Mean and Median (also contains information about Standard Deviation) at http://www.ruf.rice.edu/~lane/stat_sim/descriptive/index.html. This exercise will give you the chance to see how descriptive statistics change when you modify the data we have.

Recommended reading:

Caldwell (pp. 19-26, rest of chapter 2),

March 9

1st (Midterm) Exam.

Your activities for the week are:

1. STUDY!!!!
2. go to the content section on the blue navigation bar in D2L and click on “exam_1.doc”
3. Save it in your computer. You can “pick up” the exam starting at 8 am on March 9th. You’ll have 14 hours to complete the exam (until 10 pm).
4. Fill in your answers
5. Modify the name of the file to: “exam_1_yourname”

- Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "exam #1" and upload your file "exam_1_yourname" there. Remember, the deadline is March 9th 10:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

March 12-20.
Spring Recess (no classes-ENJOY!)

March 24.
Cross-tabulations.

Your activities for the week are:

- Read LR&C (Chapter 9).
- Complete the ninth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on "worksheet_9.doc"
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: "worksheet_9_yourname"
 - Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "worksheet #9" and upload your file "worksheet_9_yourname" there. The deadline is March 24th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

March 31.
Measures of Association.

Your activities for the week are:

- Read the lecture notes posted online. Available under the "content" tab in the blue navigation bar in D2L (look for the module "lecture notes").
- Read LR&C (Chapter 10).
- Complete the tenth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on "worksheet_10.doc"
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: "worksheet_10_yourname"
 - Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "worksheet #10" and upload your file "worksheet_10_yourname" there. The deadline is March 31st at 8:00 pm (Arizona time). I

penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

April 7. ANOVA (ANalysisOfVariance).

Your activities for the week are:

1. Read the lecture notes posted online. Available under the “content” tab in the blue navigation bar in D2L (look for the module “lecture notes”).
2. Read LR&C (Chapter 11).
3. Complete the eleventh work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_11.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_11_yourname”
 - Drop your file in the digital "Dropbox". To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #11” and upload your file “worksheet_11_yourname” there. The deadline is April 7th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Recommended:

You can practice a bit on ANOVA if you visit the Utah Virtual Lab and try the ANOVA simulation at:

<http://www.psych.utal.edu/stat/introstats/anovafash.html>.

April 14. Controlling for a Third Variable.

Your activities for the week are:

1. Read LR&C (Chapter 12).
2. Complete the twelfth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_12.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_12_yourname”
 - Drop your file in the digital "Dropbox". To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #12” and upload your file “worksheet_12_yourname” there. The deadline is April 14th at 8:00 pm (Arizona time). I

penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

April 21. Regression

Your activities for the week are:

1. Read the lecture notes posted online. Available under the “content” tab in the blue navigation bar in D2L (look for the module “lecture notes”).
2. Read LR&C (Chapter 13).
3. Complete the thirteenth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_13.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_13_yourname”
 - Drop your file in the digital “Dropbox”. To do this, go to the “dropbox” tab on the blue navigation bar. Then select the folder “worksheet #13” and upload your file “worksheet_13_yourname” there. The deadline is April 21st at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

Recommended: run the RVLS simulation of *Regression by Eye* at http://www.ruf.rice.edu/~lane/stat_sim/reg_by_eye/index.html and see how good you are at predicting outcomes.

Recommended reading:
Caldwell (chapter 12),

April 28. Wrapping it up...

Your activities for the week are:

1. Read LR&C (Chapter 14).
2. Complete the fourteenth work sheet.
 - go to the content section on the blue navigation bar in D2L and click on “worksheet_14.doc”
 - Save it in your computer (somewhere where you can easily remember)
 - Open the file and fill in your answers
 - Modify the name of the file to: “worksheet_14_yourname”

- Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "worksheet #14" and upload your file "worksheet_14_yourname" there. The deadline is April 28th at 8:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.

May 4.
2nd Exam.

Your activities for the week are:

1. STUDY!!!!
2. go to the content section on the blue navigation bar in D2L and click on "exam_2.doc"
3. Save it in your computer. You can "pick up" the exam starting at 8 am on March 9th. You'll have 14 hours to complete the exam (until 10 pm).
4. Fill in your answers
5. Modify the name of the file to: "exam_2_yourname"
6. Drop your file in the digital "Dropbox". To do this, go to the "dropbox" tab on the blue navigation bar. Then select the folder "exam #2" and upload your file "exam_2_yourname_doc" there. Remember, the deadline is May 4th 10:00 pm (Arizona time). I penalize late submissions with a drop of a full letter in the grade for every 30 minutes of tardiness. For instance, if you scored a 79 in the worksheet, but submitted the file between 8:01 pm and 8:30 pm, then your final grade will be a 69. If your submission was made between 8:31 and 9:00, then the grade is a 59.