
POLITICAL SCIENCE 6: INTRODUCTION TO DATA ANALYSIS

Summer Session C 2024

Instructor:	Siyu Liang	Time:	TR 3:15pm – 5:20pm
Email:	sliang46@g.ucla.edu	Place:	Zoom (Bruinlearn – zoom)

Course overview and goals: This course aims to equip students with the skills to develop research questions that can be addressed through data analysis. Students will engage in exploring and modeling variations, evaluate models, and effectively communicate findings from the data analysis process. At the end of this course, students should:

1. Understand basic concepts that underlie descriptive and statistics, and be able to use these concepts to make sense of new situations.
2. Be prepared to learn more advanced techniques in the future.
3. Be able to do basic data analyses using R and Jupyter Notebooks

Approach to the course:

- **Focus on understanding and ask questions:** The emphasis of the course will be on understanding rather than memorization. While students won't need to memorize formulas, they should be able to understand and articulate the purpose of fundamental statistical formulas. Approach the course with curiosity: strive to understand the material and don't hesitate to ask questions if you need clarification!!
- **Interactive online textbook:** A significant portion of the course content will be delivered through the interactive online textbook, CourseKata (CK), which includes exercises and assessment questions. You should thoroughly read the textbook, complete all exercises, and answer all questions. Most importantly, invest the time needed to fully understand the material. *Up until March 31, 2024, the textbook has been free, but for classes starting April 1, 2024 or later the cost is \$32 per student. If you decide to drop the class in the first 2 weeks, you can get a full refund.*
- **Lectures:** We will use Jupyter Notebooks and focus on new examples during the lecture. Students should finish corresponding CK before the lecture and attend the lecture. **Synchronous attendance is recommended, as it allows for real-time support. However, it is not required. Lectures will be recorded and available online.**
- **Coding expectations:** Previous coding experience is not required for this course!
- **Technical help:** : Laptop or desktop computer is required for this class. You will need a computer to complete CKs, JNBs, and quizzes. Please use Chrome as your browser.
- **Getting help:** Please visit "First Things First! (Don't Skip This Page)" page in the "Getting Started (Don't Skip This Part)" module for any technical problems. If you need any technical assistance, please click the blue CK diamond in the textbook.
- **Artificial intelligence:** Please do not use any forms of artificial intelligence to assist with your coding. Understanding the foundations is a very important step in learning. It is very noticeable if you use AI to help you code. Please **only** use the code we have covered in this class. You can find the consequences of cheating and plagiarism in the Academic Integrity section.

Office hours (from week2): Tuesday 9am - 11am. Zoom link: <https://ucla.zoom.us/j/98761313568>

- Attending office hours is the best way to get support! If you cannot attend office hours, I'm more than happy to communicate through email. Alternatively, you can send me an email to schedule an appointment. I will respond to emails within 48 hours. When emailing, please include "PS 6" in the subject line and attach screenshots for troubleshooting. Please avoid sending emails at the last minute before the deadline.
- **I will not respond to troubleshooting requests or grant extensions within 24 hours of the deadline unless there is proof of an emergency.**

Course activities:

1. Assignment via CourseKata (One chapter per meeting). Weekly assigned CourseKata is due by the end of Friday at 11:59 PM. CourseKata will be graded based on correctness. I do not accept late work. If you have an emergency, please email me at least 48 hours before the deadline with the appropriate documentation.

Bonus: To motivate students to complete the corresponding CK before the lecture, students will receive bonus points for each chapter. If you finish the corresponding chapter before the lecture, you'll receive an additional +10 points for that CK. The deadline for this is 5 minutes before the lecture begins.

2. Participation via Jupyter Notebooks (One notebook per meeting). Weekly assigned Jupyter Notebooks is due by the end of Friday at 11:59 PM. JNB will be graded based on completion. However, I reserve the right to randomly grade a few questions. Recordings will be provided. I do not accept late work. If you have an emergency, please email me at least 48 hours before the deadline with the appropriate documentation. Complete JNBs will be uploaded within five days after due date.
3. Quizzes via Jupyter Notebooks (One quiz per week). The weekly quiz will open on Friday morning and close on Saturday at midnight. All quizzes will be open book and open note, and will be posted as a Jupyter Notebook. The quiz should only take you less than two hours to complete. If you need a late submission, you must request an extension 48 hours before the quiz opens, and you do not need to provide a reason. If you request an extension within 48 hours before the quiz opens, you must provide documentation. The hard submission deadline for everyone is Monday at 11:59 PM. No exceptions.

Course Schedule:

Week	Tuesday		Thursday		Saturday
	Before meeting	After meeting	Before meeting	After meeting	Before 11:59 PM
1	Complete CK Ch 1	Submit JN 1	Complete CK Ch 2	Submit JN 2	Submit quiz 1
2 (async)	Complete CK Ch 3	Submit JN 3	Complete CK Ch 4	Submit JN 4	Submit quiz 2
3	Complete CK Ch 5	Submit JN 5	Complete CK Ch 6	Submit JN 6	Submit quiz 3
4	Complete CK Ch 7	Submit JN 7	Complete CK Ch 8	Submit JN 8	Submit quiz 4
5 (async)	Complete CK Ch 9	Submit JN 9	Complete CK Ch 10	Submit JN 10	Submit quiz 5
6	Complete CK Ch 11	Submit JN 11	Complete CK Ch 12	Submit JN 12	Submit quiz 6

Grading: There are two ways to calculate your final grade. I will calculate your final grade using both methods, and assign you the higher grade.

Weighting	Homework via CK	Participation via JN	Quizzes via JN
Method 1	40%	30%	30% (drop lowest quiz grade)
Method 2	30%	0%	70% (drop lowest quiz grade)

Final grade calculation:

A+: 97 to 100*	B+: 87 to 89.99	C+: 77 to 79.99	D+ : 67 to 69.99
A: 93 to 96.99	B: 83 to 86.99	C: 73 to 76.99	D: 60 to 66.99
A-: 90 to 92.99	B-: 80 to 82.99	C-: 70 to 72.99	F: 0 to 59.99

University policies and resources

- **Academic Integrity:** UCLA is a community of scholars. In this community, all members including faculty, staff and students alike are responsible for maintaining standards of academic honesty. As a student and member of the University community, you are here to get an education and are, therefore, expected to demonstrate integrity in your academic endeavors. You are evaluated on your own merits. Cheating, plagiarism, collaborative work, multiple submissions without the permission of the professor, or other kinds of academic dishonesty are considered unacceptable behavior and will result in formal disciplinary proceedings usually resulting in suspension or dismissal. Please visit the Dean of Students syllabus statement for more information.

[source: the Dean of Students syllabus statement]

- **Accessible Education:** Students needing academic accommodations based on a disability should contact the Center for Accessible Education (CAE) at (310) 825-1501. When possible, students should contact the CAE within the first two weeks of the term as reasonable notice is needed to coordinate accommodations. For more information visit www.cae.ucla.edu.
- **Religious Observances:** In the event of a religious holiday or any other form of observance, please contact me regarding your absence and as soon as possible so we can make accommodations for you.
- **Resources for Students:** UCLA provides resources if you are feeling overwhelmed and need personal and/or academic assistance. Please visit this link for more information.
- **Title IX:**
 - *Advocacy and Confidential Services:* Please note that Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at the CARE Advocacy Office for Sexual and Gender-Based Violence, 205 Covell Commons, Los Angeles, CA, 90095, care@careprogram.ucla.edu, (310) 206-246 5. Counseling and Psychological Services (CAPS) provides confidential counseling to all students and can be reached 24/7 at (310) 825-0768.

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- *Reporting and Non-confidential Services:* Your professor is required under the UC Policy on Sexual Violence and Sexual Harassment to inform the Title IX Coordinator should he become aware that you or any other student has experienced sexual violence or sexual harassment. In addition, You can also report sexual violence or sexual harassment directly to the University's Title IX Coordinator, 2255 Murphy Hall, titleix@equity.ucla.edu , (310) 206-3417. Reports to law enforcement can be made to UCPD at (310) 825-1491.