POS 4734: Quantitative Research Methods
University of Florida – Spring 2021
MWF 9:35-10:25 am
HyFlex (In Person: Matherly Hall 151)

Dr. Annie Watson
kanne.watson@ufl.edu
Virtual Office Hours: Wednesday 1:00-4:00pm (and/or by appointment)
Office Hours Link: Provided on Canvas

Grader: Jake Caldwell
Virtual Office Hours: Mondays 10:45am-12:00pm
Office Hours Link: Provided on Canvas

Course Description and Objectives

This course is designed to introduce students to research methods for political science. It will also give students a better understanding of how to develop a research agenda and of the various quantitative methods employed in political science to conduct research. To this end, students will learn how to critically engage with existing literature; how theory drives measurement, data collection, and data analysis; and how research can also be a tool of oppression (and how to avoid this).

As such, by the end of this course, students will be able to:

- Summarize and interpret political science research
- Identify the power and privilege in many examples of research
- Formulate research questions and designs
- Evaluate the appropriateness of research designs for answering research questions
- Analyze quantitative data, drawing appropriate inferences
- Effectively communicate research findings
- Engage with data management, visualization, and analysis in R

Required Readings

Required Text:

- Johnson, Janet Buttolph, H. T. Reynolds, and Jason D. Mycoff. 2016. *Political Science Research Methods*. 8th ed. New York: SAGE Publications. (JRM)

Recommended Text:

- Wickham, Hadley and Garrett Grolemund. 2017. *R for Data Science.* O'Reilly. https://r4ds.had.co.nz/

All other required readings will be shared with you on Canvas. Please do not distribute these materials to people beyond this class.

Course Requirements and Evaluation

Three Quizzes (10 points each for 30 points)

Lectures and class discussions are intended to supplement, not duplicate, the readings. Quizzes will draw upon both readings and class material. We will discuss the exact format of the quizzes in class, but they will be take home and open note. The final quiz will be cumulative but focus more on material covered after the midterm.

- February 19: Quiz 1 (10 points)
- March 26: Quiz 2 (10 points)
- April 26: Quiz 3 (10 points)

Research Project (30 points, in stages)

The final project for this class is an independent research project on the topic of your choice. The end product will be 8 to 10 pages long, with the following form: **introduction, literature review, theory, analysis, results, conclusion**. You will be working on various pieces of this assignment (and turning them in) over the course of the semester. The due dates for each piece are listed below. Unless otherwise noted, each assignment is due at the beginning of class.

- January 22: Research Proposal MadLib (1 point)
- February 5: Bibliography Tree and Annotated Bibliography (1 point)
- February 26: Literature Review (2 points)
- March 12: Theory Section, Proposed Analysis (2 points)
- April 2: First Draft (4 points)
- April 21: Final Draft and Memo (10 points)
- April 12-21: Presentations (10 points)

Assignments (6 points each for 30 points)

Throughout the semester, there will be 5 assignments (or problem sets) assigned. Each problem set will be posted on Canvas and should be turned in on Canvas by the beginning of the class they are due. These assignments will cover a wide variety of material, such as probability and statistics, software exercises, and applying the broad concepts of the course.

- January 29: Assignment 1
- February 12: Assignment 2
- March 5: Assignment 3
- March 19: Assignment 4

- April 9: Assignment 5

Attendance and Participation (10 points)

Attendance and participation are a necessary condition for satisfactory achievement in this class. The best way for you to learn is to engage with the material and to debate and discuss it at length with your peers. Thus, excellence in participation means more than just talking a lot in class; rather, it requires that your participation be high in both quality and quantity. As such, you get one unexcused absence for any reason with no penalty. Each unexcused absence following that will result in a zero for attendance and participation for that class day.

Grading Scale

Grades are constructed to reflect university standards and are summarized below. Grades will be based on how many points you earn according to the following distribution:

A	94-100 points
A-	90-93 points
B+	87-89 points
B	84-86 points
B-	80-83 points
C+	77-79 points
C	74-76 points
C-	70-73 points
D+	67-69 points
D	64-66 points
D-	61-63 points
F	Fewer than 61 points

Preliminary Course Schedule

Unless noted otherwise, assignments should be handed in at the beginning of the class period they are due. I may make changes to the reading to reflect new publications or current events; these changes will be shared with you in class and/or through Canvas e-mails.

Assignments that cite JRM are referring to the course textbook.

Week 1: Introductions and Expectations

January 11: Introductions and Expectations
- Syllabus

January 13: Data and Power
- D'Ignazio, Catherine and Lauren F. Klein. 2020. *Data Feminism*. Cambridge: The MIT Press. (Chapter 2)

January 15: Virtual R Lab (Introduction to R)
- R Packet 1

Week 2: Initiating Research

January 18: NO CLASS (MARTIN LUTHER KING, JR. DAY)

January 20: Initiating Political Science Research
- JRM Ch. 3
- Knopf, Jeffrey W. 2006. "Doing a Literature Review." *PS: Political Science and Politics* 39(1) 127-132.

January 22: Virtual R Lab (Creating Data)
- R Packet 2

Due: Research Topic MadLib

Week 3: Digging Deeper

January 25: Reading Political Science Research
- Dietrich, Simone and Amanda Murdie. 2017. "Human rights shaming through INGOs and foreign aid delivery." *Review of International Organizations* 12: 95-120.
- Green, Amelia Hoover. 2013. "How to Read Political Science: A Guide in Four Steps." https://calgara.github.io/Pol157_Spring2019/howtoread.pdf

Due: Reading Worksheet

January 27: Decolonizing Research
- Falcón, Sylvanna M. 2016. "Transnational Feminism as a Paradigm for Decolonizing the Practice of Research: Identifying Feminist Principles and Methodology Criteria for US-Based Scholars." *Frontiers* 37(1): 174-194.
- Tuhiwai Smith, Linda. 2012. *Decolonizing Methodologies: Research and Indigenous Peoples*. London: Zed Books Ltd. (Chapters 1-3)

January 29: Virtual R Lab (Loading and Manipulating Data)
- R Packet 2

Due: Assignment 1

Week 4: Theories and Hypotheses

February 1: Building Blocks of Social Scientific Research
- JRM Ch. 4

February 3: TBD
- TBD

February 5: Virtual R Lab (Visualizing Data, Part 1)
- R Packet 3

Due: Literature Tree and Annotated Bibliography

Week 5: Variables and Measurement

February 8: Variables and Measurement
- JRM Ch. 5

February 10: What Gets Counted Counts
- D'Ignazio, Catherine and Lauren F. Klein. 2020. *Data Feminism*. Cambridge: The MIT Press. (Chapter 4)
- Cingranelli, David L. and David L. Richards. 1999. "Measuring the Level, Pattern, and Sequence of Government Respect for Physical Integrity Rights." *International Studies Quarterly* 43: 407-417.

February 12: Virtual R Lab (Variables and Measurement)
- R Packet 3
- JRM Ch. 11

Due: Assignment 2

Week 6: Sampling

February 15: Sampling
- JRM Ch. 7

February 17: Untrustworthy Numbers
- TBD

February 19: Virtual R Lab (Probability)
- R Packet 4

Due: Quiz 1

Week 7: Research Designs and Data

February 22: Research Designs
- JRM Ch. 6
- JRM Ch. 8, pgs. 245-248

February 24: Data
- NSF. "An Overview of Quantitative and Qualitative Data Collection Methods." https://www.nsf.gov/pubs/2002/nsf02057/nsf02057_4.pdf
- D'Ignazio, Catherine and Lauren F. Klein. 2020. *Data Feminism*. Cambridge: The MIT Press. (Chapter 6)

February 26: Virtual R Lab (Visualizing Data, Part 2)
- R Packet 4

Due: Literature Review

Week 8: Bivariate Hypothesis Testing

March 1: Statistical Inference
- JRM Ch. 12

March 3: Relationships between Variables
- JRM Ch. 13 (pgs. 412-467)

March 5: Virtual R Lab (Testing Relationships)
- R Packet 4

Due: Assignment 3

Week 9: Linear Regression

March 8: Bivariate Regression
- JRM Ch. 13 (pgs. 478-512)

March 10: Multiple Regression
- JRM Ch. 14

March 12: Virtual R Lab (Linear Regression)
- R Packet 5

Due: Theory and Proposed Analysis

Week 10: Interaction Terms

March 15: Interaction Terms
- JRM Ch. 14 (pgs. 516-558)

March 17: Interaction Terms, Part 2
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14(1): 63-82.

March 19: Virtual R Lab (Interaction Terms)
- R Packet 5

Due: Assignment 4

Week 11: Limited Dependent Variables

March 22: Limited Dependent Variables
- JRM Ch. 14 (pgs. 559-581)

March 24: NO CLASS (RECHARGE DAY)

March 26: Virtual R Lab (Limited Dependent Variables)
- R Packet 6

Due: Quiz 2

Week 12: Ethical Considerations of Research

March 29: Heading Out into the World as Researchers
- Sprague, Joey. 2016. *Feminist Methodologies for Critical Researchers: Bridging Differences.* 2nd ed. Lanham, Maryland: Rowman & Littlefield. (Chapter 6)

March 31: TBD

April 2: Virtual R Lab (Visualizing Data, Part 3)
- R Packet 6

Due: First Draft

Week 13: Wrapping Up

April 5: Catching Up and Introducing the Presentations
- Ignite Documentation

April 7: Example Presentations

April 9: Presentation Practice

Due: Assignment 5

Week 14: Presentations

April 12: Presentations

April 14: Presentations

April 16: Presentations

Week 15: Presentations

April 19: Presentations

April 21: Presentations

Due: Final Draft and Memo

April 23: NO CLASS (READING DAY)

Week 16: Final Exams

April 26: Final exam period 10:00am – 12:00pm (QUIZ 3 DUE)

Course Policies

Students with Disabilities

If you have (or suspect you have) a learning or other disability that requires academic accommodations, you should contact the UF Disability Resource Center (DRC) as soon as possible (https://disability.ufl.edu/ or (352) 392-8565). To obtain a classroom accommodation, you must first pre-register with the DRC by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to your instructors when requesting an accommodation. I am always happy to make whatever accommodations you may need to be successful in the course.

Academic Honesty

Academic integrity is a core value of institutions of higher learning. All students, upon enrolling, are held to the Honor Pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: 'On my honor, I have neither given nor received unauthorized aid in doing this assignment.'" It is your responsibility to avoid plagiarism, cheating, and dishonesty. The university policy on academic integrity is posted at: https://archive.catalog.ufl.edu/ugrad/1617/advising/info/student-honor-code.aspx.

To qualify the application of the policy in this course: papers and other assignments should be your own work (though you may ask others for suggestions). Any material drawn from other sources must be properly cited. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to me.

An Inclusive Classroom

Political debates and discussions can become quite heated. This passion is part of what makes the study of politics fun! However, the fun ends where personal attacks and disrespect begin. Creating an inclusive, respectful, and safe classroom environment is integral to the success of this course. To this end, all class members are expected to treat each other at all times with respect, courtesy, tolerance, fairness, and justice.

Communicating with the Instructor

My primary method of communicating with you outside of class time/office hours will be through the Canvas messaging system (which also communicates with your school-assigned e-mail address). You will be held responsible for regularly checking this account. Assignment changes, important dates, and other valuable information may be sent to this account over the course of the term. Please check it daily. I do my best to answer e-mails within 24 hours (but rarely answer e-mails at night or on weekends).

I have posted office hours on Wednesdays from 1 pm to 4 pm. During this time period, you should feel free to come to my virtual office on Zoom (link at the top of the syllabus) and discuss any questions you may have about the class. If this time does not work for you, I am more than happy to set up an appointment.

Late Work

The late submission of assignments will result in a 10 percent reduction in points per day it is late, unless alternative arrangements are made with the instructor. *If you are worried about meeting deadlines or if something comes up, please come talk to me as soon as possible.* I can't help if I don't know what's going on.

Recording

Because of privacy issues, I will not be recording our class sessions. As in a face-to-face class, attendance is expected; when you are absent, you are encouraged to reach out to a classmate to get their supplementary notes on the day's material. As in all courses, unauthorized recording and sharing of recorded materials is prohibited. Please note that Florida is a two-party consent state; it is against the law to record others without their permission.

Cameras On/Off

There will be times in which I request you turn on your camera to help facilitate discussion and active learning. These times will often occur in our group or team discussions. Please feel free to use Zoom's free virtual background feature as desired—no green screen required. Beyond these "camera on" times, I will not require cameras to be on but do encourage you to keep them on if you feel comfortable, as it can help facilitate discussion throughout lecture and help keep us all engaged.

Course Evaluations

At the end of the semester, you will have the chance to provide feedback on the course by completing an online course evaluation through GatorEvals. You will be notified when the evaluation period opens and can complete the evaluation in one of two ways: through the email you receive from Gator Evals or from your Canvas course menu under GatorEvals.

Changes to the Syllabus

The course syllabus is a general plan for the course; deviations by the instructor may be necessary. As such, I reiterate the absolute necessity that you (1) come to class and (2) regularly check your e-mail.

Campus Resources

Technology Resources

The entirety of our course will take place virtually, requiring the use of a working computer and access to audio-visual resources (e.g., webcam, microphones). If you are struggling to use Zoom, please review the UF Quick Start guides (https://elearning.ufl.edu/zoom/). There is also information available regarding connectivity issues (https://elearning.ufl.edu/media/elearningufledu/keep-teaching/Connectivity-Options.pdf).

The UF Computing Help Desk can assist you with any of your technical issues. You can access the Help Desk 24/7 at https://helpdesk.ufl.edu/, 352-392- HELP (4357), or helpdesk.@ufl.edu. If you use email, write from your gatorlink@ufl.edu email address or include your UFID and/or GatorLink username (NOT your password!) in the body of the email. Provide complete information regarding the course and content to which you are referring.

Finally, keep in mind that in a pinch you can dial in to our virtual class using your cellphone to participate in class.

Academic Resources

There are many academic resources available to you on campus throughout the semester. These include:

- E-learning Technical Support—Contact the UF Computing Help Desk at (352) 392-4357 or via e-mail at helpdesk@ufl.edu.

- Library Support—Various ways to receive assistance with respect to using the libraries or finding resources.

  https://uflib.ufl.edu/find/ask/

- Teaching Center—Offers support for general study skills and tutoring. Located in Broward Hall, contact by phone at (352) 392-2010 or make an appointment at (352) 392-6420.

  https://www.teachingcenter.ufl.edu

- Writing Studio—Help with brainstorming, formatting, and writing papers. Now offering online consultations! Located at 2215 Turlington Hall; contact at (352) 846-1138.

  http://www.writing.ufl.edu/writing-studio

- Student Complaints

  https://www.sfa.ufl.edu/written-student-complaints/

  https://distance.ufl.edu/getting-help/student-complaint-process/

Hardship Resources

Being a student can be hard. Your lives are changing, and college can be a stressful environment. *There is no shame in struggling with this.* If you are feeling depressed or otherwise concerned about your mental health, please reach out to UF's Counseling and Wellness Center (CWC). Their website is https://counseling.ufl.edu/services/, and their phone number is (352) 392-1575.

If you are experiencing other kinds of hardship, UF has a number of services that may help. These include, but are not limited to, the provision of food, clothing, professional clothing, and school supplies, described in greater detail below.

- Alan and Cathy Hitchcock Field & Fork Pantry—Provides *free* non-perishable food items, toiletries, and fresh produce with the swipe of a UF ID card for those in need. There is also an online order form.

  https://pantry.fieldandfork.ufl.edu/

- UMatter—Links to multiple campus resources for making healthcare appointments, reporting incidents of bias, health promotion services, substance abuse recovery and support, sexual violence response, mental health and academic support, support for students experiencing homelessness, and more.

  https://umatter.ufl.edu/helping-students/your-well-being/

  If you or someone you know is in distress, you can reach out to them either through the website above, at umatter@ufl.edu, or at (352) 392-1575.

- HealthStreet Drive Up Services—Provision of clothing, toiletries, naloxone (Narcan), masks, and medical referrals.

  http://healthstreet.program.ufl.edu/our-community-our-health-2/covid-19-resources/#create-a-page-jump-2

- More HealthStreet Resources—HealthStreet has also curated an extensive list of resources that you might find particularly helpful for staying safe and healthy during the pandemic, including community resources for medical and social services, financial assistance, food/grocery and medicine delivery services, online exercise resources, mental health resources, recovery resources, support for parents, and suggestions for ways to socialize while physically distancing.

  http://healthstreet.program.ufl.edu/our-community-our-health-2/covid-19-resources/

- Aid-a-Gator—Provides students with emergency funding intended to "help our students' need to cover costs related to unanticipated travel, additional technology requirements, or other needs related to an emergency situation.

https://www.sfa.ufl.edu/aidagator/

If you have a family member whose financial situation was affected by the Covid-19 crisis, especially through loss of work hours or their job, you can submit a revision petition for consideration of having their income reevaluated. UF is encouraging these students to complete the 2019-20 Financial Aid Revision Petition and the 2020-2021 Revision Petition.

- UF Multicultural & Diversity Affairs—Advocates for an inclusive campus for all students across identities and offers a wide range of services, educational opportunities, learning, support, outreach, and activities to students.

    https://multicultural.ufl.edu/

For other crises it might be helpful to have the following on hand:

- UF Health Shands Emergency Room/Trauma Center: (352) 733-0111

- Gainesville Police Department: (352) 955-1818 (non-emergency line)

    http://www.gainesvillepd.org

My (virtual) office door is also always open to you. Please keep in mind that I am a Title IX mandatory reporter.