

Syllabus

POS 5698.1, Data Management for Campaigns

Course Meetings

📅 Tuesdays
🕒 5:30-8PM
📍 [HCB 0219 \(second floor\)](#)

Instructor

👤 [Prof. Matt Pietryka](#)
🏠 561 Bellamy
✉ mpietryka@fsu.edu
📅 [Schedule an appointment](#)

Teaching Assistant

👤 Marli Dunietz
✉ mdunietz@fsu.edu
📅 [Schedule an appointment](#)

Course objectives

Campaigns run on data.¹ Therefore, successful campaigns need people who know how to use data judiciously. The purpose of this course is to help you fill that role for your current or future employer. Specifically, by the end of the semester, students should know how to:

¹ Though I focus on electoral campaigns, virtually every step in policy-making requires data. Feel free to replace the word *campaigns* with legislators, lobbying firms, policy advocates, or part of the policy process you are interested in

1. find and access relevant data
2. merge together data from multiple sources
3. visualize the data
4. identify problems with the data
5. fix those problems
6. use the data to make informed judgments about campaign activities (e.g., who to target)
7. communicate insights extracted from the data to people who are not trained in statistics or R programming

To accomplish goals 2-6, students will use the statistical software and programming language, [R](#). To accomplish goals 3-7, students will also learn (or relearn) some basic research design and statistical skills.

Ultimately, students will *not* walk away from this class as master programmers or statisticians. But they will be able to credibly signal to prospective employers that you are proficient in the [R](#) programming language. More importantly, the course will make students better able to learn additional data management and analysis skills on their own.

Students who are successful in the course will be able to demonstrate the following following skills, taken verbatim from real job ads²:

² Source Ads: [Data science, The Messina Group](#), [Energy Campaigns Analyst, Sierra Club](#), [Research Associate, WPA Intelligence](#), [Data science, WPA Intelligence](#)

1. "Quantitative, analytical and research skills. Ability to distill analysis into key results for broad consumption. A desire to grow expertise in a new subject area through research and analysis. Skilled at analyzing reports and datasets to solve specific research objectives."
2. "Effective written and oral communication skills. Comfort with public speaking. Skill at packaging and explaining complex concepts to a wide range of audiences through clear written materials."
3. "Experience using GIS mapping and/or Tableau for data visualisation"³
4. "Ability to apply concepts from statistics and explain your decisions clearly to others"
5. "Proficiency in R, Python, Stata, or another statistical computing language"
6. "Experience in data standardization and data manipulation"
7. "Facility with research design, particularly survey design or experiment design"
8. "Experience in natural language processing and textual analysis"
9. "Proficiency with GIS or other mapping software"
10. "Conducting quantitative analysis using SPSS and/or [R](#) statistical packages and other tools"
11. "Building data visualizations and graphic representations of data"
12. "Writing analysis memos and summaries that provide strategic guidance to clients"
13. "Solid knowledge of tidyverse [R](#) and SQL"

³ Note that this course focuses entirely on `R` rather than the other software and programming languages listed in these quotes like Tableau, Python, or SQL.

If these careers look interesting to you, consider subscribing to the [POLMETH listserv](#) and watch for jobs posted to [Progressive Data Jobs](#).⁴

⁴ I'm still looking for a centralized source for conservative-oriented data jobs so please let me know if you are aware of any.

What materials are required for this course?

All materials required for this class are free to students.

Required software and webapps

All data work in this course will be done using the free, open-source `R` programming language. The political science department has generously purchased our class a semester-long license to use *Posit Cloud*, a web-based `R` interface. By uploading your data and scripts to their servers, you will be able to share your work with me. I will be able to run the same code as you and get the same results. We will also rely heavily on *DataCamp*, an online code academy, which is also free to students in this class.

No books required

In this class, the DataCamp assignments will take the place of required textbooks. In addition, the schedule lists several required readings and many suggested readings. All readings are available free online. All students must complete the required readings and students who want to get the most from the course should also complete the suggested readings. Likewise, students who struggle with the DataCamp assignments or in-class workshops should consult the suggested readings for help.

Prerequisites

The course has no *formal* prerequisites. But **success in this course requires a single, substantial *informal* prerequisite: motivation.** To learn a programming language and develop enough analytical skills to apply the language, students must be prepared to invest significant time, effort, and patience.

Course structure

A **typical week** follows this structure...

- **before 11:59PM each Monday:** complete readings, DataCamp assignments, the previous week's Programming Workshop, and Canvas assignments related to the Midterm and Final Projects.
- **Tuesdays, 5:30-8PM:** the weekly class meeting

A **typical class meeting** includes these three elements...

1. a **lecture** on new material
2. a **discussion** of readings and DataCamp assignments
3. completing **in-class Programming Workshops**

Grading

Students' cumulative percentage in this course will be calculated based on four assessments:

$$\begin{aligned}\text{Cumulative Percentage} = & \\ & \text{Programming Workshops} \times 0.20 \\ & + \text{DataCamp Courses} \times 0.20 \\ & + \text{DataCamp Assessments} \times 0.10 \\ & + \text{Midterm Project} \times 0.25 \\ & + \text{Final Project} \times 0.25\end{aligned}$$

Each of these assessments is described briefly below.⁵

⁵ More details about each will be provided in class and on Canvas as the semester progresses.

At the end of the semester, your cumulative percentage will be converted to a final letter grade according to the standard table:

	Final											
Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
Percentage	93-	90-	87-	83-	80-	77-79	73-76	70-72	67-69	63-	60-	00-
	100%	92	89	86	82					66	62	59

Programming Workshops

The best way to learn a language is to use it. So most classes will include a project that requires you to use R. Students are welcome to work together on these workshops, but each student must turn in their own answers and list the students they worked with on the submission. The workshops will begin in class each Tuesday and will be due two days later (before 11:59PM). Students can still complete the workshops if they miss class, but they will lose the opportunity to receive help in class. Each workshop submission is graded on a three point scale: A ✓+ indicates 100% success on the submission and receives 100% in the gradebook. A ✓ indicates 80-99% success and receives 95% in the gradebook. A ✓— indicates less than 80% success and receives 50% in the gradebook. Unsubmitted workshops receive 0%.

Datacamp Courses

Most weeks will require students to complete one or more *Datacamp Courses*, which typically feature a series of video lectures and programming tasks that introduce you to various R programming concepts. Each course will be graded on a pass/fail basis; if you complete it, you will receive full credit. Each student may use a few *Take Hint* and *Show Answer* options each chapter without penalty. Please do not overuse these features.

Datacamp Assessments

On several weeks throughout the semester, students will complete *Datacamp Assessments* during the class meeting. These assessments are brief, timed challenges designed to measure various programming skills. Students are allowed to take each assessment two times per week, but I will count only the score you achieve during class. Each assessment will classify students one of three categories: novice,

intermediate, or advanced. When computing your grade, these assessments will be converted to scores of novice = 80%, intermediate = 90%, and advanced = 100%.

Midterm and Final Projects

Students will complete two projects that apply the skills we have learned to a problem they choose. These projects include a final written report along with several preliminary activities including a 10-minute presentation to the rest of the class.

Course Policies

How students can communicate with us

All questions or comments that might be of interest to other students should be posted to one of three course discussion boards:

1. Post questions about the syllabus, assignments, and course material [here](#).
2. Post questions about R programming [here](#).
3. Post links to interesting information and useful resources [here](#).

For questions of a personal nature (e.g., medical issues) please contact me via email.

How we will communicate with students

We will communicate with students in this class in three ways:

1. We will typically message the entire class using [the Canvas Announcements feature](#)
2. We will comment on individual assignments using the Canvas [Submission Comment](#) feature.
3. We will occasionally send emails to individual students or the entire class using their [@fsu.edu](#) email addresses. Therefore, you must check your [@fsu.edu](#) email on a daily basis.

Students are responsible for ensuring that they receive these communications.

When a reply is required, students are expected to do so within 24 hours, excepting weekends and holidays.

To ensure you do not miss important information, please follow the steps at [this link](#).

Late Work

I am happy to modify due dates as long as you receive my permission prior to the original deadline. If circumstances make it impossible to receive advanced permission, please reach out to explain these circumstances.

When you email me to request an extension, please propose a new due date that works better for your needs. I will grant extensions wherever it is feasible for me to do so—as long as you complete most course assignments on time and are otherwise keeping up with the course material.

Late work is *not* accepted in this course, unless you receive my permission prior to the deadline.

Course Recording Not Permitted

In this class, consistent with state law and university policy, **you may not make recordings of classroom activities without the permission of the instructor.** This policy applies to both audio and video recordings.

I *will* try to record all lecture material and post the recordings to the course Canvas. Only the lecture portion of the class will be recorded. These recordings are only for the students in this class. Sharing, posting, or publishing classroom recordings may subject you to honor code violations and legal penalties associated with theft of intellectual property and violations of other state law. If I forget to post a recording, please email me. Keep in mind that the recording equipment occasionally fails and therefore it is possible that some or all of a class meeting will not be recorded.

University Policies

University Attendance Policy

Excused absences include documented illness, deaths in the family, and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid written excuse. Consideration will also be given to students whose dependent children experience serious illness.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of student's academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University."

(For more details see the [FSU Academic Honor Policy and procedures for addressing alleged violations](#).)

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

Americans With Disabilities Act

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodation for all persons with disabilities in a manner that is consistent with the academic standards of the course while empowering the student to meet the integral requirements of the course.

Students with disabilities needing academic accommodation should:

1. register with and provide documentation to the Office of Accessibility Services; **and**
2. request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; **and**
3. meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations.

Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided. This syllabus and other class materials are available in an alternative format upon request. For the latest version of this statement and more information about services available to FSU students with disabilities, contact the

Office of Accessibility Services

874 Traditions Way

108 Student Services Building

Florida State University

Tallahassee, FL 32306-4167

(850) 644-9566 (voice)

(850) 644-8504 (TDD)

oas@fsu.edu

<https://dsst.fsu.edu/oas>

Confidential Campus Resources

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program

University Center A, Rm. 4100

(850) 644-7161

Available 24/7/365

Office Hours: M-F 8-5

<https://dsst.fsu.edu/vap>

Counseling and Psychological Services (CAPS) Florida State University's Counseling and Psychological Services (CAPS) primary mission is to address psychological needs and personal concerns, which may interfere with students' academic progress, social development, and emotional well-being. The following in-person and virtual (tele-mental health) services are available to all enrolled students residing in the state of Florida:

1. Individual therapy
2. Group therapy
3. Crisis Intervention

4. Psychoeducational and outreach programming
5. After hours crisis-hotline
6. Access to community providers for specialized treatment

Call 850-644-TALK (8255) for more information on how to initiate services.

Counseling and Psychological Services

250 Askew Student Life Center

942 Learning Way

(850) 644-TALK (8255)

Walk-in and Appointment Hours:

M-F 8 am – 4 pm

<https://counseling.fsu.edu/>

Services at UHS are available to all enrolled students residing in Florida: The mission of University Health Services (UHS) is to promote and improve the overall health and well-being of FSU students. UHS provides a coordinated continuum of care through prevention, intervention, and treatment. Services include general medical care, priority care, gynecological services, physicals, allergy injection clinic, immunizations, diagnostic imaging, physical therapy, and a medical response unit. The Center for Health Advocacy and Wellness (CHAW) assists students in their academic success through individual, group, and population-based health and wellness initiatives. Topics include wellness, alcohol and other drugs, hazing prevention, nutrition and body image, sexual health, and power based personal violence prevention. For more information, go to uhs.fsu.edu.

University Health Services

Health and Wellness Center

960 Learning Way

Tallahassee, FL 32306

Hours: M-F, 8 am – 4 pm

(850) 644-6230

<https://uhs.fsu.edu/>

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance

notice.

- 2024-02-14, based on class feedback, the due date for the weekly Programming Workshops has been moved from Thursday night to the following Monday night.