

[Course Number] Power, Pluralism, and Parity: Intersectional Data Feminism

SPRING 2025

Section:001Teacher:Alyssa PivirottoPrerequisite:N/AOffice:Carpenter A4Office Hours:By appointmentPhone:610-526-7917

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COURSE DESCRIPTION

Data is often perceived as objective and impartial, but the processes of data collection, analysis, and visualization are deeply influenced by existing power structures. In this course, we will explore the intersection of data and these power structures through the lens of feminist theory, examining how data can both reinforce and challenge systems of oppression. By centering the experiences of the affected communities, we will explore methods to make data practices more inclusive and equitable. Through a combination of readings, class discussions, and hands-on activities, students will engage with key concepts in data feminism. We will apply these concepts to real-world examples, using Python for data analysis. No prior programming experience is required, as the course will provide the necessary foundational skills. By the end of the course, students will be equipped to critically analyze data practices and contribute to more just and ethical data-driven decision-making.

KEY LEARNING OUTCOMES

- ☐ Critically examine how data practices reinforce or challenge existing power structures, with particular attention to gender, race, and class
- ☐ Understand the origins and impacts of algorithmic bias and will be able to critique algorithms from a feminist perspective
- ☐ Design and implement data collection and analysis methods that prioritize inclusively, transparency, and accountability
- ☐ Effectively communicate the results of data analyses with an emphasis on clarity, accessibility, and impact

REQUIRED BACKGROUND AND PREREQUISITE KNOWLEDGE

No prior coding experience is required! While we will be utilizing Python, it will primarily be used for understanding concepts. Python assignments will not be graded on ability to code, but on understanding of concepts of data analysis, data visualization, and algorithmic bias.

GRADING SCHEME

Course Component	Overall Weight	
Individual Homework		
Discussion Posts	25%	
In-class Exercises	20%	
Participation		
Discussion Leader	10%	
Project		
Proposal	10%	
Data Write-up	10%	
Final Write-up	15%	
Final Presentation	10%	

Notes and Constraints

- Students can drop one discussion post and one in-class exercises.
- Late work is not accepted unless you make arrangements with the instructor prior to the due date.

TEXTBOOKS AND COURSE MATERIALS

- ONLINE RESOURCES: Students will have access to Piazza for discussion posts. Supplemental materials will be uploaded to Moodle.
 - **Using POSIT cloud:** Throughout the semester, students will use POSIT cloud to complete in-class exercises.
- **TEXTBOOK:** Two main texts will primarily be used with supplemental readings from a variety of sources that will be uploaded to Moodle for student access.



Title: Data Feminism

Author: Catherine D'Ignazio and Lauren Klein **Publisher:** MIT Press, publication year: 2020

ISBN-13: 978-0-262-04400-4 **Available at:** MIT Press (FREE!)



Title: Unmasking AI **Author:** Joy Buolamwini

Publisher: Penguin Random House; publication year: 2023

ISBN-13: 978-0-593-24183-7 **Available at:** Several Vendors,

TENTATIVE COURSE CONTENT

Week	Topics & Homework
1	1/20: Course Overview & Introduction to Data Feminism
	Read: DF Introduction, Combahee River Collective Reading
	HW: None
2	1/27: Power in Data
	Read: DF Ch. 1, Reading from Unmasking AI
	HW: Discussion Post 1 - Power structures in data science
3	2/3: Python Basics and Equitable Thinking
	Read: Reading from Weapons of Math Destruction
	HW: Finish In-class activity 1 - Application Screening Process
4	2/10: Challenging Data Neutrality
	Read: DF Ch. 2, Reading from Race After Technology
	HW: Discussion Post 2 - Challenging power structures
5	2/17: Algorithms of Oppression
	Read: Algorithms of Oppression
	HW: Finish in-class activity 2
6	2/24: Communicating Data
	Read: DF Ch. 3, Supplemental readings
	HW: Discussion Post 3 - Emotion and Embodiment
7	3/3: Dismantling Heirarchies
	Read: DF Ch. 4, Supplemental readings
	HW: Project Proposal
	3/10: Spring Break
8	3/17: Data Collection in Communities
	Read: DF Ch. 5, Reading from Braiding Sweetgrass
	HW: Discussion Post 4 - Pluralism
9	3/24: Visualizing Data
	Read: Reading from Unmasking AI
	HW: Finish in-class activity 3
10	3/31: Considering Context
	Read: DF Ch. 6, Supplemental readings
	HW: Discussion Post 5 - Context, Project Data Write-up
11	4/7: Ethics of AI
	Read: Reading from Artifcial Unintelligence
10	HW: Finish in-class activity 4
12	4/14: Who's Doing the Work?
	Read: DF Ch. 7, Reading from Invisible Women
10	HW: Discussion Post 6 - Labor
13	4/21: Data Feminism in Action
	Read: DF Conclusion, Reading from Counting Feminicide
	HW: Finish in-class activity 5
14	4/28: Final Project Presentations
	Read: None
	HW: Project Final Write-up and Presentation

NOTE: The above actual dates may be modified due to the requirements of the class. Also, the indicated dates may be moved backward or forward depending on class progress. Exact dates and instructions will be announced on course webpage .		