



**DATA &**

SOCI 136  
2021

**SOCIETY**

# SYLLABUS

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# ABOUT DATA & SOCIETY

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## WHAT IS THE COURSE ABOUT?

**D**ata is changing the world around us. Or, is it? In Data & Society, we will explore how digital data is produced, communicated, disassembled, reassembled, sold, and acted upon in the early twenty-first century. Our objective is to develop a critical yet informed account of why data matters in contemporary societies and how it might affect our collective futures.

The class requires students to read, participate, discuss and engage with current debates about 'data', 'algorithms', and 'artificial intelligence' as both extensions of past practices and biases and new, still congealing socio-technical domains. At its core, this course invites you to think about how algorithms, data, artificial intelligence, and so forth transform (or not) the world of work, our relation to others, our institutions of governance and employment, our sense of self, and what we can see and say about the world.



## WHAT TO EXPECT

**S**OCL 136 Data & Society is a fully remote course with both synchronous and asynchronous components. Every week, we will have **two synchronous meetings**. Those on Wednesday are intended to be spaces to **discuss readings**. Out of these, students are expected to formulate 2 questions for our Friday discussions. Discussions on Friday will be **integrative**, and will

involve connecting themes within readings to broader discussions on data, society, algorithms, artificial intelligence, etc.

Students are expected to read the required readings, engage in the learning activities online, attend the reading discussion sessions (**Wednesdays 11:00-11:50**), submit questions for our Friday conversations, and attend our Friday integrative discussions (**Fridays 11:00-11:50**). These discussions require you to submit 2 (two) written questions by Wednesday evening. These questions will be graded as participation.

All asynchronous study materials are provided as short videos that introduce key concepts and/or discussions that are necessary for understanding the readings and working on the assignments. In addition to these asynchronous materials, students are invited to attend our bi-weekly synchronous meetings as well as office hours. There are no lectures for SOCL 136, only online discussions that require prior work and preparation.

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## GRADING POLICIES

In this course, we will adopt a novel teaching approach that emphasizes individual learning and self-assessment over standardized and regimented forms of evaluation. Captured under the title of "ungrading", this approach means that we will eschew grades in favor of feedback and conversation that speaks to your interests and the knowledge you are discovering and producing with the projects you will develop in this course. Grades are helpful, of course, yet as various studies show, they also hinder learning, lead to less engagement, divert attention towards specific targets, and create forms of competition that are not necessary or helpful. To be clear: you will have full power to grade your performance throughout this course in conversation with your instructor and peers.

Although still mostly online, I want this move away from grades to foster collaboration, commitment, and experiential learning. Instead of focusing on reaching particular quantitative goals by guiding your attention towards (rather predictive) assignments, the adoption of an ungrading strategy invites you to engage more thoroughly with the course materials as a whole, to use the synchronous resources as moments for conversation and feedback, to engage with

colleagues, and to explore cases that allow you to "get your hands dirty" in exploring the real world.

Practically, this means that the course will involve a combination of peer-feedback and peer-assessment, the development of individual portfolios and group projects, student-generated rubrics, and various opportunities for self-assessment and monitoring. My role as your instructor is to guide you through the field and make sure that you do not bump into difficulties, rather than to tell you which path you must follow and grade you on your deviations. If you feel you have learned much about the tensions and possibilities created by data in society as we complete the course, you will have done your part and your grade will fully reflect that fact. The only formally graded component (10%) are the weekly questions you will have to submit every Wednesday evening.



## YOUR PORTFOLIO

### Weekly submissions:

Every week, you will have to submit items for your portfolio. Your final (un)grade will be determined by this element in the portfolio. In total, you should aim at having 10 points submitted per week. The point values of contributions are given below.

#### 10 points:

- 500 word essay/reflection on the readings and discussions
- 20 minute podcast
- 10 minute video

#### 5 points:

- 250 word essay/reflection
- Blog post
- 10 minute podcast
- Short tweetable video
- Visualization/infographic summarizing key aspects of the week's discussion

#### 2.5 points

- Twitter thread (min 5 tweets with relevant media and links)
- TikTok

In lieu of these, you may work on a single, large-scale research project which you may develop throughout the course. If you chose this option, you will have to submit 200 word progress reports every week to keep track of your development.

### Final submission:

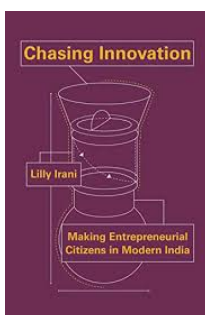
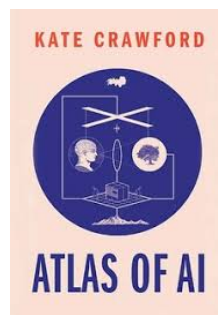
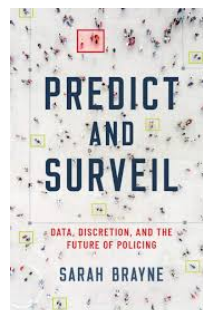
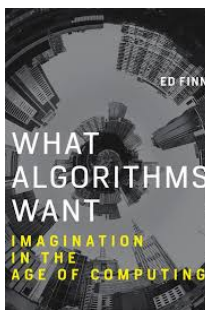
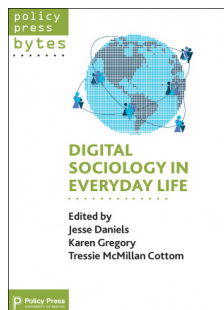
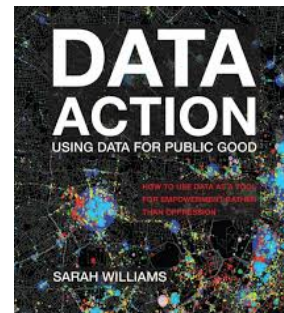
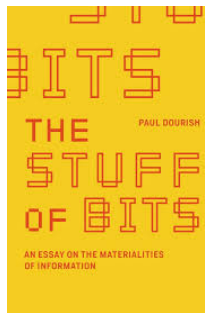
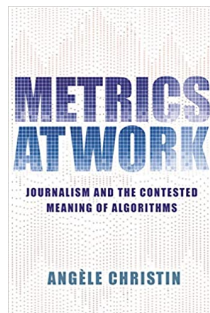
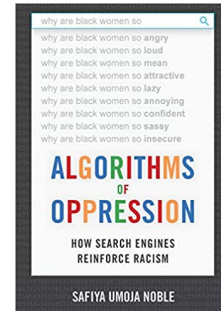
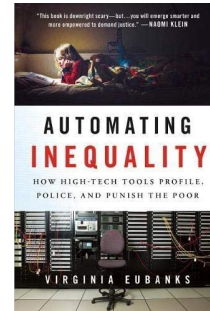
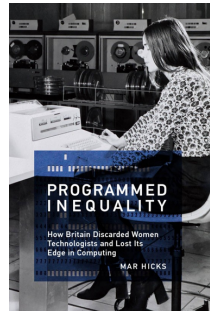
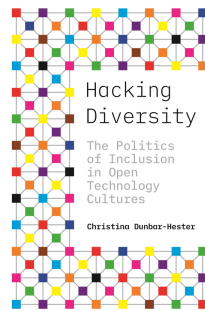
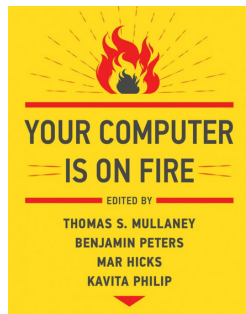
Along with your complete portfolio, you will have to write a brief integrative essay (2000 words) showing how themes connect within your submissions connect and addressing a substantive question/challenge/concern about data, artificial intelligence, machine learning, etc. This final essay can (and should) integrate a final "creative" piece (like a collage, video, twitter thread, TikTok, etc) on what you found relevant from the course. This will be due in final's week.

### Rubrics:

You will assess yourself and your colleagues. We will work on the rubrics that best fit your interests and your chosen strategy for the course.

# OUR LIBRARY

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In addition to the reading list, please consult the longer list of references on Canvas which contains groundbreaking contributions from scholars working on algorithms, data, artificial intelligence, machine learning, etc.



WEEK 1

## DISPLACING LABOR

**Ricardo** (1817) "On The Principles of Political Economy and Taxation - On Machinery"

**Keynes** (1930) "Economic Possibilities for Our Grandchildren"

Computer History Museum  
(virtual visit)

Gottesman Libraries - Warping the Future (virtual visit)

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WEEK 2

## THINKING MACHINES

**Pickering** (1995) "Cyborg history and the World War II regime"

**Nofre et al** (2014) "When Technology Became Language: The Origins of the Linguistic Conception of Computer Programming, 1950-1960"

**WIRED** (2018) "AI and the Future of Work"

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WEEK 3

## A WORLD WITHOUT WORKERS

**Dick** (1955) "Autofac"

**Wood and Stoltz** (2018)  
Scatterplot: thoroughly puzzled: what's so bad about the autofac?

**Davis** (2016) "What might replace the modern corporation: Uberization and the web page enterprise"

**Kellogg, Valentive, and Cristin** (2020) "Algorithms at Work: The New Contested Terrain of Control"

**Crawford and Joler** (2018)  
"Anatomy of an AI System"

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WEEK 4

## INSTITUTIONS

**Eubanks** (2018) "Automating Inequality"

**Fourcade and Healy** (2013)  
"Classification situations: Life-chances in the neoliberal era"

**McMillan Cottom** (2015) Credit Scores, Life Chances, and Algorithms

**Ghosh** (2017) "AI is the future of hiring, but it's far from immune to bias"

"Objective or Biased: On the questionable use of Artificial Intelligence for job applications"

**Black Mirror** "Nosedive" (Season 3 Episode 2)

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WEEK 5

## SENSES

**Seaver** (2019) "Captivating algorithms: Recommender systems as traps"

**Ticona and Wellmon** (2015)  
"Uneasy in Digital Zion"

**Miyarrka Media** (2020) "Phone and Spear: A Yuta Anthropology"

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WEEK 6

## DEFINING OUR RUBRICS - A WORKSHOP

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WEEK 7

## LANGUAGE

**Garg et al** (2018) "Word embeddings quantify 100 years of gender and ethnic stereotypes"

"Man is to Doctor as Woman is to Nurse: the Gender Bias of Word Embeddings"

"Gender bias in Google Translate"

**Paullada et al** (2020) "Data and its (dis)contents: A survey of dataset development and use in machine learning research"

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## WEEK 8

# VISION

**Schwemmer et al** (2020)  
"Diagnosing Gender Bias in Image  
Recognition Systems"

**Smits and Wevers** (2021) "The  
agency of computer vision models  
as optical instruments"

**Noble and Roberts** (2016)  
"Through Google-Colored  
Glass(es)"

**Black Mirror** "White Christmas"  
Season 2 Episode 4



## WEEK 9

# BODIES

**How Normal Am I**

**Buolamwini's** "Coded Bias"

**Stark** (2019) "Facial recognition is  
the plutonium of AI"

**Lohr** (2018) "Facial Recognition Is  
Accurate, if You're a White Guy"



part 3 - now what?

## WEEK 10

# ACCOUNTABILITY

**AI Now Institute** (2018)  
"Algorithmic Accountability Policy  
Toolkit"

**AI Now Institute** (2019)  
"Discriminating systems: race,  
gender and power in AI"

