

COMM 494LI – Social Life of Algorithms

Fall 2025

Credits: 3

Tuesday/Thursday 11:30 AM- 12:45 PM

Hasbrouck Laboratory, Room 230

Instructor: Burcu Baykurt

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Office hours:

Tuesday and Thursday 1 PM- 2 PM

Course Description: Algorithmic systems are at the center of today's digital world, and mediate communication processes in areas as diverse as social media, journalism, healthcare, cities and even governments. How do algorithmic systems capture, represent, and transmit information about everyday interactions? How do they shape, and are shaped by, social, cultural, and political life? What kind of new issues and concerns arise from their ubiquitous use? *Social Life of Algorithms* provides a critical introduction to algorithmic systems, and how they relate to issues of communication, power and inequalities in society.

Student Learning Objectives: By the end of the class, you should be able to (1) identify content, interactions, and habits that are shaped by algorithmic systems, (2) demonstrate and critically analyze what kind of values and goals inform the architecture of algorithmic systems, (3) explain different mechanisms through which algorithmic systems reproduce and reinforce inequalities, and (4) review these mechanisms to decipher the effects and consequences of existing algorithmic systems.

Course Materials:

There is no required textbook for this course. All course materials and other critical course content will be on Canvas.

Attendance Policy: Students are required to attend each class and participate in class discussions. If you miss five or more unexcused classes, I'll advise you to withdraw. If personal challenges arise for you over the course of the semester, please bring them to my attention; we can work together to discuss alternative means of participation.

Late/ Make-Up Work Policy: Since the assignments and deadlines are given on the first day of class, late assignments should be easy to avoid. If you do hand something in after the deadline it will be marked down at a rate of one grade per day (e.g. if an A paper is one day late it will receive an A-). If there is a prior agreement between us or there is an emergency that disrupts your ability to get the work finished, please let me know and I will of course be willing to figure out a workable deadline with you.

Note on technology use in class: The use of tablets, laptops, and smartphones during class is not permitted. Please bring paper and pen for note-taking and any in-class exercises. If you have a documented accommodation that requires technology use, let me know so we can make arrangements that support your learning.

Grade Weight and Course Requirements:

- Participation- 10%
 - You are expected to show up to class and participate in whatever we are doing. This means getting in on time and staying until class is over. We will also engage in small group work during class now and then. This will be an opportunity for those not comfortable speaking to the larger group to earn some participation points.
- Weekly readings & written responses- 15%
 - Each week will have required readings (academic articles and book chapters) as well as several supplementary materials such as press articles, blog posts, videos, etc., all of which will be available on the course Canvas site. At the start of each week, you are expected to: 1) complete the required readings and videos in time for classes and 2) write a short (~150-300 words) response to the readings, **by 5 pm on Monday.**
- Three In-Class Reading Checks - 30%
 - There will be three reading checks based on course readings and class discussions. These are in-class exams, and each will count 10% of your final grade.
- Final Project Part I- 20%
 - Throughout the course, you will conduct an “algorithmic audit” of social media platforms or apps you frequently use. The first part of this audit, which will also be your mid-term paper, is to design your audit and share the initial findings in a 5-page essay (1250-1500 words). The details of this assignment are on Canvas.
- Final Project Part II- 25%
 - The final paper will build on the feedback you receive on the previous draft (Part 1), report on the final results of your algorithmic audit, and present a strong argument based on your findings and course materials. The essay will not be longer than 10 pages (2500-3000 words). Further instructions are on Canvas.

Grade Scale:

Percentage Total	Grade
93-100%	A
90-92%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
73-76%	C
70-72%	C-

67-69%	D+
60-66%	D
59% or below	F
Incomplete	INC

Academic Honesty Policy:

Since the integrity of the academic enterprise of any institution of higher education requires honesty in scholarship and research, academic honesty is required of all students at the University of Massachusetts Amherst. Academic dishonesty is prohibited in all programs of the University. Academic dishonesty includes but is not limited to: cheating, fabrication, plagiarism, and facilitating dishonesty. Appropriate sanctions may be imposed on any student who has committed an act of academic dishonesty. Instructors should take reasonable steps to address academic misconduct. Any person who has reason to believe that a student has committed academic dishonesty should bring such information to the attention of the appropriate course instructor as soon as possible. Instances of academic dishonesty not related to a specific course should be brought to the attention of the appropriate department Head or Chair. Since students are expected to be familiar with this policy and the commonly accepted standards of academic integrity, ignorance of such standards is not normally sufficient evidence of lack of intent (http://www.umass.edu/dean_students/codeofconduct/acadhonesty/).

Accommodations Statement:

The University of Massachusetts Amherst is committed to providing an equal educational opportunity for all students. If you have a documented physical, psychological, or learning disability on file with Disability Services (DS), you may be eligible for reasonable academic accommodations to help you succeed in this course. If you have a documented disability that requires an accommodation, please notify me within the first two weeks of the semester so that we may make appropriate arrangements. For further information, please visit Disability Services (<https://www.umass.edu/disability/>)

Title IX Statement

In accordance with Title IX of the Education Amendments of 1972 that prohibits gender-based discrimination in educational settings that receive federal funds, the University of Massachusetts Amherst is committed to providing a safe learning environment for all students, free from all forms of discrimination, including sexual assault, sexual harassment, domestic violence, dating violence, stalking, and retaliation. This includes interactions in person or online through digital platforms and social media. Title IX also protects against discrimination on the basis of pregnancy, childbirth, false pregnancy, miscarriage, abortion, or related conditions, including recovery. There are resources here on campus to support you. A summary of the available Title IX resources (confidential and non-confidential) can be found at the following link: <https://www.umass.edu/titleix/resources>. You do not need to make a formal report to access them. If you need immediate support, you are not alone. Free and confidential support is available 24 hours a day / 7 days a week / 365 days a year at the SASA Hotline 413-545-0800.

For purposes of Title IX reporting, I am considered a “responsible employee” at UMass (<https://www.umass.edu/titleix/about>). **That means that if you tell me about a situation involving sexual assault, sexual harassment, domestic violence, dating violence, stalking, and retaliation, I must share that information with the Title IX Coordinator.** Making a report to the Title IX Coordinator is my legal obligation, meets the University's goal of providing members of our community with supportive resources they might need, and enables the University to obtain a more accurate picture of the extent of sexual violence in our community. **It will be completely up to you to determine if and how you want to work with the Title IX Coordinator's office. You will not be in trouble for reporting to me that you have experienced any of these situations, and the law prohibits retaliation against anyone who participates in a Title IX process.**

Course Schedule:

Class Number and Date	Questions/themes we will explore this session:	How to prepare for this session:	Quick reminders
1. Sept 2	#1 Get to know each other	Come excited; be open-minded & curious!	NO CLASS on SEPT 4
2. Sept 4			
3. Sept 9	#1 What do we talk about when we talk about algorithmic systems?	Read Kate Crawford and Vladan Joler. 2018. "Anatomy of an AI System."	Weekly response on Slack due Mon, Sept 8 at 5 pm
4. Sept 11	#2 Do digital technologies have politics? How do we know their politics? #2 What is the role of technologies in distributing morality in society, if at all?	Read Langdon Winner. 1980. "Do Artefacts have Politics?" Read Community Defense: Sarah T. Hamid on Abolishing Carceral Technologies	
5. Sept 16	#1 What is machine learning? How does it operate?	Read Cathy O'Neil. 2016. "What is a Model?"	Weekly response on Slack due Mon, Sept 15 at 5 pm
6. Sept 18	#2 How do machines think?	Read: Machine Learning: The DL on ML Read Jenna Burrell. 2016. "How the Machine 'Thinks': Understanding Opacity in Machine Learning Algorithms."	
7. Sept 23	#1 What are the social techniques behind algorithmic systems?	Read Mark Andrejevic. 2019. "Automating Surveillance."	Weekly response on Slack due Mon, Sept 22 at 5 pm

8.	Sept 25	#2 Can we design algorithmic systems without classification or surveillance?		First Reading Check on SEPT 25 th (in-class)
9.	Sept 30	#1 What is the political economic model of algorithmic systems?	Read Matthew Crain and Anthony Nadler. 2017. "Commercial Surveillance State."	Weekly response on Slack due Mon, Sept 29 at 5 pm
10.	Oct 2	#2 How do data companies and platform companies generate value? Are there any differences between the ways they create value online?	Read Marion Fourcade and Kieran Healy. 2017. "Seeing Like a Market." Read Shazeda Ahmed. 2019. "The Messy Truth About Social Credit."	

11.	Oct 7	#1 Who profits from our presence on platforms?	Read "'Having it All' on Social Media: Entrepreneurial Femininity and Self-Branding Among Fashion Bloggers."	Weekly response on Slack due Mon, Oct 6 at 5 pm
12.	Oct 9	#2 What do you think people gain from "branding" themselves online? #3 How has being on the internet changed the experience of being human?	Read Taina Bucher. 2012. "Want to be on the top? Algorithmic power and the threat of invisibility on Facebook."	
13.	Oct 14	#Paper workshop	Bring a draft of your paper, ready to discuss it with your peers.	"Final Project Part I" due OCT 16 by 5 pm on Canvas
14.	Oct 16			NO CLASS ON OCT 16 th

15.	Oct 21	#1 In what ways do algorithmic systems reproduce inequalities?	Read Ruha Benjamin. <i>Race After Technology</i> (excerpts)	Weekly response on Slack due Mon, Oct 20 at 5 pm
16.	Oct 23	#2 Are robots racist? Why / why not? #3 Can we reimagine the default settings of technology? Why / why not?	Watch "Are robots racist?" Read Safiya Noble "The Power of Algorithms"	
17.	Oct 28	#1 In what ways do digital technologies change politics?	Explore John Keegan. 2019. "Blue Feed, Red Feed: See Liberal Facebook and Conservative Facebook Side by Side."	Weekly response on Slack due Mon, Oct 27 at 5 pm
18.	Oct 30	#2 Are we more polarized as a society because of social media? #3 Do tech companies have a political responsibility in democracies? Why / why not?	Read Francesca Tripodi. 2019. "Devin Nunes and the Power of Keyword Signaling." Read All of YouTube, Not Just the Algorithm, is a Far-Right Propaganda Machine Read Daniel Kreiss and Shannon C. McGregor. 2018. "Technology Firms Shape Political Communication" Read Facebook Is Turning A Blind Eye To Global Political Manipulation, According To This Explosive Secret Memo	
19.	Nov 4		Reading Check #2 in class on November 6th	No Class on the 4 th (Election Day)
20.	Nov 6			

21.	Nov 11	#1 What are the limits of generative AI?	No Class on Nov 11 (Veterans' Day)	Weekly response on Slack due Mon, Nov 10 at 5 pm
22.	Nov 13	#2 How to review generative AI?	Read "Why A.I. Isn't Going to Make Art."	
23.	Nov 18	#1 What are the ways automated systems are changing work conditions?	Read "Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers."	Weekly response on Slack due Mon, Nov 17 at 5 pm
24.	Nov 20	#2 What is "ghost work"? How can we recognize it?	Explore The Uber Game Watch Algorithmic Cruelty and the Hidden Costs of Ghost Work Read Refugees help power machine learning advances at Microsoft, Facebook, and Amazon	

25.	Dec 2	#1 Can we regulate algorithmic systems? Would that be enough?	Read "How to Hold Algorithms Accountable." Read #MoreThanCode	Reading Check #3 on DEC 4th
26.	Dec 4	#2 What are the ways people organize and push back against the consequences of algorithmic systems?	Read Amazon employees hope to confront Jeff Bezos about law enforcement deals at an all-staff meeting Read Americans Need a Bill of Rights for an AI-Powered World	
27.	Dec 9	#1 We will workshop your final papers.	Bring a draft of your final paper, ready to discuss it with your peers.	Final paper due DEC 11 th by 5 pm on Canvas