

CUSP-GX 8002: Understanding the Politics of Urban Artifacts

Summer 2021

Mondays 5:30pm - 8:00pm

CUSP, 370 Jay street, Room 1201

New York University – Center for Urban Science and Progress

Instructor:

Dr. Eric Corbett, eric.corbett@nyu.edu

Office Hours: Mondays 1-3pm

Course Description:

In this course, we will study the political dimensions of technology in urban environments. You will learn “to see” the politics of technological artifacts by learning several analytical perspectives from Science and Technology Studies, Human Computer-Interaction, and Design Theory. We will use these perspectives to engage the politics within the design and use of a range of digital technologies: smart city infrastructures, automated decision-making systems, social media platforms, etc. By learning to see the political dimensions of these technologies, students will be better able to create positive social impact in urban environments.

Course Prerequisites:

There are no formal prerequisites for this course.

Course Structure:

We will meet once a week on Monday evenings to discuss the weekly readings. Students will be expected to come to class prepared by completing required readings, critically engage in class discussion, and complete weekly reading reflections.

Grading:

- Class Participation – 30
- Reading Reflections – 50
- Discussion Posts – 10
- Final Reflection – 10

Class Participation:

Class attendance and participation is mandatory. Participation in discussion is imperative because it allows you to explore content and design process collaboratively. Participation in class also challenges you to continuously question, refine, and articulate your own ideas and interpretations. Missing more than 2 classes will result in a loss of 1 letter grade. To earn full points for participation you must actively engage, expand, and lead. In each class you should be doing the following:

- Pose questions or respond to other students’ questions.
- Provide examples and counter-examples.
- Perform scholarly, constructive criticism of the assigned reading.

- Propose additional literature, websites or resources.
- Share current news items and media reports that are relevant to class topics.

Reading Reflections:

You will write reflections on the readings throughout the semester. Each reflection will develop an argument about the readings – you may choose to focus on one article or connect several (including from previous weeks) – but the key here is that you are developing an argument about the topic and not simply reporting on the content. Reflections should be at least 1500-words and can engage with the following questions:

1. What ideas presented in these readings did you find the most helpful for building a foundation for discussing the political elements of urban technology? Why?
2. What ideas did you find the most challenging or provocative? Why?
3. Can you map any of the ideas from the readings into your own life, work, or research experiences?
4. What is the role of data in the issue discussed?
5. What is the discipline, analytical, or theoretical frame of the paper?

Though this is a personal reflection, please observe formal writing practices: use evidence from the texts as you refer back, cite page numbers when referring to direct quotes in the readings, re-read your work before submitting, and edit for grammar and clarity. Write up your reflection and upload it to the designated assignment section on the course page. This assignment will be graded for organization, clarity; as well as demonstrated scholarly engagement with, and comprehension of, the course material.

Discussion Posts:

Make at least one twitter style post and reply to a MINIMUM of two (2) of your classmates' post weekly:

- Posting questions or responding to other students' forum postings
- Providing examples and counter-examples
- Performing scholarly, constructive criticism of the assigned reading
- Proposing additional literature, websites or resources
- Sharing current news items and media reports that are relevant to class topics

Final Reflection:

Reflect on your experience in the class in a 3000 word essay.

Course Schedule:

5/24 **Course Introduction**

5/31 **No Class Memorial Day**

6/7 **Analytical Foundations 1: Philosophy of Technology**

Readings:

- Winner, L. (1980). Do artifacts have politics? *Daedalus*, 121-136.

- The Democratic City: The Social Determinants of Technology's Impacts - Chapter 3 in Green, B. (2019). *The smart enough city: putting technology in its place to reclaim our urban future*. MIT Press.

6/14 **Politics of Automated Decision-Making Systems**

Readings:

- Richardson, Rashida and Kate Crawford. 2019. "Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice." *New York University Law Review Online*, Forthcoming.
- Automating Eligibility in the Heartland - Chapter 3 in Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press.

6/21 **Analytical Foundations 2: Critical Data Studies**

Readings:

- <https://www.societyandspace.org/articles/what-does-a-critical-data-studies-look-like-and-why-do-we-care>
- Kitchin, R., & Lauriault, T. (2014). Towards critical data studies: Charting and unpacking data assemblages and their work.

6/28 **Politics of Data**

Readings:

- Kitchin, R., Lauriault, T. P., & McArdle, G. (2015). Knowing and governing cities through urban indicators, city benchmarking and real-time dashboards. *Regional Studies, Regional Science*, 2(1), 6-28.
- Can Snow-Clearing be Sexist - Chapter 1 in Perez, C. C. (2019). *Invisible women: Exposing data bias in a world designed for men*. Random House.

7/5 **NO CLASS**

7/12 **Democracy and Algorithms**

Readings:

- Rahwan, I. (2018). Society-in-the-loop: programming the algorithmic social contract. *Ethics and Information Technology*, 20(1), 5-14.
- Gregory, J. (2003). Scandinavian approaches to participatory design. *International Journal of Engineering Education*, 19(1), 62-74.

7/19 **Participatory Algorithm Development #1**

Readings:

- Lee, M. K., Kusbit, D., Kahng, A., Kim, J. T., Yuan, X., Chan, A., ... & Procaccia, A. D. (2019). WeBuildAI: Participatory framework for algorithmic governance. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1-35.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.

7/26 **Participatory Algorithm Development #2**

Readings:

- Cheng, H. F., Stapleton, L., Wang, R., Bullock, P., Chouldechova, A., Wu, Z. S. S., & Zhu, H. (2021, May). Soliciting Stakeholders' Fairness Notions in Child Maltreatment Predictive Systems. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-17).

8/2 **Participatory Algorithm Development #3**

Readings:

- Brown, A., Chouldechova, A., Putnam-Hornstein, E., Tobin, A., & Vaithianathan, R. (2019, May). Toward algorithmic accountability in public services: A qualitative study of affected community perspectives on algorithmic decision-making in child welfare services. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (pp. 1-12).

8/9 **Participatory Algorithm Development #4**

Readings:

- Holten Møller, N., Shklovski, I., & Hildebrandt, T. T. (2020, October). Shifting concepts of value: Designing algorithmic decision-support systems for public services. In Proceedings of the 11th Nordic Conference on Human-Computer Interaction: Shaping Experiences, Shaping Society (pp. 1-12).

8/16 **Participatory Algorithm Development #5**

Readings:

- Zhu, H., Yu, B., Halfaker, A., & Terveen, L. (2018). Value-sensitive algorithm design: Method, case study, and lessons. Proceedings of the ACM on Human-Computer Interaction, 2(CSCW), 1-23.

8/23 **Last Day of Class: Final Reflections**

Statement of Academic Integrity:

NYU-CUSP values both open inquiry and academic integrity. Full and Part-Time graduate programs and advanced certificate programs are expected to follow standards of excellence set forth by New York University. Such standards include but are not limited to: respect, honesty and responsibility. The program has zero tolerance for violations to academic integrity. Such violations are deemed unacceptable at NYU and CUSP. Instances of academic misconduct include but are not limited to:

- Plagiarism
- Cheating
- Submitting your own work towards requirements in more than one course without
 - Prior documented approval from instructor and
 - Proper citation
- Forgery of academic documents with the intent to defraud
- Deliberate destruction, theft, or unauthorized used of laboratory data, research materials, computer resources, or University property
- Disruption of an academic event (lecture, laboratory, seminar, session) and interference with access to classroom, laboratories, or academic offices or programs

Students are expected to familiarize themselves with the University's policy on academic integrity and CUSP's policies on plagiarism as they will be expected to adhere to such policies at all times – as a student and an alumni of New York University.

