Course Description & Objectives

Smart Cities are now a buzzword. While there is no consistent definition of what these cities are, these smart cities are urban spaces blanketed with ubiquitous and heterogeneous sensor networks that are constantly monitoring the vitality of the city. Such continuous surveillance raises deep political and ethical questions. It raises issues about institutional reconfiguration to manage and plan for these cities.

In this seminar, we will examine urban analytics platforms and interrogate them from variety of lenses, including privacy, equity and probity. We will examine the need and the structure of new governance mechanisms, delineations of rights, novel market transactions and social interactions. The main objective of the course is to take a critical look at urban data infrastructure and its discontents. This includes understanding the design of data collection mechanisms, institutional dimensions of data production (e.g. administrative vs crowdsourced) and self-reinforcing feedbacks of analysis and production of data.

This is a companion course to PLAN 672: Urban Data Analytics, which deals with different analytic techniques. Students are encouraged to take them both.

The course is scheduled as Hybrid course. Because of the discussion nature of the course, I would like to conduct in-person classes as far as practicable. When it becomes infeasible, the class will be conducted on Zoom at http://go.unc.edu/plan673-fall20

Prerequisites & Preparation

This course does not require any prior preparation. However, it moves quickly and has voluminous readings. Prior exposure to an applied theory course is useful.

The course requires vigorous in-class participation, ability to digest and interpret large amount of literature and extensive out-of-class research.

Course Policies

The following set of course policies is not meant as an exhaustive list. If in doubt, ask for permission and clarification.
Grading

I will follow Specification Grading for this course. The grading is based on the following requirements.

- Seminar participation (weekly annotations and in-class participation)
- Seminar lead/presentation
- Case study presentation
- In-depth end-of-term paper

All of the above, except the term paper is graded on a Satisfactory (S)/Unsatisfactory(U) scale. Satisfactory grade is equivalent to a B+ letter grade. The focus of these assignments is on learning outcomes such as mastery of the material, engaging your peers and making innovative connections in the material.

You will need to receive a Satisfactory grade in 8 out of the 13 weekly participation in addition to the term paper to receive L/C. Fewer than these will result in a failing grade. Satisfactory grade in weekly participation is predicated on thoughtful contribution to class, annotations on Hypothes.is and bringing in material from your experience, knowledge and other classes to illuminate the connections.

To receive a P/B, you should receive 10 S in the weekly participation in addition to satisfactory grade in all the major assignments (leads, term paper, presentation etc.).

The term paper is about critical analysis of a topic of your choice as it relates to urban analytics, broadly defined. The expectation is that you will produce a publishable quality article to receive a H/A grade, if you already satisfy the requirements for a P/B.

Attendance

I will make every effort to accommodate ad hoc physical and mental health issues during this semester. You do not need seek permission to miss classes. You are free to make such judgements for your and your colleagues’ benefit. However, please remember that in a seminar, your attendance and participation is essential. If you are unable to participate in person, but could participate online, you will need to let me know ahead of time by Tuesday noon so that we could make arrangements. If continued and recurring absences are affecting the progress in the course, please make an appointment with me to discuss this or seek resources on campus.

In case, I fall sick, the course is structured so that you can learn together. I will make alternative arrangements in such instances. We will cross that bridge, when we get there.

Community Standards

This fall semester, while we are in the midst of a global pandemic, all enrolled students are required to wear a mask covering your mouth and nose at all times in the classroom. Individuals with a disability or health condition that prevents them from safely wearing a face mask must seek alternative accommodations through the Accessibility Resources and Service. For additional information, see Carolina Together.

Assigned Readings

Much of the material covered in the class will be from various books that are assigned for the particular week. I don’t necessarily require you buy them, but you can procure them as necessary including using communal strategies.
As you can see from the schedule, readings from the week are voluminous. You will have to figure out ways to read and digest material. After all, one of the recurring themes in the seminar is “Big Data”.

When articles are assigned, links are usually provided on Sakai.

We will use hypothes.is to annotate a selected set of readings for the week. The selected readings are marked explicitly on Sakai. These annotations are used by seminar lead to present and discuss the material. These readings are mandatory for everyone and form the bulk of the discussion in the class. The annotations are due Monday 5 PM.

For other readings assigned for the week, you will split the readings (chapters, articles) amongst yourself. Each of the student will then make a brief presentation (~5 min) of the main points of their assigned pieces.

Class Format

In general, every class is broken up into three parts.

In the first part, the one student will lead the seminar touching upon the salient points of the required readings for the week along with summarising/challenging/expanding on annotations made by his/her colleagues. (~1 hr)

In the second part, all students will summarise and discuss the optional readings (~30 min)

In the third part of the class, another student will lead the seminar particularly focusing on a case study that illuminates, and builds upon other readings until that week (~45 min).

We will take short breaks as necessary.

Case Study Presentation

Each of you is expected to lead the seminar using concrete case studies at least one of the topics assigned. The case studies can be drawn from the set of the readings assigned for the class, ethnographies of places or from non-academic reports. There is a non-exhaustive list at the end of the syllabus that might provide some starting points. You are welcome, but not required to pick from this list. In either case, you should treat the articles as starting points for more in-depth research on the case rather than as definitive word on the case.

If you prefer to discuss a different topic not listed in the schedule, please see me ahead of time so that we can make space.

End of Term Paper

A well thought out, diligently researched, properly supported paper on the issues of data and society as they apply to urban environment and its management is required at the end of the semester. At appropriate times, students will informally present progress on this paper in class and solicit feedback. Final presentations on this paper are scheduled on the last day of the class.

E-mail

Sakai messaging system is the preferred way to communicate with me and your colleagues.
Appointments

I am available during my office hours. You can also schedule a time on my calendar that is mutually convenient, to discuss any aspect of the course. http://www.go.unc.edu/kaza
Schedule (Tentative)

Aug 12 (Wed): Introduction


The Politics of Promise & Institutional Reconfiguration

Aug 19 (Wed): Smart Cities


Aug 26 (Wed): Pursuit of Efficiency & Neoliberal Paradigm


Sep 2 (Wed): The Fall of the Firm and the Rise of Platforms


Sep 9 (Wed): Technological Anxiety & Creative Destruction


The Politics of Data Generation & Acquisition
Sep 16 (Wed): What data is collected? Why?


Sep 23 (Wed): Multiple Epistemologies


Sep 30 (Wed): Consent & Ownership


The Politics of Data Analysis
Oct 7 (Wed): Coding & Decoding

Oct 14 (Wed): Summarisation, Analysis & (Mis)Representation of Data


Oct 21 (Wed): Ciritcal Cartography


Oct 28 (Wed): Predictive Blackboxes & Algorithmic Bias


The Politics of Control
Nov 4 (Wed): Biopolitics


Nov 11 (Wed): Surveillance

Potential Case Studies

The following are some ideas that provide starting points for exploration into cases. They are not exhaustive, nor are they meant to be representative of the cases. The collection itself is also not representative, but illustrative.

- Data Commons & Waze
- Pigeon Air Patrol
- Chicago Array of Things podcast
- Mayors’ Response to Uber, Airbnb
- Transportation Network Companies in Asia
- Pew Shared Economy & Equity
- Data Privacy in Seattle
- Civic Tech clusters
- Climate Data Partnerships
- Civic Hacking
- Brooklyn City Observatory
- Data security and IOT
- Access to healthcare
- Global South