

Course Syllabus

[Jump to Today](#)

Data Mining the City: Session B

Violet Whitney Wednesday 7p-9p 114 Avery

From Yelp reviews directing people to preferred restaurants to Airbnb reprogramming homes into vacation rentals, the invisible code that powers a city's use may have more drastic influence than any physical invention in the last century. This course will focus on encoding spatial analytical processes that enable designers to speculate creatively about the urban environment. Students will develop a critical understanding of the social, economic, and political dynamics caused by these technologies as well as technical training in simulation, sorting and visualization techniques. We will hypothesize about the relationships of tools and space, as well as develop models and simulations so designers can gain a foothold in the changing landscape of the digital city.

Material:

The main technical language of this course will be Python in Processing. Session A is required for students to enroll in Session B unless students have outstanding Python and Processing experience. This course is exceptionally difficult and time intensive. Students are expected to submit weekly coursework, attend classes and submit a final comprehensive project. Session B will be structured around in class workshops and desk crits leading up to a final technical paper.

- Methods, tools and data
- Experimentation with code-driven workflows
- Critical understanding of simulation/data concepts (e.g. generalization, bias)
- How the underlying framework of a system determines its behavior over space and time.

Project:

For Session B, you will formulate your project from Session A as a technical paper for potential submission to a conference. Projects will be developed in pairs of 2 or 3.

Schedule:

Wk 8 - **Workshop** Oct 24

Wk 9 - **Paper Draft Presentations** Oct 31

Wk 10 - **Workshop** Nov 7

Wk 11 - **FINAL REVIEW** Nov 14

Wk 12 - NO CLASS - (Thanksgiving) Nov 21

Wk 13 - **Last Workshop** Nov 28

Final Review Week Dec 3 - Dec 12

Wk 14 - **Paper Submissions Due** Dec 12