Climate Change and Cities Syllabus<sup>1</sup>

Spring 2018 | 11 am – 1 pm, Friday | 200 S Fayerweather

Instructor: Michael Kimmelman (<a href="mkimmelman@nytimes.com">mkimmelman@nytimes.com</a>; meet by appointment)

TA: Alexis Schulman (<u>as5595@columbia.edu</u>; office hours by appointment)

Course Description

Climate change and unprecedented urbanization remain two of the most potent forces reshaping life today. Here in the United States, those forces have contributed to the gaping, dangerous divide the last presidential election revealed between cities and the countryside, opportunity and decline, diversity and isolationism. Worldwide, climate change has contributed to an age of unprecedented migration, the consequence of political, economic and environmental forces that have displaced some 65 million people. These people are among the many factors driving the rapid growth of cities, especially coastal cities, and the decline of rural areas. It ought to go without saying that a healthy planet demands healthy, prosperous cities, which protect their residents and provide them with services and myriad jobs, while planning for the effects of climate change. But these goals are not easily reconciled. The focus of this seminar will be to unpack different ways climate change acts in different cities around the world, exploring strategies to counter, and ideally, even capitalize on, the consequences. What afflicts Mexico City is not the same as what threatens Guangzhou or Houston. Rotterdam may have lessons to teach but so do Jakarta and New York. There's lot of talk these days about what mayors do and how cities know best, but cities aren't islands and nature pays no heed to political borders. This means we need to look at cities from varied perspectives, question what have become standard "solutions," think of plans that address not only climate resilience but also social and economic resilience.

I am a journalist and critic, not an architect or climate scientist. Journalism demands a wider-angle view. Students will be encouraged to think through the climate change era in holistic ways. This means considering various cities through the eyes of politicians, community leaders, historians as well as environmentalists, activists, planners and architects. In whose interests are changes made, or not? How do you separate foreground issues from background ones?

We will meet with a range of guests who will present different approaches. We will adopt roles to play out scenarios. We will break into teams and present semester-ending projects that should make arguments for specific projects in specific cities. This is *not* a design studio. It is a seminar. The class will be graded on attendance and participation (40%), a midterm paper (25%) and the final project (35%). We will take a trip or maybe two

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<sup>&</sup>lt;sup>1</sup> Syllabus is subject to change and may be updated throughout the semester

around town to see first-hand what we're reading and talking about. I hope students will come away with strategies for the future and a sense of how to tell the story that they believe will make a case for action.

### Readings

There is no textbook for this course. There will be a weekly series of readings posted on Courseworks either as PDFs or as links to external content. The readings (as well as any required films or podcasts) are frontloaded so we can, early on, build a foundation for thinking through these issues together. However, the material is mostly journalistic and not too onerous— so do not be daunted! You are, of course, encouraged to read more widely and suggest your own readings to the class. *Please be sure to watch the following films and listen to the podcast below by Week 3:* 

- <u>Disruption</u> / Film (2014)
- Global Warming, What You Need to Know / Film (2017)
- Hot in My Backyard / This American Life Podcast (2013)

### **Assignments and Grading**

Class Participation (40%)

Participation in weekly discussions will be essential to the success of this course. I expect students will be present in class and be actively engaged. Unexcused absences will result in lower participation grades. Over the course of the semester, each student will also make at least one brief (5 min) oral presentation in response to the reading questions, which will be circulated a week before class. Presenters will be selected at random at the start of each class. This presentation will account for one quarter of your total participation grade.

Midterm Project (25%)

For this paper you will find, analyze, and write about a particular city's climate action plan, focusing on a particular policy or intervention that the city proposes. Describe the policy/intervention; provide your own critique and/or explain the results or lack of them; finally, explain what we can learn from this case study. You may want to explore this from one of the perspectives you have gotten so far in the class, which will become clearer by the time you get to this assignment. The paper should be 10- 15, double spaced, pages.

Due date: March 9, 2018.

Final Group Project (35%)

Your final group project, which will include a group paper of approximately 20-25 pages, will make the case for climate action. The project should propose some physical (buildable) solutions. It can focus on one place or on several places that require different approaches to the same problem, differences based on economic or environmental or political or social contrasts. For example, contrasting a city in a low-income country vs. a city in a high- income country; you could then look at, say, how to address the increasing frequency of storm surges. You

could also choose a different kind of contrast between two cities: a city in a democratic country vs. one in an autocratic country. And so on. But zeroing in on one place and one idea is fine. In any case, the project must involve more than just a hypothetical design for something. It should put the design in the context of the real political and social and other forces that can obstruct or diminish or derail the project. After the midterm break, we will begin forming groups and choosing the problems you'll focus on.

Due date: TBD

#### Schedule

### Week 1| Background

1/18/2018

This class will be an introduction to the course and to me. In turn, I'd like to hear from each of you: why you're here and what you hope to get out of the course.

No discussion questions this week.

## Week 2 New York: Superstorms and Flooding

1/26/2018

Site visit: Kai-Uwe Bergmann of Bjarke Ingels Group

We will meet with one of the principal architects from BIG at BIG's offices downtown and from there visit the site of BIG's project to redo and reinforce the Lower Manhattan riverfront, starting on the Lower East Side. The project, called the "Big U," won the Rebuild By Design competition launched by the US Department of Housing Urban Development (and partners) after Superstorm Sandy battered the eastern seaboard in 2012. The NYT and New Yorker pieces assigned this week provide additional examples of efforts to deal with coastal flooding and storm surges, and explore the question of how to build support for such efforts.

### Readings Due:

- In preparation for our site visit, please familiarize yourself with HUD's Rebuild By Design competition. Skim the report about "lessons learned." Next, take a look at the BIG U winning project design, and check out this Guardian and this Curbed article on the BIG U, aka the "Dry Line."
- Kimmelman, Michael. "Going With the Flow." The New York Times. (February 13, 2013).
- The reading is light this week, and there are no discussion questions, so please use this extra time to watch the required films and listen to the podcast, if you have not yet already.

No discussion questions this week.

Week 3| Environmental Justice and Social Resilience

2/2/2018

Visitor: Eric Klinenberg, Professor of Sociology, Public Policy, and Media, Culture, and Communications at New York University

# Readings Due:

- Eric Klinenberg. 2002. *Heat Wave: A Social Autopsy of Disaster in Chicago*. Chicago: University of Chicago Press. (Read: introduction, Chapter 2, & Conclusion)
- Klinenberg, Eric. "Adaptation." The New Yorker. (December 19, 2016).
- Klinenberg, Eric. 2015. "Is New York Ready for Another Sandy?" The New Yorker. (October 27, 2015).

By this week, you should also have watched/listen to:

- <u>Disruption</u> / Film (2014)
- Global Warming, What You Need to Know / Film (2017)
- Hot in My Backyard / This American Life Podcast (2013)

# Week 4 Miami and Houston: Risky Building

2/9/2018

Visitor: Alan Rubin, Principal with Blank Rome Government Relations

### Readings Due:

- Kolbert, Elizabeth. "The Siege of Miami." The New Yorker: December 21 & 28 Issue, 2015.
- Kimmelman, Michael. "Lesson from Hurricane Harvey: Houston's Struggle is American's Tale." New York Times. (Nov 11, 2017.)
- Check out ProPublica's <u>collaboration</u> with the Texas Tribune on Houston flooding. Spend most of your time with the interactive Hell and High Water and read about a potential <u>coastal barrier</u>.
- For the first part of class, we will discuss lawns and drought, and think about why it is so hard to change preferences— even when they have substantial social costs. Listen to this <u>podcast</u>. Skim the following articles:
  - Cvijanovic et al. "<u>Future loss of Arctic sea-ice cover could drive a substantial decrease in California's rainfall.</u>" *Nature.* (2017)
  - o Carrol, Rory. "Sod It." The Guardian. (Nov 2, 2017)
  - o CA state policy on lawns.

## Week 5| National Policy: Climate Deniers vs. National Security

2/16/2018

(Alexis Leads Class)

#### Readings Due:

• Hsiang, Solomon et al. "Quantifying the Influence of Climate on Human Conflict." Science. (2013) Dense reading; at the very least skim.

- Parenti, Christopher. "Tropic of Chaos: Climate Change and the New Geography of Violence." (Read first chapter)
- Podesta, John. "Battling Climate Change in the Time of Trump." Center for American Progress. (March 21, 2017)
- Goodell, Jeff. "<u>The Pentagon and Climate Change: How Deniers Put National Security at Risk.</u>" *Rolling Stone*.
   (Feb 12, 2015).
- And these short updates from *The Washington Post* and *The Hill*:
  - o "Final Defense Policy Bill Mandates Pentagon Climate Change Study." (Nov 9,2017)
  - "The Pentagon Takes Climate Change Very Seriously. This Government Watchdog Says that Isn't Enough" (Dec 13, 2017)
  - o "Pentagon's New Defense Strategy Won't Mention Climate Change" (Dec, 21 2017)

### Week 6| Midterm Review (Optional)

2/23/2018

Alexis will discuss the midterm paper and the upcoming role playing session. She will assign roles for the session, help you prepare for it, and explain its goals. If you cannot attend you will be assigned a role via email.

No discussion questions this week.

### Week 7| Roleplay Negotiation #1: Urban Heat Island

3/2/2018

### Readings Due:

Rumore, Danya, Susskind, Lawrence, and Schenk, Todd. "Role-play Simulation for Climate Change.
 Adaptation Education, and Engagement." Nature Climate Change. (2017)

#### **Week 8 Climate Change and Communications**

3/9/2018

Visitor: Seth Solomonow, Media and Transportation Communication, Bloomberg Associates

### Readings Due:

- "How to Take Back Public Discourse." In: George Lakoff (2014) Don't Think of An Elephant.
- Matthew Shaer. "Not Quite Copenhagen." NY Magazine. (March 20, 2011.)
- Janette Sadik-Khan. "The Bike Wars Are over, and the Bikes Won." NY Magazine. (March 8, 2016.)
- "The Case Against the Media." NY Magazine. (June 25, 2016.)
  - \*\*MIDTERM PAPER DUE IN CLASS\*\*

#### **SPRING BREAK**

### Week 9 Rotterdam, Netherlands

3/23/2018

Visitor: Henk Ovink, Special Envoy for International Water Affairs, NL

### Readings Due:

- Kimmelman, Michael, "The Dutch Have Solutions to Rising Seas," New York Times. (June 15, 2017.)
- Shorto, Russell 2014. "How to Think Like the Dutch in a Post-Sandy World." New York Times Magazine. (April 9, 2014.)
- Bakker (SOMO), Kishimoto (TNI), Nooy (Both ENDS). "Social Justice At Bay." (April 2017) Read all of pp. 23-45, but focus on the critiques outlined in Chapter 5.

#### Week 10 Jakarta, Indonesia

3/31/2018

#### Readings Due:

- Bakker (SOMO), Kishimoto (TNI), Nooy (Both ENDS). "Social Justice At Bay." (April 2017) Read remaining chapters: 1,2,6,7.
- Kimmelman, Michael. "<u>Jakarta is Sinking So Fast, It Could End Up Under Water.</u>" *New York Times.* (Dec 21, 2018.)
- Price, Larry C. and Price, Debbie M. "<u>The Death of the Citarum River: Indonesia's Most Toxic Waterway.</u>"
   Pulitzer Center. (March 13, 2018).
- Wallace-Wells, Benjamin. "The Uninhabitable Earth." NY Magazine. (July 9, 2017)

#### Week 11 Mexico City

4/6/2018

Visitor: Tatiana Bilbao, Architect, Tatiana Bilbao Estudio

### Readings Due:

- Kimmelman, Michael. "Mexico City, Parched and Sinking." New York Times. (Feb 17, 2017).
- Look through <u>Tatiana Bilbao Studio</u>
- Coverage of Bilbao's work on low-cost housing to address Mexico's housing shortage, shown at the Chicago Architectural Biennial:
  - o Dezeen
  - o New City

#### Week 12 Shenzhen, Guangzhou, and the Pearl River Delta, China

4/13/2018

Visitor: Yunjing Li, PhD student in GSAPP

# Readings Due:

- Kimmelman, Michael, "Rising Waters Threaten China's Rising Cities." New York Times. (April 7, 2017)
- TBA

Week 13 Role Playing and Negotiation Game #2: Flooding

\*\*Week 14 No Class\*\*

4/20/2018

We will hold our final meeting during exams week. You will present your final projects.