



PST 410.5: SMART CITIES - ONLINE FALL 2020

Instructor:	Prof. Austin Zwick, alzwick@maxwell.syr.edu
Time and Location:	Lecture – Tuesday 12:30 12:30pm - 1:50pm, Zoom Discussion Groups – Thursday 12:30pm - 1:50pm, Zoom
Teaching Assistants:	Alyssa Horwitz, achorwit@syr.edu (Head TA) Alexandra Pastor, aepastor@syr.edu Allison Small, asmall02@syr.edu Lujane Juburi, ljuburi@syr.edu

COURSE DESCRIPTION

As the world has rapidly urbanized over the past few decades, demand for scarce resources in city centers has become incredibly intense. Public administrators have looked to telecommunications, automation, digitalization – under the moniker of “Smart Cities” – to help address a wide variety of policy goals, from online integration of municipal social services to data-driven traffic optimization to e-posting of key performance indicators. New technologies, such as blockchain technology and autonomous vehicles, have the potential to be transformative. But how do these ideas fit into our conceptual understanding and the broader governance of the city? This course begins with an introduction to urban policy & planning, and concludes with a group project on the Bloomberg Philanthropies Innovation Teams Program.

The entire course for Fall 2020 is online. Tuesdays will be synchronous lectures on Zoom. Thursday will be a practical / small group discussion hosted by a TA, which you will sign up for on the first day of class. Discussion groups will be approximately 15 students. Attendance is required and extra credit will be awarded for substantial participation.

LEARNING OBJECTIVES

1. Describe how public policy is implemented.
2. Collect information in a variety of ways.
3. Demonstrate effective communication skills in both verbal and written forms.
4. Model effective teamwork on projects.
5. Explain the causes and policies of societal problems in at least one geographic area

TEXTBOOKS

The Smart Enough City: Putting Technology in Its Place to Reclaim Our Urban Future by Ben Green – available free online at <https://smartenoughcity.mitpress.mit.edu/>

EVALUATION

Weight	Evaluation	Due Date
12%	Weekly Reading Quiz Questions	Every Thursday
28%	Reflection Papers (4 x 7%)	September 17, October 8, October 22, November 19
22%	Group Project	December 3
28%	Take-Home Final Exam	December 10
10%	Attendance and Participation	Ongoing

Weekly Reading Assignments (12%)

By Tuesday, you must answer four quiz questions on the assigned readings that week on blackboard. There will be 48 quiz questions in total, with each question worth $\frac{1}{4}$ point towards your final grade.

Reflection Papers (4 X 7%)

At the end of each of the four modules, you will write a one-page, single-spaced reflection paper. **DO NOT GO OVER 1 PAGE** (except for references). The goal of these is, by answering a writing prompt, to take a single concept from recent class material and to make it personal. These papers should focus on a central thesis and support it with: (1) the material taught in class over the previous weeks, (2) one reference to the corresponding book chapter AND at least two syllabus readings from those weeks, (3) references to outside material, and (4) your thoughts and opinions on the material (e.g. how does it apply to your life? Or your career? etc.). **Do NOT list notes from the class material and readings, only include what applies to your thesis.** Organization, grammar, and clarity will be considered during marking.

Group Project (22%)

What makes a city smart? This report and presentation will elucidate core concepts through research on a case study city. Each person will choose a group in the second week of class. Each group choose a select city from the given list. You will work on this project throughout the duration of the semester with guidance by your TA. Guidelines on the report will be provided the second week of classes. The group presentation will be presented in your section selling us on why your city is the best Smart City.

Take-Home Final Exam (28%)

The Final Exam will be a series of 4 essay questions. An expected answer for each question should be no longer than 2 pages single-spaced (except for references). The prompts will follow the same guidelines as the reflection papers.

Attendance and Participation (10%): You will receive credit for attendance based on the percent of classes you attend. Attendance may be excused in extraordinary circumstances. Please email Austin (alzwick@syr.edu) AND your TA if you know you will miss class. At the instructor's or TA's discretion, extra points may be granted for significant class participation or subtracted for inappropriate behavior.

OVERVIEW OF TOPICS AND ASSIGNMENTS

Week	Dates	Topic	Thursday Deadlines
Module 1: Urban Planning, Innovation, and Economic Growth			
1	Aug. 24 & Aug. 26	Introduction to Smart Cities	
2	Sept. 1 & Sept. 3	Urban History and Urban Form	
3	Sept. 8 & Sept. 10	Modernist Planning and its Discontents	
4	Sept. 15 & Sept. 17	Innovation and Economic Growth	Reflection Paper 1
Module 2: Transportation			
5	Sept. 22 & Sept. 24	Intro to Transportation	Meeting 1 with TA (Annotated Bibliography)
6	Sept. 29 & Oct. 1	Platform Mobility	
7	Oct. 6 & Oct. 8	Autonomous Vehicles	Reflection Paper 2
Module 3: Privacy and Security			
8	Oct. 13 & Oct. 15	Cybersecurity and Ransomware	Meeting 2 with TA (Project Outline)
9	Oct. 20 & Oct. 22	Public Safety and Privacy	Reflection Paper 3
Module 4: Governance			
10	Oct. 27 & Oct. 29	Governance Structure & Reforms	
11	Nov. 3 & Nov. 5	Who Pays For the Smart City	
12	Nov. 10 & Nov. 12	Competitive Urbanism and the City of the Future	Meeting 3 with TA (Practice Presentation)
13	Nov. 17 & Nov. 19	Resilience	Reflection Paper 4
14	Nov. 24	<i>Urbanized</i>	
End of Semester			
	Dec. 3		Projects Due
	Dec. 10		Final Exam Due

ACADEMIC INTEGRITY

Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. Syracuse University students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

DISABILITY AND INCLUSION

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal as your instructor is to create a learning environment that are useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, I invite you to meet with me to discuss additional strategies beyond accommodations that may be helpful to your success.

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS) located at 804 University Avenue, third floor or go to the ODS website at disabilityservices.syr.edu and click current students tab to register on-line. You may also call 315.443.4498 to speak to someone regarding specific access needs. ODS is responsible for coordinating disability-related accommodations and will issue 'Accommodation Letters' to students as appropriate. Since accommodations may require early planning and are not provided retroactively, please contact ODS as soon as possible

DISCRIMINATION OR HARASSMENT

The University does not discriminate and prohibits harassment or discrimination related to any protected category including creed, ethnicity, citizenship, sexual orientation, national origin, sex, gender, pregnancy, disability, marital status, age, race, color, veteran status, military status, religion, sexual orientation, domestic violence status, genetic information, gender identity, gender expression or perceived gender. Any complaint of discrimination or harassment related to any of these protected bases should be reported to Sheila Johnson-Willis, the University's Chief Equal Opportunity & Title IX Officer. She is responsible for coordinating compliance efforts under various laws including Titles VI, VII, IX and Section 504 of the Rehabilitation Act. She can be contacted at Equal Opportunity, Inclusion, and Resolution Services, 005 Steele Hall, Syracuse University, Syracuse, NY 13244-1120; by email: titleix@syr.edu; or by telephone: 315-443-0211.

RELIGIOUS ACCOMODATION

Syracuse University's religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm recognizes the diversity of faiths represented in the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students should have an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors no later than the end of the second week of classes for regular session classes and by the submission deadline for flexibility formatted classes.

LATE POLICY

All assignments must be turned in via TurnItIn on Blackboard on the due date unless otherwise notes. Each day late, including weekends, will be subject to a 5% per day penalty unless a prior arrangement for an extension is given. Assignments more than 7 days late will not be accepted. Extensions due to illness require a medical certificate.

TECHNOLOGY POLICY

No laptops or smartphones will be allowed in discussion groups, unless otherwise noted. Attendance points may be subtracted for inappropriate use in class.

READINGS

MODULE 1

Week 1 (August 24 & 26): Introduction to Smart Cities

1. *Reimagining cities from the internet up* by Daniel Doctroff.
<https://medium.com/sidewalk-talk/reimagining-cities-from-the-internet-up-5923d6be63ba>

Week 2 (September 1 & September 3): Urban History and Urban Form

2. *The Smart Enough City*, Chapter 1
3. *A Tale of Two Suburbs* by Carl Malone <https://fivethirtyeight.com/features/a-tale-of-two-suburbs/>
4. *Supposedly 'Fair' Algorithms Can Perpetuate Discrimination* by Jol Ito
<https://www.wired.com/story/ideas-joi-ito-insurance-algorithms/>

Week 3 (September 8 & 10): Modernist Planning and its Discontents

5. *The Smart Enough City*, Chapter 7
6. *How to Decimate A City* by Alana Semuels.
<https://www.theatlantic.com/business/archive/2015/11/syracuse-slums/416892/>
7. *The Future Agency: Inside the big business of imagining the future* by Kyle Chayka
<https://www.theverge.com/2017/3/30/15113162/future-utopia-tellart-design-agency-world-government-summit-dubai>

Week 4 (September 15 & 17): Innovation and Economic Growth

8. *Glaeser and Florida on Backlash, Decline, and Renewal* by Richard Florida
<https://www.citylab.com/equity/2017/04/glaeser-and-florida-on-backlash-decline-and-renewal/523827/>
9. *How Israel's Turning Soldiers Into Entrepreneurs*. By: Ashlee Vance, Hello World, Bloomberg News. <https://www.youtube.com/watch?v=X7n11XAYp7k>

MODULE 2

Week 5 (September 22 & 24): Modern Transportation Technologies

10. *The Smart Enough City*, Chapter 2
11. *Why The US Sucks at Building Public Transit*
https://www.vice.com/en_us/article/884kvh/why-the-us-sucks-at-building-public-transit
12. *It's not you. Commuting is bad for your health* by Kimberly Mas
<https://www.vox.com/videos/2018/1/22/16919040/commuting-bad-health-work>
13. *What's Up With That: Building Bigger Roads Actually Makes Traffic Worse* by Adam Mann. <https://www.wired.com/2014/06/wuwt-traffic-induced-demand/>

Week 6 (September 29 & October 1): Platform Mobility

14. *Welcome to Uberville* by Spencer Woodman.
<https://www.theverge.com/2016/9/1/12735666/uber-altamonte-springs-fl-public-transportation-taxi-systemy>
15. *The 19th Century's "Best Planned City" Tries Again* by Aaron Gordon.
https://www.vice.com/en_us/article/v7gmz8/new-urbanism-mobility-revolution-buffalo-ny
16. *Parking is Hell (Radio Episode)* by Stephen Dubner, Freakonomics.
<http://freakonomics.com/podcast/parking-is-hell-a-new-freakonomics-radio-podcast/>

Week 7 (October 6 & 8): Autonomous Vehicles

17. *How to build a driverless car* by Jason McBride. <https://torontolife.com/tech/inside-ubers-self-driving-car-lab/>
18. *The road not taken: How we found (and lost) the dream of Personal Rapid Transit* by Adi Robertson. <https://www.theverge.com/2016/2/24/11094524/prt-transit-history-self-driving-cars-alden-starrcar-tomorrowland-1960s>
19. *The Future of Mobility: 2050 and Beyond* by Carla Bailo
<https://www.youtube.com/watch?v=q2k2Xbfuy1I>

MODULE 3

Week 8 (October 13 & 15): Cybersecurity and Ransomware

20. *The Smart Enough City*, Chapter 4
21. *The Ransomware Superhero of Normal, Illinois* by Renee Dudley
<https://www.propublica.org/article/the-ransomware-superhero-of-normal-illinois>
22. *The Untold Story of Notpeyta, the Most Devastating Cyberattack in History*. By: Andy Greenberg. <https://www.wired.com/story/notpeyta-cyberattack-ukraine-russia-code-crashed-the-world/>

Week 9 (October 20 & 22): Public Safety and Privacy

23. *The Smart Enough City*, Chapter 5
24. *Policing the Future* by Maurice Chammah.
<https://www.theverge.com/2016/2/3/10895804/st-louis-police-hunchlab-predictive-policing-marshall-project>
25. *Facial Recognition Is the Perfect Tool for Oppression* by Woodrow Hertzog.
<https://medium.com/s/story/facial-recognition-is-the-perfect-tool-for-oppression-bc2a08f0fe66>
26. *Stalking the Smart City* by Brian House. <https://urbanomnibus.net/2019/05/stalking-smart-city/>

MODULE 4

Week 10 (October 27 & 29): Governance Structure & Reforms

27. *The Smart Enough City*, Chapter 6
28. *Smart cities: A world of opportunity in data* by Frank Harmsen <http://analytics-magazine.org/smart-cities-a-world-of-opportunity-in-data/>
29. *Connecting Dots Across City Services: OKRs in Syracuse* by Bruce Gil
<https://www.whatmatters.com/articles/syracuse-city-services-okrs/>

Week 11 (November 3 & 5): Who Pays For the Smart City

30. *The Smart Enough City*, Chapter 3
31. *What if You Controlled the Budget? An Experiment in Democracy* by Jay Arthur Sterrenberg of Meerkat Media Collective, The Atlantic.
<https://www.youtube.com/watch?v=DHhm6W0sD7M>

Week 12 (November 10 & 12): Competitive Urbanism and the City of the Future

32. *Would you live in the City of the Future?* Radio Interview of Jon Lorinc.
<https://thebigstorypodcast.ca/2019/07/22/sidewalk-labs-smart-city-toronto/>
33. *Smart Cities: What Do We Need to Know to Plan and Design Them Better?* by Anthony Townsend <https://medium.com/@anthonymobile/smart-cities-what-do-we-need-to-know-to-plan-and-design-them-better-b6d05e736ea1>

Week 13 (November 17 & 19): Resilience

34. *The Harsh Future of American Cities* by Steve LeVine <https://gen.medium.com/the-harsh-future-of-american-cities-7263da52fd1f>
35. *Why Richard Florida worries cities will recover too quickly from Covid* by Eric Jaffe
<https://medium.com/sidewalk-talk/why-richard-florida-worries-cities-will-recover-too-quickly-from-covid-99f3942045c2>
36. *How a Feel Good AI Story Went Wrong in Flint* by Alexis C. Madrigal
<https://medium.com/the-atlantic/how-a-feel-good-ai-story-went-wrong-in-flint-96e097378b9b>

Week 14 (November 24): Urbanized

37. *Urbanized* (film) by Gary Hustwit <https://www.linkedin.com/learning/urbanized>