SYLLABUS
GEOG 5502

Data Justice and the Right to the Smart City
Spring 2025 – Course # 27686
1080 Derby Hall, 12:45pm - 2:05pm, Wednesdays and Fridays

COURSE OVERVIEW
Course Information

- Geography 5502 is a *Citizenship for a Just & Diverse World* GE course
- Class lecture periods: Wednesdays & Fridays, 12:45pm – 2:05pm
- Credit hours: 3
- Prerequisites: None
- Mode of delivery: In Person
- Should in-person classes be canceled (eg due to weather), I will notify you as to which alternative methods of teaching will be offered to ensure continuity of instruction for this class. Communication will be via email.

Instructor

- **Instructor**: Dr. Nancy Ettlinger, she, her, hers
- Phone number: 614-292-2573
- Email: ettlinger.1@osu.edu (email directly, *not* via Canvas)
  - Office: 1100 Derby Hall Office hours: 2:05pm – 3:35pm Wednesdays & Fridays or by appointment
    If you are unable to come to office hours, I am happy to set up appointments to accommodate schedules. To set up an appointment, please let me know before or after class, email, or stop by my office to chat or to set up a time to meet.

Course Description

We are living in the infancy of the digital era in which new, digital approaches to governance have emerged and now prevail. This course focuses on digital governance in *cities*, which have been the principal focal points of digital governance. Columbus, for example, is a 'smart' city, dubbed as such following its successful bid for a federal grant in 2016 to develop 'smart governance.' Most cities around the world, of all sizes, are embarking on new plans for digital governance, even small towns and villages. At an

advanced level regarding critical thinking, reading, writing, and discussion, this course introduces students to the problems and potentialities of digital life in cities with a fundamental concern for social justice and democratic processes.

We all are subject to smart governance, and as citizens, we need to know the implications for our lives and those of our families, friends, neighbors. Crucially, citizenship in smart cities can be constructed in various ways along a continuum from passive citizenship in which citizen rights are given by city governments and the tech firms that design and implement smart-city technologies, to active citizenship in which ordinary urban residents organize to design, implement, and manage digital technologies to serve their needs. ***'The right to the city'*** is the title of a book written in 1968 by critical theorist Henri Lefebvre (Le Droit à la Ville); it is an idea about citizenship and has become a slogan for formal and informal social movements and progressive authorities to claim their role in local governance and to produce social space that is open and accessible to all. The agenda is not about specific rights relative to particular sectors (transportation, education, housing, health…) but rather is a general call to enable active citizenship, fair and equitable governance.

In a smart-city context, ***data justice*** is germane. A cliché of the digital era is 'data is the new oil' because data are fundamental to value and profitability. Our personal data routinely is extracted by firms whenever we are online or engaged in 'smart' life' through the use of Siri to smart appliances, watches, and toys. Firms use our data in the absence of our knowledge and consent, constituting a profound erosion of privacy in digital life. '***Datafication***' refers to the quantification of social activity – human life – for use in algorithmic governance and predictive analysis as ordinary actors – citizens – become 'datafied.' '***Data justice***,' then, refers not just to the use and collection of data and associated societal impacts, but also to the power relations that enable datafication and to issues of social justice that are interwoven in the use of data. Although digital governance promises numerous efficiencies and opportunities, research has revealed discriminatory designs and numerous injustices resulting from algorithmic control over city life as people and places are unjustly profiled, resulting in the production or deepening of inequalities along multiple axes of difference such as class, race/ethnicity, gender, sexuality, abilities. More generally, then, 'data justice' is about understanding the context and dynamics of such injustices and making use of that knowledge towards constructing uses of data that deliver justice.

Students learn through critical reading and class discussion, collaborative critiques of reading, reflective and critical carmen posts on reading, a collaborative group project, independent research, and two short essays (4-6 pp.) intended to aid in tying material together for a synthetic understanding.

The course examines topics (indicated below) in US cities and around the world, and accordingly, class discussion includes a comparative, context-sensitive assessment of digital urban governance. Throughout the course, we discuss geographic insights on digital life, notably regarding issues of place, space, and multi-scalar sensibilities.

<u>Course Organization and Topics</u>
The course begins with introductory classes on basic concepts such as dataification, dataism, dataveillance, data justice, smart cities, citizenship, and the right to the smart city.

The next section historizes the smart city and calls attention to *context* – how processes in a pre-digital socio-technical context become reproduced in a digital context, albeit in different ways, often deepening longstanding inequalities and socio-economic polarization. We examine the legacies of minoritization processes and injustices in 'smartified' cities in the United States and internationally.

The section on 'platform urbanism' – data-driven digital platforms that prevail in cities of the 21st century for wide-ranging activity, including governance and work – introduces the concept and explains the connection with smart-city life. Specific readings and class discussions focus on work in the localized gig economy and the problems that gig workers as citizens confront, the role of platforms in subject formation, the crucial importance of an intersectional lens on the effects of platform urbanism on citizen's lives, and the role of the pandemic in accelerating governance processes through platforms.

The next 2 short sections (1 week each) focus on how smart-city processes foster gentrification and the displacement of citizens in new ways, as well as smart-city regimes of control regarding surveillance, securitization, predictive policing and the consequences for citizenship in the smart city.

Just before spring break, the class will move into workshop mode for group projects on specific smart cities. Students will get into groups, and each group will decide by consensus the smart city on which they will focus and develop a plan for collaborative research. The final product will be a collaborative group oral presentation to the class followed by Q/A and discussion at the end of March.

The remainder of classes focuses on data justice regarding specific challenges, projects, and an appraisal of the prospects for data justice in smart-city life. We begin with a discussion of 'data activism' – how 'data citizens' can challenge the status quo productively by proactively making use of the digital infrastructure to serve their needs. Individual topics include constructing agency in the smart city; citizen sensing; civic hacking; and counter mapping.

GOALS and EXPECTED LEARNING OUTCOMES (ELOs)

Course-based Goals

Successful students will:

- Appreciate how a new round of technological development (in this case smart-city technologies) constructs citizenship differently depending on how technology and governance are linked.
- Appreciate how a new round of technological development (in this case, smart-city technologies) can result in data injustice or data justice, depending on the role of citizens in the design and deployment of the technologies.
- Engage in independent advanced scholarly research of a topic/problem of choice on citizenship in a particular smart city or across smart cities in consultation with and approval from the instructor through a proposal process.
- Engage in advanced scholarly collaborative research regarding how citizenship has been constructed in a particular smart city and the consequences.
- Examine the various ways in which technological advance in the digital era is deployed to construct citizenship.
- Explain how the pre-existing socio-technical context for smart-city development shapes whom 'development' is for, who participates in 'development,' and the consequences for inclusions and exclusions and associated lived experiences.
- Explain the concept 'data justice,' how uneven power relations in cities being 'smartified' prompt projects seeking 'data justice,' and the relation between 'data justice' and issues of difference and citizenship.

GE Goals & ELOs for All Themes

goals	expected learning outcomes	related course content
GOAL 1: ADVANCED LEVEL Successful students will... analyze an important topic or idea at a more advanced and in-depth level than in the Foundations component	Successful students are able to... 1.1 engage in critical and logical thinking about the topic or idea of the theme	critically annotate and reflect on each assigned text in advance of the class in which reading is due
	1.2 engage in advanced, in - depth, scholarly exploration of the topic or idea of the theme	propose and develop a research project of their choice resulting in a final paper that makes use of knowledges learned in the course
GOAL 2: INTEGRATION Successful students will... Integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes ad that they anticipate doing in future	Successful students are able to... 2.1 identify, describe, and synthesize approaches or experiences as they apply to the theme	work collaboratively with peers to orally present a case study of a smart city of their choice to the class that applies knowledges learned in the course and critically evaluates the smart-city projects in that city
	2.2 demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts	reflect on their changing views of urban lived experience in reflections on each assigned text throughout the semester

Citizenship for a Just & Diverse World Goals & ELOs:

goals	expected learning outcomes	related course content
GOAL 3: CITIZENSHIP Successful students will... explore and analyze a range of perspectives on local, national, or global citizenship, and apply the knowledge, skills, and dispositions that constitute citizenship	Successful students are able to... 3.1 describe and analyze a range of perspectives on what constitutes citizenship and how it differs across political, cultural, national, global, and/or historical communities	In this course, students will... read, reflect on, discuss cutting-edge research throughout the semester, and write an essay on the various ways in which technological advance in the digital era is deployed to construct citizenship and the social and ethical implications write an essay that identifies and explains different constructions of citizenship through smart-city technologies
	3.2 identify, reflect on, and apply the knowledge, skills and dispositions required for intercultural competence as a global citizen	write an essay that identifies salient challenges to constructing active and engaged citizenship in smart cities around the world; accordingly, identify and reflect on the techno-economic, social, and political knowledges and skills that are required to achieve 'the right to the smart city' in various contexts around the world
GOAL 4: JUST & DIVERSE WORLD Successful students will... examine notions of justice amidst difference and analyze and critique how these interact with historically and socially constructed ideas of citizenship and membership within societies, both within the US and/or around the world	4.1. Students are able to... examine, critique, and evaluate various expressions and implications of diversity, equity, inclusion, and explore a variety of lived experiences	examine power relations and processes of minoritization in pre-digital socio-technical urban contexts and their legacies in smart-city contexts
	4.2 analyze and critique the intersection of concepts of justice, difference, citizenship, and how these interact with cultural traditions, structures of power and/or advocacy for social change	read, reflect on, and discuss cutting-edge research throughout the semester on various dimensions of issues pertaining to citizenship in smart-city life and the social and ethical implications

HOW THIS COURSE WORKS

Mode of delivery

This course is delivered in-person. Class periods will feature a combination of <u>lecture</u>, <u>small-group discussion</u>, and <u>general (whole-class) discussion</u>.

Activities and materials

Students access all course materials on OSU's Carmen Canvas interface; no purchases are required. The course Carmen page includes modules for:

- the syllabus and schedule
- topics and the content and requirements for each class with links to
- assigned texts
- rubrics
- class outlines in Word, posted before each class (see below)

Just before each class, an outline of class content is posted on Carmen Canvas. *The outlines are not notes! Students are responsible for taking notes in class; bring your laptops to class so you can take notes on the outline, which is why the outlines are posted in Word.* The outlines have several purposes. They:

- serve as a guide for the content of a class
- indicate what students need to know from each class
- serve as a review when students are preparing written assignments.

Credit hours and work expectations: This is a 3-credit-hour course. According to <u>Ohio State policy</u>, students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (assigned texts, Carmen Canvas posts, writing assignments, discussion facilitations) to receive a passing grade.

Attendance and participation requirements: <u>Attendance</u> is mandatory because class content goes beyond the assigned texts due for each class; students need to 'be there' physically and mentally to grasp course material and apply it in writing assignments and preparing for class discussion. Students are expected to <u>participate</u> in small-group discussions and responsibly share their thoughts in whole-class discussions; 'responsible' discussion means (1) informed participation based on adequate class preparation and (2) an appreciation of limited class time to avoid dominating class with their thoughts and leaving little time for other students to express themselves.

As indicated in the section on Grading, attendance accounts for 10% of the final grade. Attendance is taken at the start of each class and is evaluated on a presence/absence basis.

COURSE MATERIALS AND TECHNOLOGIES

Texts

Assigned texts for this course include mainly <u>reading</u> (journal articles or chapters from books); 1 <u>webinar</u>; and 1 <u>podcast</u>. No purchases are required. Links to all assigned texts are on Carmen Canvas for each class. Generally, 2 readings are assigned for each class; if a third text is assigned, it is brief and an important complement to the other assigned text. The bibliographic information (including page numbers for reading assignments and duration for the webinar and podcast) for all assigned texts is indicated below in alphabetical order for the (a) reading, (b) webinar, and (c) podcast.

(**a**) <u>**Required Reading:**</u> All readings are accessible on the course Carmen page, listed in the order in which you read the assigned material; bibliographic information below is in alphabetical order.

Antenucci, I. 2021. Infrastructures of extraction in the smart city zones, finance, and platforms in New Town Kolkata. *International Journal of Communication* 15: 2652-2668.

Bauriedl, S. and Strüver, A. 2020. Platform urbanism: technocapitalist production of private and public spaces. *Urban Planning* 5: 267–276.

Bronsvoort, I. & Uitermark, J.L. 2021. Seeing the street through Instagram: digital platforms and the amplification of gentrification. *Urban Studies*, DOI: 10.1177/00420980211046539.

Bulkeley, H. and Stripple, J. 2021. Climate smart city: new cultural political economies in the making in Malmö, Sweden. *New Political Economy* 26: 937-950.

Cardullo, P., Ribera-Fumaz, R., and Gil, P.G. 2023. The Decidim 'soft infrastructure': democratic platforms and technological autonomy in Barcelona. *Computational Culture* 9, http://computationalculture.net/the-decidim-soft-infrastructure/.

Coates, T.-N. 2014. The case for reparations. *The Atlantic* https://www.theatlantic.com/magazine/archive/2014/06/the-case-for-reparations/361631/.

Cugurullo, F. 2019. Dissecting the Frankenstein city: an examination of smart urbanism in Hong Kong. In *Place, Politics and Urban Innovation*, eds. A. Karvonen, F. Cugurullo, and F. Caprotti, pp. 30-44. New York: Routledge.

Dattani, K. 2021. Platform 'glitch as surprise.' *City*: 25: 376-395.

Dencik, L. and Sanchez-Monedero, J. 2022. Data justice. *Internet Policy Review* 11: 1-16.

Fernández, C.G. and Peek, D. 2020. Smart and sustainable? Positioning adaptation to climate change in the European smart city. *Smart Cities* 3: 511-526.

Fileborn, B. 2021. Online activism and street harassment: critical cartographies, counter-mapping and spatial justice. *Oñati Socio-Legal Series* 11: 1198-1221.

Gabrys, J. 2019. Data citizens: how to reinvent rights. *Data Politics: Worlds, Subjects, Rights*. Bigo, D., Isin, E., and Ruppert, E., eds., pp. 248-266. New York: Routledge.

Gregory, K. and Sadowski, J. 2021. Biopolitical platforms: the perverse virtues of digital labour. *Journal of Cultural Economy* 14: 662–674.

The Guardian 2017, podcast, March 13 https://www.theguardian.com/technology/audio/2017/mar/31/how-tech-can-help-asylum-claims-homelessness-and-parking-fines-tech-podcast.

Hanakata, N.C. and Bignami, F. 2022. Platform urbanization, its recent acceleration, and implications on citizenship: the case of Singapore. *Citizenship Studies* 27: 189-209.

Hao, K. and Freischlad, N. 2022. The gig workers fighting back against the algorithms. *MIT Technology Review*, April 21, https://www.technologyreview.com/2022/04/21/1050381/the-gig-workers-fighting-back-against-the-algorithms/.

Hao, K. and Paola Hernández, A. 2022. How the AI industry profits from catastrophe. *MIT Technology Review*, April 20, https://www.technologyreview.com/2022/04/20/1050392/ai-industry-appen-scale-data-labels/.

Heeks, R. and Shekhar, S. 2019. Datafication, development and marginalised urban communities: an applied data justice framework. *Information, Communication & Society* 22: 992–1011.

Houston, L., Gabrys, J., and Pritchard, H. 2019. Breakdown in the Smart City: Exploring workarounds with urban-sensing practices and technologies. *Science, Technology & Human Values* 44: 843-870.

Iazzolino, G. 2021. 'Going Karura': colliding subjectivities and labour struggle in Nairobi's gig economy. *Environment & Planning A: Economy & Space*, DOI: 10.1177/0308518X211031916.

Jefferson, B.J. 2017. Digitize and punish: computerized crime mapping and racialized carceral power in Chicago. *Environment & Planning D: Society & Space* 35: 775-796.

Kitchin, R., Cardullo, P., and Di Feliciantonio, C. 2018. Citizenship, justice and the right to the smart city. *The Programmable City*, Working Paper 41, http://progcity.maynoothuniversity.ie/.

Lehtiniemi, T. and Haapoja, J. 2020. Data agency at stake: MyData activism and alternative frames of equal participation. *New Media & Society* 22: 87-104.

Leszczynski, A. and Kong, V. 2022. Gentrification and the an/aesthetics of digital spatial capital in Canadian "platform cities." *The Canadian Geographer* 66: 8-22.

McElroy, E. 2019. Housing, cartographic, and data justice as fields of inquiry: a connected approach to mapping displacement. In *Housing justice in unequal cities*, eds. A. Roy and H. Malson, pp. 29-42. Institute on Inequality and Democracy: University of California, Los Angeles.

McElroy, E. and Vergerio, M. 2022. Automating gentrification: Landlord technologies and housing justice organizing in New York City homes. *Environment & Planning D: Society & Space*, DOI: 10.1177/02637758221088868.

Magalhães, F.N.C. 2023. Popular economies in, against, and through the platform. *Antipode* 55: 527-547.

Meng, A. and DiSalvo, C. 2018. Grassroots resource mobilization through counter-data action. *Big Data & Society* 5: 1-12.

Munn, L. 2024. Digital Labor, platforms, and AI. In *Introduction to digital humanism*, eds. H. Werthner, C. Ghezzi, J. Kramer, J. Nida-Rümelin, B. Nuseibeh, E. Prem, and A. Stranger, eds., pp. 557-570. Cham, Switzerland: Springer Nature.

Reijers, W., Orgad, L., and de Filippi, P. 2022. The rise of cybernetic citizenship. *Citizenship Studies* 27: 210-229.

Ricker, Y., Cinnamon, J., and Dierwechter, B. 2020. When open data and data activism meet: An analysis of civic participation in Cape Town, South Africa. *The Canadian Geographer*, DOI: 10.1111/cag.12608.

Sadowski, J. 2020a. Cyberspace and cityscapes: on the emergence of platform urbanism, Urban Geography, 41: 448-452.

Sadowski, J. 2020b. The internet of landlords: digital platforms and new mechanisms of rentier capitalism. Antipode 52: 562-580.

Safransky, S. 2020. Geographies of algorithmic violence: redlining the smart city. *International Journal of Urban and Regional Research* 44: 200-218.

Schrock, A.R. 2016. Civic hacking as data activism and advocacy: a history form publicity to open government data. *New Media & Society* 18: 581-599.

Shelton, T., Zook, M., and Wiig, A. 2015. The 'actually existing smart city.' *Cambridge Journal of Regions, Economy and Society* 8: 13-25.

Taylor, L. 2021. The taming of chaos: optimal cities and the state of the art in urban systems research. *Urban Studies* 58: 196–3202.

Teli, M., Bordin, S., Menéndez Blanco, M., Orabona, G., De Angeli, A. 2015. Public design of digital commons in urban places: a case study. *International Journal of Human-Computer Studies* 81: 17-30.

van Dijck, J. 2014. Datafication, dataism and dataveillance: Big data between scientific paradigm and ideology. *Surveillance and Society* 12: 197-208.

Wiig, A. 2018. Secure the city, revitalize the zone: smart urbanization in Camden, New Jersey. *Environment & Planning C: Politics and Space* 36: 403-422.

(b) Required Webinar – access link for webinar on Carmen page
Jefferson 2020 (webinar) Computerizing carceral space, Robinson Lecture, Department of Geography, Ohio State University, October 16 (34:10), https://www.youtube.com/watch?v=EzmDLdrQfMA&t=67s.

(c) Required Podcast 20:15
How tech can help asylum claims, homelessness ... and parking fines - tech podcast, https://www.theguardian.com/technology/audio/2017/mar/31/how-tech-can-help-asylum-claims-homelessness-and-parking-fines-tech-podcast (20:15).

(d) *Not* Required: fyi, some ORGANIZATIONS dedicated to DATA JUSTICE
web sites include critical research/publications, projects, events, webinars, more…
AI Now Institute https://ainowinstitute.org/
Algorithmic Justice League https://www.ajl.org/
All Tech is Human https://alltechishuman.org/
Black in AI https://blackinai.github.io/#/
Center for Critical Race & Digital Studies https://criticalracedigitalstudies.com/
Center for Humane Technology https://www.humanetech.com/

Center on Race and Digital Justice (CRDJ) https://www.raceanddigitaljustice.org/
Cities for Digital Rights https://citiesfordigitalrights.org/
Citizens and Technology Lab https://citizensandtech.org/
Coding Rights https://www.codingrights.org/about/
Data & Society https://datasociety.net/
Data for Black Lives https://d4bl.org/
Data Justice Lab https://datajusticelab.org/people/
Decoding Stigma https://decodingstigma.tech/
Detroit Digital Justice Coalition https://alliedmedia.org/projects/detroit-digital-justice-coalition
Digital Equity Laboratory https://www.digitalequitylab.org/
Distributed AI Research Institute (DAIR) https://www.dair-institute.org/
Encode Justice https://encodejustice.org/
Environmental Data & Governance https://envirodatagov.org/
Ethical AI Data Base (EAIDB) https://www.eaidb.org/
Fairwork https://fair.work/
Feminist Digital Justice https://itforchange.net/feminist-digital-justice-DAWN-ITfC
Humane Intelligence https://www.humane-intelligence.org/
Ida B. Wells Just Data Lab https://www.thejustdatalab.com/
NYM (Building the next generation of privacy infrastructure) https://nymtech.net/
   Our Data Bodies: Digital Defense Playbook
        https://detroitcommunitytech.org/?q=content/our-data-bodies-digital-defense-playbook
   Syrian Archive https://syrianarchive.org/

Course Technology

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- Self-Service and Chat support: ocio.osu.edu/help
- Phone: 614-688-4357(HELP)
- Email: servicedesk@osu.edu
- TDD: 614-688-8743

Basic computer and web-browsing skills are expected, and navigating Carmen is an essential skill for this course. For questions about specific functionality, see the Canvas Student Guide.

This course requires use of 2 tools: (1) the Respondus Lockdown Browser for the in-class mid-term and final essay exams, and (2) Hypothesis, an annotation tool for each reading.

➢ Students need to install the **Respondus Lockdown Browser**, which will be used for the in-class mid-term and final essay exams. To download, see:

https://teaching.resources.osu.edu/toolsets/carmencanvas/guides/respondus-lockdown-browser-students. The installation should be made *before* the mid-term. One class before the mid-term exam will set aside time for the installation + a brief (ungraded) sample essay exam.

➢ This course requires the use of a digital social annotation tool called Hypothes.is. If you encounter an issue with access to this tool, please contact me (ettlinger.1@osu.edu). Accommodation and assistance will be arranged for you to complete any work required with this tool free of penalty.

Required Technology Skills Specific to This Course
None

Required Equipment
You will need a mobile device to:

- take notes in class and write the in-class mid-term and final essay exams - **laptop**, Mac (OS) or PC (Windows)
- authenticate for BuckeyePass
- view a webinar and listen to a podcast. The webinar may require high-speed internet connection; if you don't have a device with high-speed connection, use the facilities at any of the OSU libraries

Required Software
Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found at go.osu.edu/office365help.

Carmen Access
You will need to use BuckeyePass multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

GRADING AND RESPONSE TIME

How Your Grade is Calculated (% breakdown)

ASSIGNMENT CATEGORY	% OF FINAL LETTER GRADE
Attendance	10%
Annotated Texts & Reflections	25%
Discussion Facilitation	10%
Group Presentation	10%
2 In-Class Exams	30% (15% each)
Independent Project	15%
Total	100%

Assignment Descriptions

Attendance (10%)
Attendance is required for all classes. If you are unable to come to class or if you must leave class early for something beyond your control (sickness, doctor's appointment, job interview…), you must let me know in advance of the class; otherwise, you will be marked as absent.

Attendance is graded on a presence/absence basis. If there are 28 classes and a student is present at 21 classes, then they have attended 75% of the classes.

Annotation & Reflection on Readings (25%)

Students annotate and reflect on all assigned articles, and reflect on the webinar and podcast.

For the articles, you will annotate using the Canvas *Hypothesis* tool. On the course Carmen page, for articles, click on an assigned article, and then click on "Load

Read/Annotate …". The article will appear with a side pane for annotation. If you prefer to view the article on whole screen, click on the carrot (>) at the top of the annotation pane to remove it; you will still be able to annotate and highlight.

The requirements for each <u>article</u> are (1) annotation; (2) a reflection (when you are finished reading and thinking about the article and ready to write your reflection, click on the title of the article, and write a reflection in the annotation box. For the <u>webinar</u> and <u>podcast</u>, there is no annotation; for your reflections, click on 'Reflection' and write your reflection in the text box.

All annotations and reflections are due by 9:30am the day the article is due. **LATE POLICY:** If you are pressed for time and cannot meet the deadline on an annotation &/or reflection, I will read your work and record it as completed IF *you send me an email <u>before</u> the deadline to let me know it will be late + when you plan to submit (day & time); OTHERWISE, a 0 will be recorded.*

<u>Reflections</u> (highlight title of article and write reflection in annotation box) should include:

- a *brief* indication of the main point/message (about 2 sentences)
- an indication of how the author supported the main message (eg empirical examples)
- a thoughtful comment on the reading relative to other readings, your experiences/interests, and/or changes in/evolution of your thinking
- when applicable, comment on how smart cities and ordinary citizens are conceptualized in the material presented in the reading

<u>Annotations</u>
There are different types of annotations. Below are 4 types. You are <u>required</u> to <u>annotate at least 3 times re: type 1 and at least once re: types 2, 3, and 4</u>. This is the basic requirement, but note that these annotations prepare you for class, help you to internalize material, and prepare you for the essay exams, so it is advisable to use the annotation tool well beyond the basic requirement.
  ➢ type 1: ***substantive***
          - paraphrase of main point (this is helpful to do on main points throughout the article to provide a guide of central issues)
          - go beyond paraphrasing to indicate your thoughts about the author's point
  ➢ type 2: ***connections***
          - make a connection between an author's point and other course material
  ➢ type 3: ***questions***
           - ask a clarification question about a point in the article
           - raise a question that a passage in the article prompts
  ➢ type 4: ***reflections*** (on a particular passage as opposed to the reflection on the entire article)

- comment on how a passage broadened, challenged, or changed your way of thinking

Annotations & Reflections on the articles are graded on a presence/absence basis (absence = 0).

The Hypothesis tool also permits highlighting, and you are welcome to use this feature, although it is not a requirement.

GUIDELINES for annotations & reflections are posted on the webpage.

Collaborative Discussion Facilitation (DFs) (10%)

Readings in the schedule designated 'DF' (discussion facilitation) provide an opportunity for students to collaborate on raising points for class discussion on a case study from the assigned reading. Discussion facilitations are a vehicle for actively and critically engaging course material *collaboratively* to appraise the case study, situate it in the literature, provide presentation experience; and provide a mechanism for teamwork. The discussion facilitation should <u>not</u> summarize a case study -- summarizing would be boring because everyone in class will have read and submitted annotations and reflections on the article. Rather, students collaborating should discuss *what they think about the case study*, the perspective on smart cities, citizenship, and data justice, and how it is situated relative to other reading and perspectives, and raise questions for discussion; presentations are *analytical*, not descriptive, regarding the case study. Style is open; notes are fine, but discussion should <u>not</u> be read.

Students present in groups of 2 or 3 on an assigned reading. Individual commentaries in a group presentation must connect and flow from *collaborative preparation*. Should students find that they disagree about points while preparing, that's fine; indicate the disagreement in the presentation as a talking point.

Each group should prepare a brief **outline** (*not more than 1 side of 1 page*) of the main points to be raised in class; email the outline to me *no later than 30 minutes before class* to enable posting on the Carmen page in advance of class so that everyone has access to it.

Grades for presentations will be posted on Carmen within 24 hours after class. 50% of the grade will be given by your partner(s) regarding your collaboration; *each student should email me the 'collaboration grade' (a letter grade)* <u>before</u> *class*. Grades below an 'A' should be accompanied by an explanation.

Students are welcome to request facilitating a particular article and/or topic; please let me know at the start or end of class at the beginning of the semester or by email if you have requests (assignments will be made on a first-come, first-serve basis). By the second week of the semester, students will either sign up for presentations or I will

assign presentations randomly. As soon as the assignments are finalized, the facilitation roster will be posted on the Carmen page. Students are then welcome to swap presentations if the need arises (due to a difficult schedule in a particular week, changing interests…); justification for swapping is *not* required – the main requirement is that you handle the swap yourselves and let me know immediately so that I can update the online assignment roster.

GUIDELINES for DFs are posted on the webpage.

Group Oral Presentation on a Particular Smart City (10%)

Students work collaboratively in small groups to research and present to the class a critical analysis of issues in a smart city selected by their group. After deciding on a city, students work together on research and on applying their knowledges from the course to critically evaluate the smart projects and prospects for the right to that particular smart city, and then decide of a division of labor for the group presentation. Each student receives a separate grade. As with the collaborative DFs, 50% of the grade is based on collaboration; students email me the collaboration grades for their presentation partners before the class in which they present. Collaboration grades under 'A' should be accompanied by an explanation.

GUIDELINES for the Group Oral Presentation are posted on the webpage.

2 In-Class Essay Exams (30% @15% each)

Students write 2 in-class essay exams using the Respondus Lockdown Browser, one just before Spring break, and the other near the end of the semester. These essay exams are intended to help tie together material for a synthetic understanding of course material. The 2nd essay exam focuses on the material in the 2nd part of the course, although note that knowledges in the course are cumulative, and so the 2nd part of the course requires a grasp of the material in the 1st part. Students bring their laptops to class to write their essays using a lock-down browser and submit through Carmen.

Independent Project (15%)

Students complete their independent research projects. The completed project is due on Wednesday, April 23; it should be double spaced with 1" margins using 11 or 12 Times Roman font, paginated, and proofed. The projects can be (A) a research paper, (B) a critical review of book of a student's choice subject to approval, or (C) some other independent project depending on one's skill set (e.g. a podcast, a film) that students may propose.

(A) RESEARCH PAPER. Research papers should be 8-12 pages, double spaced (not including the bibliography) and should connect to course material, using at least 6 assigned references from the course. Referencing beyond course material also is

required, using at least 6 academic references outside course readings; in addition, references may include non-academic references (blogs, news articles…). Research papers might be used to launch a senior thesis project.

(B) CRITICAL BOOK REVIEW. Students can choose to write a critical review of a book they have selected that takes a deep dive into issues pertinent to the course; the 'research' component of this option is in *finding* and selecting an appropriate, cutting-edge book. Critical book reviews should be 5-8 pages (not including the bibliography) and should connect to course material, using at least 5 assigned references; other references are welcome but not required. You are welcome to structure your review as you like; all the following elements should be included: (1) a *brief* summary of the book (no more than 1-2 paragraphs and not more than 1 page); (2) a critique of the book (i.e. situate the book in the literature per course readings and clarify the nature of the contributions, issues, problems or limitations); (3) bibliography.

(C) POSSIBLE 3RD OPTION: Proposals from students for an alternative to a written paper are welcome; the course is intended to be useful for students from wide-ranging disciplines, recognizing that some fields of study may be conducive to a project with a communication mode other than writing. Students interested in proposing an independent project other than (A) and (B) above should discuss with me.

All students submit written proposals for their projects (due by March 20), on which they will receive feedback; a revised proposal (due by March 27) may be required. GUIDELINES for the proposal are posted on the Carmen page. Proposals can be submitted anytime during the semester before the deadline, and discussions about proposals are welcome at any time.

Grading Scale

93–100: A
90–92.9: A-
87–89.9: B+
83–86.9: B
80–82.9: B-
77–79.9: C+
73–76.9: C
70–72.9: C-
67–69.9: D+
60–66.9: D
below 60: E

Student-Instructor Communication

The following list indicates the instructor's availability throughout the course. (Remember that you can call 614-688-HELP at any time if you have a technical problem.) Please contact me:

* in person at the beginning or end of class.
* in my office (1100 Derby) during office hours or at some other time that we can
arrange by email or at class.
* via email: *Please contact instructor directly by email, <u>not</u> via the Carmen
Canvas page:* ettlinger.1@osu.edu.

Turnaround Time on Written Assignments

- annotations & reflections: within 48 hours
- discussion facilitation (DF): within 24 hours
- group presentation: within 24 hours
- in-class exams: up to 2 weeks
- independent project: 1 week

COURSE SCHEDULE

*Assigned texts (last column) are indicated by the last name of the author (see
bibliographic information, including year of publication and page numbers for reading,
and duration for the webinar and podcast in the Text section,* pp. 7-10*).*

DF indicates collaborative *Discussion Facilitation* (see Assignments/Evaluation/Grading section)

date			general topic	class	assignment
Jan W	8		introductions, class requirements and discussion of the course		
F	10		introduction to basic concepts: datafication, data justice, smart cities, citizenship, the right to the (smart) city, place & space	datafication, dataism, dataveillance, data justice	van Dijck; Dencik & Sanchez-Monedero
W	15			smart cities	Shelton et al; Cugurullo
F	17			data, justice, citizenship, smart cities, place & space	Kitchin et al.; Teli et al.
W	22				Taylor; Heeks & Shekhar
F	24		pre-digital socio-technical contexts & their significance	legacies of minoritization from a postcolonial perspective	Antennuci **DF**; Magalhães
W	29			legacies of injustice through the lens of critical race theory and racial capitalism in the US	Coates; Safransky **DF**
F	31		platform urbanism	the platform urbanism – smart-city relation	Sadowski '20a, '20b
Feb W	5			the platform economy and work	Munn; Hao & Paola Hernández **DF**
F	7			platform work and subject formation	Gregory & Sadowski; Iazzolino **DF**

W	12		platforms through the lens of intersectionality	Dattani **DF**; Bauriedl & Strüver
F	14	smart-city regimes of control	longstanding → smart-city conceptualizations of security	Jefferson *webinar*; Jefferson **DF**
W	19		***in-class installation of lockdown browser + brief (ungraded) sample essay exam***; 'cybernetic citizenship'?	Reijers et al.
F	21	platforms and gentrification	securitization and gentrification in the smart city	Wiig; McElroy & Vergerio **DF**
W	26		aestheticizing the smart city & consequences	Leszcynski & Kong; Bronsvoort & Utermark
F	28	smart cities & climate change	planning for climate change	Fernández & Peek; Bulkely & Stripple **DF**
Mar W	5	***in-class midterm essay exam***		
F	7	workshop: group projects on smart-cities – form groups, decide on a smart-city project as focus, decide on issues, develop plan for collaboration		
W	12	***spring break!***		
F	14			
W	19		data activism & participatory governance in the smart city	Ricker et al.; Cardullo et al. **DF**
Th	20		**Project proposals due by email (Word attachment)**	
F	21		constructing agency in the smart city	Lehtiniemi & Haapoja; Hao & Freischlad **DF**; *podcast*
W	26		environment, sensors, and data citizens	Gabrys; Houston et al **DF**
Th	27	data justice – projects, challenges, prospects	**Revised proposals due by email (Word attachment)**	
F	28		workshop – group projects	
Apr W	2		**group presentations**	
F	4		**group presentations, cont'd**	
W	9		civic hacking	Schrock; Meng & DiSalvo **DF**
F	11		counter mapping	McElroy; Fileborn **DF**; post suggestion(s) for last class
W	16	***in-class final essay exam***		
F	18	Independent Project preparation – discussion; tbd by class		
W	23	**final projects due by email (Word attachment)**		

COURSE POLICIES

Discussion and Communication Guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style**: Students should use proper grammar, spelling, and punctuation. Make sure to proof your writing assignments.
- **Tone and civility**: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Basic expectations include respect for others and interest in learning from others.
- **Citing your sources**: It makes sense to develop the habit of proper referencing to avoid issues of plagiarism and ensure professionalism in presenting concepts and empirics. The guidelines for the writing assignments include instructions for citing your sources. See also the academic integrity policy in the section of this syllabus on Campus Policies as well as on the left column on the course Carmen Canvas page.

Late Policy on Writing Assignments

Due dates for writing assignments are indicated on the course schedule and on the Carmen Canvas page. It is understood that sometimes a student may need extra time to perform to the best of their abilities on a writing assignment. If you are pressed for time and cannot meet a deadline, you may request an extension without penalty IF *you send me an email before the deadline to let me know it will be late + your requested deadline (day and time); otherwise, a 0 will be recorded.*

Use of Electronic Devices in Class

Use of computers, cell phones or other electronic devices in class for any reason other than course engagement is considered disrespectful and unacceptable.

Course Policy on the Use of Generative AI (ChatGPT and Related Products) – see also University policy on use of AI

Requirements for use of generative AI are indicated below. *Failure to comply will result in a failing grade on the assignment in question.*

If you use generative AI for an assignment, you must: 1) indicate so at the outset, and 2) indicate *how* you used it as a complement to your own work (see below for more details). *Under no circumstances is generative AI acceptable on its own without indication of your own work and the nature of the complementarity.*

<u>Using generative AI as a complement to your own work & documenting the complementarity</u>

Your assignments *always* need to connect with course material – the readings as well as class lectures and discussions. A generative AI product may have an assigned article in the database, but it does not account for class discussions and the contextualization of assigned reading in course material. Further, generative AI products are well known for making up references and information, and more generally being 'off' despite producing narratives that sound professional and are well written. Therefore, if you use a generative AI product, you will need to <u>fact check</u> and <u>document your fact checking</u>, as well as modify the narrative relative to the course context.

UNIVERSITY ACADEMIC POLICIES

Ohio State's Policy on AI (https://oaa.osu.edu/artificial-intelligence-and-academic-integrity)

There has been a significant increase in the popularity and availability of a variety of generative artificial intelligence (AI) tools, including ChatGPT, Sudowrite and others. These tools will help shape the future of work, research and technology — but when used in the wrong way, they can stand in conflict with academic integrity at Ohio State.

All students have important obligations under the Code of Student Conduct to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use "unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment" unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing" of writing, ideas or other work that is not your own. These requirements apply to all students — undergraduate, graduate, and professional.

To maintain a culture of integrity and respect, these generative AI tools should not be used in the completion of course assignments unless an instructor for a given course specifically authorizes their use. Some instructors may approve of using generative AI tools in the academic setting for specific goals. However, these tools should be used only with the explicit and clear permission of each individual instructor, and then only in the ways allowed by the instructor.

Ohio State's Policy on Academic Integrity (see also 'Academic Policies' on the left column of the Carmen Canvas page)

It is the responsibility of the Committee on Academic Misconduct (COAM) to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487).

Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*

Plagiarism is the act of stealing the ideas and/or the expression of another and representing them as your own. It is a form of cheating and a kind of academic misconduct, which can incur severe penalties. It is important, therefore, that you understand what it consists of, so that you will not unwittingly jeopardize your college career. Plagiarism includes, but is not limited to: word-for-word copying of someone else's work, in whole or in part, without acknowledgment, whether that work be a magazine article, a portion of a book, a newspaper piece, another student's essay, or any other composition not your own without proper citation. Changing a few words of another's composition, omitting a few sentences, or changing their order does not constitute original composition. If you have any doubts about the originality of a paper/assignment you have written, see your instructor before you turn it in (*Colleges of the Arts and Sciences Degree Planning Manual 2006-7*, pp. 34-35).

Copyright Disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

CIVIL RIGHTS, UNIVERSITY RESOURCES FOR DISABILITY, MENTAL HEALTH & WELLNESS

Statement On Title IX
Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or

someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu

Free Speech, Academic Freedom and Freedom of Expression
Ohio State is steadfastly committed to protecting the First Amendment right to free speech, academic freedom and freedom of expression on its campuses. The Campus Free Speech Policy, adopted in May 2023, supports this commitment. Freedom of expression is also central to our values as an institution of higher education. Ohio State supports the rights of its students, faculty, staff, volunteers, visitors, community partners and program participants to exercise their freedom of speech and expression in a way that is lawful, respectful and productive. The university encourages everyone to participate in public discourse and exercise their democratic rights through voting, advocacy and civic engagement.

The Freedom of Expression website is an online hub for support resources, policies and other information to help everyone participate in public discourse and exercise their rights. It includes Ohio State's University Space Standards, updated with input from students, faculty and staff to improve clarity and add detail. The website also now includes more comprehensive information about reserving space and better connects to relevant support and policy resources.

Disability Services, Office of Student Life
The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you have a mental or physical condition that impacts your ability to succeed in the classroom, please register with the Student Life Disabilities Services (SLDS) in Baker Hall 009. Once registered, you can receive services that will level the playing field with your peers. The SLDS will provide a letter listing only the services you need; you have every right to keep your health conditions private from me. Please bring the letter with you, and we will discuss the ways Marc and I can help you to maximize your success and participation.

Counseling and Consultation Service - Office of Student Life
As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. OSU offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at 614-292-5766 and 24-hour emergency help is also available through the 24/7

National Suicide Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org.

Student Advocacy Information & Other Resources

Student Advocacy Center: Answer students' questions, direct students to appropriate resources and departments, provides general university guidance
- 614-292-1111 http://advocacy.osu.edu/

Student Wellness Center: Promoting student wellness through nine dimensions of wellness
- 614-292-4527 http://swc.osu.edu/

Multicultural Center: Offering programs, services and outreach for all OSU students; supporting and celebrating all stud**ents through an intercultural model**
- **614-688-8449** http://www.mcc.osu.edu/

Academic Advising: Advising for undergraduate students on the Columbus campus is provided by the individual college or department that offers the program of study you are pursuing. This allows you to get advice from someone who knows the specifics of your curriculum
- https://advising.osu.edu/

Student Academic Services: Find information by topic and take care of your personal Buckeye business (i.e. Financial Aid and other services) online at buckeyelink.osu.edu. Or speak with someone in person
- Student Academic Services Bldg., Lobby; 281 W. Lane Ave. [map] Monday–Thursday: 9 a.m. to 5 p.m.; Friday: 9 a.m. to 4 p.m.

Academic Support Services: This includes various resources for learning support from tutoring and study strategies to stress management and confidence building
- http://younkinsuccess.osu.edu/academic-se**rvices/**

ACCOMMODATIONS
Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities.

Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Office of Institutional Equity](#).