

## **Master of Science in Sustainability Management**

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### **SUMA PS6120: Equity, Policy, and Sustainability**

**Wednesday: 6:10 PM – 8:00 PM EST**

**3 Credits**

**Instructor:** Dan Mathis, JD | [dm3813@columbia.edu](mailto:dm3813@columbia.edu)  
**Office Hours:** Tuesdays 5:00 PM – 7:00 PM and by appointment

**Response Policy:** Email communication is preferred and students can expect responses within 24 hours on weekdays. Weekend communication will be limited with delayed response.

**Facilitator/Course Reader:** Kristen Tadrous | [kvt2106@columbia.edu](mailto:kvt2106@columbia.edu)  
**Office Hours:** By appointment

## **Course Overview**

Public policy shapes how our environment, both natural and built, is managed and regulated. Policy not only creates the infrastructure and regulatory frameworks needed to support sustainability goals, but is also critical in establishing an equitable foundation that supports individual and collective change in pursuit of those goals.

This course will serve as an introduction to equity in sustainability policy: We will survey federal, state, and local policies and proposals to understand how we use policy to enhance urban resilience, mitigate environmental impacts, and also promote social and economic justice. Using an interdisciplinary approach that draws from economics, sociology, urban studies, critical theory, and more, students will develop their capacities to read and interpret policy, enhance their understanding of current policy frameworks, and strengthen their ability to engage with emerging policy developments.

Building on contemporary efforts in public policy, we will use an equity lens to focus on the human dimension of sustainability. We will explore policy frameworks and dialogues that foster more equitable outcomes, increase engagement of people most impacted, and contribute to sustainability goals. As an entry point, the course will focus on policies related to climate adaptation and urban sustainability transitions, setting the stage for students to explore equity in urban resilience efforts and to examine intersections of race, class, and other social factors with access to resources.

The course will be discussion-based and center participatory activities (e.g., student-led discussions, paired analyses, team exercises) designed to encourage students to consider policy issues from multiple perspectives—including identifying disparities and assessing opportunities for increasing equity in the sustainability policy sector. The course will also invite scholars and practitioners to share expertise and experience from the field. Students are not expected or required to have any previous experience with policy or law.

## **Learning Objectives**

Upon successful completion of this course, students should be able to:

**L-1:** Explain and articulate what public policy is; understand commonly used policy language and terminology related to policy design; identify how and where policy shows up in society both historically and currently

**L-2:** Read, interpret, and analyze policy texts (including laws, legislation, regulations, guidance, and proposals) from varying bodies including, but not limited to, federal, state, and local governments

**L-3:** Identify and examine disparities that exist or persist as a result of inequitable policies, particularly along race and socioeconomic lines; articulate how equity interacts with and/or contributes to policy goals

**L-4:** Indicate an understanding of the diversity of policymaking bodies creating sustainability-related policies; articulate examples of equity-oriented policy related to urban resilience efforts and urban sustainability transitions

**L-5:** Develop a theoretical framework for making policy change; evaluate current and emerging policy developments with an eye towards improving equitable outcomes; compare the substance of policies and policy proposals

## Readings

Anazagasty-Rodríguez, J. (2021, June 11). Colonial waterscapes: The water issue in Puerto Rico. The Brooklyn Rail. [https://brooklynrail.org/special/River\\_Rail\\_Puerto\\_Rico/river-rail/Colonial-Waterscapes-The-Water-Issue-in-Puerto-Rico](https://brooklynrail.org/special/River_Rail_Puerto_Rico/river-rail/Colonial-Waterscapes-The-Water-Issue-in-Puerto-Rico) (11 pages)

Bell, D. (2018). The Space Traders. In *Faces at the bottom of the well: The permanence of racism* (pp. 144–173). Chapter, Basic Books. (29 pages)

Basseches, J. A., Bromley-Trujillo, R., Boykoff, M. T., Culhane, T., Hall, G., Healy, N., Hess, D. J., Hsu, D., Krause, R. M., Prechel, H., Roberts, J. T., & Stephens, J. C. (2022). Climate policy conflict in the U.S. states: A critical review and way forward. *Climatic Change*, 170(3–4). <https://doi.org/10.1007/s10584-022-03319-w>. (24 pages)

Bulkeley, H., Edwards, G. A. S., & Fuller, S. (2014). Contesting climate justice in the city: Examining politics and practice in urban climate change experiments. *Global Environmental Change*, 25, 31–40. <https://doi.org/10.1016/j.gloenvcha.2014.01.009> (10 pages)

Capps, K. & Cannon, C. (2021, March 15). Redlined, Now Flooding. Bloomberg. Retrieved from <https://www.bloomberg.com/graphics/2021-flood-risk-redlining/> (12 pages)

Dernbach, J. C., & Jones, R. (2023). Evolution of U.S. Climate Law and Policy. In M. Gerrard, J. Freeman, & M. Burger (Eds.), *Global climate change and U.S. law*. essay, American Bar Association, Environment, Energy, and Resources Section. (44 pages)

Diezmartínez, C. V., & Short Gianotti, A. G. (2022). US cities increasingly integrate justice into climate planning and create policy tools for climate justice. *Nature Communications*, 13(1). <https://doi.org/10.1038/s41467-022-33392-9> (10 pages)

Exec. Order No. 14008, 86 Fed. Reg. 19, (February 1, 2021). (15 pages)

Gotham, K. F. (2014). Reinforcing inequalities: The impact of the CDBG program on Post-Katrina rebuilding. *Housing Policy Debate*, 24(1), 192–212. <https://doi.org/10.1080/10511482.2013.840666> (22 pages)

Green, F., & Healy, N. (2022). How inequality fuels climate change: The climate case for a green new deal. *One Earth*, 5(6), 635–649. <https://doi.org/10.1016/j.oneear.2022.05.005> (15 pages)

Hammer, D. (2022, December 13). *Why Louisiana's Road Home Program Based Aid on home values*. ProPublica. <https://www.propublica.org/article/why-louisiana-road-home-program-based-grants-on-home-values> (7 pages)

H.Res.109 - Recognizing the duty of the Federal Government to create a Green New Deal (14 pages)

Hess, D. K. & McKane, R. (2021). Making sustainability plans more equitable: an analysis of 50 U.S. Cities. *Local Environment*, Volume 26:4, pages 461-476. (15 pages)

Islam, N., & Winkel, J. (2017). Climate change and social inequality. *UN Department of Economic and Social Affairs (DESA) Working Papers, No 52*. <https://doi.org/10.18356/2c62335d-en>. (32 pages)

Kaswan, A. (2019). California Climate Policies Serving Climate Justice. *Natural Resources & Environment*, 33(4), 12–16. <https://www.jstor.org/stable/27010524> (6 pages)

Minow, M. (2021). Equality vs. equity. *American Journal of Law and Equality*, 1, 167–193. [https://doi.org/10.1162/ajle\\_a\\_00019](https://doi.org/10.1162/ajle_a_00019) (27 pages)

M-21-28, Interim Implementation Guidance for the Justice40 Initiative. Executive Office of the President, Office of Management and Budget. (July 20, 2021). (13 pages)

New York State Climate Action Council. (2022, December 30). Draft Scoping Plan - Executive Summary. (25 pages)

Plumer, B., Popovich, N., & Palmer, B. (2020, August 24). How decades of racist housing policy left neighborhoods sweltering. *The New York Times*. <https://www.nytimes.com/interactive/2020/08/24/climate/racism-redlining-cities-global-warming.html>

Reckien, D., Creutzig, F., Fernandez, B., Lwasa, S., Tovar-Restrepo, M., Mcevoy, D., & Satterthwaite, D. (2017). Climate change, equity and the Sustainable Development Goals: an urban perspective. *Environment and Urbanization*, Volume 29(1), pages 159–182. (23 pages)

Conley, S., Konisky, D. M., & Mullin, M. (2023). Delivering on environmental justice? U.S. state implementation of the Justice40 Initiative. *Publius: The Journal of Federalism*, 53(3), 349–377. <https://doi.org/10.1093/publius/pjad018> (29 pages)

Siders, A.R. Social justice implications of US managed retreat buyout programs. *Climatic Change* 152, 239–257 (2019). <https://doi.org/10.1007/s10584-018-2272-5> (19 pages)

Siders, A. R. (2019). Managed retreat in the United States. *One Earth*, 1(2), 216–225. <https://doi.org/10.1016/j.oneear.2019.09.008> (10 pages)

Zhong, R., & Popovich, N. (2022, March 9). How air pollution across America reflects racist policy from the 1930s. *The New York Times*. <https://www.nytimes.com/2022/03/09/climate/redlining-racism-air-pollution.html>

## Assignments and Assessments

### Reading Reactions – 15% (Individual Grade – L1, L2, L3, L4, L5)

Students will prepare 250 to 300 word written reactions in response to the assigned readings weekly. The reactions should be submitted via Canvas by 3:00pm prior to each class session. Reaction papers will be evaluated based on engagement with the reading material and critical thinking and analysis. Students should not attempt to review the reading material, but instead synthesize the information, identify themes and questions, and begin to develop thoughts and ideas that can lead to robust in-class discussion.

### Policy Motivation Essay – 20% (Individual Grade – L1, L3, L4, L5)

Students will prepare a 750 word, double-spaced essay describing their policy motivation(s). Students should identify a policy issue that they are personally interested in researching further and developing public policy solutions to address. The essay should articulate why the student thinks that this is an important issue to address and highlight any relevant knowledge or experience (educational, professional, or personal) that drives their interest. Additionally, students are not expected to frame comprehensive policy solutions, but should identify their vision for change in the policy area (how would the world look different?). Additional guiding questions will be shared after the start of the course.

### Policy Analysis – 25% (Individual Grade – L1, L2, L3, L4, L5)

Students will be asked to analyze the policy design decisions and outcomes of an existing state or local policy or policy proposal related to sustainability. Written documents should be a minimum of 1,000 words, double spaced. Students should consider the policymaking context and process, the substance of the policy, as well as the policy's quality and effectiveness. Each of these areas of analysis will be further discussed during in-class lectures. Essays will be evaluated based on evidence of policy analysis, synthesis of lecture/discussion and reading content, ability to demonstrate awareness of equity considerations in the policy context, organization of information, writing mechanics, and personal reflection.

### Final Paper & Presentation – 30% (Individual Grade – L1, L2, L3, L4, L5)

#### *Making Policy Change: Final Paper (10-12 pages)*

Students will be expected to conduct research about a problem related to climate adaptation efforts or urban sustainability transitions. Using policy change frameworks that will be introduced during the course, students will assess the problem, current strategies (or lack thereof) addressing their identified problem, and discuss potential solutions using different levers to influence policy change. Each student will first prepare a written proposal summarizing their work (2 pages max), followed by a final paper that will provide: an overview of their identified problem, vision, proposed solutions, relevant decision makers, concerns of impacted communities, and changemaking strategy.

#### *Final Project Presentation (10 minutes)*

Students will prepare a 10 minute presentation on their proposed policy change. Presentations will be followed by 5 minutes of Q & A.

Final assignments will be evaluated on the student's ability to identify and discuss common policy levers that can be used to address their problem; their explicit articulation and inclusion of equity-oriented measures; and the quality/rigor of the presentation in terms of context and substance. Papers should reflect thoughtful incorporation and analysis of the concepts introduced in the course. More details will be made available on Canvas as the course progresses.

**Participation and Attendance – 10% (Individual Grade – L1, L2, L3, L4, L5)**

Students should come to each class prepared to discuss the readings and relevant materials when called upon. Relevant, respectful dialogue, and thoughtful comments are vital for shared learning efforts. *The Socratic Method* will be used to help students develop critical thinking skills and confidently engage with questions of policy and law.

**Grading**

The final grade will be calculated as described below:

**FINAL GRADING SCALE**

Grade	Percentage
A+	98–100%
A	93–97.9%
A-	90–92.9%
B+	87–89.9%
B	83–86.9%
B-	80–82.9%
C+	77–79.9%
C	73–76.9%
C-	70–72.9%
D	60–69.9%
F	59.9% and below

Assignment/Assessment (Individual)	% Weight
Reaction Papers (10)	15%
Policy Motivation Essay	20%
Policy Analysis	25%
Final Paper	30%
Attendance & Participation	10%

## Course Schedule/Course Calendar

	Date	Topics and Activities	Readings (due on this day)	Assignments (due on this date)
Week 1	9/6/23	<b>Course introductions</b>	Bell, Derrick. The Space Traders.	
Week 2	9/13/23	<b>Section 1: Foundations of equity + public policy</b>  <i>Understanding equity; climate change and social inequality</i>	Minow, Martha. Equality vs. Equity.  Islam, N. and J. Winkel. Climate Change and Social Inequality.	Reaction paper submissions begin this week
Week 3	9/20/23	<b>Foundations of equity + public policy</b>  <i>Reading, interpreting, and analyzing policy; U.S. climate policy</i>	Dernbach, J. and Jones, R. Evolution of U.S. Climate Law and Policy.	<del>Policy Motivation Essay due</del>
Week 4	9/27/23	<b>Section 2: Climate policy and governance</b>  <i>Federal climate policy (cont'd)</i>	Green, F., & Healy, N. How inequality fuels climate change.  H.Res.109  Executive Order 14008: Tackling the Climate Crisis at Home and Abroad  <i>Skim:</i> M-21-28, Interim Implementation Guidance for the Justice40 Initiative  <i>In-class resource:</i> Climate and Economic Justice Screening Tool ( <a href="https://screeningtool.geoplatform.gov/">https://screeningtool.geoplatform.gov/</a> )	Policy Motivation Essay due - NEW date
Week 5	10/4/23	<b>Climate policy and governance</b>  <i>State actions</i>	Conley et al. Delivering on Environmental Justice? U.S. State Implementation of the Justice40 Initiative.	

	Date	Topics and Activities	Readings (due on this day)	Assignments (due on this date)
			<p>Basseches et al. Climate policy conflict in the U.S. states.</p> <p><i>Skim:</i> Kaswan. California policies serving climate justice</p> <p><i>Skim:</i> NY Climate Action Council Scoping Plan (Executive Summary).</p>	
Week 6	10/11/23	<p><b>Climate policy and governance</b></p> <p><i>Municipal actions</i></p>	<p>Hess, D. K. &amp; McKane, R. Making sustainability plans more equitable: an analysis of 50 U.S. Cities.</p> <p>Diezmartínez &amp; Gianotti. US cities increasingly integrate justice into climate planning and create policy tools for climate justice.</p> <p>Bulkeley et al. Contesting climate justice in the city.</p>	Policy Analysis due
Week 7	10/18/23	<p><b>Section 3: Unsustainable inequalities</b></p> <p><i>Distribution of risk + vulnerability</i></p>	<p><i>Video:</i> Segregated by Design (<a href="https://www.segregatedbydesign.com/">https://www.segregatedbydesign.com/</a>)</p> <p>Capps, K. &amp; Cannon, C. <a href="#">Redlined, Now Flooding.</a></p> <p>Plumer, B., Popovich, N., &amp; Palmer, B. <a href="#">How decades of racist housing policy left neighborhoods sweltering.</a></p> <p>Zhong, R., &amp; Popovich, N. <a href="#">How air pollution across America reflects racist policy from the 1930s.</a></p>	
Week 8	10/25/23	<p><b>Section 4: Adaptation &amp; Resilience</b></p>	<p><i>Video:</i> After Hurricanes, the ‘Road Home,’ the Long Way (<a href="https://www.nytimes.com/">https://www.nytimes.com/</a>)</p>	

	Date	Topics and Activities	Readings (due on this day)	Assignments (due on this date)
		<i>Communities' capacity to adapt/react: Disaster recovery</i>	<p><a href="https://www.washingtonpost.com/news/energy-environment/wp/2013/10/28/booming/after-hurricanes-the-road-home-the-long-way.html">2013/10/28/booming/after-hurricanes-the-road-home-the-long-way.html</a>) (11 mins)</p> <p>Hammer, D. Why Louisiana's Road Home Program Based Aid on Home Values.</p> <p>Gotham, K. F. Reinforcing inequalities: The impact of the CDBG program on Post-Katrina rebuilding.</p>	
Week 9	11/1/23	<p><b>Adaptation &amp; Resilience</b></p> <p><i>Communities' capacity to adapt/react: Managed retreat</i></p>	<p>Siders, A. R. (2019). Managed retreat in the United States.</p> <p>Siders, A.R. Social justice implications of US managed retreat buyout programs.</p> <p><a href="https://grist.org/series/flood-retreat-repeat/">Flood. Retreat. Repeat.</a> (https://grist.org/series/flood-retreat-repeat/)</p>	
Week 10	11/8/23	<p><b>Section 5: Urban sustainability transitions</b></p> <p><i>Water</i></p>	<p>Seigerman, C. K. et al. Operationalizing equity for Integrated Water Resources Management.</p> <p>Anazagasty-Rodríguez, J. Colonial waterscapes: The water issue in Puerto Rico.</p>	Final paper written proposals due
Week 11	11/15/23	<p><b>Urban sustainability transitions</b></p> <p><i>Energy</i></p>	Baker, S. Anti-Resilience: A Roadmap for Transformational Justice within the Energy System.	Reaction paper submissions end
Week 12	11/22/23	<b>No Class</b>	University Holiday	
Week 13	11/29/23	<b>Making policy change</b>		



	Date	Topics and Activities	Readings (due on this day)	Assignments (due on this date)
		<i>Final assignment presentations + perspectives from practitioners</i>		
Week 14	12/6/23	<b>Making policy change</b>  <i>Final assignment presentations + perspectives from practitioners</i>		

## Course Policies

### *Participation and Attendance*

You are expected to complete all assigned readings, attend all class sessions, and engage with others in classroom discussion. I will use the Socratic Method, which will require you to think deeply about the materials and confidently engage with questions of policy and law. Your participation may require that you answer questions, articulate your point of view, and respectfully engage with the perspectives of others.

If, for any reason, circumstances prevent you from being fully prepared on any given day, please provide a notification before the class begins. If you need to miss a class for any reason, please discuss the absence with me in advance. More than one absence will affect your grade.

### *Late work*

Work that is not submitted on the due date noted in the course syllabus without advance notice and permission from the instructor will be graded down 1/3 of a grade for every day it is late (e.g., from a B+ to a B).

There will be no credit granted for any reaction papers submitted after the start of class during the given week.

### *Citation & Submission*

All written assignments must use the APA citation format, cite sources, and be submitted to the course website (not via email).

## School and University Policies and Resources

### *Copyright Policy*

Please note—Due to copyright restrictions, online access to this material is limited to instructors and students currently registered for this course. Please be advised that by clicking the link to the electronic materials in this course, you have read and accept the following:

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials. Under certain conditions specified in

the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

#### *Academic Integrity*

Columbia University expects its students to act with honesty and propriety at all times and to respect the rights of others. It is fundamental University policy that academic dishonesty in any guise or personal conduct of any sort that disrupts the life of the University or denigrates or endangers members of the University community is unacceptable and will be dealt with severely. It is essential to the academic integrity and vitality of this community that individuals do their own work and properly acknowledge the circumstances, ideas, sources, and assistance upon which that work is based. Academic honesty in class assignments and exams is expected of all students at all times.

SPS holds each member of its community responsible for understanding and abiding by the SPS Academic Integrity and Community Standards posted at <https://sps.columbia.edu/students/student-support/academic-integrity-community-standards>. You are required to read these standards within the first few days of class. Ignorance of the School's policy concerning academic dishonesty shall not be a defense in any disciplinary proceedings.

#### *Diversity Statement*

It is our intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. It is our intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture.

#### *Accessibility*

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website: <https://health.columbia.edu/content/disability-services>.

#### *Class Recordings*

All or portions of the class may be recorded at the discretion of the Instructor to support your learning. At any point, the Instructor has the right to discontinue the recording if it is deemed to be obstructive to the learning process.

If the recording is posted, it is confidential and it is prohibited to share the recording outside of the class.

#### *SPS Academic Resources*

The Division of Student Affairs provides students with academic counseling and support services such as online tutoring and career coaching: <https://sps.columbia.edu/students/student-support/student-support-resources>.

#### *Columbia University Information Technology*

[Columbia University Information Technology](#) (CUIT) provides Columbia University students, faculty and staff with central computing and communications services. Students, faculty and staff may access [University-provided and discounted software downloads](#).

*Columbia University Library*

[Columbia's extensive library system](#) ranks in the top five academic libraries in the nation, with many of its services and resources available online.

*The Writing Center*

The Writing Center provides writing support to undergraduate and graduate students through one-on-one consultations and workshops. They provide support at every stage of your writing, from brainstorming to final drafts. If you would like writing support, please visit the following site to learn about services offered and steps for scheduling an appointment. This resource is open to Columbia graduate students at no additional charge. Visit <http://www.college.columbia.edu/core/uwp/writing-center>.

*Career Design Lab*

The Career Design Lab supports current students and alumni with individualized career coaching including career assessment, resume & cover letter writing, agile internship job search strategy, personal branding, interview skills, career transitions, salary negotiations, and much more. Wherever you are in your career journey, the Career Design Lab team is here to support you. Link to <https://careerdesignlab.sps.columbia.edu/>

*Netiquette*

*[Only applies to courses using online platforms]*

Online sessions in this course will be offered through Zoom, accessible through Canvas. A reliable Internet connection and functioning webcam and microphone are required. It is your responsibility to resolve any known technical issues prior to class. Your webcam should remain turned on for the duration of each class, and you should expect to be present the entire time. Avoid distractions and maintain professional etiquette.

**Please note:** Instructors may use Canvas or Zoom analytics in evaluating your online participation.

More guidance can be found at: [https://jolt.merlot.org/vol6no1/mintu-wimsatt\\_0310.htm](https://jolt.merlot.org/vol6no1/mintu-wimsatt_0310.htm)

Netiquette is a way of defining professionalism for collaborations and communication that take place in online environments. Here are some Student Guidelines for this class:

- Avoid using offensive language or language that is not appropriate for a professional setting.
- Do not criticize or mock someone's abilities or skills.
- Communicate in a way that is clear, accurate and easy for others to understand.
- Balance collegiality with academic honesty.
- Keep an open-mind and be willing to express your opinion.
- Reflect on your statements and how they might impact others.
- Do not hesitate to ask for feedback.
- When in doubt, always check with your instructor for clarification.