

Green Cities

Online summer course



Cornell University

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- **Class number:** NTRES 2470, 3 credits
 - **Dates:** June 22 – July 10, 2020 (3 weeks)
 - **Class time:** Monday–Friday, 7:00pm–8:00pm (EST), via zoom
 - **Course platform:** Readings and discussions are provided on Canvas
 - **Instructor:** Alex Kudryavtsev, PhD, Research Associate, Cornell University
 - **Teaching Assistants:** Bethany Jorgensen, PhD Candidate, Cornell University
Kim Snyder, MS student, Antioch University
 - **Office hours:** Usually before each class at 6:30pm–7:00pm
 - **Summer Sessions course page:** XXXXX
 - **Zoom:** XXXXX
 - **Canvas:** XXXXX
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Overview

The world's population has recently transformed from mostly rural to mostly urban. Billions of people call cities their home. In cities, urban residents hope to take care of their families, meet friends, get quality education, find gratifying jobs, experience diverse cultures, obtain good healthcare, and live in a sustainable environment. However, rapid urbanization creates unprecedented social and environmental problems that influence human well-being and threaten global sustainability. At the same time, cities address social-ecological problems through innovations in environmental policies, governance, green infrastructure, education, and ecosystem management. Several frameworks describe urban efforts to create a more sustainable urban future – including green urbanism, biophilic cities, smart cities, and sustainable cities – which we collectively refer to as “green cities” frameworks. These frameworks help us understand, analyze, and create sustainable, livable, just, resilient, and biophilic cities.

Through this 3-week course, students will learn about different aspects and dynamics of sustainable cities, and apply these ideas to develop novel approaches that address specific urban social-ecological issues. Learning materials include zoom-based lectures, readings, videos, discussions, individual projects, and group projects. Before each class begins, students will learn from required readings and videos assigned for that day, and post daily reflections. Students will explore independently the topics of their choice during the course, write individual essays that critically integrate ideas from relevant publications, and present their essays in the last week of the course. In addition, students will work in small groups on creative projects that will reflect the deep values that should guide the development of green cities.

Learning Objectives

1. **Frameworks.** Analyze and compare historical and contemporary “green cities” frameworks such as biophilic cities, sustainable cities, garden cities, and critical urbanism.
2. **Topics.** Explore various topics that inform urban sustainability, such as green design, urban nature, food security, transportation, ecological footprint, energy consumption, waste, urban agriculture, environmental justice, social norms, environmental identity, self-efficacy, and environmental behavior..
3. **Scholars.** Understand the main arguments and works of key urban/environmental scholars and practitioners.
4. **Thinking.** Practice critical and independent thinking in regards to urban environmental issues and solutions.
5. **Solutions.** Propose research-based approaches to solving specific urban social-ecological issues, and present these solutions through an ebook essay.
6. **Values.** Articulate your own values and guiding principles for green cities by working in groups with other students. Understand how human values can inform green technologies, economics, regulations, policies, and norms.
7. **Action.** Become a more conscious and engaged environmental citizen by practicing more sustainable living in your own city, and by involving your friends and families in pro-environmental behaviors.

Teaching Team

- Alex Kudryavtsev (Instructor), Research Associate, Cornell University (<http://alexruss.org>)
- Bethany Jorgensen (Teaching Assistant), PhD Candidate, Cornell University.
- Kim Snyder (Teaching Assistant), MS student, Antioch University New England.

Zoom

For each meeting, we will use the same zoom link. Please do NOT share this link with anyone outside the course. All meetings are recorded and posted on Canvas. We encourage you to keep your camera on during our meetings. Please use your full name when you log in so we can record your attendance (but you can add your nickname in parentheses). XXXXX

Textbooks

This course uses selected chapters from the following books:

- Beatley, T. (2011). *Biophilic cities: Integrating nature into urban design and planning*. Washington, DC: Island Press.
- Gehl, J. (2010). *Cities for people*. Washington, D.C.: Island Press.
- Glaeser, E. (2011). *Triumph of the city: How our greatest invention makes us richer, smarter, greener, healthier, and happier*. New York: The Penguin Press.
- Jacobs, J. (1961/2011). *The death and life of great American cities*. New York: Modern Library.
- Lyndon, M., & Garcia, A. (2015). *Tactical urbanism: Short-term action for long-term change*. Washington, DC: Island Press.
- Spiro, A. W. (1984). *The granite garden: Urban nature and human design*. New York: Basic Books.
- Speck, J. (2012). *Walkable city: How downtown can save America, one step at a time*. New York: Farrar, Straus and Giroux.

Case Study Books

Some of the case studies we will discuss are from these books:

- Beasley, L. (2019). *Vancouverism*. Vancouver: On Point Press.
- Beatley, T. (2000). *Green urbanism: Learning from European cities*. Washington, D.C.: Island Press.
- Gaines, J., & Jäger, S. (2009). *A manifesto for sustainable cities: Think local, act global*. Munich: Prestel.
- Gehl, J., & Svarre, B. (2013). *How to study public life*. Washington: Island Press.
- La Farge, A. (2012). On the High Line: Exploring America's most original urban park. In (pp. 218). New York: Thames & Hudson.
- Philips, A. (2013). *Designing urban agriculture: A complete guide to the planning, design, construction, maintenance, and management of edible landscapes*. Hoboken, New Jersey: Wiley.
- Russ, A. (2016). *Urban environmental education narratives*. Washington, DC and Ithaca, NY: NAAEE and Cornell University.

Inspirational Quotes

Conservation is a state of harmony between [humans] and land. – Aldo Leopold

Any city however small, is in fact divided into two, one the city of the poor, the other of the rich. – Plato

As an artificial world, the city should be so in the best sense: made by art, shaped for human purposes. – Kevin Lynch
Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody. – Jane Jacobs

We might not be able to make everyone rich as Americans. But we can design the city to give people dignity, to make them feel rich. The city can make them happier. – Enrique Peñalosa

Selected Urban/Environmental Scholars and Practitioners



Frederik
Olmsted
1822-1903
Landscape
architect



Ebenezer
Howard
1850-1928
Urban planner



Le Corbusier
1887-1965
Architect



Jane Jacobs
1916-2006
Urban theorist



Kevin Lynch
1918-1984
Urban planner



Majora Carter
1966-
Urban
strategist



Greta
Thunberg
2003-
Environmental
activist



Kongjian Yu
1963-
Ecological
urbanist



Timothy
Beatley
1957-
Green urbanist



Julian
Agyeman
1958-
Critical urban
planner

Selected Journals

- Anthropocene Magazine <https://anthropocenemagazine.org>
- Cities and the Environment <https://digitalcommons.lmu.edu/cate/>
- Environment and Urbanization <https://journals.sagepub.com/toc/EAU/current>
- City and Society <https://anthrosource.onlinelibrary.wiley.com/journal/1548744x>
- Built Environment <https://www.alexandrinepress.co.uk/built-environment>
- Urban Climate <https://www.journals.elsevier.com/urban-climate>
- More urban studies journals <https://www.scimagojr.com/journalrank.php?category=3322&order=h>

Ideas Sandbox

Adaptive capacity, adaptive governance, biophilic cities, bioswale, brownfield, carbon neutrality, circular economy, civic participation, civil society, climate change, community development, cultural heritage, decision making, ecological transformation of urban land, ecosystem services, ecosystem thinking energy conservation, environmental citizenship, environmental justice, environmental stewardship, equality, food production, food security, green building, green cities, green design, green economy, green infrastructure, green roofs, green walls, green urbanism, healthy environment, human-wildlife interactions, inclusivity, landscape architecture, local economies, open space, planetary boundaries, pollution remediation, pro-environmental behavior, public transportation, rain garden, renewable energy, resilient cities, resilient systems, smart growth, social capita, social-ecological resilience, smart cities, stormwater management, sustainable development, Sustainable Development Goals, sustainable energy, sustainable food systems, technological innovation, transport and eco-mobility, urban agriculture, urban greening, urban nature, urban planning, urban sprawl, urban streetscaping, urbanization, zero-waste.

Recommended Inspirational Resources

Websites

- <http://thenatureofcities.com>
- <https://drawdown.org>
- <https://www.usgbc.org/education>
- <https://eatforum.org>
- <https://sustainabledevelopment.un.org>
- <https://www.citylab.com/environment>
- <https://iclei.org>
- <https://grist.org>
- <https://www.gapminder.org/tools>
- <https://julianagyeman.com>

Movies

- An Inconvenient Truth (2006)
- Koyaanisqatsi (1982)
- Requiem for the American Dream (2019)
- Timelapse of the future (2019)
<https://youtu.be/uD4izuDMUQA>
- Urbanized (2011)

Books

- Harari, Y.N. (2011). *Sapiens: A Brief History of Humankind*.
- Hawken, P. (2017). *Drawdown*.
- Kolbert, E. (2014). *The sixth extinction: An unnatural history*.
- Stanton, B. (2013). *Humans of New York*.
- Wilson, E.O. (2014). *The meaning of human existence*.

Teaching and Learning

Teaching philosophy: (1) Research-based. This course is based on ideas from research publications related to green cities. (2) Critical thinking. The course promotes critical thinking during students' work on all readings and written assignments. (3) Social learning. Effective learning is social, thus students will have opportunities to develop ideas together during class, and collaborate on group projects. (4) Innovation. Through individual and group assignments, students can practice higher-level thinking by creating new solutions for social-ecological problems.

Tips for successful learning: (1) Ask questions and share your ideas during classes. (2) Submit all assignments before deadlines. (3) Come on time for each class. (4) Tell teaching assistants (TAs) beforehand if you have to skip a zoom class. (5) The course instructor is available to talk before most classes, but not after classes. (6) If you need any help, ask TAs first. (7) Do not multitask during class. (8) For your research essay, choose a topic you care about. (8) Turn on your camera during zoom sessions if you can; this helps everyone experience a more welcoming learning environment.

Disability Statement

It is Cornell policy to provide reasonable accommodations to students who have a documented disability (e.g., physical, learning, psychiatric, vision, hearing, or systemic) that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact Student Disability Services and their instructors for a confidential discussion of their individual need for academic accommodations. Student Disability Services is located in Cornell Health Level 5, 110 Ho Plaza. Staff can be reached by calling +1 (607) 254-4545.

Environmental Statement

This course encourages pro-environmental behavior among students to minimize our ecological footprint. We encourage students to think about applying the principles we learn in the class in their own homes, for example, by reducing food waste or eating a plant-based diet.

Code of Academic Integrity

Absolute integrity is expected of every Cornell student in all academic undertakings, and that includes those of high school age. Everybody should follow the [University's Essential Guide to Academic Integrity](#). Plagiarism, presenting ideas and words as your own without proper referencing, is absolutely unacceptable in this class; if you have any doubts or questions about it, ask the instructor or TA/s.

Cornell Email

The course instructor will send course information only to students' Cornell email. Please either check your Cornell email regularly or setup email forwarding from your Cornell email to another email account.

Assignments and Grading

Grading scale: A (93-100), A- (90-92), B+ (87-89), B = (83-86), B- = (80-82), C+ = (77-79), C = (73-76), C- = (70-72). An "A+" grade can be granted to students who show exceptional performance; these students can request a letter of recommendation from the instructor in Fall 2020 if they apply for colleges. The final grade is based on:

- **Reflections.** Write thoughtful daily reflections submitted before each class on discussion boards (30%),
- **Comment.** Write helpful feedback/comments for two other students on each discussion board (5%)
- **Research essay.** Write a 2-page research essay on an urban social-ecological topic of your choice (35%).
- **Group article.** In groups of 3-4 students, create a 2-page document describing urban values (30%),

Please keep in mind:

- Complete all assignments **before** each class. You will learn most content through reading and writing, and by working with other students between classes. During classes, we will synthesize what you've learned, and organize your learning experiences. If you have any questions or issues, please contact the TAs in advance. In case of illness or emergency, let the TAs know as soon as you can if a situation arises preventing you from completing your work.
- Attend all zoom meetings. If you cannot come (e.g., if it's the middle of the night in your time zone or you have an emergency), please discuss with TAs how to accommodate your learning experience.
- Instead of a "research essay," students are welcome to complete an independent project (e.g., magazine article, video script, research proposal) that requires research on a topic of the course. Such independent projects must be finished by the end of the course. If you want to do an independent project, you must discuss it first with the teaching team.

Rubrics

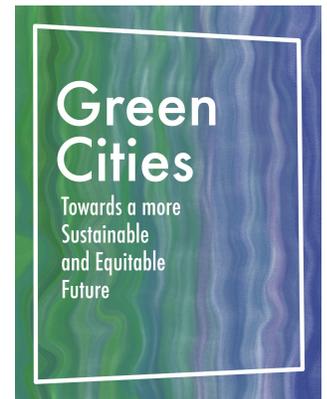
	5 (100)pts	4 (80)pts	3 (60)pts	2 (40)pts	1 (20)pts
Reflections (30%)	These are posts on discussion boards. Thought-provoking, creative and relevant. Main idea stands out and is supported by ideas from readings. Submitted before a class begins. Usually 2-3 short paragraphs is enough, unless advised otherwise. <i>Graded on a 5-point scale.</i>	Main idea is clear, but supporting evidence is not specific or insufficient.	Main idea is somewhat clear, but unsupported by evidence.	The main idea is not clear. Random collection of information.	Late submission.
Comments (5%)	Contribute two thoughtful and meaningful comments to fellow students (for the previous day). Provide positive feedback ("I like..."), useful suggestions ("Have you considered..."), relevant resources, and connections with other ideas. One paragraph is enough. <i>Graded on a 5-point scale.</i>	Contribute one thoughtful and helpful comment, and one fair comment.	Contribute two fair comments.	Contribute only one comment.	Late submission.
Research essay (35%)	<ul style="list-style-type: none"> ● Thesis Statement. Exceptionally clear, focused, interesting thesis at the end of the introduction paragraph. ● Supporting Research/Evidence. Strong, rich supporting arguments, details, and examples that prove the thesis statement. ● Organization. Coherent and logical progression and skillful transitions between supporting arguments. Meaningful conclusion explaining the importance of your findings. ● Style. Written in formal, understandable, and concise language. Correct usage and grammar. 	<ul style="list-style-type: none"> ● Clear thesis statement, consistent focus. ● Consistent and logical progression. ● Supporting evidence is mostly relevant. ● 3-4 cited sources are 	<ul style="list-style-type: none"> ● Thesis has a vague focus. ● Cited sources do not always support the thesis. ● Conclusion merely summarizes research. ● More analysis needed. 	<ul style="list-style-type: none"> ● Thesis statement lacks clarity and focus. ● Weak supporting evidence. ● Most cited sources are not credible. ● Lack of logical connections 	<ul style="list-style-type: none"> ● Essay lacks order. ● Message is unclear. ● Informal language. ● Some parts are plagiarized. ● Fails to

	No typos. ● Citations. Use 5 or more appropriate and credible sources, correctly use APA style. <i>Graded on a 100-point scale.</i>	correctly cited and used. ● Careful editing.	● A few typos. ● Too many direct quotations.	between ideas. ● Some typos and errors	follow APA style.
Group article (30%)	● Convincing message. Clear and valid main ideas. Logical and convincing examples, arguments, language and transitions. ● Powerful illustration. Illustration enhances or extends the message or arguments of the text. ● Meaningful. Presenting ideas that can help us improve sustainability or other characteristics of cities. ● Group Work. Evidence that group members put considerable effort in collaborative work, exploration, discussion and learning while writing this article. ● Language. Easy, clear, creative and professional text. <i>Graded on a 100-point scale.</i>	● The main ideas are relevant and interesting. ● Evidence or the flow of ideas can be more convincing or logical. ● Group could coordinate their work more effectively.	● Interesting and relevant ideas, but not convincing or not creative. ● Illustration does not expand or enhance the main ideas.	● Weak and unsupported main ideas. ● Text and illustration lack a strong connection. ● Ineffective group work.	● Little effort in producing a creative article.

Research Essay Requirements (Individual Work)

Through this course, students will contribute a chapter to an ebook about urban issues of their choice. Students will be sole authors of their research essays. The ebook will be posted online and used in future courses.

- **Template:** Strictly use the “research essay” template, provided on Canvas (or here: XXXXX). Do not change the formatting: font size and type, page size, margins, line spacing. This helps us to combine all chapters into one ebook. Absolutely no longer than 2 pages (between 1.5-2 pages is okay).
- **Submit:** Submit your research essay by the deadline as a Word document.
- **Topic:** For your research essay, consider investigating a narrow topic of your interest. Ideally, it should combine social aspects of urban life (e.g., consumption, legislation, civic engagement, market-based solutions, social equity, education...) and ecological/environmental aspects (e.g., green infrastructure, transport, housing, urban sprawl, information technologies, urban agriculture, outdoor spaces...).
- **Specific requirements:** (1) Title must be short and memorable and fit on one line. (2) Your essay must introduce a specific urban social or ecological issue, develop a new approach to addressing this issue, and be based on valid research findings. (3) In your text, cite 4-6 references; and include each cited reference in the reference list at the end. (4) Use the APA style to format your references in-text and in the list at the end. (5) Don’t exceed two pages. (6) The last sentence of the first paragraph must include your thesis statement. The following several paragraphs must present supporting arguments. You can also include optional counter-arguments and rebuttal. The conclusion paragraph should not include new information.
- See last year’s ebook created by students, although this time the format is different (2-page text, no illustration): https://0aee4d43-1d26-4aa5-9980-7f0af4e76e36.filesusr.com/ugd/5db919_bc60cff8563948b2861243732badffc0.pdf



Group Article

Students will work in small groups (3-4 people) on articles that will outline the values of green cities. Group articles will include 1-page text and 1-page illustration. These articles will be included in the same ebook.

- **Template:** Strictly use the “group project” template provided on Canvas (or here: XXXXX). Do not change the formatting. Absolutely no longer than 2 pages total, including one page text, and one page visual illustration (art, graph, diagram, photo collage, etc.).
- **Submit:** Submit your group project (one submission per group) by the deadline as a Word document.
- **Topic:** In your group project, you will propose ~3 main values that should guide green cities, sustainable urbanism, or urban development in general (2-4 values is okay).
- **Peer evaluation:** Submit peer evaluation at the end of the course through an online form, in which you will provide feedback on how your peers performed during the group work. Your performance will also be evaluated by your peers.
- **Specific requirements:** (1) Title must be short and memorable and fit on one line. (2) Creative writing (like in magazine articles or professional blogs) is encouraged, but you can also use a more research style. Use professional, convincing, and clear language. (3) Cite 2-3 books or articles that inform your ideas, include APA references at the end of the first page. (4) Use the first page for text, and the second page only for the illustration. (5) The illustration should enhance the main idea of your text. It can be a photo, comics, collage, diagram, graph,

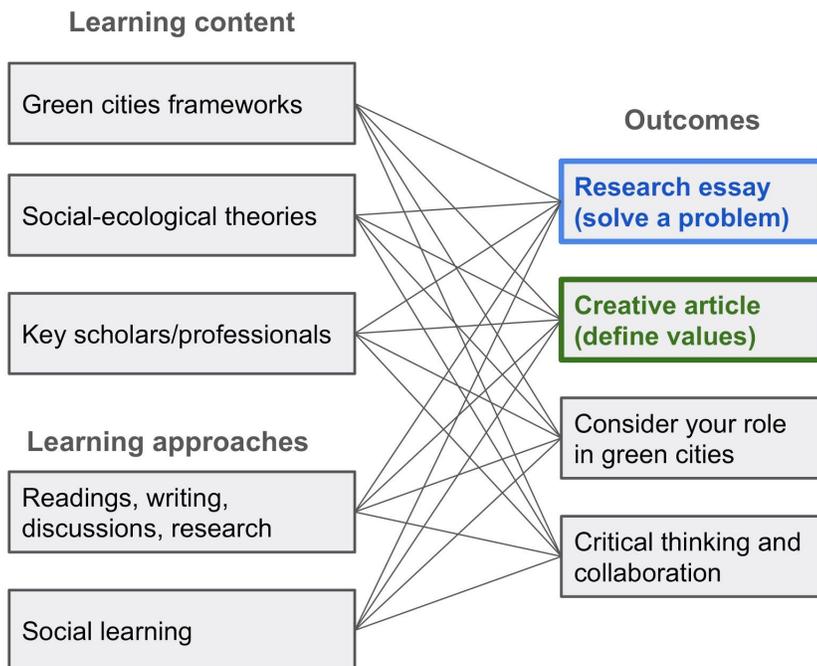
infographic, painting, calligraphy, urban map, poetry, wordcloud, recipe, landscape blueprint, mental model, decision tree, drawing, or something else.

Reflections and Comment Requirements

- Each day before class, you will submit reflections on a Canvas discussion board. Do your reading first. Then answer questions for each day. Sometimes you will need to summarize a reading and provide your feedback on it, sometimes you need to write thoughts about your research essay or group article. Late reflections are not accepted. Write original thoughts in your own words, do not plagiarise, do not copy and paste long direct quotations. You can write about what was surprising, new, confusing, eye-opening, or what you disagree with and why; try to connect ideas with your own experiences, other theories and frameworks, and other academic fields.
- Each day before class, post **two** comments for other students on a **previous** discussion board. For example, if today you submit your reflections for 6/26, then write comments for the 6/25 discussion board.

Roadmap

Below are the main elements of the course: content, pedagogy, and outcomes.



Students 2020

Students map: XXXXX (Please contact Kim if you don't see yourself.)

We encourage students to contact each other informally via social media and messengers. You can support each other informally outside of class by sharing ideas, and helping to understand assignments. Although all submitted assignments must be your own, you are welcome to collaborate with other students. Here are students' names and emails (@cornell.edu):

XXXXX

Important Links

- Creative articles groups: XXXXX
- Individual and group chapters: XXXXX

Contacts

- With most questions, please email Kim Snyder
- Grading, assignments, ebook — Bethany Jorgensen
- Contents — Alex Kudryavtsev

Schedule

Content topics (14 classes)

1. Introduction
2. Urban environmental history
3. Social and environmental frameworks
4. Climate change
5. Green infrastructure
6. Civic participation
7. Current issues
8. Social theories
9. Environmental justice and equality
10. Urban agriculture
11. Environmental stewardship
12. Urban environmental education
13. Impact outside cities & So what
14. Final presentations

Organizing topics

1. Critical thinking
2. Working in groups
3. How to take reading notes
4. Selecting a research topic
5. Searching literature
6. How to cite articles and books
7. Annotated bibliography
8. Research essay structure
9. Effective work

Cross-cutting reviews

1. Urban case studies
2. Key scholars

Important dates

- Friday 6/26 – Research Essay (draft 1)
- Wednesday 7/1 – Group Article (draft 1)
- Friday 7/3 – Research Essay (draft 2)
- Tuesday 7/7 – Research Essay FINAL
- Wednesday 7/8 – Group Article FINAL
- Friday 7/10 – Group Presentations

Date	Assignments due BEFORE each class	Class activities
6/22	<p>1. Fill in the pre-course survey (10 min): XXXXX</p> <p>2. Login on Canvas, find the Green Cities course: XXXXX</p> <ul style="list-style-type: none"> ● On the discussion board (6/22), please introduce yourself. Click “Reply” under the discussion board question (not under others’ posts). <p>3. Read these readings before the first class:</p> <ul style="list-style-type: none"> ● Glaeser 2011 Introduction ● Glaeser 2011 Chapter 7 [Sprawl] ● Jacobs 1961 Introduction ● Jabareen 2013 [Resilience] 	<p>7pm-8pm — Class Introduction Objectives: (1) Get to know the course and one another, (2) Begin to engage with the concept of green cities, (3) Consider the meaning and significance of urban sustainability.</p> <ol style="list-style-type: none"> 1. Syllabus review 2. Self-introductions 3. Breakout group: What are the most pressing environmental issues in city planning? 4. Q&A <p>At the end of the class, submit an Exit Ticket: XXXXX</p>
6/23	<p>Before you begin, first see below what’s required for the reflection.</p> <p>1. Read</p> <ul style="list-style-type: none"> ● Beasley (2019) - Chapters 7 and 8 <p>2. Skim (familiarize yourself, write down the main ideas that you want to remember)</p> <ul style="list-style-type: none"> ● About Frederick Olmsted’s parks, read one of these: <ul style="list-style-type: none"> ○ A. Rome (2007) - XXXXX ○ Cramer (1993) - Canvas ● About Ebenezer Howard’s “Garden City” concept: <ul style="list-style-type: none"> ○ March (2004) - Canvas ○ Wiki: https://en.wikipedia.org/wiki/Garden_city_movement ● About Kevin Lynch’s image of the city: <ul style="list-style-type: none"> ○ Lynch (1960) - Chapter 1 and 2 - Canvas ○ Lynch (1960) - The “Lynch 1960 Summary” file - Canvas ● Green Cities 2019 (This ebook created by students in the previous course; you’ll create a similar one.): PDF <p>3. Watch - think how ideas from these videos apply to creating more sustainable cities:</p> <ul style="list-style-type: none"> ● Le Corbusier https://youtu.be/-sT1f1Se_9g ● Attractive cities https://youtu.be/Hy4QjmKzF1c ● Vancouver, the best city? https://youtu.be/P8dmVUrNt38 <p>4. Research skills</p> <ul style="list-style-type: none"> ● Paul (2006) - skim through the brochure. You’ll practice critical thinking in your research essay. 	<p>7pm-8pm — Class Urban environmental history (1) Continue to cultivate community, (2) Discuss the ideas of key historical urban scholars, (3) Apply these ideas to a case study [Vancouver], (4) Start working on research essays.</p> <ol style="list-style-type: none"> 1. Historical ideas that influence green cities 2. Breakout group 3. How to choose an essay topic 4. Q&A <p>Exit ticket: XXXXX</p>

	<ul style="list-style-type: none"> ● Learn the APA format for in-text citations and references: XXXXX ● We recommend that you organize your citations using Zotero (optional): https://www.zotero.org/download/ <p>5. Post reflections (Canvas discussion “6/23”). Post 5-10 very short quotations from today’s readings that expand your thinking about green cities (not merely confirm what you already know or agree with). In other words, while reading today’s readings, find short quotations that you’d like to remember and share with the class. After each quotation, write a 1-sentence note why you chose it (e.g., how it relates to your experiences, prior knowledge, or interest; whether you agree/disagree and why).</p> <p>6. Post two meaningful replies for other students in the same discussion</p> <p>7. Start to create groups (due on 6/24). Soon, you’ll work in groups on group projects. You can already create groups (3-4 students). Contact students first via email or social media to agree that you work together. Then fill in here before the 6/24 class: XXXXX</p> <p>8. Optional: Connect with other students informally via social media or email. Students in this course are encouraged to create groups (on Facebook, WeChat, WhatsApp, etc.) to communicate among themselves independent from course instructors. You can exchange ideas, help each other to understand assignments.</p>	
<p>6/24</p>	<p>While you are reading today, try to find several possible topics/ideas that you may use in your research essay later in this course. These ideas will inform our thinking about green cities.</p> <p>1. Read (you don’t have to read every detail; try to find the key ideas, and take notes):</p> <ul style="list-style-type: none"> ● Three fixes <ul style="list-style-type: none"> ○ Heberlein (2012) - focus on 3 fixes (technological, cognitive, structural) ○ Ferkany (2014) - attitude change, p.135 ● Planetary boundaries / safe operating space <ul style="list-style-type: none"> ○ Steffen (2016) - read carefully the 1st page ● Social-ecological systems, Resilience, and Resilience thinking <ul style="list-style-type: none"> ○ Read or watch: https://tinyurl.com/resiliencethinking ○ Ramaswami (2013) - understand Figure 2 ○ Berkes (2013) - look at Table 2 for strength / attributes of resilience ○ Berkes (2007) - Table 1 ● Ecosystem services <ul style="list-style-type: none"> ○ Gómez-Baggethun 2013 (read pp.177-186) ○ Bolund 1999 ● Sustainable development goals <ul style="list-style-type: none"> ○ Understand SDGs. Choose any 5 SDGs, learn more about them (including “targets”), and think how they apply to green cities: https://tinyurl.com/SDGs-read <p>2. Think about potential topics for your research essay. You can explore topics in these resources to give you some creative ideas</p> <ul style="list-style-type: none"> ● See the titles of presentations in “The Nature of Cities” summit (some of them are cool): https://www.tnoc-summit.org/program-2/en ● See keywords in the “Sandbox” in the course syllabus <p>3. Research skills: watch two videos</p> <ul style="list-style-type: none"> ● Papers and Essays: https://youtu.be/KIqR1q3UQZE ● Who Can You Trust? https://youtu.be/o93pM-b97HI <p>4. Reflections - please post only 2 short paragraphs:</p> <ul style="list-style-type: none"> ● In the first paragraph, we hope to learn about your own city or your neighborhood! Remind us where you are. Then in a few short sentences, describe some ecological or related social issues in your current city. Use at least 3 new concepts that you’ve learned from today’s readings. Cite the authors like this when you mention their ideas (Heberlein, 2012). Please no more than one short paragraph! ● In the second paragraph, list several possible topics for your research essay. Don’t worry, you can change your topic later. <p>5. Post two meaningful replies for other students in the same discussion</p> <p>6. Create groups. Soon, you’ll work in groups on group projects (creative essays). Please talk with other students, find someone you’d like to work with (3-4 students), write your names here: XXXXX</p>	<p>6:30pm-7pm — Office hours 7pm-8pm — Class</p> <p>Social and Environmental Frameworks Objectives: (1) Analyze frameworks and research ideas that inform green cities thinking, (2) Understand how to find reliable sources for research.</p> <ol style="list-style-type: none"> 1. Brief review of today’s readings, and thinking how they apply to solving urban social-ecological issues 2. Breakout group 3. Research essay discussion 4. Q&A <p>Exit ticket: XXXXX</p>

<p>6/25</p>	<p>1. Read</p> <ul style="list-style-type: none"> Climate change on Kurzgesagt https://youtu.be/ipVxxxqwBQw Drawdown (https://drawdown.org) - learn about their framework and solutions. Choose any 2 solutions that you find interesting and useful for cities, and read more details about them (https://drawdown.org/solutions/table-of-solutions). TNOC website (https://www.thenatureofcities.com). On this website, find and read any 2 climate-related articles. You can also spend some time on this website to get ideas for your research essay. <p>2. Calculate your ecological footprint</p> <ul style="list-style-type: none"> http://www.footprintcalculator.org <p>3. Research essay topics</p> <ul style="list-style-type: none"> Continue thinking about your research essay. Think how your research essay topic is connected to the issues of environmental justice, social equity, inclusivity, human oppression, poverty, access to resources, racism, mutual respect, self-determination, socio-economic inequity, or human rights. We want to make sure that your solutions for urban environmental problems can benefit the environment and all urban residents. If you want to learn more about some of these topics, check p.424 in Mohai (2009). Spend 20 min exploring / reading TNOC essays and roundtables. You will be amazed how many interesting research questions about urban sustainability one could ask!! https://www.thenatureofcities.com <p>4. Meet with your group (today or tomorrow)</p> <ul style="list-style-type: none"> Schedule a meeting with your group in the next 1-2 days (use any online technologies, messengers, video calls). Brainstorm a list of 10 values that should guide the development of green/sustainable cities. Later, you'll present them in class, and use these ideas for your creative article. Groups: https://tinyurl.com/GC-groups <p>5. Reflections</p> <ul style="list-style-type: none"> Based on what you've learned from Drawdown and TNOC, let us know what your urban community (or your city) can do to mitigate climate change? You can connect your response to what you've learned from Drawdown and TNOC. At the end, please provide some critique of these solutions (e.g., from the standpoint of equality, justice, gentrification, poverty, or other issues). One short paragraph is enough! What's your ecological footprint? <p>6. Post two meaningful replies for other students in the same discussion</p> <p>7. Required assignment</p> <ul style="list-style-type: none"> Sleep at least 8 hours every day. We want you to have a lot of energy! :) 	<p>6:30pm-7pm — Office hours 7pm-8pm — Class</p> <p>Climate Change Objectives: (1) Understand how climate influences cities (2) Define how environmental and social justice may be reflected in your research essays.</p> <p>(1) Climate change: the role of and impact on cities (2) Research essay discussion</p> <p>Exit ticket: XXXXX</p>
<p>6/26</p>	<p>Research Essay (draft 1) due before class 6/26</p> <p>1. Read</p> <ul style="list-style-type: none"> Beatley (2011) - Read chapter 3 and 4 (boxes 3.1 and 4.1 are important) <p>2. Skim (quickly explore any chapters, write down any new/interesting ideas)</p> <ul style="list-style-type: none"> Gehl (2010) Lydon (2015) <p>3. Watch (optional, funny)</p> <ul style="list-style-type: none"> Bike lane infrastructure https://youtu.be/DNNIB_PdaA Green building (CAS) https://youtu.be/tpnUP3mgWdw <p>4. Reflections</p> <ul style="list-style-type: none"> Take an example of any green infrastructure from today's readings, or another real-life example that you know in any city. Tell us which example you've chosen to discuss (any green building, green roof, sustainable community, greenway, bioswale, green school, park, outdoor pace, urban farm, farmers market, low-impact development, green school yard, etc.). Criticize this specific green infrastructure from the standpoint of social and environmental justice. Who benefits from it? Who is excluded? What environmental and social benefits are produced or overlooked? What values does it promote? What opportunities are missed or underdeveloped? How effective is it mitigating climate change, providing ecosystem services, or receding ecological footprint? Who participated in the design, how inclusive the planning was? <i>One very short paragraph is enough!</i> <p>5. Post two meaningful replies for other students in the same discussion</p>	<p>6:30pm-7pm — Office hours 7pm-8pm — Class</p> <p>Green Infrastructure Objectives: (1) Explore, criticize, and think about improving green infrastructure projects, (2) Get ready to start group projects,</p> <p>Exit ticket:XXXXX</p>

	<p>6. Upload your research essay (draft 1) to Canvas (Assignments) Use the research essay template. Type the first introductory paragraph. The last sentence must be a thesis statement (where you claim what should be done to address a specific urban social-ecological issue). Optional: after your thesis statement, you can list your arguments that support this thesis statement, so we can give you early feedback.</p>	
<p>6/29</p>	<p>1. Read</p> <ul style="list-style-type: none"> • Krasny (2015) - read the “Principled Chapter” (pp.1-12). And skim through Ch. 1. • Optional: Krasny (2012) - explore 10 principles of civic ecology. They are similar to the chapter above, but some examples are different. <p>2. Skim – these readings are in preparation for the 6:00pm guest lecture:</p> <ul style="list-style-type: none"> • Low, S., Taplin, D., & Scheld, S. (2009). <i>Rethinking urban parks: Public space and cultural diversity</i>. University of Texas Press. Chapter 1. • Cahill, C., Stoudt, B. G., Matles, A., Belmonte, K., Djokovic, S., Lopez, J., & Torre, M. E. X, D. (2017). The Right to the Sidewalk: The Struggle Over Broken Windows Policing, Young People, and NYC Streets. <i>City Unsilenced</i>, 94-105. • A playbook for inclusive placemaking: Community process. Explore the website: XXXXX <p>3. Watch</p> <ul style="list-style-type: none"> • Examples of civic ecology: restoration of the Bronx River in NYC: <ul style="list-style-type: none"> ◦ Bronx River Alliance: https://youtu.be/xvTq2ynivZ4 ◦ Major Carter’s TED talk: https://youtu.be/gQ-cZRMHfs4 • These videos may help some of our groups get more ideas for creative articles: <ul style="list-style-type: none"> ◦ Single-family zoning https://youtu.be/ajSEldjkU8E ◦ Principles of Building Better Cities https://youtu.be/IFjD3NMv6Kw <p>4. Reflections</p> <ul style="list-style-type: none"> • Choose once “civic ecology” principle from the reading. (1) Give us an example of how it can be implemented in your city/neighborhood. (2) Please briefly discuss how this principle is connected with any new ideas that you’ve learned from any previous readings (e.g., any indicators of biophilic cities, tactical urbanism, ecological footprint, ecosystem services, sustainable development goals, planetary boundaries). Please no more than one very short paragraph! • Please find any journal article (e.g., through Google Scholar) that broadly relates to the topic of your research essay. Using a correct APA reference style, please type the reference. That’s it! Just type one reference for a journal article that you may use. This will help us to see that you can find research articles, and that you can correctly type a reference using APA style. <p>5. Post two meaningful replies for other students in the same discussion</p> <p>6. Group creative article - please work on your creative article with your group. Be ready to discuss your article during the Monday class. You can also show us your preliminary illustration.</p>	<p>6:00-6:55pm — Guest lecture: “Socially Just Public Space.” Speaker: Bryce DuBois (Assistant Professor at The Rhode Island School of Design)</p> <p>7pm-8pm — Class Civic Participation Objectives: (1) Understand the framework and practice of civic ecology and urban environmental stewardship, (2) Make progress in groups’ creative essays.</p> <p>Exit ticket: XXXXX</p>
<p>6/30</p>	<p>1. Read about Covid-19 and urban sustainability:</p> <ul style="list-style-type: none"> • Choose and read any 2 opinions on this TNOC webpage: https://www.thenatureofcities.com/2020/05/03/covid-has-upended-all-the-normal-routines-in-our-lives-and-work-how-do-you-imagine-you-might-be-changed-by-it-both-professionally-but-also-personally-as-you-negotiate-a-new-post-virus-norm/ • Johnson, N. (2020). Are we there yet? Now that states are reopening, it’s time to rethink how we get around. <i>Grist</i>. https://grist.org/politics/the-covid-recovery-is-coming-how-will-we-get-around/ • Samuelsson, K., Barthel, S., Colding, J., Macassa, G., & Giusti, M. (2020). Urban nature as a source of resilience during social distancing amidst the coronavirus pandemic. <i>Landscape and Urban Planning</i>. Preprint DOI: 10.31219/osf.io/3wx5a • Serhan (2020). The coronavirus is already reshaping urban life. <i>The Atlantic</i>. <p>2. Skim</p> <ul style="list-style-type: none"> • Refresh your memory about previous readings before an in-class mini-test. Look at chapters and articles that we’ve read and discussed so far. <p>3. Reflections</p> <ul style="list-style-type: none"> • Please submit a <i>brief</i> reflection about how Covid-19 may influence urban sustainability, green cities planning, or our understanding of environmental justice. Write your own thoughts, but you can support them by citing some of the readings (optional). No more than a few short sentences! 	<p>6:30pm-7pm — Office hours 7pm-8pm — Class Current issues Objectives: (1) Connect what we’ve learned with current urban issues, (2) Make progress on group articles.</p> <p>(1) Discuss current issues (Covid-19) and the urban environment, (2) Group work.</p> <p>Exit ticket: XXXXX</p>

7/1	<p>Group Article due (draft 1)</p> <p>1. Read and watch in preparation for Akiima Price's guest lecture:</p> <ul style="list-style-type: none"> • Statement on racism in the environmental field: https://tinyurl.com/ybnpvoa4 • Video 1: Meaningful Engagement Video 2019 • Video 2: NatureFest Video 2015 • Video 3: Community EE 2013 • Video 4: Talk in Baltimore 2016 <p>2. Read</p> <ul style="list-style-type: none"> • Stern (2018) – read and be ready to discuss: <ul style="list-style-type: none"> ◦ See the Contents: various theories that explain human and organizational behavior related to sustainability. ◦ Read Chapter 4.1 (social norm theory) ◦ Read Chapter 4.5 (theory of planned behavior) <p>3. Group article is due</p> <ul style="list-style-type: none"> • Before the class, please finish your group's creative article. It must be an almost final version. Strictly follow all the requirements in the syllabus (one page convincing text, one page professional quality illustration). Your group article must be in this folder: https://tinyurl.com/GC-chapters <p>4. Learning on LinkedIn</p> <ul style="list-style-type: none"> • This is not required, but very recommended (1 hour). On LinkedIn Learning, find the "Writing a Research Paper" course. Watch Part 3 of this course "Writing the Paper". It will take you less than an hour, and greatly improve your understanding of thesis statement and supporting arguments (paragraphs): https://www.linkedin.com/learning/writing-a-research-paper/developing-a-thesis-statement <p>5. Reflections</p> <ul style="list-style-type: none"> • No reflection today. Please work hard on finishing your group's creative article. 	<p>6:00pm-6:55pm Guest lecture: "Meaningful park/nature engagement with stressed populations." Akiima Price, Akiima Price Consulting, Washington, D.C.</p> <p>7pm-8pm — Class Social Theories Objectives: Understand how to use social theories to develop solutions for urban environmental issues.</p> <p>(1) Review research theories, understand how to use them in your research essays. (2) Learn more about writing research essays: structure, strong supporting arguments, counterargument and rebuttal, conclusion.</p> <p>Exit ticket: XXXXX</p>
7/2	<p>Research Essay is due (draft 2)</p> <p>1. Read/watch, and get ready to discuss the link between environmental justice and ecological sustainability in class. Find ideas you may use in your research essay.</p> <ul style="list-style-type: none"> • Agyeman (2003) • Agyeman (2013) - Chapter 1 • Optional: Watch "Just sustainability": https://youtu.be/N6S6700LJ7o (he talks about sustainable campuses, but his ideas about broadening "sustainability" to include social justice, equity, and diversity is applicable anywhere). • Optional: On the TNCO website (https://www.thenatureofcities.com), use the Search to look for articles that mention "justice" or "equality," and read any one article that interests you. <p>2. Research essay is due</p> <ul style="list-style-type: none"> • Before the class, please finish your individual research essay. It must be an almost final version. Strictly follow all the requirements and don't change the formatting. Your research essay must be in this folder: https://tinyurl.com/GC-chapters <p>3. Reflections</p> <ul style="list-style-type: none"> • Please respond in 1 sentence (in your own words, your own ideas): Why is social justice important for sustainable urban development? <p>4. Mini-test</p> <ul style="list-style-type: none"> • You don't have to do anything to prepare for the mini-test that will be in class. If you took notes while reading during this course, you may want to review them. 	<p>7pm-8pm — Class Environmental Justice and Equality Objectives: Strengthen the environmental justice theme in your research essays.</p> <p>(1) Social/environmental justice discussion. (2) Write a mini-essay based on this prompt: <i>"I used to think... about green cities. Now I think..."</i> You can cite sources we've read to support your ideas (optional).</p> <p>Exit ticket: XXXXX</p>
7/3	<p>No class due to Independence Day</p> <ul style="list-style-type: none"> • If you've missed our class on Thursday 7/2, please respond to the "Friday 7/3" discussion board on Canvas. Otherwise, you don't need to post anything. 	
7/6	<p>1. Read</p> <ul style="list-style-type: none"> • Phillips (2013) – Chapter 1 (take notes about the main ideas that you find important) • Cohen (2012) – Understand types of urban agriculture (starting from p. 50), and 	<p>7pm-8pm — Class Urban Agriculture Objectives: Understand environmental and social</p>

	<p>benefits (p. 89).</p> <ul style="list-style-type: none"> Dejah Powell, Cornell undergraduate student, involves kids in urban gardening. https://news.cornell.edu/stories/2018/03/dejah-powell-uses-awards-help-feed-her-chicago-neighborhood <p>2. Watch</p> <ul style="list-style-type: none"> Urban ag in Singapore https://youtu.be/vPRySy3Qtvs Green Bronx Machine https://youtu.be/9Dt0odIFzmQ Green Power https://youtu.be/vs7BG4IH3m4 <p>3. Reflections</p> <ul style="list-style-type: none"> Paragraph 1: Please describe urban agriculture in your city - current agriculture, and/or opportunities to develop urban agriculture in the future. Please use at least 5 new terms that you've learned from today's readings (highlight these terms with another color). One paragraph is enough. Paragraph 2: Please post a link and a one-sentence description of a video/website/article that you found on the internet about urban agriculture. <p>4. Comments</p> <ul style="list-style-type: none"> Post two meaningful comments for other students in the same discussion board. 	<p>benefits of urban agriculture</p> <p>(1) Urban agriculture in NYC. (2) What problems does urban agriculture address? (3) Create a Table of Contents for a future book on urban agriculture education.</p> <p>Exit ticket: XXXXX</p>
7/7	<p>Research Essay due (FINAL VERSION)</p> <p>1. Read (in preparation for Erika Svendsen's lecture)</p> <ul style="list-style-type: none"> Connolly (2013) Svendsen (2008) McMillen (2016) Views out from our windows. LINK <p>2. Create TWO questions</p> <ul style="list-style-type: none"> When you read, please come up with TWO questions you'd like to ask Erika Svendsen (our guest lecturer). During her guest lecture, you will post your question in the zoom chat. <p>3. Reflections</p> <ul style="list-style-type: none"> On the discussion board, post only two questions that you've got while you did today's readings. <p>4. Research Essay due today!!!</p> <ul style="list-style-type: none"> Please focus on finishing your research essay on Google Docs (https://tinyurl.com/GC-chapters). Today is the absolute deadline. Carefully proofread your research essay (read it out loud). Have others check your grammar/English. Make sure that arguments support your thesis statement. See again all the requirements for research essays (listed in the syllabus). Follow APA citation style. Prepare your essay to be included in the ebook. 	<p>6:00pm-6:55pm Guest lecture: "Environmental stewardship in NYC." Dr. Erika Svendsen, Social Research Scientist with the USDA Forest Service</p> <p>7pm-8pm — Class <u>Environmental Stewardship</u> Objectives: Begin to prepare for final presentations.</p> <p>(1) Spend time in groups to generate ideas for final presentations. (2) Sort ebook chapters into several book sections.</p> <p>Exit ticket: XXXXX</p>
7/8	<p>Group article is due (FINAL VERSION)</p> <p>1. Read</p> <ul style="list-style-type: none"> Choose and read any 3 chapters from Russ (2017) <p>2. Reflections</p> <ul style="list-style-type: none"> Post three bullet points. In each bullet point, type the title of a chapter you've read, and list 2-4 new terms/concepts/ideas that you've learned. <p>3. Group articles</p> <ul style="list-style-type: none"> Group articles are due Wednesday night! https://tinyurl.com/GC-chapters This must be an absolutely final version. <p>4. Submit group work assessment on Wednesday after class</p> <ul style="list-style-type: none"> Please fairly evaluate your and your peers' work in your group. Your answers will be anonymous (only instructors will see them, not other students) Submit this survey by Wednesday evening Link: XXXXX <p>5. Optional videos to watch about environmental education</p> <ul style="list-style-type: none"> Nature education in cities: https://youtu.be/yhQYmgze1Jc Jian-An Eco-School: https://youtu.be/9kybZ9tYYzg Environmental education in Mexico City: https://youtu.be/3Kq6pvffids New York Harbor School: https://youtu.be/CcxaZm2NkCl 	<p><u>Urban Environmental Education</u> Objectives: Understand how environmental education contributes to urban sustainability.</p> <p>(1) Cornell undergraduate experiences (ESS major talk, and a student's experience). (2) Activity: What's missing in our "green city" values? Perspective from 2050.</p> <p>Exit ticket:XXXXX</p>

	<ul style="list-style-type: none"> • Satellite Academy High School: https://youtu.be/7d5mQILH3jo 	
7/9	<p>Individual and Group slides due by Thursday night</p> <p>1. Skim / briefly explore any of these resources. Some of them may be useful for group presentations. Think which topics have NOT been covered in this course. Take notes of any new concepts/ideas.</p> <ul style="list-style-type: none"> • Flannery (2011) • van Uffelen (2013) • Haas (2012) • Mostafavi (2010) • Angel (2012) • Burdett (2007) • Curran (2018) • Gehl (2013) • Gaines (2009) • Gorgolewski (2011) • WorldWatch Institute (2016) <p>2. Skim / optional watch</p> <ul style="list-style-type: none"> • Bridging DC https://youtu.be/vg5nrxr2HW4I • Farmland in shipping containers https://youtu.be/w-1tBWDHcQs • Smart Cities... using Technology https://youtu.be/nnyRZotnPSU • Berlin a Sponge City https://youtu.be/uWjGGvY65jk • Copenhagen: carbon neutral https://youtu.be/dXkamwNWPgg <p>3. Reflections</p> <ul style="list-style-type: none"> • Please write only 2-3 sentences about your vision of green cities (what's important for you, what you would like to see, what has been so far), and/or reflection about your exploration/experience/learning about green cities. Feel free to use any terminology from this course. We may use some of your reflections as quotations in the beginning of our ebook, similarly to students' quotations in the beginning of last year's ebook (https://tinyurl.com/GC-book2019). <p>4. Slides</p> <ul style="list-style-type: none"> • All slides (individual research essays AND group presentations) must be completed before Thursday night! Make sure that you have absolutely finished your work on the slides: https://tinyurl.com/GC-presentations 	<p>6:30pm-7pm — Office hours 7pm-8pm — Class</p> <p>So What Objectives:</p> <p>(1) Cornell undergraduate experiences (ESS major talk, and a student's experience). (2) GapMinder (3) Activity: What's missing in our "green city" values? Perspective from 2050.</p> <p>Exit ticket: XXXXX</p>
7/10	<p>Group presentations</p> <p>1. Read these webpages to prepare for the guest lecture</p> <ul style="list-style-type: none"> • http://urbansystemslab.com/urbanfloordrisk • http://urbansystemslab.com/environmental-justice-social-equity <p>2. Questions: Prepare 1-2 questions for the guest speaker. You can ask them during his presentation.</p> <p>3. Optional reading</p> <ul style="list-style-type: none"> • WorldWatch Institute (2016). Briefly look at this publication. You may find useful ideas for your group presentations related to green city values and indicators. <p>4. Practice, practice, practice!</p> <ul style="list-style-type: none"> • Please practice your individual Bright Spot presentation (up to 1 min), and your group presentation a few times (up to 5 min). <p>5. Reflection</p> <ul style="list-style-type: none"> • As a global environmental citizen, what can you do for your city to become more green, sustainable, just, biophilic, and livable? What have you done so far, what can you do now, and how can you contribute in the future? How can you involve your friends, family, colleagues and your networks in environmental action to achieve sustainability and justice for all? The more specific and concrete your answer is, the better. Feel free to use any terminology from this course or other resources. 	<p>6:00pm-6:45pm Guest lecture: "Environmental justice in urban flood risk." Pablo Herreros, Urban Systems Lab, The New School</p> <p>6:45pm-8pm — Final class Final Presentations Objectives: Present the value of green cities, and solutions for specific social-ecological issues.</p> <ul style="list-style-type: none"> • 6:00-6:45pm — Guest lecture • 6:45-7:15pm — Bright Spots (1-min individual presentations) • 7:15-8:00pm — Group presentation (5-min each) <p>Exit ticket: XXXXX</p>