**SUMA PS6110 - Sustainability and Urban Form: Redevelopment, Reuse, and Ecological Design**

**Instructor:**  Allison Bridges

**Course Overview**

With over 4.5 billion people living in cities worldwide, innovations in urban land management and infrastructure redevelopment are increasingly imperative. Whether cities are transitioning industrial districts into commercial areas or striving to meet sustainability goals, brownfield redevelopment and urban renewal are a mainstay of urban modernization. Reimagining obsolete urban structures – while also improving equity, resiliency, and environmental performance – often requires creative partnerships and non-traditional financial arrangements. The barriers to getting projects from concept to completion are numerous. This class examines these barriers, as well as pathways to success, through the weekly exploration of the most pressing sustainability issues facing cities today.

Using a case-study format, course modules guide analysis of redevelopment projects in three key areas: (1) the various policy incentives and approaches to sustainable urban renewal, (2) the stakeholders in the planning and implementation process, and (3) the impact on the social fabric of the community. By the end of the course, students will have the skills necessary to analyze urban form from an environmental and social standpoint as well as an understanding of the key components of the redevelopment process. Students will gain familiarity with a variety of redevelopment partnership arrangements as well as implementation strategies. These skills are applicable across a range of professional contexts including project design and management within municipal departments, private and non-profit organizations, multilateral organizations, and development finance institutions.

This course fulfills curriculum requirements in Content Area 3: The Physical Dimensions of Sustainability or Area 4: Public Policy. The course explores human-environment linkages in urban areas through the lens of environmental planning to highlight the critical importance of urban redevelopment in the sustainability transition.

The class is offered in an online format and is enriched with practitioner lectures that offer students the opportunity to gain valuable insight into the redevelopment process. Students participate in the course using the [CanvasLinks to an external site.](https://courseworks.columbia.edu/) (CourseWorks) learning management system. Support in accessing or navigating the online course is available in the [Remote Learning Guide (Links to an external site.)](https://cusps.zendesk.com/hc/en-us/articles/360044213014-Remote-Learning-Guide-For-Students-) designed for SPS students or from the [CUSPS Helpdesk (Links to an external site.)](https://cusps.zendesk.com/hc/en-us).

**Learning Objectives**

By the end of this course students will be able to:

1. Evaluate urban redevelopment projects across environmental, economic, and social outcomes;
2. Analyze redevelopment policies and incentives in relation to development goals and the impact on land use;
3. Critique redevelopment partnerships in terms of inclusivity, financial arrangements, and land rights;
4. Evaluate data in relation to the political and social challenges of implementation;
5. Collect and evaluate both primary and secondary urban data;
6. Interpret data from Geographic Information Systems (GIS)
7. Distinguish between common analysis techniques used in urban planning;
8. Apply visual communication methods and professional communication skills to effectively convey spatial aspects of redevelopment projects.

**Required Readings**

Agyeman, J., Bullard, R. D., & Evans, B. (2002). Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity. Space & Polity, 6(1), 77–90.

Ahern, J. (2013). Urban landscape sustainability and resilience: the promise and challenges of integrating ecology with urban planning and design. Landscape Ecology, 28(6). pp. 1203–1212.

Alexiou, J. (2015). Chapter 10: Superfund Me! (1981-2010). (pp. 329-356). In: Gowanus: Brooklyn’s Curious Canal. New York: NYU Press

American Cities Climate Challenge Renewables Accelerator, City Stories, https://cityrenewables.org/city-stories/

Anguelovski, I., Shi, L., Chu, E., Gallagher, D., Goh, K., Lamb, Z., … Teicher, H. (2016). Equity Impacts of Urban Land Use Planning for Climate Adaptation: Critical Perspectives from the Global North and South. Journal of Planning Education and Research, 36(3), 333–348. [https://doi.org/10.1177/0739456X16645166 (Links to an external site.)](https://doi.org/10.1177/0739456X16645166)

Betsill, M. and Bulkeley, H. (2007). Looking Back and Thinking Ahead: A Decade of Cities and Climate Change Research. The International Journal of Justice and Sustainability. 12(5), 447-456.

Caniglia, B. S., Frank, B., John L. Knott, J., Sagendorf, K. S., Wilkerson, E. A., Frank, B., … Wilkerson, E. A. (2019). Regenerative Urban Development, Climate Change and the Common Good. Routledge. [https://doi.org/10.4324/9781315150505 (Links to an external site.)](https://doi.org/10.4324/9781315150505)

Citycraft. (2013). Noisette Journey to Sustainability: 2013 Update. [https://noisettesc.wordpress.com/ (Links to an external site.)](https://noisettesc.wordpress.com/)

Corner, J. (2016). The Ecological Imagination: Life in the City and the Public Realm. In: Nature and Cities: The Ecological Imperative in Urban Design and Planning. Lincoln Institute of Land Policy.

Curran, W. and Hamilton, T. (2019). Chapter 4: Reworking Newtown Creek. In Krueger, R., Freytag, T., & Mössner, S. (Eds.) (2019). Adventures in Sustainable Urbanism. SUNY Press.

Drake, S.C. & Y. Kim. (2011). Gowanus Canal Sponge Park. Ecological Restoration. 29(4), pp. 392-400.

Healy, P. (2008). Chapter 1: The Project of Strategic Spatial Planning for Urban Areas. (1-12) In: Urban Complexity and Spatial Strategies: Towards a relational planning for our times. The RTPI Library Series. [https://www.alnap.org/system/files/content/resource/files/main/healey.pdf (Links to an external site.)](https://www.alnap.org/system/files/content/resource/files/main/healey.pdf)

Knott, John L., Jr., CityCraft® Mindset

Kwartler, M. & Gianni Longo. (2008). Chapter 1: The Context (1-13). In: Visioning and Visualization: People, Pixels, and Plans. Lincoln Institute of Land Policy. [https://www.lincolninst.edu/sites/default/files/pubfiles/visioning-and-visualization-chp.pdf (Links to an external site.)](https://www.lincolninst.edu/sites/default/files/pubfiles/visioning-and-visualization-chp.pdf)

Maantay J. (2007). Chapter 9: Methods of Spatial Data Analysis (209-246). GIS for the urban environment. ESRI Press.

Ndubisi, F. (2017). Adaptation and Regeneration: A Pathway to New Urban Places. In: Nature and Cities: The Ecological Imperative in Urban Design and Planning. Lincoln Institute of Land Policy.

New York City Departments of Design and Construction (DDC), Health and Mental Hygiene, Transportation (DOT), and City Planning. (2010). Active Design Guidelines: Promoting Physical Activity and Health in Design. [https://centerforactivedesign.org/dl/guidelines.pdf (Links to an external site.)](https://centerforactivedesign.org/dl/guidelines.pdf)

New York State Department of Environmental Conservation. (2014). Cleanup Action to Begin at Brownfield Site, 365 Bond. [http://www.dec.ny.gov/data/der/factsheet/c224174cubegins.pdf (Links to an external site.)](http://www.dec.ny.gov/data/der/factsheet/c224174cubegins.pdf)

Palma, D. (2019). The Connected Communities Initiative at NYCHA. Enterprise Community Partners.

Pearsall, H. (2013). Superfund Me: A Study of Resistance to Gentrification in New York City. Urban Studies, 50(11), 2293.

Rocky Mountain Institute (RMI). The Carbon-Free City Handbook. (2017). Rocky Mountain Institute. [https://rmi.org/insight/the-carbon-free-city-handbook/ (Links to an external site.)](https://rmi.org/insight/the-carbon-free-city-handbook/)

Rosenzweig, C. and Solecki, W. (2019). New York City Panel on Climate Change 2019 Report, Chapter 1: Introduction. https://nyaspubs.onlinelibrary.wiley.com/doi/10.1111/nyas.14004

Sandercock, L. (2016). Towards a Cosmopolitan Urbanism: From Theory to Practice. In: Fainstein, S. & DeFilippis, J. eds. 2016. Readings in Planning Theory. 3rd edition. John Wiley & Sons.

Strom E. (2018). Brownfield Redevelopment: Recycling the Urban Environment. In: Brinkmann R., Garren S. (eds) The Palgrave Handbook of Sustainability. Palgrave Macmillan, Cham

Thakuriah, P., N. Tilahun, & M. Zellner. (2017). Big Data and Urban Informatics: Innovations and Challenges to Urban Planning and Knowledge Discovery. (11-45) In: Seeing Cities Through Big Data: Research, Methods and Applications in Urban Informatics. Springer Books.

The Noisette Company. (2003). The New American City - Noisette Community Master Plan. Introduction, Chapter 1: Planning for Integrated Restoration, Chapter 2: Regenerative Land Use Strategy, Chapter 3: Restoring Natural Systems. (pp. 1-41).

Turning the Tide: A Community-Based Collaboration for Public Housing Residents to Thrive in a Changing Climate. Fifth Avenue Committee (FAC) with partners Red Hook Initiative (RHI), Families United for Racial and Economic Equality (FUREE), Southwest Brooklyn Industrial Development Corporation (SBIDC), and the New York City Housing Authority (NYCHA). [https://openlab.citytech.cuny.edu/sheadesignteamsp16d278/files/2016/02/Final-Implementation-Plan\_FAC.pdf (Links to an external site.)](https://openlab.citytech.cuny.edu/sheadesignteamsp16d278/files/2016/02/Final-Implementation-Plan_FAC.pdf)

**Resources**

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: [http://library.columbia.edu/Links to an external site.](http://library.columbia.edu/).

SPS Academic Resources

The Office of Student Life and Alumni Relations (SLAR) provides students with academic counseling and support services such as online tutoring and career coaching:  [http://sps.columbia.edu/student-life-and-alumni-relations/academic-resourcesLinks to an external site.](http://sps.columbia.edu/student-life-and-alumni-relations/academic-resources).

**Course Requirements (Assignments)**

**Weekly Reflections, Speaker Questions, and Discussion (L1, L3, L4)**

* Students will prepare a 1-2 paragraph reflection on the assigned content for the week. Students are encouraged to reflect on an issue of interest such as design, data, methods of analysis, political context, or social context. The reflections should be posted in the discussion section of the course website by 3:00pm Tuesday. Students are required to also post responses to at least two posts other than their own by 3:00pm Thursday.
* Students will prepare 2-3 questions for each guest lecturer. The questions should be posted to the Discussion section by 3:00pm on the day of the guest lecture.
* During the week of the GIS workshop, students will replace the weekly reflection with a basic map prepared following the workshop. The map should be shared in the Discussion section the following Sunday by midnight. Students are required to comment on at least two maps other than their own.
* Students will engage in thematic discussions on topics of interest in small group breakout sessions following guest speaker presentations. Notes on issues or questions that arise during the group discussion will be recorded in a google doc.

**Mid-term Policy Memo (3-5 pages) (L2, L6)**

The policy memo should be an evaluation of an urban redevelopment policy or incentive. The evaluation should draw from assigned readings and can address any municipal policy or incentive (examples covered in class include the federal Opportunity Zones tax incentives or the NYC Brownfield Incentive Grant Program). More than a summary of readings, the memo should synthesize concepts introduced in class to evaluate the selected policy and the targeted geographic area. Further guidelines will be provided the first day of class. The memo will be submitted via Canvas by midnight on the day due.

**Final Case Study Project Proposal (2 pages) (L1, L4, L7)**

Students will work in groups of 3-4 people to develop a 2 page proposal for a final case study project. The proposal should clearly outline the case background and research plan (original research and/or secondary data sources). Examples of appropriate case studies will be covered weekly in class. The proposal should include a bibliography of data sources, project context, and project outcomes (generally 10-20 sources). The final project can take the form of a 10-15 page written case study (using the template provided) or an interactive online format such as ArcGIS StoryMaps. Please indicate the project format and submit one proposal per group via Canvas by midnight on the day due.

**Final Case Study Project (10-15 pages) (L1, L2. L3, L5, L8)**

The final case study is an analysis of an urban redevelopment or adaptive reuse project. Groups of 3-4 students will prepare case studies according to a template provided or in a multi-media format. The case study template organizes the case study by: (1) type of redevelopment (brownfield, adaptive reuse, megaproject, etc), (2) time period and relevant policies, (3) motivation for the redevelopment or problem addressed, (4) design strategy, (5) implementation challenges and solutions, and (6) outcome. The people and partnerships driving the project should be highlighted. Special attention should be given to environmental and equity impacts (short term and long term). Each group should submit their final case study in their chosen format via Canvas by midnight on the day due. Students will indicate the portion of the final project that they write or design and will be graded on that portion only.

**Final Case Study Presentation (15 minutes) (L8)**

Groups will prepare a 15 minute presentation on their final projects. Presentations will be followed by 5 minutes of Q & A.

**Evaluation/Grading**

The policy memo, weekly discussion and postings, case study proposal, the final case study project, and presentation will be evaluated on a 100 point scale using a grading rubric that will be provided. Class participation and speaker questions will be evaluated on a 5 point scale where 5 = 100, 4 = 90, etc. After weighting and combining the scores on the 100 point scale, a final score will be translated to a letter grade. The final score will be calculated based on the following components:

* Participation (10%) – Students are expected to attend all sessions and contribute to class discussions.
* Weekly Discussion (20%) – Students are required to post regularly in the discussion forum. Required posts include a one to two paragraph reflection on the weekly case study, a minimum of two responses weekly to the posts of classmates, 2-3 questions for each guest lecturer, and live small group discussions reflecting on key concepts.
* Policy Memo (15%) – The 3-5 page policy memo will be graded on understanding of key urban planning concepts, appropriate use of supporting data, and quality of writing.
* Final Case Study Proposal (10%) – Student groups will submit a 2 page proposal for the final case study that clearly outlines the case background, relevance, and research plan (original research and/or secondary data sources).
* Final Case Study (30%) – Final case studies will be graded based on (1) identifying a land use challenge or problem, (2) analyzing policy alternatives, (3) identifying key players and degree of project inclusivity, (4) describing the approach to project implementation, (5) identifying implementation challenges, and (6) analyzing project outcomes and long term project performance (economic, equity, and environmental).
* Final Case Study Presentation (15%) – Presentation will be graded on completion, organization, clarity, and quality of visuals or other media.

**Course Policies**

Participation and Attendance

You are expected to do all assigned readings, attend all class sessions, and engage with others in online discussions. Your participation will require that you answer questions, defend your point of view, and challenge the point of view of others. If you need to miss a class for any reason, please discuss the absence with me in advance.

Late work

There will be no credit granted to any written assignment that is not submitted on the due date noted in the course syllabus without advance notice and permission from the instructor.

Citation & Submission

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

**Course Schedule/Course Calendar**

\*When guest lecturers are scheduled, classes will include a 30-minute guest presentation and 20 minutes of Q&A.

**Class 1, July 7**

**Topics and Activities:** Course Introduction and Overview of Environmental Planning and Urban Redevelopment

* Overview, introduction to case studies and speakers, and course expectations
* Historical context of sustainable urban planning
* The ecological urbanism movement
* Trends in urban land use and redevelopment policy

**Readings:**

Recommended:

Chapple, K. (2015). Introduction. Planning Sustainable Cities and Regions. (1-23) London: Routledge. [http://www.regscience.hu:88/record/419/files/DEMO-BOOK-2017-056.pdf (Links to an external site.)](http://www.regscience.hu:88/record/419/files/DEMO-BOOK-2017-056.pdf)

Fishman, R. (1982). Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank Lloyd Wright, and Le Corbusier. (23-50). In: Fainstein, S. & DeFilippis, J. eds. 2016. Readings in Planning Theory. 3rd edition. John Wiley & Sons.

Foglesong, R. (1986). Planning the Capitalist City. (118-124). In: Fainstein, S. & DeFilippis, J. eds. 2016. Readings in Planning Theory. 3rd edition. John Wiley & Sons.

BlackSpace Manifesto [https://www.blackspace.org/manifesto (Links to an external site.)](https://www.blackspace.org/manifesto)

Watch video of ecological urbanist Kongjian Yu,[This man is turning cities into giant sponges to save lives | Pioneers for Our Planet (Links to an external site.)](https://www.youtube.com/watch?time_continue=267&v=U37gst79pGc&feature=emb_logo)[](https://www.youtube.com/watch?time_continue=267&v=U37gst79pGc&feature=emb_logo)

Virtually explore the New York City High Line Park, [https://www.thehighline.org/ (Links to an external site.)](https://www.thehighline.org/)

Review plans for Toronto's Eastern Waterfront Quayside Project, Sidewalk Labs

[https://sidewalktoronto.ca/ (Links to an external site.)](https://sidewalktoronto.ca/)

[Introducing Sidewalk Toronto (Links to an external site.)](https://www.youtube.com/watch?v=xQYSy8w9j5c)[](https://www.youtube.com/watch?v=xQYSy8w9j5c)

**Assignments Due:**Introductory Survey

**Class 2, July 9**

**Topics and Activities:**Urban Redevelopment and Climate Change

Guest Speaker: [Madeline Tyson (Links to an external site.)](https://rmi.org/people/madeline-tyson/)

Senior Associate, Rocky Mountain Institute, Carbon-free Cities and States

* Renewable Energy
* Building retrofits
* Low-carbon urban transportation networks

**Readings:**

Required:

Rocky Mountain Institute (RMI). The Carbon-Free City Handbook. (2017). Rocky Mountain Institute. [https://rmi.org/insight/the-carbon-free-city-handbook/ (Links to an external site.)](https://rmi.org/insight/the-carbon-free-city-handbook/)

American Cities, Climate Challenge Renewables Accelerator, City Stories, [https://cityrenewables.org/city-stories/ (Links to an external site.)](https://cityrenewables.org/city-stories/)

Betsill, M. and Bulkeley, H. (2007). Looking Back and Thinking Ahead: A Decade of Cities and Climate Change Research. The International Journal of Justice and Sustainability. 12(5), 447-456.

Recommended:

Why Cities? Ending Climate Change Begins in the City, C40, [https://www.c40.org/ending-climate-change-begins-in-the-city (Links to an external site.)](https://www.c40.org/ending-climate-change-begins-in-the-city)

Inventory of New York City GHG Emissions. [https://nyc-ghg-inventory.cusp.nyu.edu/ (Links to an external site.)](https://nyc-ghg-inventory.cusp.nyu.edu/)

**Assignments:**Speaker questions posted to discussion board

**Class 3, July 14**

**Topics and Activities:** Case Study: Gowanus, Brooklyn

Guest Speaker: Amy Motzny

[Gowanus Canal Conservancy (Links to an external site.)](https://gowanuscanalconservancy.org/)

**Readings:**

Required:

Alexiou, J. (2015). Chapter 10: Superfund Me! (1981-2010). (pp. 329-356). In: Gowanus: Brooklyn’s Curious Canal. New York: NYU Press.

Review the work of the Gowanus Canal Conservancy. [https://gowanuscanalconservancy.org/ (Links to an external site.)](https://gowanuscanalconservancy.org/)

Drake, S.C. & Y. Kim. (2011). Gowanus Canal Sponge Park. Ecological Restoration. 29(4), pp. 392-400.

Recommended:

Review 365 Bond. Brooklyn Luxury Apartments, [http://365bond.com/ (Links to an external site.)](http://365bond.com/)

**Assignments Due:**Weekly reflection and speaker questions posted to discussion board

**Class 4, July 16**

**Topics and Activities:**Redevelopment and Environmental Justice

Guest Speaker: [Karen Blondel (Links to an external site.)](https://bklyner.com/meet-karen-blondel-fighting-for-justice-within-nycha-and-beyond/)

Organizer, [Turning the Tide Environmental Initiative (Links to an external site.)](http://furee.org/campaigns/#campaign-three). Fifth Avenue Committee (FAC)

* Discussion of redevelopment projects in terms of social objectives and the intended and unintended social outcomes
* Approaches to accounting for environmental and social outcomes that do not have explicit monetary value

**Readings:**

Required:

Turning the Tide: A Community-Based Collaboration for Public Housing Residents to Thrive in a Changing Climate. Fifth Avenue Committee (FAC) with partners Red Hook Initiative (RHI), Families United for Racial and Economic Equality (FUREE), Southwest Brooklyn Industrial Development Corporation

(SBIDC), and the New York City Housing Authority (NYCHA). [https://openlab.citytech.cuny.edu/sheadesignteamsp16d278/files/2016/02/Final-Implementation-Plan\_FAC.pdf (Links to an external site.)](https://openlab.citytech.cuny.edu/sheadesignteamsp16d278/files/2016/02/Final-Implementation-Plan_FAC.pdf)

Pearsall, H. (2013). Superfund Me: A Study of Resistance to Gentrification in New York City. Urban Studies, 50(11), 2293.

Agyeman, J., Bullard, R. D., & Evans, B. (2002). Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity. Space & Polity, 6(1), 77–90.

Recommended:

Campbell, S. (1996). Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. (217-243). In: Fainstein, S. & DeFilippis, J. eds. 2016. Readings in Planning Theory. 3rd edition. John Wiley & Sons.

Newman, K., & Wyly, E. K. (2006). The Right to Stay Put, Revisited: Gentrification and Resistance to Displacement in New York City. Urban Studies, 43(1), 23–57. [https://doi.org/10.1080/00420980500388710 (Links to an external site.)](https://doi.org/10.1080/00420980500388710)

**Assignments Due:**Speaker questions posted to discussion board and Mid-term Policy Memo Due by 7/19 (midnight)

**Class 5, July 21**

**Topics and Activities:**Urban Land Use: GIS and Methods of Urban Spatial Analysis

GIS Workshop conducted by [Eric GlassLinks to an external site.](https://guides.library.columbia.edu/prf.php?account_id=29773)

CU Metadata Librarian

* How does data impact the way we imagine new urban form? How do policy makers and planners interact with data today?
* Large data sets and new technologies help us understand cities in new ways.

**Readings:**

Required:

Maantay J. (2007). Chapter 9: Methods of Spatial Data Analysis (209-246). GIS for the urban environment. ESRI Press.

Kwartler, M. & Gianni Longo. (2008). Chapter 1: The Context (1-13). In: Visioning and Visualization: People, Pixels, and Plans. Lincoln Institute of Land Policy. [https://www.lincolninst.edu/sites/default/files/pubfiles/visioning-and-visualization-chp.pdf (Links to an external site.)](https://www.lincolninst.edu/sites/default/files/pubfiles/visioning-and-visualization-chp.pdf)

Thakuriah, P., N. Tilahun, & M. Zellner. (2017). Big Data and Urban Informatics: Innovations and Challenges to Urban Planning and Knowledge Discovery. (11-45) In: Seeing Cities Through Big Data: Research, Methods and Applications in Urban Informatics. Springer Books.

Example data visualizations will be provided in the class modules available in Canvas.

**Assignments Due:** Weekly Reflection posted to discussion board and map due by July 26 (midnight)

**Class 6, July 23**

**Topics and Activities:** Redevelopment and Resiliency

Guest Speaker: Adam Parris

Deputy Director of Climate Science and Risk Communication at the Mayor's Office of Resiliency, New York

**Readings:**

Required:

Rosenzweig, C. and Solecki, W. (2019). New York City Panel on Climate Change 2019 Report, Chapter 1: Introduction. [https://nyaspubs.onlinelibrary.wiley.com/doi/10.1111/nyas.14004 (Links to an external site.)](https://nyaspubs.onlinelibrary.wiley.com/doi/10.1111/nyas.14004)

Ahern, J. (2013). Urban landscape sustainability and resilience: the promise and challenges of integrating ecology with urban planning and design. Landscape Ecology, 28(6). pp. 1203–1212.

Anguelovski, I., Shi, L., Chu, E., Gallagher, D., Goh, K., Lamb, Z., … Teicher, H. (2016). Equity Impacts of Urban Land Use Planning for Climate Adaptation:

Critical Perspectives from the Global North and South. Journal of Planning Education and Research, 36(3), 333–348. [https://doi.org/10.1177/0739456X16645166 (Links to an external site.)](https://doi.org/10.1177/0739456X16645166)

NYC Flood Maps. [https://www1.nyc.gov/site/floodmaps/index.page (Links to an external site.)](https://www1.nyc.gov/site/floodmaps/index.page)

NYC Hazard Mitigation Projects. [https://maps.nyc.gov/resiliency/ (Links to an external site.)](https://maps.nyc.gov/resiliency/)

**Assignments Due:**Speaker questions posted to discussion board and Final Case Study Proposal due by 7/26 (midnight)

**Class 7, July 28**

**Topic and Activities:** Key Concepts of Urban Redevelopment and Ecological Design

* Drawing from the introductory case studies, this module will focus on policies that incentivize redevelopment
* Deep dive into design with nature, ecological modernization, and park design
* Class discussion and group work will focus on managing conflicting development goals and the participatory process

**Readings:**

Required:

Ndubisi, F. (2017). Adaptation and Regeneration: A Pathway to New Urban Places. In: Nature and Cities: The Ecological Imperative in Urban Design and Planning. Lincoln Institute of Land Policy.

Healy, P. (2008). Chapter 1: The Project of Strategic Spatial Planning for Urban Areas. (1-12) In: Urban Complexity and Spatial Strategies: Towards a relational planning for our times. The RTPI Library Series. [https://www.alnap.org/system/files/content/resource/files/main/healey.pdf (Links to an external site.)](https://www.alnap.org/system/files/content/resource/files/main/healey.pdf)

Corner, J. (2016). The Ecological Imagination: Life in the City and the Public Realm. In: Nature and Cities: The Ecological Imperative in Urban Design and Planning. Lincoln Institute of Land Policy.

Sandercock, L. (2016). Towards a Cosmopolitan Urbanism: From Theory to Practice. In: Fainstein, S. & DeFilippis, J. eds. 2016. Readings in Planning Theory. 3rd edition. John Wiley & Sons.

Recommended:

Rauscher, R.C. & S. Momtaz. (2014). Chapter 3: Planning for Sustainable Communities (43-61).

In: Brooklyn’s Bushwick - Urban Renewal in New York, USA: Community, Planning and Sustainable Environments. Springer.

Halle D. & Tiso, E. (2014). Chapter 7: The Hudson Yards: Rezonings of 2004-2009 and Beyond: The City’s Uniform Land-Use Review Process, Inclusionary Zoning for Affordable Housing, Tax Increment Financing and the Number 7 Subway Extension, and the Culture Shed (280-324). In: New York's New Edge: Contemporary Art, the High Line, and Urban Megaprojects on the Far West Side. University of Chicago Press.

**Assignments Due:**Weekly reflection posted to discussion board

**Class 8, July 30**

**Topics and Activities:** Case Study: Greenpoint Landing, Brooklyn

Guest Speaker: [Mimi Raygorodetsky (Links to an external site.)](https://www.langan.com/wp-content/uploads/2018/01/Raygorodetsky.pdf)

Senior Associate, Langan Engineering

Environmental Remediation

* Focus on brownfield redevelopment policies and incentives
* Discussion of environmental impact assessments and remediation

**Readings:**

Required:

Review Greenpoint Landing, Brooklyn. https://greenpointlanding.com/

New York State, Department of Environmental Conservation, Greenpoint Petroleum Remediation Project. [http://www.nysdecgreenpoint.com/ProjectHistory.aspx (Links to an external site.)](http://www.nysdecgreenpoint.com/ProjectHistory.aspx)

Curran, W. and Hamilton, T. (2019). Chapter 4: Reworking Newtown Creek. In Krueger, R., Freytag, T., & Mössner, S. (Eds.) (2019). Adventures in Sustainable Urbanism. SUNY Press.

Strom E. (2018). Brownfield Redevelopment: Recycling the Urban Environment. In: Brinkmann R., Garren S. (eds) The Palgrave Handbook of Sustainability. Palgrave Macmillan

Recommended:

Gould, K.A. & Lewis, T.L. (2017). Chapter 4, Brooklyn Bridge Park: from abandoned docks to destination park. In: Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice. New York: Routledge.

BenDor, T. K., Metcalf, S. S., & Paich, M. (2011). The dynamics of brownfield redevelopment. Sustainability, 3(6), 914-936.

Madden, D. J. (2014). Neighborhood as Spatial Project: Making the Urban Order on the Downtown Brooklyn Waterfront. International journal of urban and regional research, 38(2), pp. 471-497.

**Assignments Due:**Speaker questions posted to assignment board

**Class 9, August 4**

**Topics and Activities:** Health and the Built Environment

Guest Speaker: Yianice Hernandez

Former Director of Capital Planning at New York City Housing Authority (NYCHA) and former Director of Active Living with the NYC Department of Health and Mental Hygiene

* Using the built environment to promote healthy lifestyles

**Readings:**

Required:

Chapter 1 and Chapter 2. New York City Departments of Design and Construction (DDC), Health and Mental Hygiene, Transportation (DOT), and City Planning. (2010). Active Design Guidelines: Promoting Physical Activity and Health in Design. [https://centerforactivedesign.org/dl/guidelines.pdf (Links to an external site.)](https://centerforactivedesign.org/dl/guidelines.pdf)

Palma, D. (2019). [The Connected Communities Initiative at NYCHA (Links to an external site.)](https://www.enterprisecommunity.org/blog/nycha-connected-communities-initiative-new-york). Enterprise Community Partners.

Design Trust for Public Space: Opening the Edge: Phase I, 2016–2018: Reimagining green space at Wald Houses. [http://designtrust.org/projects/opening-edge/ (Links to an external site.)](http://designtrust.org/projects/opening-edge/)

Recommended:

Kimmelman, M. (2020). Can City Life Survive Coronavirus? New York Times, March 17.

Urban Design after Covid-19. An [Urban Design Group (Links to an external site.)](http://www.udg.org.uk/) Webinar.[Urban Design after Covid-19. An Urban Design Group Webinar. (Links to an external site.)](https://www.youtube.com/watch?v=zW4blxq9qOQ)[](https://www.youtube.com/watch?v=zW4blxq9qOQ)

**Assignments Due:**Speaker questions and weekly reflection posted to discussion board

**Class 10, August 6**

**Topic and Activities:** Case Study: The Navy Yard at Noisette, City of North Charleston

Guest Speaker: [John L. Knott Jr., (Links to an external site.)](https://www.citycraftventures.com/the-team/johnlknottjr/) Founder & CEO, CityCraft Ventures

President/CEO and co-founder of the Noisette Company, LLC

Adaptive Reuse

* Focus on building reuse and preservation policies
* Discussion of cost-benefit analysis and methods for evaluating adaptive reuse projects

**Readings:**

Required:

Chapter 1, Chapter 9, and Chapter 14. Caniglia, B. S., Frank, B., John L. Knott, J., Sagendorf, K. S., Wilkerson, E. A., Frank, B., … Wilkerson, E. A. (2019). Regenerative Urban Development, Climate Change and the Common Good. Routledge. [https://doi.org/10.4324/9781315150505 (Links to an external site.)](https://doi.org/10.4324/9781315150505)

CityCraft Core Beliefs

The Noisette Company. (2003). The New American City - Noisette Community Master Plan. Introduction and Chapter 1: Planning for Integrated Restoration.

Recommended:

Wong, L. (2016). Chapter 1: New Order: The Frankenstein Syndrome. (30-41). In: Adaptive Reuse: Extending the Lives of Buildings. Walter de Gruyter GmbH.

**Assignments Due:** Speaker questions posted to discussion board

**Class 11, August 11**

**Assignments Due:** Case Study Presentations

**Class 12, August 13**

**Assignments Due:** Case Study Presentations and Final Projects (Due by midnight)

**School Policies**

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