

Master of Science in Sustainability Management

Applied Energy Methods in Affordable Housing Development, TBD

3 credits Elective

Instructor: Kenyetta Lovings, knl2109@columbia.edu

Office Hours:

Response Policy: I generally respond within a day but on weekends and when I travel, I am not always able

to respond in that timeframe. Please plan ahead in making requests.

Facilitator/Teaching Assistant Office Hours: Response Policy:

Course Overview

This course looks to legal definitions of "low-income" and "disadvantaged community" codified in federal and state statutes to frame discussions on energy insecurity and resiliency risks. Using these guiding points, a cross-disciplinary approach is followed to explore how the construction of energy efficient and resilient buildings contribute to their affordability in operations and maintenance. The course primarily focuses on creating sustainable and affordable multifamily housing, a building type unique to urban areas located in the US Northeast. However, in view of recommended strategies to meet carbon reduction goals, such as building electrification, the parameters of the course are expanded to highlight best practices in equitable policy-making around the design of utility rates and rules for low-income electric customers.

The course also aims to address common barriers to developing sustainable and affordable multifamily housing—barriers like poor property conditions, limited access to financial and social capital, and lack of community engagement. To the first barrier, some of the oldest buildings in the country are located in the US Northeast. Building age and the variability of extreme weather in this geographic region presents environmental hazards such as lead, asbestos and mold, which defer critical cost and energy saving projects until remediation takes place. Second, narrow profit margins from below-market rents in affordable housing and the high cost to borrow money, financially constrain and may discourage owners from making necessary investments toward energy efficiency and resiliency on their properties. Finally, affordable multifamily housing is legally structured in a way that requires tenant approvals before building improvements are executed. This legality elevates community engagement, including forms of community-based workforce development, into a central role when assessing the feasibility of energy efficiency and resiliency projects in affordable multifamily housing. In view of this, the course examines practical methods used by affordable housing development and sustainability practitioners that leverage energy incentives, low-cost capital and other resources for energy efficiency and resiliency projects deployed in affordable multifamily housing. The course also uses case studies from the US Northeast, grey literature, professional texts and tools, primary sources, and peer-reviewed journal articles to 1) learn best practices for designing equitable utility rates and rules for low-income electric customers, 2) inform strategies that shape energy efficiency and resiliency projects in deed-restricted housing, public housing, and naturally-occurring affordable housing (NOAH), and 3) gain a fundamental understanding of how to implement an energy efficiency and resiliency project across all stages of the project lifecycle.

This course is discussion intensive and requires from students the critical analysis of weekly readings in class and through online interactions on Canvas. Case and financial analyses are conducted in class and through take-home assignments. A group final project is required, and should focus on one component (e.g., rate design, financial development, workforce development, community engagement, etc.) of sustainable and affordable housing



highlighted in class. It is strongly advised that students have a basic understanding of energy efficiency and business math to follow this course. Recommended readings are provided to students to supplement limited knowledge of those topics.

The course is semester-long and will take place on campus. Cross-registrants are permitted to enroll from the Climate School, the Graduate School of Architecture, Planning and Preservation (GSAAP) and the MS in Construction Management Program.

Learning Objectives

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

- L1: Identify key stakeholders in affordable housing development including government agencies, civil society, professional associations and building organizations
- L2: Evaluate government statutes, census data and social determinants of health for capturing low-income populations and legally-recognized disadvantaged communities in the design and implementation of equitable energy rates, utility rules, programs and projects
- L3: Explain affordable housing and low-income energy programs, incentives and financing mechanisms
- L4: Underwrite an affordable multifamily housing rehabilitation project with considerations for energy efficiency and resiliency
- L5: Apply decarbonization, resiliency, and health and safety hazard reduction strategies to affordable multifamily housing development projects
- L6: Create strategies for workforce development and community engagement for energy and resiliency projects implemented in affordable multifamily housing
- L7: Articulate the various legal structures of subsidized and unsubsidized affordable multifamily housing

Readings

Required Books

Netherton, Laurence, M., Adrienne Shmitz, Mike E. Miles, et al. *Real Estate Development: Principles and Process*. Urban Land Institute, 2007.

US Department of Housing and Urban Development (HUD). *Utility Allowance Guidebook*, 1998. https://www.hudexchange.info/resource/2267/utility-allowance-guidebook/. Accessed May 2023.

Other Required Readings and Resources (available through Canvas course site or web link)

Baskaran, Priya. "Introduction to Worker Cooperatives and Their Role in the Changing Economy". *Journal of Affordable Housing & Community Development Law*, 24.2 (2015): 355-381.

Bennet, Susan. "Making the Second Pandemic: The Eviction Tsunami, Small Landlords, and the Preservation of "Naturally-Occurring Affordable Housing". *Journal of Affordable Housing and Community Development Law*, 39.2 (2020): 158-175.

Bergstrom, Danielle, Kalimantan Rose, Jillian Olinger and Kip Holley. "The Sustainable Communities Initiative: The Community Engagement Guide for Sustainable Communities". *Journal of Affordable Housing & Community Development Law*, 22.4 (2014):191-211.

Building Energy Exchange and the NYC Department of Housing Preservation and Development. *Decarbonization Roadmap for Affordable Multifamily Housing*, 2023. (54 min video presentation), https://be-exchange.org/report/hpd-ll97-decarbonization-roadmap/. Accessed May 2023.



Center for Urban Pedagogy. "What is Zoning?". *Envisioning Development, Guide No.* 2, *New York City Edition*. https://welcometocup.org/assets/images/What Is Zoning Guide English.pdf. Accessed May 2023.

Chuck, Harry. Chinatown Rising. Center for Asian Media, 2019.

Executive Order 14008. "Interim Implementation Guidance for the Justice40 Initiative". https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf. Accessed May 2023.

"Climate Resiliency Design Guidelines". New York City Mayor's Office of Climate and Environmental Justice. https://climate.cityofnewyork.us/initiatives/climate-resiliency-design-guidelines/. Accessed May 2023.

Graff, Michelle and Maureen Pirog. "Red Tape is Not so Hot: Asset Tests Impact Participation in the Low-Income Home Energy Assistance Program (LIHEAP)". *Energy Policy*, 129.1 (2019): 749-764.

Hutch, Daniel, Karen Bouye, Elizabeth Skillen and Charles Lee. "Potential Strategies to Eliminate Built Environment Disparities for Disadvantaged and Vulnerable Communities". *American Journal of Public Health*, 101.4 (2011): 587-595.

Mumford, Eric. "The Tower in a Park" in America: Theory and Practice, 1920–1960". *Planning Perspectives*, 10.1 (1995): 17-41.

Nardone, Anthony, Joe Chiang and Jason Coburn. "Historic Redlining and Urban Health Today in US Cities". *Journal of Environmental Justice*, 13.4 (2020): 109-119.

New York City, Local Law 84. Benchmarking. https://www.nyc.gov/assets/buildings/local-laws/1184of2009.pdf.

New York City, Local Law 87. Energy Audits and Retro-Commissioning. https://www.nyc.gov/html/planyc2030/downloads/pdf/ll87of2009_audits_and_retro-commissioning.pdf. Accessed June 2023.

New York City, Local Law 95. Building Efficiency Grade. https://www.nyc.gov/assets/buildings/local_laws/ll95of2019.pdf. Accessed June 2023.

NYC Local Law 97. Emissions Limits.

https://locallaws.dos.ny.gov/sites/default/files/drop_laws_here/ECMMDIS_appid_DOS20190701060031/Content/09_0213438026d9f3.pdf. Accessed June 2023.

Saegert, Susan and Lymari Benitez. "Limited Equity Housing Cooperatives: Defining a Niche in the Low-Income Housing Market". *Journal of Planning Literature*. 19.4 (2005): 427 – 439.

Stone, Nehemiah, Sean Denniston, Charles Ehrlich, Puja Manglani and Heschong Mahoney Group. "Energy Efficiency-Based Utility Allowances: A Driver for More Efficient Affordable Housing". American Council for an Energy Efficient Economy, SSO4, Panel 2, Paper 27.

https://www.aceee.org/files/proceedings/2004/data/papers/SS04_Panel2_Paper27.pdf. Accessed May 2023.

Schweitzer, Martin and Bruce Tonn. "Non-Energy Benefits from the Weatherization Assistance Program (WAP): A Summary of Findings from the Recent Literature". ORNL/CON-484, Oak Ridge National Laboratory, 2002. Accessed May 2023.

Thompson, Adrienne. "Protecting Low-Income Ratepayers as the Electricity System Evolves". *Energy L.J.* 37. 265 (2016): 267-281.

Vázquez Irizarry, Vivian. Decade of Fire, Independent Television Service, 2018.



WE ACT for Environmental Justice. "Green Jobs Report: Creating a Green Workforce, Community-Based Solutions for a Diverse Green Jobs Sector".

https://www.weact.org/wp-content/uploads/2020/12/FINAL-2_Green-Jobs-Report_Full-Report-Full-View.pdf. Environmental Leadership Forum, 2020.

Recommended Readings and Other Resources

Community Preservation Corporation. "Underwriting Efficiency: A Mortgage Lender's Handbook for Realizing Energy and Water Efficiency in Multifamily Housing".

https://communityp.com/wp-content/uploads/2017/05/CPC_Underwriting_Efficiency_Handbook_Full_Interactive_FINAL.pdf. Accessed June 2023.

Damdodaran Online. "Chapter 4: Risk Measurement and Hurdle Rates". *Applied Corporate Finance: 4th Edition*. https://pages.stern.nvu.edu/~adamodar/New Home Page/ACF4E/appldCF4E.htm. Accessed May 2023.

Damdodaran Online. "Chapter 5: Measuring Returns on Investments". *Applied Corporate Finance: 4th Edition*. https://pages.stern.nyu.edu/~adamodar/New Home Page/ACF4E/appldCF4E.htm. Accessed May 2023.

Damdodaran Online. "Chapter 7: Capital Structure: An Overview of the Financing Decisions". *Applied Corporate Finance:* 4th *Edition*. https://pages.stern.nyu.edu/~adamodar/New_Home_Page/ACF4E/appldCF4E.htm. Accessed May 2023.

Damdodaran Online. "Chapter 8: Capital Structure: Model and Applications". *Applied Corporate Finance: 4th Edition*. https://pages.stern.nyu.edu/~adamodar/New Home Page/ACF4E/appldCF4E.htm. Accessed May 2023.

Freidrich, Chad. The Pruitt-Igoe Myth. 2011.

Levite, Brian and Alex Rakow. Energy Resilient Buildings and Communities: A Practical Guide. Rivers Publishing, 2020.

Mehta, Aditi, Mark Brennan and Justin Steil. "Affordable Housing, Disasters and Social Equity: LIHTC as a Tool for Preparedness and Recovery". *Journal of the American Planning* Association, 86.1 (2020): 75-88.

Mehta, Paul and Albert Thumann. Handbook of Energy Engineering, Eight Edition. Rivers Publishing, 2021.

NYC Local Law 41. Climate Resiliency.

https://locallaws.dos.ny.gov/sites/default/files/drop_laws_here/ECMMDIS_appid_DOS20210513060110/Content/09021343802f04f5.pdf. Accessed June 2023.

Pohl, Jen. Building Science: Concepts and Applications. Wiley-Blackwell, 2011.

Thumman, Albert and Eric Woodruff. Energy Project Financing. Rivers Publishing, 2021.

Vaillencourt, Richard. Simple Solutions to Energy Calculations, Sixth Edition. Rivers Publishing, 2022.

Assignments and Assessments

All assignment page lengths are based on using Times New Roman 12-pt font and double spacing. Page numbers do not include notes or works cited. Title pages are not needed. All assignments must be submitted through the Canvas course site (not email).



- 1. **Class participation and attendance**: Please be prepared to discuss the readings and the items needed. Relevant, respectful dialogue, thoughtful comments and active listening are all required as important elements of learning in a graduate environment. Active participation in class will lead you to contributing to all of the course learning objectives.
- 2. Group project prospectus: The purpose of this assignment is to develop skills in problem-solving by framing energy and resiliency solutions that are data-driven and based in empiricism for decision-makers and stakeholders. The group prospectus should be between 250 and 500 words and should include the problem statement for your group project, background on the issue, your proposed methodology and an annotated bibliography. A more detailed description of the group project and the expectations for both individual and group work is available on the Canvas course site. L1, L2, L3, L4, L5, L6, L7.
- 3. Article responses: Students are encouraged to interact online to develop communications skills for the virtual workplace. Students are required to provide a written response between 250 and 300 words to one set of weekly readings. Student responses must summarize the salient points of weekly readings, if you agree or disagree with the author(s), and why or why not. All students must respond to at least one of your classmates' weekly reading reviews with 250 to 300 written words or a 2-minute oral response captured on video. A more detailed description of this assignment will be available on the Canvas course site. [L1, L2, L3, L4, L5, L7]
- 4. In-class case and financial analyses: The purpose of these assignments is for students to acquire competencies in quantitative analysis and critical thinking across disciplines related to the sustainable development of affordable housing. Practice sets on rate design, utility rule-making, and rental affordable housing development and finance are completed in breakout groups in-class, but students are responsible for submitting final answers to practice sets individually. A more detailed description of the case and financials studies, in addition to the expectations for both individual and group work is available on the Canvas course site. [L1, L2, L3, L4, L5, L7]
- 5. Mid-term case analysis: The mid-term case analysis is a take-home exam. Students should provide written responses between 250 to 500 words to case study prompts. The purpose of this assignment is for students to gain skills in qualitative analysis and critical thinking across disciplines related to the development of sustainable and affordable housing. A more detailed description of the case study and expectations for individual work is available on the Canvas course site. [L1, L2, L3, L5, L7]
- 6. Homework case analysis: The purpose of this assignment is for students to gain skills in qualitative analysis and critical thinking across disciplines related to the development sustainable and affordable housing. Student responses should be between 250 and 500 words. A more detailed description of the case study and expectations for individual work is available on the Canvas course site. [L1, L2, L6, L7]
- 7. Final group project: The group project should focus on one component (e.g., rate design, financial development, workforce development, community engagement, etc.) of affordable housing development highlighted in class. The purpose of this assignment is to develop student competencies that align with sustainability practitioners who work in the affordable housing field. A more detailed description of the group project and the expectations for both individual and group work is available on the Canvas course site. [L1, L2, L3, L4, L5, L6, L7].

Grading

The final grade will be calculated as described below:

| FINAL GRADING SCAL | | |
|--------------------|------------|--|
| Grade | Percentage | |



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

| Assignment/Assessment | % Weight | Individual or Group/Team Grade |
|---|----------|---|
| 1. Class participation and attendance | 10% | Individual Grade |
| 2. Group project prospectus | 5% | Group Grade |
| 3. Response to weekly readings and student analyses | 5% | Individual Grade |
| 4. In-class financial and case analyses | 15% | Group Participation Individual Grade |
| 5. Mid-term case analysis (take-home) | 20% | Individual Grade |
| 6. Homework case analysis | 20% | Individual Grade |
| 7. Final group project | 25% | Group Participation Individual Grade |

Extra Credit: A site visit to an affordable housing facility will be arranged for students on a Saturday. Though attendance is voluntary, it is strongly encouraged that students participate in the site visit to tangibly understand the operations and maintenance of a heating and cooling plant sited in a large multifamily facility.

Course Schedule/Course Calendar

| Date | Topics and Activities | Readings (due on this day) | Assignments (due on this date) |
|--------|------------------------------------|--|---|
| Week 1 | What is Affordable Housing? | Mumford, E. "The Tower in a Park" in America: Theory and Practice, 1920–1960". <i>Planning Perspectives</i> (1995): 17-41. (23 pages) | One paragraph bio of each student noting background, education and why you are taking this class posted to Canvas before first class Sign-up for reading response postings on Canvas In-Class Viewing (1 hr 16 mins): Vázquez Irizarry, V. et al. <i>Decade of Fire</i> , 2018. |
| Week 2 | What is a Disadvantaged Community? | Nardone, A, et al. "Historic Redlining and Urban Health Today in US Cities". <i>Journal</i> of Environmental Justice, 13.4 (2020): 109-119. (18 pages) | In-Class Exercise: Develop a Disadvantaged Community Map |

| | | Hutch, D. et al. "Potential Strategies to Eliminate Built Environment Disparities for Disadvantaged and Vulnerable Communities". <i>American Journal of Public Health</i> , 101.4 (2011): 587-595. (12 pages) "Interim Implementation Guidance for the Justice40 Initiative". <i>Executive Order</i> 14008. | |
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| | | https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf. (13 pages) | |
| Week 3 | Affordable Housing Programs and Financing Mechanisms | HUD. "Chapter 1: Primer on Key Utility Allowance Principles and Terms', 'Chapter 2: The Federal Regulations', 'Chapter 3: Methodologies to Establish Utility Allowances'". Utility Allowance Guidebook, 1998. https://files.hudexchange.info/resources/documents/Utility-Allowance-Guidebook-Part-One.pdf. (30 pages) Bennet, S. "Making the Second Pandemic: The Eviction Tsunami, Small Landlords, and the Preservation of "Naturally-Occurring Affordable Housing". Journal of Affordable Housing and Community Development Law, 39.2 (2020): 158-175. (17 pages) | Select members for final group projects |
| Week 4 | Low-Income Energy Programs, Financing and Incentives | Graff, M. "Red Tape is Not so Hot: Asset Tests Impact Participation in the Low-Income Home Energy Assistance Program (LIHEAP)". Energy Policy, 129.1 (2019): 749-764. (25 pages) Schweitzer, M. et al. "Non-Energy Benefits from the Weatherization Assistance Program (WAP): A Summary | One-page prospectus for group project due |

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|----------------------------|---|--|---|
| | | of Findings from the Recent Literature". <u>ORNL/CON-484</u> , Oak Ridge National Laboratory, 2002. (23 pages) | |
| Week 5 | Low-Income Electric Rate-Making and Utility Rule-Setting | Thompson, A. "Protecting Low-Income Ratepayers as the Electricity System Evolves". <i>Energy L.J.</i> 37.265 (2016): 267-281. (25 pages) | Guest Lecturer: Ashley Marshall, Legal Director, CT Department of Energy and Environmental Protection In-Class Case Analysis: Low-Income Rate Design in Connecticut |
| Week 6 | Zoning and Rental Affordable Housing Development | Center for Urban Pedagogy. "What is Zoning?". Envisioning Development, Guide No. 2, New York City Edition. https://welcometocup.org/assets /images/What Is Zoning Guid e_English.pdf. Accessed May 2023. (appx 40 pages) Stone, N. et al. "Energy Efficiency-Based Utility Allowances: A Driver for More Efficient Affordable Housing". American Council for an Energy Efficient Economy, SSO4, Panel 2, Paper 27. https://www.aceee.org/files/pro ceedings/2004/data/papers/SSO 4_Panel2_Paper27.pdf. Accessed May 2023. (10 pages) | In-Class Viewing (1 hr 25 mins): Chuck, Harry. <i>Chinatown Rising</i> . Center for Asian Media, 2019. |
| Week 7 | Rental Affordable Housing Development Finance: Financial Projects, Syndication, Low-Income Housing Tax Credits (LIHTC) | Netherton, L. et al. Chapter 10: Real Estate Finance – Background". Real Estate Development: Principles and Process. Urban Land Institute, 2007. (37 pages) | Mid-term Case Analysis Due: Utility Rule-Setting for On-site Community Renewable Energy in Connecticut In-Class Exercise: Rental Affordable Housing Development Financial Analysis |
| Week 8 | Rental Affordable Housing Development Finance: Private Sector Financing, Discounted Cashflows, Underwriting to Energy Savings | Netherton, L. et al. Chapter 11: Real Estate Finance – The Basic Tools". <i>Real Estate</i> Development: Principles and Process. Urban Land Institute, 2007. (44 pages) | In-Class Exercise: Rental Affordable Housing Development Financial Analysis |
| Week 9: Spring Break | NO CLASS | NO READINGS | NO ASSIGNMENTS DUE |
| Week 10 | Decarbonization, Resiliency, and Health and Safety Barrier | Building Energy Exchange and the NYC Department of Housing Preservation and | |

| Week 11 | Remediation in Affordable Housing Workforce Development and Cooperative Business Models | Development. "Decarbonization Roadmap for Affordable Multifamily Housing, 2023". (54 min video presentation), https://be-exchange.org/report/hpd-ll97-decarbonization-roadmap/. Accessed May 2023. New York City Mayor's Office of Climate and Environmental Justice. "Climate Resiliency Design Guidelines".https://climate.cityofnewyork.us/initiatives/climate-resiliency-design-guidelines/. WE ACT for Environmental Justice. "Green Jobs Report: Creating a Green Workforce, Community-Based Solutions for a Diverse Green Jobs Sector". https://www.weact.org/wp-content/uploads/2020/12/FINAL-2 Green-Jobs-Report_Full-Report-Full-View.pdf. Environmental Leadership Forum, 2020. (20 | Guest Lecturer: Charles Callaway, Director of Workforce Development & the Green Institute, WE ACT for Environmental Justice |
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| | | pages) Baskaran, P. "Introduction to Worker Cooperatives and Their Role in the Changing Economy". Journal of Affordable Housing & Community Development Law, 24.2 (2015): 355-381(26 pages) | |
| Week 12 | Affordable Housing Legal Structures and Community Engagement | Saegert, S et al. "Limited Equity Housing Cooperatives: Defining a Niche in the Low-Income Housing Market". Journal of Planning Literature. Volume 19, Issue 4. May 2005, pp 427 – 439. (12 pages) Bergstrom, D. "The Sustainable Communities Initiative: The Community Engagement Guide for Sustainable Communities". Journal of Affordable Housing & Community Development Law, 22.4 (2014):191-211. (21 pages) | Homework Cases Analysis Due: Workforce Development Strategies for District Heating and Cooling in Connecticut Public Housing In-Class Exercise (1 hr): Work on group projects and seek support from Instructor/Staff Associate |



| | Building Accreditation, Professional Certification and Career Pathways In Sustainable Affordable Housing Development Leveraging NYC Climate and Energy Laws for Affordable Housing Asset Management | NYC Local Law 84. Benchmarking. https://www.nyc.gov/assets/buil dings/local_laws/ll84of2009.pd f. (8 pages) NYC Local Law 87. Energy Audits and Retro-Commissioning. https://www.nyc.gov/html/plan yc2030/downloads/pdf/ll87of20 09_audits_and_retro-commissio ning.pdf. (18 pages) NYC Local Law 95. Building Efficiency Grade. https://www.nyc.gov/assets/buil dings/local_laws/ll95of2019.pd f. (2 pages) NYC Local Law 97. Emissions Limits. https://locallaws.dos.ny.gov/site s/default/files/drop_laws_here/ ECMMDIS_appid_DOS201907 01060031/Content/0902134380 26d9f3.pdf. (20) | Submit group projects In-Class Exercise: Local Law 97 Compliance Analysis |
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| Week 14 | Group Presentations | NO READINGS | Group presentations |

Course Policies

Participation and Attendance

I expect you to come to class on time and thoroughly prepared. I will keep track of attendance and look forward to an interesting, lively and confidential discussion. If you miss an experience in class, you miss an important learning moment and the class misses your contribution. You are expected to complete all assigned readings and attend all class sessions.

Participation is more than attendance. Your participation will require that you answer questions, defend your point of view, and challenge the point of view of others, all in civil fashion. Students are responsible for identifying and learning material missed due to absence.

If you have a change of circumstances or a condition that requires you to miss three or more classes, please see me about accommodations or potentially dropping the course. If you do not contact me on the third absence, starting with the fourth absence, your entire course grade decreases 1/3 of a grade for each absence (e.g. A- becomes a B+), as the course is based on interactive learning that can be disrupted with inconsistent participation.

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).



Citation & Submission

All written assignments must use standard citation format for MLA, cite sources, and be submitted through Canvas (not via email).

Netiquette

Work 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.

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-resources.

Columbia University Information Technology

<u>Columbia University Information Technology</u> (CUIT) provides Columbia University students, faculty and staff with central computing and communications services. Students, faculty and staff may access <u>University-provided and</u> discounted software downloads.

Columbia University Library

<u>Columbia's extensive library system</u> 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/