

TOWARD RESILIENT CITIES AND LANDSCAPES
RESILIENT PLANNING PRACTICUM: A GREEN NEW DEAL FOR APPALACHIA

Columbia University in the City of New York
Graduate School of Architecture Planning and Preservation / GSAPP A6832 / PLAN6617

FALL 2019 UD Seminar & Practicum II / Urban Planning Practicum
Day/Time: Tuesdays 3:00pm-5:00pm
Location: WARE Lounge Avery Hall
Note: Some books are on our seminar shelf #409 or on reserve at Avery Library

Instructors:
PLANNING Prof. Thad Pawlowski t.pawlowski@columbia.edu

URBAN DESIGN Prof. Kate Orff RLA ko2111@columbia.edu

COURSE DESCRIPTION

This course explores urban design & planning practice through the lens of resilience. We will focus on emerging approaches and strategies to climate adaptation in the built environment, and integrating ecological imperatives and social justice into next century forms of infrastructure. The UD Seminar and Planning practicum will share learning objectives, guest lectures, and a field trip; but the course will have separate instructors, assignments and evaluation. A shared central learning objective will be to develop an understanding workshops as an essential tool for design and planning. Students will help to design and implement a public workshop that will explore the possibilities of social, environmental, and economic transformation that could follow a coordinated national infrastructure program such as those being proposed today as a Green New Deal. We will travel to a small town in Western Pennsylvania to conduct this workshop, developing techniques to engage a broad set of stakeholders in complex and sometimes divisive conversation.

Interdisciplinary collaboration is a central challenge to implementing policies and projects needed to address the climate crisis. This shared learning environment is intended to facilitate collaboration between students enrolled in the urban design and planning program at GSAPP. At the same time, students will be expected to develop and apply their emerging professional skills toward the collective effort. The planners will be responsible for developing an understanding of historic and existing policies that govern infrastructure development, and exploring pathways for their reconception. Urban designers will focus on catalytic urban ecological design projects and emergent forms of design practice that synthesize infrastructure with public space and ecosystem thinking.

Through faculty guidance and relevant readings, this seminar will facilitate informed discussion and exchange on dynamic, systems thinking, and imagine cities of the future as a living field of infrastructure and a hybrid of cultural and natural systems. We will also discuss and critique the concept of resilience as a position - does it lack radical change at its core? How does the concept of resilience apply particularly in the context of countries in different stages of the urbanization process and where social justice and democracy are nascent? Can a concept like resilience that help to define and catalyze a positive future for a post fossil-fuel community, such as those emerging in Appalachia and the Rust Belt.

FORMAT

The course will be divided into three phases with three assignments:

Weeks 1- 4: Introduction to Resilience: We will share a series of guest speakers, readings and events, including a trip to U.Penn for a Green New Deal conference and an event on Governor's Island for Climate Week. Students will be expected to complete readings and engage in discussions.

Weeks 5-9: Preparation for Resilience Workshop in Johnstown. Students will be responsible for developing materials for the workshop, including case studies and site investigation. The planning students will also help to develop the workshop exercises and the design students will prepare visual materials.

Week 10-13: Reflection on thorny issues. Reporting back from the workshop and synthesizing learnings. The final deliverable for the course will be a workshop report that summarizes a resilient future for Appalachia.

Course Requirements

Students are expected to do all of the assigned reading, to actively participate in class discussion, and to prepare questions for lectures and engage actively in dialogue throughout the semester. Students will be asked to work in small teams of no more than 3 (designers and 1 planner) to produce research and visualizations for the workshop. This presentation is an investigation and critical understanding, to include drawings, diagrams and text, of one case study of a mode of practice and representative project(s) that emphasize synergistic thinking between community organizing, science, design and engineering in an urban context. Two classes will be dedicated to desk crits on this exercise. This presentation will be critiqued and translated into narrative and will serve as the basis for the brief final synopsis paper, due at the end of the semester. Students may also be asked to prepare 1-2 brief issues paragraph reactions to specific readings or to prepare and transmit questions in advance for invited speakers.

In order to reduce paper consumption, PDFs of readings will be made available on Google Drive, and books will be placed on our reserve shelf 409 in Avery Library where possible. Note that your final Design report (approximately 10-15 pages) must source at least two required or recommended readings. You are asked to regularly and thoughtfully participate in discussions, and to prepare questions for speakers, and responses to readings. You cannot miss more than 3 classes. Please inform the instructor in advance should you have to miss class for any reason.

Course Schedule

9/03 **Week 1**
Tues **INTRODUCTION TO THE STUDIO & “RESILIENCE THINKING”**
 Location: Ware Lounge
 3-4 pm / Intro to the Seminar, Schedule and Expectations

4-5pm / After Great Disasters: How Six Countries Managed Community Recovery
visiting lecturer Rob Olshansky, Klaus Jacob

An introductory discussion on the objectives and format of the course, and review of the course schedule and expectations with Kate and Thad. Initial lecture on methodologies and strategies for changing the conversation and integrating resilience, infrastructure and equity into urban design & planning practice by Thad Pawlowski. What is the agency of the urban designer and planner? What is resilience? What is adaptation? How can resilience as an applied framework advance new collaborations, planning practice, and policy? Kate will provide a brief overview of the ecosystem driven resilience concepts and examples of shocks and stressors facing global cities from flooding, to coastal erosion, to threats such as lack of sediment supply and sand mining. Design strategies will be presented that aspire to rethink urban design as socio-ecological change process and design strategies for combining regenerative Infrastructure with social agency.

Reading:

Kate Aronoff, With a Green New Deal, Here's What the World Could Look Like for the Next Generation
<https://power.buellcenter.columbia.edu/essays/474>

Dr. Rob Olshansky
<https://urban.illinois.edu/people/faculty-directory/core-faculty/24-robert-olshansky>

Recommended Reading:
Toward an Urban Ecology, by K. Orff / SCAPE. Chapters ‘Intro’ ‘Revive’ and ‘Scale’ (in Drive)

9/10 **Week 2**
Tues **What is Resilience? Bouncing Back and Bouncing Forward**
 Lecture & Discussion: A conversation with **Michael Berkowitz**
 Location: Ware Lounge

Mike will share examples from 100 RC / Rockefeller’s work and highlight initiatives that span policy, strategy, design, funding and implementation. Resilience in practice - what does collaboration mean ?

*****do the reading & prepare 3 questions for Michael**

Reading:

“Resilience thinking: sustaining ecosystems and people in a changing world.” by Brian Walker, David Salt, Walter Reid
BH Walker Island Press, 2006

The Resilience Dividend Judith Rodin. (in the drive) it is suggested that you read the entire book over the course of the semester, however you may for the purposes of this seminar session focus on Introduction and Chapter

<https://www.greenbiz.com/article/mike-berkowitz-100-resilient-cities-its-new-era-climate-action>

*****do the reading & prepare 3 questions for Mike Berkowitz - please submit your questions via CANVAS before class time**

9/13 **Week 2**

Fri **DESIGNING THE GREEN NEW DEAL**

Philadelphia, PA

UPenn/Buell Center Symposium on Green New Deal

BUSES LEAVE COLUMBIA AT 6:30 AM ! SUGGEST TO PACK LUNCH & WATER

You do not need to get a ticket. Columbia has reserved a block of tickets.

9/17 **Week 3**

NEW METHODS FOR COLLABORATIVE DESIGN

Thad Pawlowski: **WORKSHOP WARM UP**

Columbia GSAPP and CRCL have been invited to participate in Our Futures Festival NYC, a one day celebration to open Climate Week on Governor's Island. This presents an opportunity to warm-up our workshop skills and engage the public in a conversation about the innovation in critical infrastructure systems needed in order to transition to carbon-free fuels by mid-century; and how those will need to work together in order to make our city more sustainable, resilient and equitable.

During this workshop, students will be asked to draw a simple diagram of how that system works today and how it will be vulnerable to climate change.

Readings: TBD based on system assignment

9/17 ****Special Event at The Forum: Lessons From Rebuild By Design**

Shaun Donovan, former Secretary for Housing and Urban Development, Obama Administration and Kate Orff, Columbia University

Lecture (forum) - 6:30 PM

<https://worldprojects.columbia.edu/content/events>

Please register here

<https://www.eventbrite.com/e/lessons-from-rebuild-by-design-with-shaun-donovan-and-kate-orff-tickets-69489255233>

Reading: TOO BIG: Rebuild By Design / A Transformative Approach to Climate Change (Ovink & Beoijenga)
(PDF in the Drive)

9/21 **SATURDAY BONUS CLASS** -CLIMATE WEEK EVENT in GOVERNOR'S ISLAND, A workshop warm-up

9/24 **Week 4**
Tues **Invited Speaker: Nicholas Pevsner**
HISTORY OF NEW DEAL LANDSCAPES
Research case study: FRACKING IN APPALACHIA

Reading: "The Deep Section" in Scenario Journal, and "Green New Deal, Landscape and the Public Imagination" - both in the Seminar Drive

9/27 *** Special Event
Friday **Public Works for a Green New Deal** **3:00-5:30 PM Wood Auditorium**
Daniel Aldana Cohen, on Housing
Public Transportation
Public Electricity, Abby Spienok, Harvard - Electricity and Energy

10/1 **Week 5**
Tues **LECTURE: Johnstown as Case Study for Green New Deal in Post-Industrial America**
Thaddeus Pawlowski on the geography, history, planning and design challenges of Johnstown, Pennsylvania. A discussion of Regional Economic Transition and the power of planning to make a difference.

10/08 **Week 6**
WORKSHOP PREP #1
Separate research assignments . Additional handout will be provided with detailed instructions

1. Each student is responsible for one case study (5 slides).
2. Work with your team to develop a map of the infrastructure in Western Pennsylvania and describe some of the issues, referencing climate change and energy transition.
3. Planners on student teams should also prepare an understanding of the governance of that infrastructure including historical development, employment and current trends.

WATER

1. Water Supply & Quality, dams, drinking water reservoirs
2. Wastewater Treatment, industrial pollution, domestic wastewater, Stormwater
3. Rivers & edge infrastructure, flooding, channelization, riverbank reclamation

CULTURE & ECONOMY

4. Industrial Heritage, Manufacturing, job growth
5. Arts and Culture as economic generators
6. Health care & aging, urban heat

DECARBONIZING TRANSPORTATION & HOUSING

7. Transit & Intercity Rail

- 8. Housing
- ENERGY & WASTE
- 9. Energy Generation - decarbonizing
- 10. Waste Management

PREPARATION & FEEDBACK FOR CASE STUDIES AND DESIGN SKETCHES.

During this session we will be meeting in the classroom to review progress on the Case Study Presentation (approx 15 min duration each) and the initial mapping & documentation of the Design sketch sites. Please be prepared to discuss your work.

10/15 **Week 7**
Tues **WORKSHOP PREP #2**
Case Study Review & presentation prep

10/22 **Week 8**
Tues **WORKSHOP PREP #3**
Case Study Review & presentation prep

10/26-29 **TRAVEL TO PENNSYLVANIA FOR WORKSHOP ON ECONOMY & ECOLOGY**
 A detailed hand out will be provided with additional detail

10/27
 Sunday **LECTURE: Rivers as Ecological and Economic Engines**
 Kate Orff on the catalytic power of rivers to bring cities together and drive a change process. Specific examples from Louisville, Lexington, Jacksonville, Atlanta, and other places will be incorporated into the lecture.

10/28
 Monday **WORKSHOP DAY IN PA**
Note: Urban Designers, your studio faculty are aware that you will miss class on Monday October 28th.

10/29 **Week 9**
NO CLASS
WE WILL BE RETURNING FROM JOHNSTOWN, PA

11/05 **Week 10**
ELECTION DAY / NO CLASS

11/12
Week 11 **IN- CLASS DISCUSSION**

THORNY ISSUE: MANAGED RETREAT & RESETTLEMENT

**Nathan Kensinger will visit the class and show his video
Debate ! RETREAT or REBUILD or _____**

Eric Klinenberg "Adaptation"

<https://www.newyorker.com/magazine/2013/01/07/adaptation-2>

Elizabeth Rush

<https://urbanomnibus.net/2015/02/leaving-the-sea-staten-islanders-experiment-with-managed-retreat/>

On Staten Island: Liz Koslov

<http://woods.stanford.edu/sites/default/files/koslov-retreat-draft-public-culture-2016.pdf>

Lizzie Yarina, "Your Seawall Will Not Save You, *Places Journal*, March, 2018, found at:

<https://placesjournal.org/article/your-sea-wall-wont-save-you/>

Sunday

*****November 17**

Special Event: The Green New Deal - A Public Assembly

The Buell Center, The Architecture Lobby, NY AIA

At the QUEENS MUSEUM, Queens NY

11/19

Week 12

BRIEF PRESENTATION - GROUPS

Reporting Back

CULTURE & ECONOMY & HUMAN SERVICES

TRANSPORTATION & HOUSING

11/22

Green New Deal Super Crit at GSAPP

Wood Auditorium

11/22

Friday

****Special Event**

Columbia World Projects River & Delta Cities Symposium

THANKSGIVING BREAK 11/23-11/24

11/26
Week 13

BRIEF PRESENTATION - GROUPS
Reporting Back
WATER
ENERGY & WASTE

11/30 Last day of classes

12/07 Urban Design Final Review

12/10
Tuesday

FINAL CHAPTERS DUE

12/20 Grades due

1. [Vox introduction to the Green New Deal \(7 minute video\)](#)
2. [The Architecture Lobby's annotated resolution](#)
3. [A Green New Deal For Housing by Daniel Aldana Cohen](#)
4. [Design and the Green New Deal by Billy Fleming](#)
5. [Living, Not Just Surviving by Alyssa Battistoni](#)
6. [Just Transitions/Design for Transition by Damian White](#)
7. [Let Them Drown by Naomi Klein \(audio option available\)](#)
8. [Climate Leviathan by Joel Wainwright and Geoff Mann](#)
9. [With A Green New Deal, Here's What the World Could Look Like for the Next Generation by Kate Aronoff](#)