# 2021 Urban Planning and Policy Development Concentrations

# **Community Development and Housing Concentration**

# **Faculty Advisers**

Kathe Newman and James DeFilippis (Co-Coordinators), Radha Jagannathan, Will Payne, Ron Quincy, Julia Sass Rubin, Eric Seymour, Mi Shih

#### Overview

This concentration features several tracks: (1) Community Based Planning; (2) Community, Housing, Land, and Finance; (3) Community Health and Justice. The community development and housing concentration and specialty tracks expose students to the practices and theory of community development, housing, and health. Course work examines: the history and practice of community development; the processes that shape urban change; the operations of housing markets and housing finance; the ways in which affordable housing is built and maintained; participatory and community planning methods; issues of gender, race, class, and power; and social and economic policy formation, implementation, and evaluation, and environmental justice. This concentration meets the needs of students with a range of interests including community and community economic development and finance, housing development and rehabilitation, community planning and revitalization, urban poverty, and health. Students take at least three of the required courses and at least four courses total in the concentration. Recommended methods courses include Advanced Qualitative Methods (34:833:628) and Introduction to Geographic Information Systems for Planners (34:970:591). A graduate planning studio in community development is recommended as an additional course.

# **Community Based Planning Track**

## **Required Courses** (choose at least three of these courses)

34:970:563 Community Development (fall)

34:970:XXX Community Planning and Engagement in the US and Global South (S23, alt. years)

34:970:XXX Placemaking (S22)

34:833:612 Non-profit and Community Development Finance (S22)

34:833:686 Community Organizing (S23, alt. years)

34:833:570 Non-profit Management (S22)

# **Community, Housing, Land, and Finance Track**

# **Required Courses** (choose at least three of these courses)

34:970:563 Community Development (fall)

34:970:529 Principles of Housing (fall)

34:970:530 International Urbanization and Housing Issues (F22, alt. years)

34:970:528 Housing Economics and Markets (S22, alt. years)

34:970:XXX Affordable Housing: LIHTC (S22)

34:970:605 Planning Real Estate Analysis (fall)

34:833:612 Non-profit and Community Development Finance (S22)

#### **Community Health and Justice Track**

# **Required Courses** (choose at least three of these courses)

34:970:563 Community Development (fall)

34:970:561 Social Justice in Planning and Public Policy (S23, alt. years)

34:970:532 Bridging Public Health and Urban Planning (F21, alt. years)

34:970:XXX Placemaking (S22)

34:970:XXX Environmental Justice (F21, alt. years)

34:833:513 Issues in Health Disparities (spring)

34:833:552 Education Policy, Community Development and Social Justice (S22)

34:970:555 Transportation and Equity (S23, alt. years)

# **Recommended Courses** (choose at least one additional courses, which can include the required courses you did not choose above, for a total of four)

34:970:521 Historic Preservation (spring)

34:970:528 Housing Economics and Markets (S22, alt. years)

34:970:529 Principles of Housing (fall)

34:970:XXX Affordable Housing: LIHTC (F21)

34:970:530 International Urbanization and Housing Issues (F22, alt. years)

34:970:532 Bridging Public Health and Urban Planning (F21, alt. years)

34:970:561 Social Justice in Planning and Public Policy (S23, alt. years)

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34:970:594 Program Evaluation (prereq BQM; Discrete Methods or Multivariate Methods)(fall)
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34:970:605 Planning Real Estate Analysis (fall)

34:970:622 Urban Redevelopment (fall)

34:970:630 Discrete Choice Methods (spring)

34:970:653 Case Study Methods (S22, alt. years)

34:970:XXX History and Theory of Urban Redevelopment (S23, alt. years)

34:970:XXX Environmental Justice (F21, alt. years)

34:833:513 Issues in Health Disparities (spring)

34:833:540 State and Local Public Finance (spring)

34:833:552 Education Policy, Community Development and Social Justice (S22)

34:833:570 Non-profit Management (S22)

34:833:585 American Social Policy (fall)

34:833:595 Economics of Poverty (fall)

34:833:612 Non-profit and Community Development Finance (S22)

34:833:686 Community Organizing (S23, alt. years)

## **Recommended Courses in other Programs**

# Sociology

920:571 Space, Place, Inequality

920:573 Community Inequality

920:614 Race, Ethnicity, and Inequality

#### Geography

16:450:513 Rethinking Economy (F21)

16:450:516 Urban Geography (F21)

16:450:605:06 Geography Seminar: Black Geographies

#### **Labor Studies**

37:575:359 Organizing for Social Change (F21, spring) (undergraduate course)

#### **Graduate Certificates**

Students in this concentration may be interested in graduate certificates in Historic Preservation, Real Estate Development and Redevelopment, Geospatial Information Science, Human Dimensions of Environmental Change, and Coastal Climate Risk and Resilience.

# **Design and Development/Redevelopment Concentration**

# **Faculty Advisers**

Tony Nelessen and David Listokin (co-coordinators), Juan Ayala, Barbara Faga

#### Overview

This concentration includes two tracks: (1) Urban Design and (2) Development/ Redevelopment. Because of the connections between these two topics, many courses are listed in both tracks. Students may choose to combine these two tracks for a custom concentration.

## **Urban Design Track**

The Urban Design track focuses on the visioning, planning and design of healthy and resilient communities. Urban design courses equip students with critical thinking skills. The classes are sequenced to provide students with the fundamental knowledge of urban design, an understanding of time-tested design principles, and best practice of planning and urban design. The curriculum in visual communications and representation enables students to navigate through the complex realm of digital programs and provides them with the basic skills of hand drawing and sketching. From this foundation students learn digital drawing techniques in urban design illustration, visualization (Photoshop, Maxwell Studio or VRay), rendering, (Sketchbook Pro, AdobeSketch) and 3D modeling techniques (Rhino 3D, Sketch Up) used in successful national and inter-national urban planning projects.

Graphical Communication and Design Representation (34:970:590) and Planning and Design 1 (970 600:01) are required first-semester courses. Recommended methods courses include Introduction to GIS for Planners (34:970:591) and Topics in GIS (34:970:592). A graduate planning studio in design or land-use is recommended as one of the two studio choices. The design and land use studios support practice-based experience that allows students to develop the confidence to interact with their peers, faculty, clients, and public officials on real-world issues.

# **Required Courses** (take all of these courses as shown below)

#### First Year, First Semester

34:970:590 Graphical Communication and Design Representation (1<sup>st</sup> year, fall) 34:970:600 Planning and Design I (1<sup>st</sup> year, fall, *pre- or co-req: 34:970:590*)

#### First Year, Second Semester

34:970:601 Planning and Design II (1st year, spring, pre-req: 34:970:600 or instructor approval)

## Second Year, First Semester

34:970:593 Design Representation and Visualization (fall second year)

34:970:602 Zoning for Urban Planning (fall)

Studio

Second Year, any semester

34:970:605 Planning Real Estate Analysis (fall)

Studio

#### **Recommended Courses**

34:970:508 Comprehensive Planning (spring)

34:833:572 Negotiation and Conflict Resolution (S22)

34:970:520 Planning and Land Use Administration (spring)

34:970:521 Historic Preservation (spring)

34:970:523 Environmental Law and Policy (spring)

34:970:530 International Urbanization and Housing Issues (F22, alt. years)

34:970:551 Transportation and Land Use (F21, alt. years)

34:970:552 Transportation and Environment (F21, alt. years)

34:970:572 Green Building (spring)

34:970:604 Land Development Practice (F22, alt. years)

34:970:620 Energy Sustainability and Policy (spring)

34:970:622 Urban Redevelopment (fall)

# **Development/Redevelopment Track**

A broad understanding of real estate development and redevelopment, including land, building, market and financial analysis, particularly in the United States, is gained through a sequence of courses in development/redevelopment planning and practice; real estate, finance, investment; and development impact analysis. This track meets the needs of students with varying interests, including planning for development/redevelopment, real estate market research and analysis, real estate finance and investment analysis, and relating land use planning and controls to the private development process. It is strongly recommended that students take at least one studio in urban redevelopment, neighborhood revitalization, urban design, housing, or community development.

**Required Courses:** (take all of these courses) 34:970:605 Planning Real Estate Analysis (fall) 34:970:622 Urban Redevelopment (fall)

**Recommended Courses** (choose at least two additional courses for a total of four) 34:970:508 Comprehensive Planning (spring)

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34:970:520 Planning and Land Use Administration (spring)
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34:970:521 Historic Preservation (spring)

34:970:XXX Affordable Housing: LIHTC (F21)

34:970:523 Environmental Law and Policy (spring)

34:970:528 Housing Economics and Markets (S22, alt. years)

34:970:529 Principles of Housing (fall)

34:970:551 Transportation and Land Use (F21, alt. years)

34:970:552 Transportation and Environment (F21, alt. years)

34:970:563 Community Development (fall)

34:970:572 Green Building (spring)

34:970:590 Graphical Communication and Design Representation (1st year, fall)

34:970:600 Planning and Design I (1st year, fall, pre- or co-reg of 34:970:590)

34:970:601 Planning and Design II (spring, *pre-req: 34:970:600*)

34:970:602 Zoning for Urban Planning (fall)

34:970:604 Land Development Practice (F22, alt. years)

34:970:620 Energy Sustainability and Policy (spring)

34:970:XXX History and Theory of Urban Redevelopment (S23, alt. years)

34:833:540 State and Local Public Finance (spring)

34:833:572 Negotiation and Conflict Resolution (S22)

### **Recommended Courses in other Programs**

(may substitute for any recommended course, with concentration coordinator's approval)
Students should check courses in these (and other) programs: Cultural Heritage and
Preservation Studies (CHAPS) at Rutgers, New Brunswick; real estate program at the Rutgers
Business School, Newark and Piscataway; design in the Department of Landscape Architecture
at Rutgers, New Brunswick (design background required).

#### **Graduate Certificates**

Students in this concentration may be interested in graduate certificates in Historic Preservation, Real Estate Development and Redevelopment, and Geospatial Information Science.

# **Environmental Planning Concentration**

# **Faculty Advisers**

Clinton Andrews (Coordinator), Michael Greenberg, Eric Seymour

#### Overview

This concentration features several tracks: (1) Coastal Resilience, (2) Environmental and Human Health Planning (3) Environmental Policy, and (4) Land Use Planning. Because there are many connections among these topics, students may choose to blend tracks for a custom concentration. We urge students to work with their advisers. Students should take at least four courses for the concentration, one required and three recommended, as shown below.

This concentration prepares students to plan and manage the human-environment interface. The Coastal Resilience track brings the science of sea level rise and storm risk together with planning and engineering responses to make coastal settlements safer. The Environment and Human Health track focuses on the application of planning and risk analysis tools to improve human health outcomes. The Environmental Policy track focuses on policy approaches to managing local, regional and global environmental problems. The Land Use Planning track emphasizes land-use planning, master planning, and zoning regulation at the scale of towns, cities, and states. All students in this concentration will develop familiarity with design, regulatory and managerial approaches. Recommended Methods courses include Graphical Communication and Design Representation (34:970:590), Introduction to GIS for Planning and Policy (34:970:591), and Topics in GIS (34:970:592). At least one graduate planning studio in environmental, coastal risk, comprehensive planning or other physical planning is strongly recommended.

## **Required Course**

34:970:618 Environmental Planning and Management I (fall)

#### Recommended Courses for Coastal Resilience Track (choose at least three additional courses)

34:970:627 Hazard Mitigation Planning: Prevention, Resilience and Sustainability (spring)

34:970:631 Communicating Science With Decision Makers (spring)

16:218:502 Transdisciplinary Perspectives on Coastal Climate Risk and Resilience (fall)

16:460:571 Climate Change Risk Analysis (spring)

16:450:612 Natural Hazards (co-listed as undergrad course 01:450:31 1)(fall undergrad) Landscape Architecture

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# Recommended Courses for Environment and Health Track (choose at least three additional courses)

34:970:532 Bridging Public Health and Urban Planning (F21, alt. years)

34:501:520 Population Health (fall, spring)

34:970:572 Green Building (spring)

34:970:552 Transportation and Environment (F21, alt. years)

34:970:563 Community Development (fall)

16:450:508 Environment and Development

# Recommended Courses for Environmental Policy (choose at least three additional courses)

34:970:619 Environmental Economics and Policy (F23, alt. years)

34:970:571 Industrial Ecology (S22, alt. years)

34:970:523 Environmental Law and Policy (spring)

34:970:620 Energy Sustainability and Policy (spring)

34:816:637 Global Data Analytics (fall)

16:375:534 Environmental Sustainability: Life-Cycle Assessment Tools

16:375:530 Hazardous Waste Management

16:450:370 Climate Change and Society (spring)

16:790:580 Global Environmental Politics and the United Nations (Political Science) (online)

16:215:604:04 Global Change & Ecology (assumes familiarity with ecological modeling)

# Recommended Courses for Land Use Track (choose at least three additional courses)

34:970:508 Comprehensive Planning (spring)

34:970:520 Planning and Land Use Administration (spring)

34:970:602 Zoning for Urban Planning (fall)

34:970:521 Historic Preservation (spring)

34:970:600 Planning and Design I (fall) (pre- or co-req of 34:970:590)

34:970:601 Planning and Design II (spring)

34:970:604 Land Development Practice (F22, alt. years)

34:970:622 Urban Redevelopment (fall)

34:970:605 Planning Real Estate Analysis (fall)

34:970:621 Infrastructure Planning (spring)

34:970:551 Transportation and Land Use (F21, alt. years)

34:970:590 Graphical Communication and Design Representation

16:450:606 Geography Seminar: Integrated Land Use Change (occasional)

11:550:431 Advanced Landscape Architecture (studio course, requires design background)

11:372:444 Watershed Management: An Interdisciplinary Perspective

# Recommended Courses for All Tracks (consider substituting one of these as your fourth course)

34:833:572 Negotiation and Conflict Resolution (S22)

34:970:550 Introduction to Transportation (S22, F22)

34:970:553 Methods of Transportation Planning (spring)

34:970:556 Bicycle and Pedestrian Planning (F22, alt. years)

16:450:605 Geography Seminar: Environmental Change Topics (occasional)

#### **Graduate Certificates**

Students in this concentration may be interested in graduate certificates in Human Dimensions of Environmental Change, Historic Preservation, Coastal Climate Risk and Resilience, Energy and Geospatial Information Science.

# **International Development Concentration**

# **Faculty Advisers**

Radha Jagannathan and Hal Salzman (Co-coordinators), Hooshang Amirahmadi, Frances Barchi, Michael Lahr, Ronald Quincy, Mi Shih

#### Overview

This concentration prepares students to effectively frame and engage with the dynamic challenges of designing and implementing plans and public policies in regional and international settings, with particular focus on urbanization and human settlement systems. Specific topics include the interplay of development and the presence and absence of political stability, social cohesion and social movements, economic equity, environmental sustainability, the spatial concentration of economic activity, inter-industry linkages, technology transfer, sustainable development, green economic growth, Sustainable Development Goals, and cross-boundary movement of people, trade, capital, and information. Students must take two of the required courses and at least four within the concentration.

**Required Courses** (take at least two of these courses)

34:970:530 International Urbanization and Housing Issues (F22 alt, years)

34:970:644 International Economic Development (spring)

34:970:645 Regional Development (fall)

34:970:643 Debates in International Development (fall)

**Recommended Courses** (choose at least two of these courses, which can include the required courses you did not choose above, for a total of four courses)

34:816:637 Global Data Analytics (fall)

34:970:651 International Environmental Law and Policy (spring)

34:970:XXX Community Planning and Engagement in the US and Global South (S23 alt, years)

#### **Recommended Courses in other Programs**

You may substitute one of these courses for one of the two recommended courses

# Geography

450:605:03 Critical Ethnographies of Power and Hegemony (fall)

#### **Political Science**

16:790:536 International Law and the United Nations (fall, spring)

16:790:580 Global Environmental Politics and the United Nations (fall) (online)

#### **Social Work**

19:910:545 Global Social Work and Social Development (spring) 19:910:549 Latinos: Culture, Community and Social Welfare (spring)

#### Women's Studies

16:988:535 Gender and Human Rights (spring)

#### **Global Affairs**

26:475:504 International Law (fall) 26:478:541 Global Political Economy (fall)

## **Urban Systems**

26:977:617 Urban Systems III: Globalization, International Migration, and Contemporary Cities (fall)

Since graduate course offerings throughout the University change annually, there may be relevant courses in cognate fields (or at the Princeton Woodrow Wilson School) which could be approved by a faculty coordinators for inclusion in the concentration. Students may also take a Directed Study relevant to their specific interests as one of the recommended courses.

# International Development and Global Affairs at the Bloustein School

The <u>International Development Interest Group (IDIG)</u>, was established at the Bloustein School in early 2009 and in 2010 was recognized as by the Graduate Student Association. It functions as a forum for the exchange of ideas and information, as well as a platform for collaborative work around various themes and geographies of relevance in planning and policy work in low- and middle-income countries. <a href="https://bloustein.rutgers.edu/idig">https://bloustein.rutgers.edu/idig</a>

### **Rutgers Global**

<u>Rutgers Global</u>—provides Rutgers community members with the opportunities, programs, resources, and services they need to advance their global experience. <a href="http://global.rutgers.edu/">http://global.rutgers.edu/</a>

# Other Global Initiatives at Rutgers

**Rutgers Global Health Institute** fosters collaboration across the university and with partners beyond Rutgers to improve the health of vulnerable populations. Promotes health equity locally and around the world by working with communities to create and implement comprehensive, long-term solutions to pressing global health challenges.

# **Rutgers Climate Institute**

https://climatesociety.rutgers.edu/

Rutgers Climate Institute is a University-wide effort understand climate change

# **Transportation Policy and Planning Concentration**

# **Faculty Advisers**

<u>Robert Noland</u> and <u>Michael Smart</u> (Co-Coordinators), <u>Kelcie Ralph, Will Payne, Wenwen Zhang,</u> Piyushimita Thakuriah

### Overview

The transportation policy and planning concentration provides a broad survey of the field as well as a critical evaluation of current and alternative policies and practical application of planning methods. Urban transport systems are examined in the context of environmental, energy, safety, equity, financial, and health impacts. Particular focus is placed on public transit planning, non-motorized modes such as walking and bicycling, environmental issues, and the coordination of land use and transportation planning. Students must take three of the seven core courses, and choose one elective from either the other core courses or from the listing of recommended courses below for a total of four courses. Students are encouraged to consider a Directed Study which may substitute for one recommended course. Recommended methods courses include Introduction to GIS for Planning and Public Policy (34:970:591), Topics in GIS (34:970:592), and Discrete Choice Methods (34:970:630). A graduate planning studio with a transportation focus or component is strongly recommended.

# **Required Courses** (take at least three of these courses)

34:970:550 Introduction to Transportation (S22, F22)

34:970:551 Transportation and Land Use (F21, alt. years)

34:970:552 Transportation and the Environment (F21, alt. years)

34:970:553 Methods of Transportation Planning (spring)

34:970:554 Transportation Economics and Finance (S23, alt. years)

34:970:555 Transportation and Equity (S23, alt. years)

34:970:556 Bicycle and Pedestrian Planning (F22, alt. years)

34:970:558 Public Transit Planning and Management (fall)

**Recommended Courses** (choose one additional course, which can include the required courses you did not choose above, or other courses with approval from the concentration coordinators, for a total of four courses)

34:970:508 Comprehensive Planning (spring)

34:970:559 Transportation Risk and Security (S23, alt. years)

34:970:560 Freights and Ports (spring)

34:970:594 Program Evaluation (F21)

34:970:590 Graphical Communication and Design Representation (1st year, fall)

34:970:600 Planning and Design I (fall) (pre- or co-reg of 34:970:590)

34:970:618 Environmental Planning and Management (fall)

34:970:634 Data Analytics: Using Big Data (fall, spring)

# **Recommended Courses in other Programs**

Civil and Environmental Engineering (these course offerings may change from year to year)

16:180:531 Traffic Engineering

16:180:532 Transportation Planning

16:180:533 Traffic Operations

16:180:536 Transportation System Analysis

16:180:537 Intelligent Transportation Systems

16:180:548 Infrastructure Management Systems

16:180:551 Rail Transportation System

16:180:552 Engineering Risk Analysis in Transportation Systems

16:180:554 Sustainable Transportation Infrastructure

16:180:555 Railway Track Engineering and Safety

#### **Graduate Certificates**

Students in this concentration may be interested in the <u>Graduate Certificate in Transportation</u> <u>Studies</u> and the <u>Graduate Certificate in Transportation Management: Vulnerability, Risk, and Security.</u>

# **Urban Informatics Concentration**

# **Faculty Advisers**

<u>Clinton Andrews</u> and <u>Eric Seymour</u> (Co-coordinator) <u>Juan Ayala</u>, <u>Michael Lahr</u>, <u>Robert Noland</u>, Will Payne, <u>Michael Smart</u>, <u>Wenwen Zhang</u>, <u>Piyushimita Thakuriah</u>

#### Overview

Evidence-based decision making in urban planning requires the use of advanced computational tools and data management techniques that can evaluate the data generated in public settings. This concentration provides the vehicle for educating this new cross-trained professional cohort by providing competencies needed in urban informatics: context, statistics, programming, data management, data analytics, visualization, spatial analysis, applications and integration of skills.

## **Prior Preparation**

This concentration is suitable for students with undergraduate degrees in any field. Applicants must demonstrate competency in one or more programming languages and skills in data management (with coursework, work experience, or by examination). *Basic Quantitative Methods and Planning Methods* may be taken concurrently with concentration courses. Students with appropriate backgrounds may substitute more advanced courses for topics already mastered (see Methods Flowchart and consult with your adviser).

# **Required Courses** (take three of these courses)

34:970:502 Theory and Practice of Public Informatics (fall)

34:970:591 Intro to GIS for Planning (fall, spring)

34:833:633 Data Analytics: Using Big Data (fall, spring), pre req: Applied Multivariate Methods (34:970:527) or Discrete Choice (34:970:630).

#### **Recommended Courses** (choose one additional course for a total of four courses)

34:970:527 Applied Multivariate Methods (fall, spring)

34:970:590 Graphical Communication and Design Representation (fall, spring)

34:970:592 Topics in GIS (fall, spring)

34:970:593 Design Representation and Visualization (F21)

34:970:607 Communicating Quantitative Information (TBD)

34:970:630 Discrete Choice Methods (spring)

34:970:631 Communicating Science with Decision Makers (spring)

34:833:635 Survey Research

34:816:637 Global Data Analytics (fall)

34:816:640 Robotics and Society (fall)

34:816:xxx Data Visualization (fall)

# **Graduate Certificates**

Students in this concentration may be interested in the graduate certificate in Geospatial Information Science.