

CITY AND REGIONAL PLANNING (CPLN)

CPLN 5000 Introduction to City Planning: History, Theory and Practice

This course introduces students to the history, theories, and contemporary practice of city and regional planning. Readings, lectures, class discussion, and walking tours focus on: - The evolution of planning ideas, strategies, institutions, and powers, and of planning's influence on cities and regions around the world; - The structure and dynamics of urban change; - The ways planners and social and environmental scientists have understood, theorized, and responded to social, economic, political, and environmental conditions and change over time; and - The development of the planning profession and its relationships with allied fields, examining various types of planning, urban development, and design.

Fall

1 Course Unit

CPLN 5010 Quantitative Planning Analysis Methods

Introduction of methods in analyzing demographic conditions, land use and housing trends, employment and business changes, community and neighborhood development. Focus on using spreadsheet models and data analysis for local and neighborhood planning.

Fall or Spring

1 Course Unit

CPLN 5020 Public Finance & Public Policy

This course provides an introduction to the fundamentals of accounting and budgeting for government and nonprofit organizations. The course is designed for students with little or no background in financial reporting, budgeting, and financial management. "Accounting and budgeting must be recognized as separate systems that must interact in a complementary manner if managers are to exercise control of the financial resources of their organizations" (Garner, 1991). Guided by the premise above, the course naturally divides into two parts: In the first, students are introduced to basic financial reporting concepts. The course will provide a foundation in the state and local government financial reporting model. Students will analyze Comprehensive Annual Fund Reports (the main filings required for state and local governments) and focus on the aspects and objectives that make reporting for governments unique. Students will develop a framework for evaluating performance and operating results of governments. In the second part of the course, students will focus on budgeting, which is central to the successful operation of government organizations. Government budgets are expressions of public policy and carry the authority of the law. The course examines budget formulation and development, forecasting, budget adoption, and budget evaluation. Students will be trained to determine whether organizations are effectively using their resources while meeting their legal requirements and social responsibilities.

Spring

Also Offered As: GAFL 6510

1 Course Unit

CPLN 5030 Modeling Geographical Objects

This course offers a broad and practical introduction to the acquisition, storage, retrieval, maintenance, use, and presentation of digital cartographic data with vector-oriented (i.e. drawing-based) geographic information systems (GIS) for a variety of environmental science, planning, and management applications. Previous experience in GIS is not required.

Fall

Also Offered As: MUSA 5030

1 Course Unit

CPLN 5040 Site Planning

This course introduces students to the practice of site planning. Skills and methods examined in the course include observation of the physical and community environment; physical and environmental site inventorying and analysis; analysis of alternative site programming and uses; site design processes and strategy; and the creation of site plans and development standards. Methods of community participation and collaboration with other disciplines will be explored. The spring version of this course differs from the fall version in its orientation toward urban designers and/or those with prior design backgrounds and skills.

Spring

1 Course Unit

CPLN 5050 Planning by Numbers

This class emphasizes the theory, practice, and use of statistics as applied to planning and policy problems and data. Starting with a review of basic descriptive statistics and measures of association, this course will introduce students to the regression techniques, including multiple regression analysis and logistical and probabilistic models for categorical data; data mining techniques, measures of spatial autocorrelation, and time-series modeling; and causal inference techniques, including structural equation modeling (SEM). A basic familiarity with descriptive and inferential statistics at the upper-division undergraduate level is expected at the beginning of the class. This course uses the popular, free, and open source statistical software R. Meets methods breadth requirement.

Spring

Mutually Exclusive: MUSA 5000

1 Course Unit

CPLN 5060 Negotiation and Conflict Resolution

This course is designed to introduce graduate students to the theory and practice of negotiation, conflict resolution and community engagement. We will start by looking at basic approaches to interpersonal negotiation and then move to considering contemporary approaches to understanding and addressing public disputes using negotiation, facilitation and public involvement. Design professionals - architects, construction managers, planners and others - face a variety of kinds of problems and challenges in their work. Some problems and challenges, whether simple or complex, are amenable to technical solutions based solely on the expertise of planners, managers, architects and others. There are, however, other problems and challenges that require adaptive work, primarily because technical expertise alone is insufficient to address the problems or challenges being faced. In this course, we'll focus on perspectives and methods for working through those later sorts of problems and challenges. Meets methods breadth requirement.

Spring

1 Course Unit

CPLN 5080 Urban Research Methods

This new course will introduce students to the practice of conducting original social, policy, and planning research in an urban context, and through a series of applied exercises, cover the following topics: research conceptualization and design, logic models, survey and ethnographic research, urban policy analysis and evaluation.

1 Course Unit

CPLN 5090 Law of Planning and Urban Development

The central focus will be on selected aspects of the field of the law of planning and development, a field that embraces a range of legal doctrines that are particularly relevant to cities and suburbs. We will study the principles that govern the regulation of land use and management of urban growth (through land use controls and other techniques for regulating new development) and, to a limited extent, environmental planning laws.

Spring

1 Course Unit

CPLN 5200 Introduction to Housing, Community and Economic Development

Introduction to the theories, institutions, and practices of housing, community and economic development with a focus on improving opportunity and building wealth in disadvantaged communities. Provides foundation for advanced courses in housing policy, downtown and neighborhood revitalization, real estate and economic development finance, and local and international community development.

Spring

1 Course Unit

CPLN 5280 Research Seminar 21st Century Urbanism

A seminar run in conjunction with the Institute for Urban Research at Penn, students will learn about the range of cutting-edge topics in urbanism that Penn faculty are working on and work closely with a faculty member on current research. Students will learn about new topics and methods in interdisciplinary urban research, and get first hand experience collecting urban data under the close supervision of an experienced researcher. Students and faculty jointly will present their findings for discussion. This course is a good introduction for how to frame and conduct an urban research project. For more information, visit <https://pennur.upenn.edu/instruction/uurc>

Spring

1 Course Unit

CPLN 5300 Introduction to Land Use Planning

Exploration of the methods and tools for managing land use and shaping the built environment. Presents how to create a successful Comprehensive Plan, Zoning Ordinance, Subdivision Regulations, Capital Improvements Program, and design guidelines. Also, presents functional area, regional, and state-level plans.

Fall

1 Course Unit

CPLN 5310 Introduction to Environmental Planning & Policy

Overview of federal programs for protecting air quality, water quality, and endangered species along with managing climate change, solid waste, toxics, energy, transportation, and remediating brownfields in an overall sustainability framework. State-level, local government, and NGO efforts to protect the environment are also explored as are green infrastructure and green cities.

Fall

1 Course Unit

CPLN 5350 Topics in Energy Policy

This seminar will explore a collection of ideas influencing energy policy development in the U.S. and around the world. Our platform for this exploration will be seven recent books to be discussed during the semester. These books each contribute important insights to seven ideas that influence energy policy: Narrative, Transition, Measurement, Systems, Subsidiarity, Disruption, Attachment. Books for 2018 will be chosen over the summer; the 2017 books are listed here as examples: Policy Paradox (2011) by Stone, Climate Shock (2015) by Wagner and Weitzman, Power Density (2015) by Smil, Connectography (2016) by Khanna, Climate of Hope (2017) by Bloomberg and Pope, Utility of the Future (2016) by MIT Energy Initiative, Retreat from a Rising Sea (2016) by Pilkey, Pilkey-Jarvis, Pilkey.

Spring

Also Offered As: ENMG 5030

1 Course Unit

CPLN 5400 Introduction to Property Development

This course is designed to acquaint students with the fundamental skills and techniques of real estate property development. It is designed as a first course for anyone interested in how to be a developer, and as a foundation for further courses in urban development and real estate.

Fall

1 Course Unit

CPLN 5500 Introduction to Transportation Planning

This course provides an overview and introduction to urban transportation planning and policy. Although the focus is on US transportation, the course also puts an emphasis on transportation issues in the fast-growing cities of the developing world. The course is organized around: (1) histories and theories of transportation and travel behavior; (2) transportation policy and project evaluation; (3) transportation demand modeling; and (4) multimodal transportation planning and policy. Particular attention is given to interactions between transportation and land use systems.

Fall

1 Course Unit

CPLN 5510 Transport Justice

This course will explore the concept of transport justice and how this idea can inform changes to public transit infrastructure. The first half of the course will set theoretical foundations through close reading and discussion of spatial and social justice theories, emphasizing questions of transportation and mobility. The second half of the course will feature a project-based application of these theories. Students will develop analyses to inform a planning at the intersection of Broad/Germantown/Erie in North Philadelphia. Students will be encouraged to explore multiple analytic approaches including: interviews and qualitative data collection; GIS and spatial analysis; quantitative analysis and predictive modeling, and more. The course will culminate in written and oral presentations given to partners from SEPTA, OTIS, and other planning agencies in Philadelphia.

Fall

1 Course Unit

CPLN 5600 Introduction to Graphics for Urban Design

This course introduces students to visual literacy and the use of a variety of software packages. Through a series of assignments and in class discussions participants develop a visual vocabulary and skills to function in and between AutoCAD, Adobe Creative Suite, and 3D modeling software.

Spring

1 Course Unit

CPLN 5710 Sensing the City

This course will teach you to design and build sensing installations that engage with real-time urban environmental stimuli. Using the Arduino microcontroller as a prototyping platform, you will write code and wire circuits, learn to select and implement available sensors, and generate raw environmental data. You will populate databases and interpret data streams, and then create responsive urban interventions. Following the model of hackerspaces around the globe, we will collaboratively pose problems and find solutions, teaching and learning from one another. No background in coding or electronics is required, but a desire to learn is absolutely necessary. Also, this course is hands-on. You are a maker! Be prepared to build, design, and create.

Fall

1 Course Unit

CPLN 5720 Modern Architectural Theory Seminar

A survey of architectural theory from the mid-eighteenth century to the present. The discussion of original writings will be emphasized. Open to undergraduate and graduate students.

Not Offered Every Year

Also Offered As: ARTH 5710

1 Course Unit

CPLN 5770 Topics in International Development

Course examines current trends and topics pertaining to international development. See MCP website for current offerings: Graduate City and Regional Planning, Weitzman School (upenn.edu)

Fall

1 Course Unit

CPLN 5800 The Penn Experience: Racism, Reconciliation, and Engagement

This new non-credit asynchronous course, consisting of six Modules, aims to establish common basic language and concepts for incoming graduate and professional students to facilitate subsequent difficult conversations about race, racism and difference in the classroom and beyond. Using video interviews, presentations, short readings and podcasts, the course highlights the significance of Penn and Philadelphia's history of racism and other forms of oppression, Penn's evolving relationship to West Philadelphia, and Penn's efforts toward greater engagement and inclusion. Modules also focus on implicit bias, intercultural communication gender identity and disparities in healthcare. A final module was designed primarily to address the antiracist work that must be done to dismantle white supremacy. All incoming SP2 master's students are expected to spend 20 or more hours reviewing the six modules and completing short assessments prior to starting the fall semester. Other graduate and professional schools will assign modules to be completed based on their schools requirements.

0 Course Units

CPLN 5820 Place, Taste and Neighborhood Change: Frameworks for Integrating Aesthetics, Equity and Creativity

Places provide a sense of identity and orientation to the world for its users in ways that go beyond the traditional practice areas that urbanists are trained to understand (i.e. housing, economic development, transportation). The popularization of artistic, cultural, and "creative interventions" in redevelopment has added to that complexity in hybrid ways require new tools, languages, and frameworks to meaningfully participate in the development process. By taking a humanistic and scientific views of the longstanding arts-based community development field now known as "creative placemaking", the class will help learners formulate critical, evaluative answers pressing, emergent questions for urban practitioners. In particular, learners will explore the various state-sponsored meanings of creative placemaking, artistic excellence, and artistic merit. During the course we will interrogate, compare, and articulate the power dynamics embedded in those definitions with new, alternate, and stakeholder-centric definitions. The course aims to invite conversation, reflection, and sharing of best practices alongside community-based leaders with the promise that learners will be able to apply equity-based frameworks to these debates. Learners will emerge from this guided journey with a sharpened ability to identify, generate, and extend authentic, inclusive arts-based neighborhood change.

Spring

1 Course Unit

CPLN 5830 Coloring Climates: Race, Stories, Environments

Why is the Green New Deal not talked about as a "Black Agenda"? Why are Black people not employed in 90% of the leadership positions in environmental organizations? Do Black folks resist environmentalism as a "white" issue? Why are cannabis farmers, once arrested by cities for growing hemp, now being priced out of the regulated industry in legalized states? These questions may also be asked for people of color broadly. Since the "Manifest Destiny" days of John Muir, white spatial imaginaries have shaped how environmentalism is branded; planning has been in lock-step. These persistent myths motivate the basis of historical reflection and contemporary re-constitution of what it means to be "green" while Black in place. This seminar that proposes to "Blacklight" urban space: bare visible the oft-hidden Black Geographies in urban and environmental history on the margins. By drawing on texts in critical ecology, we will elucidate how primarily Black people imagine attachment to rural, pastoral, and urban spaces. This decentering of the colonial history of environmentalism is especially urgent in environmental and land use planning. Readings will include popular literature from Camille T. Dungy's *Black Nature: Four Centuries of African American Nature Poetry*, *The Green Collar Economy* by Van Jones, *The Good Food Revolution* by Will Allen; sociology from Dorceta Taylor's *The Rise of the American Conservation Movement: Power, Privilege, and Environmental Protection*, Ron Finley's "Ganstga Gardening" videos, environmental planning from Mabel O. Wilson's "Black & Green" in *Begin with the Past: Building the National Museum of African American History & Culture*, and Richard Westmacott's *African-American Gardens and Yards in the Rural South*, Majora Carter's *Sustainable South Bronx: A Model For Environmental Justice*; memoirs by *The Cooking Gene* by chef Michael Twitty, *Unbowed* by Wangari Maathai. Articles will also include voices from BIPOC geographers, psychologists, and planners with relevant views. While being primed with these histories, students will identify a mode of environmental action and land use engagement for a "Blacklight" case study in either their hometown or current place of residence. Students will contribute to a Wikipedia page on eco-poetics or ecoliteracy to build public consciousness around Black, indigenous, and people of color (BIPOC) sensibilities in these places.

1 Course Unit

CPLN 5910 INTRODUCTION TO SMART CITIES

This course reviews the infrastructure, databases, deployment, and development of emerging digital technologies in cities. We review existing initiatives, discuss challenges and opportunities, and critically evaluate what technology has and has not been able to offer cities. We contrast utopian visions of teaching with the possible realities. Finally, we ask; what makes a city smart?

Fall or Spring

1 Course Unit

CPLN 5920 Public Policy Analytics

Data scientists convert data into actionable intelligence. While most private sector data scientists optimize for profit, their public sector counterparts must address multiple complex bottom lines including economics, equity, politics, bureaucracy and social cohesion. This course teaches students how to wrangle government data; how to mine it for descriptive and predictive intelligence and how to communicate results to non-technical decision-makers. Broadly, coursework is focused on spatial analysis and geospatial machine learning and taught 70/30 in R and ArcGIS. Use cases include home price prediction, forecasting in criminal justice, land use modeling, transportation modeling and real estate site suitability. Prerequisites include vector and raster GIS and introductory statistics.

Fall

Also Offered As: MUSA 5080

1 Course Unit

CPLN 6000 Planning Workshop

Application of planning skills (including community inventorying and reconnaissance, goal articulation; alternatives creation and analysis, and plan development and implementation) to community plan creation. Students work in groups of seven to eight students each. Juried presentation required.

Spring

2 Course Units

CPLN 6200 Techniques of Urban Economic Development

Economic Development encompasses a range of professional practices, from finance to marketing, education to hospitality. Historically, economic development practitioners have marshaled these tools in the name of economic growth, though more recently equity has received increasing attention in the space. Drawing on literature as well as the real-world experiences of a number of practitioners who will join the course as guest lecturers, this class will provide a survey of the range of techniques utilized in the practice of economic development as well as an analytic framework for understanding their efficacy. Students will be asked to critically consider the costs and benefits of the various approaches to economic development, putting themselves in the position of policymakers to think about the circumstances under which each best applies.

Spring

1 Course Unit

CPLN 6210 Metropolitan Food System

This course introduces students to the planning and development of metropolitan food systems. Major topics include regional planning and policy; sustainable agriculture; food access and distribution; and markets. The class includes a mix of lectures, discussion, and field trips; and students will work on real-world projects in Philadelphia. Ultimately, the course aims to develop students' broad knowledge of food systems planning in the global North and South, with an emphasis on community and economic development strategies for sustainable food systems and food security.

Spring, even numbered years only

1 Course Unit

CPLN 6230 The Carceral State

This course examines the period of mass incarceration that began in the US in the 1970s, its impact on communities and its connection to economic development. We'll look specifically at policies that fostered mass incarceration, the financialization of the criminal justice system, the militarization of policing, and grassroots organizing movements that challenge the carceral state. We will examine the ways in which policies and practices have had disparate impacts on people of color and women, and we will also pay attention to space and place, endeavoring to understand differences at the local, county and state levels. Students will read books and articles from a range of disciplines including sociology, law, political science, and planning. We will also read poetry and memoir, and study places that have instituted policies and practices that go against the grain. This is a heavy reading course that relies on student engagement and discussion. We will also take a couple of field trips to local reentry organizations, and students will be required to do courtroom observations.

Spring, odd numbered years only

1 Course Unit

CPLN 6240 Race, Poverty and Place

In recent years, long-disinvested cities have become the site of renewed investment, population growth, and economic development in a phenomenon often described as gentrification. Nonetheless, socioeconomic inequality between races, ethnicities, genders, and places within the larger metropolitan area continue to persist, suggesting that a rising tide does not raise all boats. Planners must grapple with these issues of inequality and inequity, particularly the implementation of plans and policies that may in theory provide benefits to all, but in practice continue to accumulate benefits for a select few. This course examines the construction of race, the making of a place, and the persistence of poverty in racialized places in the city. This course will engage in a critical discussion of the aforementioned themes, such that the normative notions of race, capitalism, urbanism, gender, power, and space are upended to privilege more marginalized perspectives of these processes.

Spring

1 Course Unit

CPLN 6250 The Politics of Housing and Community Development

This course offers an exploration of how legislative action, government policymaking, and citizen advocacy influence plans for the investment of public capital in distressed urban neighborhoods. Course topics this semester will include an evaluation of the results of City of Philadelphia development policies under the administration of former Mayor Michael A. Nutter, as well as consideration of plans being undertaken by the administration of Mayor James F. Kenney, who took office in January. The course will also include an assessment of a large-scale property acquisition and development strategy being implemented by the Philadelphia Housing Authority in North Philadelphia and a review of recent and current reinvestment proposals for Camden's waterfront and downtown-area neighborhoods.

Fall

Also Offered As: GAFL 5690

Mutually Exclusive: URBS 4510

1 Course Unit

CPLN 6270 Social Impact in Practice

The course will be an opportunity for students across PennDesign (and other schools) to meaningfully engage with community partners and practitioners working in Philadelphia and the surrounding region, and to grapple with the complex issues necessary for understanding community perspective, thereby influencing the approach when planning and designing as professionals. The course intends to reverse common perceptions and practices of community engagement ("beyond the theater of engagement:") and discuss how to productively and sensitively work with communities of all types, on projects of all scales, to work towards common goals and high aspirations. The organization of the course, will be a combination of readings and discussions, guest lecturers, and tours in the immediate community. The primary assignments will be reflection pieces, case studies, a collaborative group project, and a implementation project proposal. The group project(s) would partner students with a current, ongoing, or new community project that is funded and actionable. Students will work together, with the partner, and with community members to complete a project (could be built, a printed deliverable, evaluation, or other). The final assignment would ask students to brainstorm and present a potential "Phase II" implementation project, thinking through the mechanics of funding partnerships, academic research, etc, that could carry forward the work.

Fall

1 Course Unit

CPLN 6280 Migration and Development

Human migration is one of the most important phenomena driving urban, social community and economic development. This course focuses on the ways that migrants and community, government, and private institutions work to influence development around the world. We explore a range of large- and small-scale economic development, social and community development. After a brief introduction to histories and theories of migration and development, our major themes include: Local revitalization, labor and housing markets, workforce and enterprise development; Diaspora-led transnational development, including remittances, hometown and country associations, and transnational advocacy and community organizing; The work of institutions, governments, and private sector firms in sending and receiving nations that influence migration and development. Readings are drawn from a variety of social sciences, planning and development studies, including from academic and practice. Guests from local and transnational development organizations will visit the class. Assignments include short papers on the readings and a research paper or project designed by each student in consultation with the instructor. Ultimately, the course aims to help students develop: 1) a broad knowledge of migration and development in geographic and institutional settings around the world; 2) an in-depth understanding of community and economic development practices in migrant sending and receiving communities; and 3) familiarity with social science approaches to evaluating the dynamics and impacts of migration and development.

Spring

Also Offered As: SOCI 6280

1 Course Unit

CPLN 6290 Housing, Community & Economic Development Topics Class

Elective classes for the Housing, Community and Economic Development concentration.

Not Offered Every Year

1 Course Unit

CPLN 6300 Innovations in Growth Management

The US population is expected to grow by more than 85 million from now to 2050. This course evaluates the tools and techniques for managing growth in America, especially to control sprawl in metropolitan regions. The course analyzes the form and functions of the central cities, suburbs, edge cities, ex-urbs, and megaregions. Federal, state, and local programs that influence metro change are evaluated. Regional planning approaches are analyzed in case studies.

Spring

Prerequisite: CPLN 5300 OR CPLN 5310

1 Course Unit

CPLN 6310 Planning for Land Conservation

Land preservation is one of the most powerful, yet least understood planning tools for managing growth and protecting the environment. This course provides an introduction to the tools and methods for preserving private lands by government agencies and private non-profit organizations (e.g., land trusts). Topics include purchase and donation of development rights (also known as conservation easements), transfer of development rights, land acquisition, limited development, and the preservation of urban greenways, trails, and parks. Preservation examples analyzed: open space and scenic areas, farmland, forestland, battlefields, and natural areas.

Spring

1 Course Unit

CPLN 6320 Modeling Geographic Space

This course explores the nature and use of raster-based geographic information systems (GIS) for the analysis and synthesis of spatial patterns and processes through 'cartographic modeling'. Cartographic modeling is a general but well-defined methodology that can be used to address a wide variety of analytical examples from both cities and the environment.

Also Offered As: LARP 7410

1 Course Unit

CPLN 6340 Climate Change: Plng for Mitigation and Adaptation

This course will present the science of climate change, the impacts of climate change, and the opportunities and obstacles for avoiding climate disasters. We will identify and evaluate the application of planning tools and strategies to achieve the mitigation of climate change and adaptations to climate change. Students will understand the causes and effects of climate change and how to implement and evaluate mitigation and adaptation responses through regulations, financial incentives, infrastructure investment, design techniques, and technology. Emphasis is on climate action planning to create resilient communities.

1 Course Unit

CPLN 6350 Water Policy

Aging infrastructure, urbanization, climate change, and limited public funds are contributing to urban water management crises in cities around the globe. This course examines the systems and policies that comprise urban water. We begin with the infrastructures that underlie drinking water, wastewater, and stormwater services. Then, we review innovative management technologies and strategies, focusing on case studies of infrastructure shifts in Philadelphia and Melbourne. Finally, we undertake a global investigation of water management challenges and opportunities.

Spring

1 Course Unit

CPLN 6410 Progressive Development

Using a lecture/guest lecture/case study approach, this course will teach students how to plan, develop, and finance a variety of progressive real estate development forms including affordable housing; infill, mixed-use and brownfield development transit-oriented development; green and LEED-certified office and housing development; historic preservation projects; public-private partnerships; and suburban retrofit and master-planned-community development. In each case, we will consider site acquisition, entitlement, market and marketing conditions, financing options, ownership and deal structures, ongoing operation and asset management issues; and connections to the community. Sessions will include lectures as well as case study presentations by guest developers and students.

Spring

Prerequisite: CPLN 5400 OR REAL 8210

1 Course Unit

CPLN 6420 Downtown Development

The course will provide an overview of the changing role of downtowns and commercial centers, how and why they have evolved, diversified and been redeveloped and who are the various public and private actors that are helping them reposition themselves in a new regional and global context. There will be a strong focus on implementation, on how things get done, on the role of business improvement districts, not-for-profit development corporations and local government in the United States, Canada and a few international cities.

Fall

1 Course Unit

CPLN 6430 Design and Development

This newly reconstituted course will introduce designers and planners to practical methods of design and development for major real estate product types. Topics will include product archetypes, site selection and obtaining entitlements, basic site planning, programming, and conceptual and basic design principles. Project types will include, among others; infill and suburban office parks, all retail forms, campus and institutional projects. Two-person teams of developers and architects will present and discuss actual development projects.

Spring

Also Offered As: ARCH 7620

1 Course Unit

CPLN 6440 Housing Policy

The government intervenes in housing markets in different ways and for different reasons. This course is designed to explore why the federal and local government in the U.S. intervene in housing markets and what forms these interventions take. Specifically, students will learn about: the mechanisms that drive both the supply and demand for housing; how U.S. housing policy has changed over time; factors that affect the production, distribution, and location of housing; the social and economic impact of housing on households and neighborhoods; the equity implications of housing policies. This course will place particular emphasis on low-income rental housing. By the end of this class students will have a firm understanding of U.S. housing policy and be able to engage in a meaningful debate about future challenges and opportunities in the U.S. housing market and the implications of different policy interventions. Ultimately, this course will provide students the conceptual tools necessary to evaluate, formulate, and implement housing policy.

Fall

1 Course Unit

CPLN 6500 Transportation Planning Methods

This course introduces students to the development and uses of the 4-step urban transportation model (trip generation-trip distribution-mode choice-traffic assignment) for community and metropolitan mobility planning. Using the VISUM transportation desktop planning package, students will learn how to build and test their own models, apply them to real projects, and critique the results. Prerequisite: CPLN 505 or other planning statistics course.

Spring

Also Offered As: ESE 5480

Prerequisite: CPLN 5050

1 Course Unit

CPLN 6520 Topics in Infrastructure

Course examines current trends and topics pertaining to the nation's infrastructure.

Fall

1 Course Unit

CPLN 6540 The Practice of Trans.Plng:Crafting Policies & Bldg. Infrastructure

As the first woman and planner to serve as Secretary of the Pennsylvania Department of Transportation (PennDOT), Leslie Richards has over 20 years of leadership experience working on the planning and delivery of transportation projects, including overseeing one of the largest and most innovative transportation agencies in the U.S. She is recognized for her ability to find common ground among bi-partisan boards, as well as her commitment to engage local communities before the implementation of transportation projects to incorporate quality of life issues in all decisions. Her experience gives her a unique perspective on understanding operational, financial and stakeholder issues of transportation planning. In this seminar-style course, Leslie Richards will explore the planning, development and delivery of multimodal projects and policies at the state and regional level, including national influences and an awareness of the many actors and processes involved. Topics to be discussed include: funding and implementation processes through the levels of government (municipal, county, region, state, national); challenges and opportunities working with different sectors, politics, and contexts; current issues and emerging technologies (e.g. Pennsylvania's policies and advocacy related to Automated Vehicles); and best practices for individuals pursuing careers in planning or public administration. Presentations and lectures will be supplemented by guest presentations from transportation leaders, policymakers, and planning consultants offering local, regional, and state perspectives. Students will have the opportunity to learn directly from leaders in the field and develop the skills and knowledge to work effectively with federal, state, and local entities.

1 Course Unit

CPLN 6550 Multimodal Transport

The purpose of this course is to explore contemporary multimodal transportation systems, policy, planning, and practice through a series of comparative international case studies. Topics include innovative parking management in San Francisco, congestion charging in London, Metro investments in Mexico City, informal transportation in Indonesia, Bus Rapid Transit in Bogota, and bicycle infrastructure investments in Copenhagen. The course will also include one or more site visits to innovative multimodal transportation projects in the Philadelphia or New York City regions. By analyzing contemporary planning challenges and best practices, students will develop a better understanding of how the transportation system works and how to design and employ specific multimodal interventions and policies effectively.

Spring

1 Course Unit

CPLN 6600 Fundamentals of Urban Design

This course is a requirement for students enrolled in Certificate in Urban Design and for Master of City Planning students enrolled in the Urban Design concentration. How should urban designers give shape to the city? What urban design methods could they apply? This course helps students acquire the principles that can inform urban design practice. It has three major pedagogical objectives. First, it helps students understand the contemporary city through a series of urban design tools. Second, it covers both historical and modern urban design principles. Finally, it includes all the scales in which urban designers operate, ranging from the fundamentals of social interaction in public space, to the sustainability of the region." This course is open to other interested PennDesign students if there is space and with permission of the instructor.

Spring

Also Offered As: LARP 6600

2 Course Units

CPLN 6650 Case Studies and Urban Design Explorations

Contemporary Urbanism is a dynamic class in which each session is centered on a particular topic (see list below), combining class discussions and also the presentation of short planning/design exercises produced by small groups without the pressure of the studios, allowing to rapidly identify design opportunities, delivering the proposals with compelling narratives, strategic moves, graphics, models and verbal communication. Participants in this course are expected to become familiarized with a diversity of urban references, while acquiring skills that will facilitate planning and design processes, appreciating the value of interdisciplinary and multi-scaler initiatives, and the transformative contributions of city design/placemaking. Course topics include: good cities offer...; from territory to site-specific; on the public realm; on the urban infill; delving on history; mobility/infrastructure and urban form; community and urban design; Landscape/Ecological/Transformative Urbanism

1 Course Unit

CPLN 6710 Spatial Statistics and Data Analysis

This hands-on course will provide an introduction to statistical methods and will serve as a prequel to ESE502. Topics covered will include exploratory univariate analysis, correlation and Chi-square analysis, t-tests and ANOVA. Non-parametric alternatives to the standard tests will be discussed. OLS regression, including assumptions and diagnostics, will be covered in detail. Heavy emphasis will be placed on the application of each method covered. The course will conclude with an introduction to spatial statistical methods and a brief overview of linear algebra and matrix notation for OLS and spatial regression. Students will learn to use JMP-IN, ArcGIS and GeoDa for data analysis.

Fall

Also Offered As: MUSA 5000

Mutually Exclusive: CPLN 5050

1 Course Unit

CPLN 6720 Geospatial Data Science in Python

This course will provide students with the knowledge and tools to turn data into meaningful insights, with a focus on real-world case studies in the urban planning and public policy realm. Focusing on the latest Python software tools, the course will outline the "pipeline" approach to data science. It will teach students the tools to gather, visualize, and analyze datasets, providing the skills to effectively explore large datasets and transform results into understandable and compelling narratives. The course is organized into five main sections: Exploratory Data Science;; Introduction to Geospatial Data Science; Data Ingestion & Big Data; Geospatial Machine Learning; Data Visualization & Storytelling.

Fall

Also Offered As: MUSA 5500

1 Course Unit

CPLN 6750 Land Use and Environmental Modeling

Planners at every scale and of every type are increasingly using spatial data and models to analyze existing patterns, identify and parameterize key trends and urban processes, visualize alternative futures, and evaluate development impacts. This course will introduce students to various GIS-based land use and environmental planning models, including, among others: TR55 for analyzing parcel-level stormwater runoff; BASINS for analyzing watershed-level stream volumes, runoff, and water quality; HAZUS for analyzing the potential damage impacts of floods, earthquakes, and hurricanes; UPlan and CUF/CURBA for developing detailed urban growth projections; CommunityViz for analyzing, simulating, and visualizing the impacts of proposed development projects; and other packages as available. A basic familiarity with ArcGIS is required.

Spring

1 Course Unit

CPLN 6850 Environmental Readings

In this seminar, we will explore this green thread and analyze its influence on how we shape our environments through design and planning. The course has three parts. Throughout, the influence of literature on design and planning theory will be explored. The first part will focus on three most important theorists in environmental planning and landscape architecture: Frederick Law Olmstead Sr., Charles Eliot and Ian McHarg. The second part of the course will critically explore current theories in environmental planning and landscape architecture. The topics include: frameworks for cultural landscape studies, the future of the vernacular, ecological design and planning, sustainable and regenerative design, the languages of landscapes, and evolving views of landscape aesthetics and ethics. In the third part of the course, students will build on the readings to develop their own theory for ecological planning or, alternatively, landscape architecture. While literacy and critical inquiry are addressed throughout the course, critical thinking is especially important for this final section.

Fall

Also Offered As: ARCH 6850, LARP 6850

1 Course Unit

CPLN 6870 Topics in Historic Preservation

This seminar concentrates on a selected topic in the social and cultural history of the built environment. Past themes have included photography and the American city and the relationship between cities and sound. For our current offering, please visit: <https://www.design.upenn.edu/historic-preservation/courses>

Spring

Also Offered As: HSPV 6380

1 Course Unit

CPLN 6920 Java Script Programming for Planners and Designers

This course will introduce City Planning, MUSA and design graduate students to Javascript. Students will learn the logic and syntax of the Java programming language for use in a simple web application (weeks 1 to 7); as well as how to program database and map-oriented web and desktop applications using Javascript (weeks 8 to 14). The "hands-on" uses of Javascript in urban planning applications will be emphasized. Students will hone their programming and applications development skills through a series of bi-weekly assignments.

Fall

Also Offered As: MUSA 6110

1 Course Unit

CPLN 7010 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Spring

2 Course Units

CPLN 7020 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Spring

2 Course Units

CPLN 7030 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Fall

2 Course Units

CPLN 7040 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Spring

2 Course Units

CPLN 7050 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Fall

2 Course Units

CPLN 7060 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

2 Course Units

CPLN 7070 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Spring

2 Course Units

CPLN 7080 Planning Studio

Intensive study of a selected planning topic. Teams of students work with clients to develop alternative scenarios and produce plan and implementation strategies. Multiple presentations required.

Spring

2 Course Units

CPLN 7090 Planning Studio

Second year planning studio

Fall

2 Course Units

CPLN 7200 Community and Economic Development Practicum

This practicum involves a weekly mixture of lecture and seminar course-time with applied problem solving for real-world clients. It will be a second-year course focused on organizational development, business planning, and other strategic planning techniques that complement the physical planning focus on PennPlanning Workshop and Studio. Required of students in the CED concentration.

Fall or Spring

1 Course Unit

CPLN 7300 Sustainable Cities

Sustainability as a concept has been around for almost thirty years, but only recently has become a major factor in planning practice.

This seminar course will explore the following sustainability topics and practices: (i) Goals and organization of urban sustainability initiatives; (ii) Transportation, water and air quality, solid waste reduction; (iii) Climate change and energy efficiency initiatives; and (iv) Green building policies. We will thoroughly examine case studies drawn from sustainability planning initiatives from major American cities, with selected international comparisons.

Spring

1 Course Unit

CPLN 7500 Advance Transportation Seminar

Air transportation is a fascinating multi-disciplinary area of transportation bringing together business, planning, engineering, and policy. In this course, we explore the air transportation system from multiple perspectives through a series of lessons and case studies. Topics will include airport and intercity multimodal environmental planning, network design and reliability, air traffic management and recovery from irregular operations, airline operations, economics, and fuel, air transportation sustainability, and land use issues related to air transportation systems. This course will introduce concepts in economics and behavioral modeling, operations research, statistics, environmental planning, and human factors that are used in aviation and are applicable to other transportation systems. The course will emphasize learning through lessons, guest lecturers, case studies of airport development and an individual group and research project.

Spring

Also Offered As: ESE 5500

Prerequisite: CPLN 5500

1 Course Unit

CPLN 7600 Public Realm Studio

This intensive foundation studio focuses on the physical planning and design skills necessary in shaping the public realm. Students will undertake a series of targeted exercises that introduce them to project conceptualization, context analysis, programming, site planning, technical issues, and detailed design of public space in cities. Focusing on issues pertinent to local municipalities, students will work collaboratively and individually over the semester on design elements that cover a range of scales. Intellectual objectives within the studio include: the links between theory and practice, the development of principles to guide design, understanding associations between design and stakeholder-user interests, and exploring larger issues of sustainability and participation in design practice. Emphasis on the pragmatics of problem solving and implementation will be balanced with essential skills in visioning, critical thinking and design leadership.

Fall

2 Course Units

CPLN 7730 Urban Regeneration in The Americas: The Conservation and Development of Urban Heritage Areas

This advanced topic seminar will focus on the challenges confronted by the conservation and urban planning professions in turning the urban heritage into a social and economic development resource for cities in developing countries. The preservation of the urban heritage is moving to a new paradigm of intervention responding to: a growing interest in communities for preserving their intangible and tangible urban heritage; rising development pressures on historic neighborhoods; the generalization of adaptive rehabilitation as a conservation strategy; and recent international agreements calling for expanding the role of the urban heritage in the social and economic development of the communities. This is a problem that is in the cutting edge of the research and practice of heritage conservation and urban planning and has conservation, planning and design implications making it ideally suited to a multi-discipline seminar approach. The course will combine seminar and field study methodologies in ways that they support each other. The knowledge acquired through the seminar work will be put to use in a field study exercise whose objective is to allow the students to work on topics of their interest and pursue research or urban development and heritage conservation interventions related to the semester's specific studio site.

For the current site offering, please visit: <https://www.design.upenn.edu/historic-preservation/courses>

Spring, odd numbered years only

Also Offered As: HSPV 7030

1 Course Unit

CPLN 7900 MUSA/Smart Cities Practicum

The purpose of this course is for students to work with city and non-profit clients on data science that convert government data into actionable public policy intelligence. Groups of 2-3 students will work with the client to understand the business process, wrangle data, develop spatial and aspatial analytics and serve these outputs to non-technical decision makers through the medium of data visualization. Students will be mentored by MUSA Faculty and advised by someone from the partnering agency. Prerequisites: students must have a working knowledge of R and experience building both spatial and statistical models including machine-learning models. Prerequisites include MUSA-507/CPLN-590 and either CPLN-505 or MUSA-500. Students must have taken or be enrolled concurrently in MUSA-601 or MUSA-800. Students without these specific prerequisites are asked to contact the instructor. Please contact the instructor for full admission details, no later than November 15, 2018. Interested students are asked to contact the instructor to learn about specific projects and how to apply for the course.

Spring

Also Offered As: MUSA 8010

Prerequisite: (MUSA 5070 OR CPLN 5900) AND (CPLN 5050 OR MUSA 5000)

1 Course Unit

CPLN 7910 CPLN Summer Institute: Spreadsheet Review

Excel for Planners: use of Excel to develop simple planning indicators (e.g., location quotients), simple planning models (e.g., fiscal impact models), and database operations. Course enrollment is by permit only. Please contact Roslynn Carter (CPLN Dept.) at roslynn@design.upenn.edu.

Summer Term

0 Course Units

CPLN 7920 CPLN Summer Institute: Statistics

Basic Statistics for Planners: review of descriptive and basic inferential statistics, including z-scores, confidence intervals, t-tests, and chi-squared. Course enrollment is by permit only. Please contact Roslynne Carter (CPLN Dept.) at roslynne@design.upenn.edu.

Summer Term
0 Course Units

CPLN 7930 CPLN Summer Institute: Urban Design

Introduction to Presentation and Report Graphics for Planners: including one day each on Photoshop, Illustrator, Sketchup, and InDesign Course enrollment is by permit only. Please contact Roslynne Carter (CPLN Dept.) at roslynne@design.upenn.edu.

Summer Term
0 Course Units

CPLN 7940 CPLN Summer Institute: Microeconomics Review

Micro-econ Review: review of principles of supply and demand, elasticities, equilibrium prices and quantities. Course enrollment is by permit only. Please contact Roslynne Carter (CPLN Dept.) at roslynne@design.upenn.edu.

Summer Term
0 Course Units

CPLN 7950 CPLN SUMMER: INTRODUCTION TO GIS

The summer GIS Bootcamp prepares students for the intermediate GIS classes that begin in the fall semester. It begins with a discussion of GIS in planning and the social sciences and then moves on to topics related to spatial data, geocoding, projection, vector and raster-based geoprocessing, 3D visualization and more. Each class includes a brief lecture and a walk through involving actual planning related data. Course enrollment is by permit only. Please contact Roslynne Carter (CPLN Dept.) at roslynne@design.upenn.edu.

Summer Term
0 Course Units

CPLN 7970 CPLN Summer Institute: Writing Lab

Summer Term
0 Course Units

CPLN 7980 CPLN Summer Institute: Success Strategies

Summer Term
0 Course Units

CPLN 7990 CPLN Summer Institute: Introduction to the R Statistical System

This one-week short course will introduce students to the basics of the R statistical programming language, including importing and setting up data, using the R interface to conduct descriptive data analysis, and basic model-building procedures.

Summer Term
0 Course Units

CPLN 8000 Doctoral Seminar

Open to PhD students, this scholar-oriented seminar explores how academic researchers from different disciplines define researchable questions, craft research designs, and contribute to knowledge through an examination of important and/or recently published books and monographs with an urban focus. Required of all first- and second-year CPLN doctoral students and those doctoral students enrolled in the Urban Studies Graduate Certificate Program, enrollment is limited to 15 students. Other doctoral students may enroll on a space available basis. Course requirements include completion of a major research paper on a topic selected in consultation with the instructor.

Spring
1 Course Unit

CPLN 9950 Dissertation

Fall or Spring
0 Course Units

CPLN 9990 Independent Study and Research

Independent Study supervised by a faculty member.
Fall or Spring
1 Course Unit