INTRODUCTORY SUBJECTS

11.001J Introduction to Urban Design and Development
(Same subject as 4.250J)
Prereq: None
U (Spring)
3-0-9 HASS-S
Examines the evolving structure of cities and the way that cities, suburbs, and metropolitan areas can be designed and developed. Surveys the ideas of a wide range of people who have addressed urban problems. Stresses the connection between values and design. Demonstrates how physical, social, political and economic forces interact to shape and reshape cities over time.

L. Vale

11.002J Making Public Policy
(Same subject as 17.30J)
Prereq: None
U (Fall)
4-0-8 HASS-S; CI-H
Examines how the struggle among competing advocates shapes the outputs of government. Considers how conditions become problems for government to solve, why some political arguments are more persuasive than others, why some policy tools are preferred over others, and whether policies achieve their goals. Investigates the interactions among elected officials, think tanks, interest groups, the media, and the public in controversies over global warming, urban sprawl, Social Security, health care, the fate of the middle class, sources of increasing inequality, and approaches to advancing economic opportunity and security.

R. M. Fogelson

11.003J Methods of Policy Analysis
(Same subject as 17.303J)
Prereq: 11.002J; Coreq: 14.01
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Spring)
3-0-9 HASS-S
Provides students with an introduction to public policy analysis. Examines various approaches to policy analysis by considering the concepts, tools, and methods used in economics, political science, and other disciplines. Students apply and critique these approaches through case studies of current public policy problems.

11.004J The Art and Science of Negotiation
(Same subject as 4.216J)
Prereq: None
U (Spring)
3-0-9 HASS-S
Introduces the political economy of international economic development planning, using an applied, quantitative approach. Considers why some countries are able to develop faster than others. Presents major theories and models of development and underdevelopment, providing tools to understand the mechanisms and processes behind economic growth and broader notions of progress. Offers an alternative view of development, focusing on the persistence of dichotomies in current theory and practice. Using specific cases, explores how different combinations of actors and institutions at various scales may promote or inhibit economic development. Students re-examine conventional knowledge and engage critically with the assumptions behind current thinking and policy.

Staff

11.005 Introduction to International Development
Prereq: None
U (Spring)
3-0-9 HASS-S
Introduces the political economy of international economic development planning, using an applied, quantitative approach. Considers why some countries are able to develop faster than others. Presents major theories and models of development and underdevelopment, providing tools to understand the mechanisms and processes behind economic growth and broader notions of progress. Offers an alternative view of development, focusing on the persistence of dichotomies in current theory and practice. Using specific cases, explores how different combinations of actors and institutions at various scales may promote or inhibit economic development. Students re-examine conventional knowledge and engage critically with the assumptions behind current thinking and policy.

T. Schenk

11.006 Poverty and Economic Security
Prereq: None
U (Fall)
2-0-7 HASS-S
Explores the evolution of poverty and economic security in the US within a global context. Examines the impacts of recent economic restructuring and globalization. Reviews current debates about the fate of the middle class, sources of increasing inequality, and approaches to advancing economic opportunity and security.

P. Clay

11.007 The Once and Future City
Prereq: None
U (Spring)
3-0-9 HASS-S
Introduces the political economy of international economic development planning, using an applied, quantitative approach. Considers why some countries are able to develop faster than others. Presents major theories and models of development and underdevelopment, providing tools to understand the mechanisms and processes behind economic growth and broader notions of progress. Offers an alternative view of development, focusing on the persistence of dichotomies in current theory and practice. Using specific cases, explores how different combinations of actors and institutions at various scales may promote or inhibit economic development. Students re-examine conventional knowledge and engage critically with the assumptions behind current thinking and policy.

R. M. Fogelson

11.008 American Urban History I
Prereq: None
U (Spring)
2-0-7 HASS-S
Seminar on the history of institutions and institutional change in American cities from roughly 1850 to the present. Among the institutions to be looked at are political machines, police departments, courts, schools, prisons, public authorities, and universities. Focuses on readings and discussions.

R. M. Fogelson

11.009 American Urban History II
Prereq: None
U (Fall)
2-0-7 HASS-H; CI-H
Seminar on the history of selected features of the physical environment of urban America. Among the features considered are parks, cemeteries, tenements, suburbs, zoos, skyscrapers, department stores, supermarkets, and amusement parks.

R. M. Fogelson

11.010 Riots, Strikes, and Conspiracies in American History
Prereq: None
U (Fall)
2-0-7 HASS-S
Examines the evolving structure of cities, the dynamic processes that shape them, and the significance of a city’s history for its future development. Develops the ability to read urban form as an interplay of natural processes and...
human purposes over time. Field assignments in Boston provide the opportunity to use, develop, and refine these concepts. Enrollment limited. 
A. Spirn

11.019J Migration and Immigration in US History
(Same subject as 21H.310J)
Prereq: None
Acad Year 2014–2015; U (Fall)
Acad Year 2015–2016: Not offered
3-0-9 HASS-S
See description under subject 21H.310J. 
C. Capozzola

11.021J Environmental Law, Policy, and Economics: Pollution Prevention and Control
(Same subject as 1.801J, 17.393J)
(Subject meets with 1.811J, 11.630J, ESD.133J)
Prereq: None
U (Fall)
3-0-9 HASS-S
See description under subject 1.801J.
N. Ashford, C. Caldart

11.022J Regulation of Chemicals, Radiation, and Biotechnology
(Same subject as 1.802J)
(Subject meets with 1.812J, 10.805J, 11.631J, ESD.134J, ESD.136J)
Prereq: 1.801 or permission of instructor
U (Spring)
Not offered regularly; consult department
3-0-9
See description under subject 1.802J.
N. Ashford, C. Caldart

11.025J D-Lab: Development
(Same subject as EC.701J)
(Subject meets with 11.472J, EC.781J)
Prereq: None
U (Fall)
3-2-7 HASS-S
See description under subject EC.701J.
A. B. Smith, B. Sanyal

11.026J Downtown
(Same subject as 21H.321J)
(Subject meets with 11.339)
Prereq: None
U (Spring)
2-0-7 HASS-H
See description under subject 21H.321J.
R. M. Fogelson

11.027 City to City: Comparing, Researching and Writing about Cities
Prereq: Permission of instructor
U (Spring)
3-0-9 HASS-S
Introduces client-oriented research and the use of urban planning tools. Students work directly with government and community agencies to find solutions to real world problems, interview planners and other field experts, and write and present findings to client and community audiences. Opportunity to travel for research. Limited to 14; preference to Course 11 majors. 
C. Abbanat

11.028C Educational Theory and Practice II
(Same subject as 21H.310J)
Prereq: None
U (Spring)
3-6-3 HASS-S; CI-H
Explores the physical, ecological, technological, political, economic and cultural implications of big plans and mega-urban landscapes in a global context. Uses local and international case studies to understand the process of making major changes to urban landscape and city fabric, and to regional landscape systems. Includes lectures by leading practitioners. Assignments consider planning and design strategies across multiple scales and time frames. 

11.029J Migration and Immigration in the United States
(Same subject as 21H.310J)
Prereq: None
U (Spring)
3-0-9 HASS-S
Explores the physical, ecological, technological, political, economic and cultural implications of big plans and mega-urban landscapes in a global context. Uses local and international case studies to understand the process of making major changes to urban landscape and city fabric, and to regional landscape systems. Includes lectures by leading practitioners. Assignments consider planning and design strategies across multiple scales and time frames.

11.031J Urban Planning: Law in Practice
(Same subject as 21H.310J)
Prereq: None
U (Spring)
3-0-9 HASS-S
Introduces client-oriented research and the use of urban planning tools. Students work directly with government and community agencies to find solutions to real world problems, interview planners and other field experts, and write and present findings to client and community audiences. Opportunity to travel for research. Limited to 14; preference to Course 11 majors. 
C. Abbanat

11.035J Urban Planning: Law and Policy in Practice
(Same subject as 21H.310J)
Prereq: None
U (Spring)
3-0-9 HASS-S
Introduces client-oriented research and the use of urban planning tools. Students work directly with government and community agencies to find solutions to real world problems, interview planners and other field experts, and write and present findings to client and community audiences. Opportunity to travel for research. Limited to 14; preference to Course 11 majors. 
C. Abbanat

Specialized Subjects

11.123 Big Plans and Mega-Urban Landscapes
Prereq: None
U (Spring)
3-0-6 HASS-S
Explores the physical, ecological, technological, political, economic and cultural implications of big plans and mega-urban landscapes in a global context. Uses local and international case studies to understand the process of making major changes to urban landscape and city fabric, and to regional landscape systems. Includes lectures by leading practitioners. Assignments consider planning and design strategies across multiple scales and time frames.

11.124 Introduction to Education: Looking Forward and Looking Back on Education
Prereq: None
U (Fall)
3-6-3 HASS-S; CI-H
One of two introductory subjects on teaching and learning science and mathematics in a variety of K-12 settings. Topics include student misconceptions, formative assessment, standards and standardized testing, multiple intelligences, and educational technology. Students gain practical experience through weekly visits to schools, classroom discussions, selected readings, and activities to develop a critical and broad understanding of past and current forces that shape the goals and processes of education, and explores the challenges and opportunities of teaching. Students work collaboratively and individually on papers, projects, and in-class presentations. 
E. Klopfer

11.125 Introduction to Education: Understanding and Evaluating Education
Prereq: None
U (Spring)
3-6-3 HASS-S; CI-H
One of two introductory subjects on teaching and learning science and mathematics in a variety of K-12 settings. Topics include student misconceptions, formative assessment, standards and standardized testing, multiple intelligences, and educational technology. Students gain practical experience through weekly visits to schools, classroom discussions, selected readings, and activities to develop a critical and broad understanding of past and current forces that shape the goals and processes of education, and explores the challenges and opportunities of teaching. Students work collaboratively and individually on papers, projects, and in-class presentations. 
E. Klopfer

11.126J Computer Games and Simulations for Investigation and Education
(Subject meets with 11.252J, CMS.863J)
Prereq: None
U (Spring)
3-6-3 HASS-H
Explores how we learn from computer games and simulations, and delves into the process of building and testing interactive educational media. First, students investigate the design and use of games and simulations in the classroom (including commercial off-the-shelf games), as well as the research and development issues associated with desktop computer-based, mobile, and non-computer based media. Students then develop their own simulations and games, study what and how others learn from them (including field testing of products), and how games and simulations can be implemented in educational settings. All levels of computer experience welcome. Graduate students are expected to complete additional assignments. 
E. Klopfer

11.129 Educational Theory and Practice I
Prereq: None. Coreq: 11.124
U (Fall)
3-0-9 HASS-S
Concentrates on core set of skills and knowledge necessary for teaching in secondary schools. Topics include classroom management, student behavior and motivation, curriculum design, educational reform, and the teaching profession. Classroom observation is a key component. Assignments include readings from educational literature, written reflections on classroom
11.130 Educational Theory and Practice II
Prereq: 11.129
U (IAP)
3-0-9
Concentrates on the theory and psychology associated with student learning. Topics include educational theory, educational psychology, and theories of learning. Students assume responsibility for full-time teaching of two or more classes at their designated school. Class sessions focus on debriefing and problem-solving. Second of a three-course sequence necessary to complete the Teacher Education Program.
R. Gibb

11.131 Educational Theory and Practice III
Prereq: 11.130
U (Spring)
3-0-9 HASS-S
Students continue their IAP student teaching through mid March. Topics include educational psychology, theories of learning, and using technology and evaluating its effectiveness to enhance student learning. Assignments include readings from educational literature, written reflections on student teaching, presentations on class topics and creating a project that supports student learning at the school where the MIT student is teaching. This is the third of the three-course sequence necessary to complete the Teacher Education Program.
R. Gibb

11.137 Financing Economic Development
(Subject meets with 11.437)
Prereq: None
U (Fall)
3-0-9
Focuses on financing tools and program models to support local economic development. Provides an overview of private capital markets and financing sources to understand capital market imperfections that constrain economic development, business accounting, financial statement analysis, federal economic development programs, and public finance tools. Covers policies and program models, including revolving loan funds, guarantee programs, venture capital funds, bank holding companies, community development loan funds and credit unions, micro enterprise funds, and the Community Reinvestment Act. Students taking graduate version complete additional assignments.
K. Seidman

11.140 Urbanization and Development
(Subject meets with 11.480)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Spring)
3-0-9 HASS-S
Examines developmental dynamics of rapidly urbanizing locales, with a special focus on the developing world. Case studies from India, China, Mexico, Brazil, and South Africa form the basis for discussion of social, spatial, political and economic changes in cities spurred by the decline of industry, the rise of services, and the proliferation of urban mega projects. Emphasizes the challenges of growing urban inequality, environmental risk, citizen displacement, insufficient housing, and the lack of effective institutions for metropolitan governance. Students taking graduate version complete additional assignments.
Staff

11.142 Geography of the Global Economy
Prereq: None
U (Spring)
3-0-9 HASS-S
Analyzes implications of economic globalization for communities, regions, international businesses and economic development organizations. Uses spatial analysis techniques to model the role of energy resources in shaping international political economy. Investigates key drivers of human, physical, and social capital flows and their roles in modern human settlement systems. Surveys contemporary models of industrialization and places them in geographic context. Connects forces of change with their implications for the distribution of wealth and human well-being.
A. Glasmeier

11.144 Project Appraisal in Developing Countries
(Subject meets with 11.484)
Prereq: Permission of instructor
U (Spring)
3-0-9
Covers techniques of financial analysis of investment expenditures, as well as the economic and distributive appraisal of development projects. Critical analysis of these tools in the political economy of international development is discussed. Topics include appraisal’s role in the project cycle, planning under conditions of uncertainty, constraints in data quality and the limits of rational analysis, and the coordination of an interdisciplinary appraisal team. Students taking graduate version complete additional assignments. Enrollment limited; preference to majors.
Staff

11.145 International Housing Economics and Finance
(Subject meets with 11.355)
Prereq: 14.01
U (Spring)
3-0-6
Presents a theory of comparative differences in international housing outcomes. Introduces institutional differences in the ways housing expenditures are financed, and the economic determinants of housing outcomes, such as construction costs, land values, housing quality, and ownership rates. Analyzes the flow of funds to and from the different national housing finance sectors. Develops an understanding of the greater financial and macroeconomic implications of the mortgage credit sector, and how policies affect the ways in which housing asset fluctuations impact national economies. Considers the perspective of investors in international real estate markets and the risks and rewards involved. Draws on lessons from an international comparative approach, and applies them to economic and finance policies at the local, state/provincial, and federal levels within a country of choice. Students taking graduate version complete additional assignments.
A. Saiz

11.146 Urbanizing China (New)
(Subject meets with 11.476)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Fall)
3-0-9
Discusses China’s daunting urban challenges: congestion and smog, housing affordability, land reform and urban financing, migrants and locals, and social and spatial inequality. Provides examples of laudable achievements and diverse and innovative responses across more than six hundred cities. Presents China’s urbanization as the joint result of natural socio-economic processes and conscious actions by governments, markets, and the public. Presents multidisciplinary approaches and alternative narratives. Examines the intricate interaction between state and market in China’s context, yielding a variety of state-market ‘cocktails’ devised and experimented in different cities in response to local problems, each involving a multilayered projection onto urban space.
Students taking graduate version complete additional assignments.

J. Zhao

### 11.147 Innovative Budgeting and Finance for the Public Sector

(Subject meets with 11.487)
Prereq: Permission of instructor
U (Spring)
3-0-9 HASS-S

Examines globally relevant challenges of adequately and effectively attending to public sector responsibilities for basic services with limited resources. Particular attention to the contexts of fiscal crises, rapid population growth, as well as shrinkage: through an introduction to methods and processes of budgeting, accounting, and financial mobilization in the public sector; use of case studies and practice exercises to explore revenue strategies and to gain fiscal analytical competencies; study of pioneering examples of promising budget and accounting processes as well as innovative funding mobilization via taxation, capital markets, and experimental experiences with mechanisms such as land-value capture. Students taking graduate version are expected to explore the subject in greater depth.

G. Carolini

### 11.150J Metropolis: A Comparative History of New York City

(Same subject as 21H.220J)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Fall)
3-0-9 HASS-H

See description under subject 21H.220J.

C. Wilder

### 11.152J The Ghetto: From Venice to Harlem

(Same subject as 21H.385J)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Fall)
2-0-10 HASS-S

See description under subject 21H.385J.

C. Wilder

### 11.153J Shanghai and China's Modernization

(Same subject as 21H.351J)
Prereq: None
U (Spring)
2-0-10 HASS-H

See description under subject 21H.351J.

C. Leighton

### 11.160J Re-Energizing MIT: Innovating Energy Management at the Institute

(Same subject as 2.601J)
Prereq: None
U (Spring)
4-0-8

Designed to enable students to make a direct contribution to MIT’s efforts to improve energy management. Working in teams, students explore how energy is used on campus and then propose and implement ideas to reduce environmental and climate impact. Projects may include topics focused on improving building and appliance efficiency, transportation choices, and energy demand in dorms, offices, and laboratories. Limited to 15; preference to freshmen and sophomores.

Staff

### 11.161J Energy Decisions, Markets, and Policies

(Same subject as 14.43J, 15.031J, 17.397J, 21A.415J)
Prereq: 14.01, 15.016, or permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Fall)
4-0-8 HASS-S

See description under subject 15.031J.

D. Lessard, R. Schmalensee, S. Silbey, C. Warshaw

### 11.162 Politics of Energy and the Environment

Prereq: None
U (Spring)
3-0-9 HASS-S

Focuses on the politics of making local, state, national and international decisions on energy and the environment. Topics include implementing energy efficiency measures, siting nuclear and alternative energy plants, promoting oil and gas development in wilderness, adapting to climate change, handling toxic waste, protecting endangered species, and conserving water. Case studies include Cape Wind, disputes over oil and gas exploration in the Arctic, the response to Hurricane Katrina, and efforts to craft and comply with the Kyoto Protocol.

J. Layzer

### 11.163J Law and Society

(Same subject as 17.249J, 21A.455J)
Prereq: None
U (Fall)
Not offered regularly; consult department
3-0-9 HASS-S

See description under subject 21A.455J.

S. Silbey

### 11.164J Human Rights in Theory and Practice

(Same subject as 17.391J)
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: U (Fall)
2-0-10 HASS-S

Provides a rigorous and critical introduction to the history, foundation, structure, and operation of the human rights movement. Focuses on key ideas, actors, methods, and sources, and critically evaluates the field. Addresses current debates in human rights, including torture, security, democracy promotion, the place of rights in development and globalization, women’s rights, ethnic, religious and racial discrimination and conflict, humanitarian intervention, post-conflict rebuilding, transitional justice, terrorism, and ethical issues in science and technology. Requires familiarity with global affairs or ethics and social justice issues. Students taking graduate version are expected to write a research paper.

B. Rajagopal

### 11.165 Energy and Infrastructure Technologies

(Subject meets with 1.286J, 11.477J)
Prereq: 14.01 or permission of instructor
U (Fall)
3-0-9 HASS-S

Examines efforts in developing and advanced nations and regions to create, finance, and regulate infrastructure and energy technologies from a variety of methodological and disciplinary perspectives. Explores how an energy crisis can be an opportunity for making fundamental changes to improve collapsing infrastructure technologies. Introduces the challenges to modern society concerning energy and infrastructure technologies. Reviews the moral hazard aspects of infrastructure and the common arguments for withholding adequate support from new energy and infrastructure technologies. Seminar is conducted with intensive in-class discussions and debates. Students taking the graduate version complete additional assignments.

K. R. Polenske

### 11.166 Law, Social Movements, and Public Policy: Comparative and International Experience

(Subject meets with 11.496)
Prereq: Permission of instructor
U (Spring)
3-0-9 HASS-S

Studies the interaction between law, courts, and social movements in shaping domestic and global public policy. Examines how groups mobilize to use law to affect change and why
they succeed and fail. Uses case studies to explore the interplay between law, social movements, and public policy in current areas such as gender, race, labor, trade, environment, and human rights. Introduces the theories of public policy, social movements, law and society, and transnational studies. Students taking the graduate version complete additional assignments. Limited to 15.

B. Rajagopal

LABORATORIES

11.188 Urban Planning and Social Science Laboratory
Prereq: None
U (Spring)
3-3-6 Institute LAB
Credit cannot also be received for 11.205

An introduction to the research and empirical analysis of urban planning issues using geographic information systems. Extensive hands-on exercises provide experience with various techniques in spatial analysis and querying databases. Includes a small project on an urban planning problem involving the selection of appropriate methods, the use of primary and secondary data, computer-based modeling, and spatial analysis. Requires some computing experience.

J. Ferreira

TUTORIALS, FIELDWORK, AND INTERNSHIPS

11.UR Undergraduate Research
Prereq: None
U (Fall, Spring)
Units arranged [P/D/F]
Can be repeated for credit

11.URG Undergraduate Research
Prereq: None
U (Fall, Spring)
Units arranged
Can be repeated for credit

Undergraduate research opportunities in Urban Studies and Planning. For further information, consult the Departmental Coordinators.

E. Klopfer

11.THT| Thesis Research Design Seminar
(Same subject as 4.THT)
Prereq: None
U (Fall)
3-0-9
Can be repeated for credit

Designed for students writing a thesis in Urban Studies and Planning or Architecture. Develop research topics, review relevant research and scholarship, frame research questions and arguments, choose an appropriate methodology for analysis, and draft introductory and methodology sections.

C. Abbanat

11.THU Undergraduate Thesis
Prereq: 11.ThT
U (Fall, IAP, Spring, Summer)
Units arranged
Can be repeated for credit

Program of research leading to the writing of an SB thesis. To be arranged by the student under approved supervision.

Staff

11.189–11.190 Urban Fieldwork
Prereq: None
U (Fall, IAP, Spring)
Units arranged [P/D/F]
Can be repeated for credit

Practical application of city and regional planning techniques to towns, cities, and regions, including problems of replanning, redevelopment, and renewal of existing communities. Includes internships, under staff supervision, in municipal and state agencies and departments.

Staff

11.191–11.192 Independent Study
Prereq: None
U (Fall, IAP, Spring)
Units arranged [P/D/F]
Can be repeated for credit

For undergraduates wishing to pursue further study in specialized areas of urban studies or city and regional planning not covered in regular subjects.

Staff

11.193–11.194 Supervised Readings
Prereq: None
U (Fall, IAP, Spring)
Units arranged [P/D/F]
Can be repeated for credit

Reading and discussion of topics in urban studies and planning.

Staff

11.519–11.519 Special Subject: Urban Studies and Planning
Prereq: None
U (Fall, IAP, Spring)
Units arranged
Can be repeated for credit

For undergraduates wishing to pursue further study or fieldwork in specialized areas of urban studies or city and regional planning not covered in regular subjects of instruction. 11.5198 is graded P/D/F.

Staff

MASTER’S CORE SUBJECTS

11.201 Gateway: Planning Action
Prereq: None
G (Fall)
4-1-7

Introduces the profession of urban and regional planning. Emphasizes the key sensibilities necessary for effective planning practice as well as professional writing and oral communication skills.

J. Buckley, L. Vale

11.202 Planning Economics
Prereq: 11.203
G (Fall; partial term)
2-0-2

Introduces applications of microeconomic theory to planning problems including urban form and structure, government’s role in urban settings and problems of housing finance.

A. Saiz

11.203 Microeconomics
Prereq: None
G (Fall; partial term)
3-0-5

Introduces basic economic analysis for planning students including the functioning of markets, the allocation of scarce resources among competing uses, profit maximizing behavior in different market structures. Course illustrates theory with contemporary economic issues.

A. Saiz

11.205 Introduction to Spatial Analysis
Prereq: None
G (Fall; partial term)
2-2-2
Credit cannot also be received for 11.188

Practical introduction to spatial analysis and geographic information systems (GIS). Examines how geography is represented digitally and
how nonrandom distributions of phenomena as diverse as poverty and scenic resources can be better understood by examining their spatial characteristics. Limited enrollment; preference to first-year MCP students.
S. Williams

11.220 Quantitative Reasoning and Statistical Methods for Planning I
Prereq: Permission of instructor
G (Spring)
4-2-6
Develops logical, empirically based arguments using statistical techniques and analytic methods. Covers elementary statistics, probability, and other types of quantitative reasoning useful for description, estimation, comparison, and explanation. Emphasizes the use and limitations of analytical techniques in planning practice.
Restricted to MCP students.
C. Zegras

DEPARTMENT-WIDE SUBJECTS

11.225 Argumentation and Communication
Prereq: None
G (Fall)
Not offered regularly; consult department
2-0-4
Can be repeated for credit
A writing practicum associated with 11.201 that focuses on helping students write and present their ideas in cogent, persuasive arguments and other analytical frameworks. Reading and writing assignments and other exercises stress the connections between clear thinking, critical reading, and effective writing.
C. Abbanat

11.229 Advanced Writing Seminar
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
2-0-7
Can be repeated for credit
Focuses on writing and speaking skills. Students bring their writing from other classes to the workshop to practice reviewing and rewriting skills and make several oral presentations. Different types of writing including proposals, memos, thesis, press releases, and writing sound bites for the media.
C. Abbanat

11.233 Research Design for Policy Analysis and Planning
Prereq: Permission of instructor
G (Fall)
3-0-9
Develops skills in research design for policy analysis and planning. Emphasizes the logic of the research process and its constituent elements. Topics include philosophy of science, question formulation, hypothesis generation and theory construction, data collection techniques (e.g. experimental, survey, interview), ethical issues in research, and research proposal preparation.
J. Carmin

11.234 Making Sense: Qualitative Methods for Designers and Planners
Prereq: None
G (Spring)
3-3-6
Surveys uses of qualitative methods in urban design and planning research and practice. Topics include observing environments, physical traces, and environmental behavior; asking questions; focused interviews; standardized questionnaires; use of written archival materials; use of visual materials, including photographs, new media, and maps; case studies; and comparative methods. Emphasizes use of each of these skills to collect and make sense of qualitative data in community and institutional settings.
L. Vale

11.236 Theory of Participatory Action Research (PAR) (New)
Prereq: None
G (Fall; partial term)
2-0-4
Introduces the theory of participatory action research (PAR) and competing ideas about the uses of social research to promote social change. Focuses on the epistemological foundation for and knowledge generation in action research, as well as on approaches to co-producing research that requires engagement of the subjects, communities, or organizations that are being studied in the design, implementation and interpretation of applied social research. Explores the ethical obligations of outsiders along with rights and responsibilities of insiders in the research findings. Emphasizes recent scholarship, including arguments for and against phrenetic social science.
L. Susskind, D. Cunningham

11.237 Theory of Participatory Action Research (PAR) (New)
Prereq: 11.236 or permission of instructor
G (Spring; partial term)
2-0-4
Introduces the theory of participatory action research (PAR) and practice of case study research. Presents competing ideas about context-independent vs. context-dependent knowledge, arguments for and against generating theory on the basis of a single case, and problems of verification in participatory action research (i.e. disconfirming the researchers preconceptions). Focuses on actual cases in which PAR-like methods have been used with greater or lesser success. Integrates interactions with representatives of communities, organizations, and individuals who have been the focus of PAR. Analyzes techniques for co-designing and co-conducting all aspects of applied social research.
D. Cunningham

11.238J Ethics of Intervention
(Subject meets with 21A.409J)
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-0-9 H-LEVEL Grad Credit
See description under subject 21A.409J.
E. C. James

11.252J Computer Games and Simulations for Investigation and Education
(Subject meets with 11.127J, CMS.590J)
Prereq: None
G (Spring)
3-6-3
Understand how we learn from computer games and simulations, and delve into the process of building and testing their own simulations. First, students explore the design and use of games and simulations in the classroom, and the research and development issues associated with desktop computer-based, handheld computer based and non-computer based media. Students then develop their own simulations and games, study what and how people learn from them (including field testing of products), and how games and simulations can be implemented in educational settings. All levels of computer experience welcome. Graduate students are expected to complete additional assignments.
E. Klopf
11.255 Negotiation and Dispute Resolution in the Public Sector  
Prereq: None  
Acad Year 2014–2015: Not offered  
Acad Year 2015–2016: G (Spring)  
4-0-8  
Investigates social conflict and distributional disputes in the public sector. While theoretical aspects of conflict and consensus building are considered, focus is on the practice of negotiation and dispute resolution. Comparisons between unassisted and assisted negotiation are reviewed along with the techniques of facilitation and mediation.  
L. Susskind

11.301J Introduction to Urban Design and Development  
(Same subject as 4.252J)  
Prereq: Permission of instructor  
G (Fall)  
3-0-9  
Examines both the structure of cities and ways they can be changed. Includes historical forces that have produced cities, models of urban analysis, contemporary theories of urban design, implementation strategies. Core lectures supplemented by discussion sessions focusing on student work and field trips. Guest speakers present cases involving current projects illustrating the scope and methods of urban design practice.  
D. Frenchman

11.302J Urban Design Politics  
(Same subject as 4.253J)  
Prereq: Permission of instructor  
Acad Year 2014–2015: Not offered  
Acad Year 2015–2016: G (Spring)  
3-0-9 H-LEVEL Grad Credit  
Examines ways urban design contributes to distribution of political power and resources in cities. Investigates the nature of relations between built form and political purposes through close study of a wide variety of situations where public sector design commissions and planning processes have been clearly motivated by political pressures. Lectures and discussions focus on specific case studies of 20th-century government-sponsored designs carried out under diverse regimes in the US, Europe, and elsewhere.  
L. Vale

11.303J Real Estate Development Studio: Complex Urban Projects  
(Same subject as 4.254J)  
Prereq: Permission of instructor  
G (Spring)  
6-0-12 H-LEVEL Grad Credit

Focuses on the synthesis of projects for the real estate development industry, including the integration of physical design and programming with finance and marketing. Interdisciplinary student teams analyze how to maximize value in large-scale, mixed use projects in the process of preparing professional development proposals, involving sites in US cities and internationally. Reviews emerging real estate products and innovative developments to provide a foundation for studio work. Two major projects are interspersed with lectures, field trips, and short sketch exercises. Integrates skills and knowledge in the MSRED program; also open to other students interested in real estate development.  
D. Frenchman, P. Roth

11.304J Site and Environmental Systems Planning  
(Same subject as 4.255J)  
Prereq: Permission of instructor  
G (Spring)  
6-0-9 H-LEVEL Grad Credit

Introduces a range of practical approaches involved in evaluating and planning sites within the context of natural and cultural systems. Develops the knowledge and skills to analyze and plan a site for development through exercises and an urban design project. Topics include land inventory, urban form, spatial organization of uses, parcelization, design of roadways, grading, utility systems, off-site impacts, and landscape architecture.  
S. Gray, M. A. Ocampo

11.306 Planning Studio  
Prereq: Permission of instructor  
G (Spring)  
6-0-9 H-LEVEL Grad Credit

Provides experience in tackling city and regional planning problems in real-world settings. Students work with local clients to define issues and synthesize approaches to change that enhances performance of the environment and improves the quality of life for users and residents. The focus of the studio changes each year; past problems have involved community development in downtown Santiago, Chile, and sustainable residential development in Shenzhen and Shanghai, China.  
T. Lee

11.307 Beijing Urban Design Studio  
(Subject meets with 4.166)  
Prereq: Permission of instructor  
Acad Year 2014–2015: G (Fall)  
Acad Year 2015–2016: Not offered  
0-18-0 H-LEVEL Grad Credit

Design and development studio that involves architects and planners, working in teams on a contemporary design project of importance in Beijing, China. Students analyze conditions, explore alternatives, and synthesize architecture, city design, and implementation plans. Supplemented by lectures and brief study tours that expose students to history and contemporary issues of urbanism in China. Offered every other summer in residence at Tsinghua University, Beijing, involving students and faculty from both schools. Limited to 10.  
D. Frenchman, J. Wampler, C. Zegras

11.308J Ecological Urbanism Seminar  
(Same subject as 4.213J)  
Prereq: Permission of instructor  
G (Fall)  
3-0-9 H-LEVEL Grad Credit

Examines the urban environment as a natural phenomenon, human habitat, medium of expression, and forum for action. Subject has two related, major themes: how ideas of nature influence the way cities are perceived, designed, built, and managed; and how natural processes and urban form interact and the consequences of these for human health safety and welfare. Enrollment limited.  
A. Spirn

11.309J Sensing Place: Photography as Inquiry  
(Same subject as 4.215J)  
Prereq: None  
G (Fall)  
3-0-9

Explores photography as a disciplined way of seeing, of investigating urban landscapes and expressing ideas. Readings, observations, and photographs form the basis of discussions on light, detail, place, poetics, narrative, and how photography can inform design and planning. Enrollment limited.  
A. Spirn

11.311J Ideal Forms of Contemporary Urbanism  
(Same subject as 4.262J)  
Prereq: 4.645, 4.241, or permission of instructor  
G (Fall)  
Units arranged H-LEVEL Grad Credit

See description under subject 4.262J.  
A. D’Hooghe
11.312 Engaging Community: Models and Methods for Designers and Planners
Prereq: None
G (Spring)
3-0-9
Reviews a range of models for engaging communities, from a client-consultant relationship to advocacy, community organizing, consensus building, capacity building, and knowledge building. Explores the ways these different models have been used in design and planning practice and community building.
C. McDowell

11.313 Advanced Research Workshop in Landscape and Urbanism
Prereq: Permission of Instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-0-9 H-LEVEL Grad Credit
In-depth research workshop on pressing environmental design issue of our time, includes discussion and practices of various Landscape-based disciplines used to generate design-based solutions and landscape infrastructural responses to physical urban entropy and decline. Specific focus is adjusted each year.
A. Berger

11.314J Water, Landscape and Urban Design
(Same subject as 4.214J)
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-3-6 H-LEVEL Grad Credit
Can be repeated for credit
See description under subject 4.214J.
J. Wescoat

11.315J Disaster Resilient Design
(Same subject as 4.217J)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-6
See description under subject 4.217J.
J. Wescoat

11.316J Landscape and Urban Heritage Conservation
(Same subject as 4.216J)
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-3-6 H-LEVEL Grad Credit
Can be repeated for credit
See description under subject 4.216J.
J. Wescoat

11.318 Senseable Cities
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit
Studies how ubiquitous and real-time information technology can help us to understand and improve cities and regions. Explores the impact of integrating real-time information technology into the built environment. Introduces theoretical foundations of ubiquitous computing. Provides technical tools for tactile development of small-scale projects. Limited to 24.
C. Ratti

11.320 Digital City Design Workshop
Prereq: Permission of instructor
G (Spring)
2-0-10 H-LEVEL Grad Credit
Students develop proposals, at the city and neighborhood scales, that integrate urban design, planning, and digital technology. Aims to create more efficient, responsive, and livable urban places and systems that combine physical form with digital media, sensing, and advanced communications. Involves research and project work which is supported by lectures, case studies of digital city design, and involvement from experts and representatives of subject cities. Limited to 12.
D. Frenchman, C. Ratti

11.328J Urban Design Skills: Observing, Interpreting, and Representing the City
(Same subject as 4.240J)
Prereq: None
G (Fall)
4-2-9
Introduces methods of recording, evaluating, and representing the urban environment. Through visual observation, field analysis, measurements, interviews, and other means, students draw on their senses and develop their ability to deduce, conclude, question, and test conclusions about how the environment is used and valued. Using representational tools such as drawing, photographing, computer modeling and desktop publishing, students communicate what they observe along with their impressions and design ideas. Intended as a foundation for future studio work in urban design. Includes design-based projects.
S. Gray, M. A. Ocampo

11.330J Theory of City Form
(Same subject as 4.241J)
Prereq: 4.252 or 11.001
G (Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit
See description under subject 4.241J.
Architecture Staff

11.332J Urban Design Studio
(Same subject as 4.163J)
Prereq: 4.145, 4.162, or permission of instructor
G (Fall, Spring)
3-0-9 H-LEVEL Grad Credit
Can be repeated for credit
See description under subject 4.163J.
Architecture Design Staff

11.333J Urban Design Seminar: New Century Cities
(Same subject as 4.244J)
Prereq: None
G (Spring)
2-0-7
Examines the changing nature of cities and emerging design challenges in the 21st century. Core lectures and discussions identify new technological, environmental, social and other trends that are transforming the way we build and use cities. Case studies illustrate cutting edge urban design projects and methods by which they may be evaluated. Work focuses on student teams, which identify and research key themes of future design.
D. Frenchman

11.334J Advanced Seminar in Landscape and Urbanism
(Same subject as 4.266J)
Prereq: Permission of instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit
Explores theories, practices, and emerging trends in the fields of landscape architecture and urbanism, such as systemic design, landscape urbanism, engineered nature, drosscapes, urban biodiversity, urban mobility, megaregions, and urban agriculture. Lectures, readings, and guest speakers present a wide array of multidisciplinary topics, including current works from P-REX lab. Students conduct independent and group research that is future-oriented.
A. Berger
11.337 Urban Design Ideals and Action
(Same subject as 4.247J)
Prereq: 11.301 or permission of instructor
G (Spring)
2-0-7 H-LEVEL Grad Credit
Examines the relationship between urban design ideals, urban design action, and the built environment through readings, discussions, presentations, and papers. Analyzes the diverse design ideals that influence cities and settlements, and investigates how urban designers use them to shape urban form. Provides a critical understanding of the diverse formal methods used to intervene creatively in both developed and developing contexts, especially pluralistic and informal built environments.
B. Ryan

11.338 Urban Design Studio
Prereq: 11.328
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
0-12-9 H-LEVEL Grad Credit
Examines the rehabilitation and re-imagination of a city. Analyzes the city at three scales: citywide, neighborhood, and individual dwellings. Aims to shape innovative design solutions, enhance social amenity, and improve economic equity through strategic and creative geographical, urban design and architectural thinking. Intended for students with backgrounds in architecture, community development, and physical planning. Limited to 12 via application and lottery.
B. Ryan

11.339 Downtown
(Subject meets with 11.026J, 21H.321J)
Prereq: None
G (Spring)
2-0-7
Seminar on downtown in US cities from the late 19th century to the late 20th. Emphasis on downtown as an idea, place, and cluster of interests, on the changing character of downtown, and on recent efforts to rebuild it. Topics considered include subways, skyscrapers, highways, urban renewal, and retail centers. Focus on readings, discussions, and individual research projects. Students taking graduate version complete additional assignments.
R. M. Fogelson

11.342J Globalization and the Built Environment
(Same subject as 1.463J, ESD.53J)
Prereq: Permission of instructor
G (Fall)
2-0-4 H-LEVEL Grad Credit
See description under subject 1.463J.
F. Moavenzadeh, D. Wolff

11.344J Innovative Project Delivery in the Public and Private Sectors
(Same subject as 1.472J)
Prereq: Permission of instructor
G (Spring; first half of term)
2-0-4 H-LEVEL Grad Credit
Develops a strong strategic understanding of how best to deliver various types of projects in the built environment. Examines the compatibility of various project delivery methods, consisting of organizations, contracts, and award methods, with certain types of projects and owners. Six methods examined: traditional general contracting; construction management; multiple primes; design-build; turnkey; and build-operate-transfer. Includes lectures, case studies, guest speakers, and a team project to analyze a case example.
C. M. Gordon

11.345J Entrepreneurship in Construction and Real Estate Development
(Same subject as 1.462J)
Prereq: Permission of instructor
G (Fall; second half of term)
2-0-4 H-LEVEL Grad Credit
Researches the role of the entrepreneur in the built environment using case studies to outline different steps in developing real estate, construction, architectural and related enterprises in the built environment. Emphasizes strategic marketing and implementation of the plan in the development of these businesses. Addresses the progression of an idea, from an opportunity to a sustainable business. Guest lectures from entrepreneurs in the built environment outline the various entrepreneurial paths and characteristics they took to success. Team project consists of identifying an idea/opportunity and plan for developing a sustainable company.
J. F. Kennedy

11.351 Real Estate Ventures I: Negotiating Development-Phase Agreements
Prereq: None
G (Fall)
3-0-9
Focuses on key business and legal issues within the principal agreements used to control, entitle, capitalize, and construct a mixed-use real estate development. Through the lens of the real estate developer and its counter-parties, students identify, discuss, and negotiate the most important business issues in right of entry, purchase and sale, development, and joint-venture agreements, as well as a construction contract and construction loan agreement. Students work closely with attorneys who specialize in the construction of such agreements. Enrollment limited; preference to MSRED students.
P. Roth

11.352 Real Estate Ventures II: Negotiating Leases, Financings, and Restructurings
Prereq: 11.351 or permission of instructor
G (Spring)
3-0-9
Focuses on the key business and legal issues within the principal agreements used to lease, finance, and restructure a real estate venture. Through the lens of the real estate developer and its counter-parties, students identify, discuss and negotiate the most important business issues in office and retail leases, and permanent loan, mezzanine loan, intercreditor, standstill/forbearance, and loan modification (workout) agreements. In doing so, students work closely with attorneys who specialize in the construction of such agreements. Also touches on single-asset real estate bankruptcy and the federal income tax consequences of debt restructuring. Enrollment limited; preference to MSRED students.
W. T. McGrath

11.353J Securitization of Mortgages and Other Assets
(Same subject as 15.429J)
Prereq: 15.426, 15.401, or permission of instructor
G (Spring)
3-0-6 H-LEVEL Grad Credit
See description under subject 15.429J.
W. Torous

11.354 Real Estate Products Seminar
Prereq: None
G (Fall)
3-0-3
Examines the fundamentals of real estate development products, including residential, hotel, office, research and development/lab, retail, and industrial uses. Includes faculty lectures, guest presentations, and field trips to local case study projects. Preparers MSRED candidates for the spring Real Estate Development Studio.
P. Roth
11.355 International Housing Economics and Finance
(Subject meets with 11.145)
Prereq: 11.202, 11.203, 14.01 or permission of instructor
G (Spring)
3-0-6 H-LEVEL Grad Credit

Presents a theory of comparative differences in international housing outcomes. Introduces institutional differences in the ways housing expenditures are financed, and the economic determinants of housing outcomes, such as construction costs, land values, housing quality, and ownership rates. Analyzes the flow of funds to and from the different national housing finance sectors. Develops an understanding of the greater financial and macroeconomic implications of the mortgage credit sector, and how policies affect the ways in which housing asset fluctuations impact national economies. Considers the perspective of investors in international real estate markets and the risks and rewards involved. Draws on lessons from an international comparative approach, and applies them to economic and finance policies at the local, state/provincial, and federal levels within a country of choice. Students taking graduate version complete additional assignments.
T. S. Szold

11.360 Community Growth and Land Use Planning
Prereq: Permission of instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit

Seminar and fieldwork on strategies of planning and control for growth and land use, chiefly at the municipal level. Growth and its local consequences; land use planning approaches; implementation tools including innovative zoning and regulatory techniques, physical design, and natural systems integration. Projects arranged with small teams serving municipal clients.
A. Saiz

11.363 Civil Society and the Environment
Prereq: Permission of instructor
G (Fall)
Not offered regularly; consult department
3-0-9 H-LEVEL Grad Credit

Examines the roles civil society actors play in national and international environmental policy and politics. Considers theories pertaining to the development and import of civil society, social movement development and mobilization, and collaboration between state and non-state actors. Case studies of civil society response to specific environmental issues illustrate theoretical issues and assess the impacts that these actions have on domestic, foreign, and international policy and planning outcomes.

J. Carmin

11.364 International Environmental Treaties and Their Implementation
Prereq: 11.601, 11.255, or permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-6 H-LEVEL Grad Credit

Examines the history and dynamics of international environmental treaty-making, or what is called environmental diplomacy. Emphasis is on climate change and other atmospheric, marine resource, global waste management and sustainability-related treaties and the problems of implementing them. Reviews the legal, economic, and political dynamics of managing shared resources, involving civil society on a global basis, and enforcing transboundary agreements. Focuses especially on principles from international relations, international law, environmental management and negotiation theory as they relate to common-pool resource management.
L. Susskind

11.367 The Law and Politics of Land Use
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

Analysis of local and state power to regulate land use and development. Particular emphasis on the evolution of planning and zoning regulations, and the perceived narrowing of the relationship between public improvements requirements and development impact. The ability of regulatory bodies to impose environmental performance standards and limit development activity is explored in relation to recent Supreme Court and State SJC decisions. Development decisions rendered by public agencies are reviewed, critiqued, and discussed.
T. Szold

11.369J Energy Policy for a Sustainable Future
(Subject meets with 17.398J)
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

Focuses on a wide range of current energy and energy-related environmental policies that foster the development and mass deployment of sustainable energy technologies, fuels, and practices. Primary focus is US-based policies at the state, regional and federal level that impact the electricity, transportation and buildings and facilities sectors. Detailed case studies, diverse readings, and guest lectures by prominent policy makers and practitioners. Limited to 35.

J. Layzer

11.370J Environmental Justice
(Subject meets with 12.806, 12.807, or permission of instructor)
G (Fall)
3-0-6 H-LEVEL Grad Credit

Considers the theory and practice of urban sustainability. Introduces concepts of environmental sustainability, systems dynamics, ecological footprints, and environmental indicators. Investigates cutting-edge practices of cities in the US and around the world. Drawing on those examples, students work in and around the City of Boston on local sustainability initiatives.
J. Layzer
11.377 Food Systems and the Environment
Prereq: Permission of instructor
Acad Year 2014–2015: G (Fall)
Acad Year 2015–2016: Not offered
3-0-9 H-LEVEL Grad Credit

Explores the evolution of food production in the US and globally. Considers the science, economics, and politics behind the transition from pre-industrial to an industrial food system. Debates the costs and benefits of genetically modified food, organic agriculture, and local/regional food production. Focuses on the environmental sustainability and human-health consequences of different approaches, for both the developed and developing world.

J. Layzer

11.378J Water Planning, Policy, and Design
(Same subject as 4.625J)
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

See description under subject 4.625J.
J. Wescoat

11.380 Urban Climate Adaptation
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

Examines the challenges cities face and strategies to prepare for the impacts of climate change. Particular attention to the needs of vulnerable populations and resource-constrained cities, global and national adaptation policies and funding mechanisms, and ways in which local government and community-based activities can promote climate-readiness.

J. Carmin

11.381 Urban Energy Systems and Policy
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-9

Examines how cities use energy; the institutional, market and regulatory environment in which policymakers operate; steps cities are taking to better manage their energy use; and the challenges entrepreneurs face in trying to make the system more sustainable. Guest speakers contribute real-world perspective.

Staff

11.382 Water Diplomacy: The Science, Policy, and Politics of Managing Shared Resources
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-0-9 H-LEVEL Grad Credit

Examines the history and dynamics of international environmental treaty-making, or what is called environmental diplomacy. Emphasizes climate change and other atmospheric, marine resource, global waste management and sustainability-related treaties and the problems of implementing them. Reviews the legal, economic, and political dynamics of managing shared resources, involving civil society on a global basis, and enforcing transboundary agreements. Focuses especially on principles from international relations, international law, environmental management, and negotiation theory as they relate to common-pool resource management.

L. Susskind

11.383J Managing Sustainable Businesses for People and Profits
(Same subject as 15.662J, ESD.278J)
Prereq: None
G (Spring)
3-0-3

See description under subject 15.662J.
T. Kochan

11.384 Preparation for Malaysia Sustainable Cities Fieldwork (New)
Prereq: Permission of instructor
G (Fall, partial term)
0-0-3 [P/D/F] H-LEVEL Grad Credit

Under faculty supervision, students conduct independent research to familiarize themselves with the culture, economy, politics, geography, ecology, and history of Malaysia. Selection by application.

L. Susskind

11.385 Malaysia Sustainable Cities Fieldwork (New)
Prereq: 11.384
G (IAP)
3-0-3 [P/D/F] H-LEVEL Grad Credit

Investigates sustainable development efforts of regional development agencies in Penang, Kuala Lumpur, or Johor Bahru. In addition to these sites, students visit the government city of Putrajaya, the World Heritage cities of George Town in Penang and Malacca, and Kuching in East Malaysia. Selection by application.

L. Susskind

11.386 Malaysia Sustainable Cities Practicum (New)
Prereq: 11.385
G (Spring; partial term)
2-0-1 H-LEVEL Grad Credit

Examines examples of city development that reflect a commitment to the principles of sustainability, including economic development that ensures ecological sustainability, strategies for addressing intercultural tensions, and environmental quality improvements catalyzed by city development.

L. Susskind

11.401 Introduction to Housing, Community, and Economic Development
Prereq: None
G (Fall)
3-0-9

Provides a critical introduction to the shape and determinants of political, social and economic inequality in America. Explores equitable development as a response framework for planners; social capital and community building as planning concepts; and the history, development, and current prospects of the fields of housing (with an emphasis on affordability and inclusion) and local economic development. Considers multiple scales but primarily the neighborhood, city/town, and metro region, centered on the interplay of policies, institutions and markets.

J. P. Thompson

11.402 Urban Politics: Race and Political Change
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-9

Examines the place of US cities in political theory and practice. Particular attention given to contemporary issues of racial polarization, demographic change, poverty, sprawl, and globalization. Specific cities are a focus for discussion.

J. P. Thompson

11.404 Housing Policy and Planning in the US
Prereq: None
G (Spring)
3-0-9

Explores the policy tools and planning techniques used to formulate and implement housing strategies at local, state and federal levels. Topics include America’s housing finance system and the causes of instability in mortgage markets; economic and social inequity in access to affordable housing; approaches to meeting
community housing needs through local and state planning programs; programs for addressing homelessness; and emerging ideas about sustainable development and green building related to housing development and renovation. P. C. Clay

11.405 Political Economy and Society
Prereq: Permission of Instructor
G (Fall)
3-0-6 H-LEVEL Grad Credit
Focuses on the connection (or not) between mind (theory) and matter (lived experience). Examines basic tenets of classical and recent political economic theories and their explication in ideas of market economies, centrally planned economies, social market economies, and cooperative economies. Assesses theories according to their relation to the lived experiences of people in communities and workplaces.
J. P. Thompson

11.406 Key Ideas in City Planning History and Theory
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-9
Investigates the evolution of the ideals, the profession, and the practice of city planning throughout history by looking at key ideas that have driven theorists and practitioners. Explores city and regional planning in the light of broader historical trends, such as changing ideas about who cities are for; different approaches to urban problem-solving; variable factors affecting how urban settlements should be organized and reorganized; the development of human understanding about relationships between the built and natural environments; and about the effects of urban form and organization on society. Focuses substantially but not entirely upon the American experience.
Staff

11.407 Economic Development Tools and Techniques
Prereq: Permission of instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit
Introduces a suite of tools representing the basic set of practices used in the development field. Presents a wealth creation framework that focuses on place, improving livelihoods, incentivizing collaboration, creating multiple forms of wealth, and promoting local ownership. Students work with web-based tools designed for use in a professional setting. Discussions are based on results from tools, their interpretation, and their meaning. Relevant to all students interested in the structure and function of local, state, national and international economic contexts. Students develop a series of memos as students they complete assignments.
A. Glasmeier

11.410 Urban and Regional Economics
(Same subject as 1.283J, 14.573J, ESD.191J)
(Same subject as 14.51)
Prereq: 14.04, 14.32
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-0-9 H-LEVEL Grad Credit
See description under subject 14.573.
Consult W. Wheaton

11.427 Urban Labor Markets and Employment Policy
(Same subject as 15.677J)
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit
See description under subject 15.677.
P. Osterman

11.430 Leadership in Real Estate
(Same subject as 15.941J)
Prereq: None
G (Fall; first half of term)
3-0-3
See description under subject 15.941.
G. Schuck

11.431 Real Estate Finance and Investment
(Same subject as 15.426J)
Prereq: Permission of instructor
G (Fall)
4-0-8 H-LEVEL Grad Credit
Concepts and techniques for analyzing financial decisions in commercial property development and investment. Topics include property income streams, urban economics, discounted cash flow, equity valuation, leverage and income tax considerations, development projects, and joint ventures.
D. Geltner

11.432 Real Estate Capital Markets
(Same subject as 15.427J)
Prereq: 11.431; 15.402 or 15.414
G (Spring; first half of term)
2-0-4 H-LEVEL Grad Credit
Introduces real estate capital markets for institutional investors. Topics include real estate investment trusts (REIT), commercial mortgage-backed securities (CMBS), and private equity.
D. Geltner

11.433 Real Estate Economics
(Same subject as 15.021J)
Prereq: 14.01, 15.010, or 15.011
G (Fall)
4-0-8 H-LEVEL Grad Credit
Develops an understanding of the economic factors that shape and influence the markets for real property. Includes an analysis of housing as well as commercial real estate, and covers demographic analysis, regional growth, construction cycles, urban land markets and location theory. Exercises and modeling techniques for measuring and predicting property demand, supply, vacancy and prices.
W. C. Wheaton

11.434 Tools for Analysis: Design for Real Estate and Infrastructure Development
(Same subject as 15.428J, ESD.712J)
Prereq: None
G (Spring; second half of term)
2-0-4
Introduction to analytical tools to support design and decision-making in real estate, infrastructure development, and investment. Particular focus on identifying and valuing sources of flexibility using “real options,” Monte-Carlo simulation, and other techniques from the field of engineering systems. Integrates economic and engineering perspectives, and is suitable for students with various backgrounds. Provides useful preparation for thesis work in the area.
D. Geltner, R. de Neufville

11.435 Mixed-Income Housing Development
Prereq: None
G (Spring)
3-0-9
Provides an overview of affordable and mixed-income housing development for students who wish to understand the fundamental issues and requirements of urban scale housing development, and the process of planning, financing and developing such housing. Students gain practical experience assembling a mixed-income housing development proposal.
P. Roth
Focuses on the policy tools and planning techniques used to formulate and implement local economic development strategies. Includes an overview of economic development theory, discussion of major policy areas and practices employed to influence local economic development, a review of analytic tools to assess local economies and how to formulate strategy. Coursework includes formulation of a local economic development strategy for a client.

K. Seidman
11.472J D-Lab: Development
(Same subject as EC.781J)
(Subject meets with 11.025J, EC.701J)
Prereq: None
G (Fall)
3-2-7
See description under subject EC.781J.
A. B. Smith, B. Sanyal

11.474 D-Lab: Disseminating Water, Sanitation, and Hygiene Innovations for the Common Good
(Subject meets with EC.715)
Prereq: None
G (Spring)
3-0-6
Focuses on disseminating water, sanitation and hygiene (WASH) innovations in developing countries, especially among underserved communities. Structured around field-based learning, case studies, lectures and videos. Emphasis on core WASH principles, culture-specific solutions, appropriate and sustainable technologies, behavior change, social marketing and building partnerships. Term project entails implementing the “next steps” in a WASH innovation in a specific locale and/or a new proposal/plan/project. Long-term commitment to specific real-world WASH projects which have been disseminated by MIT faculty, students and alumni. Students taking graduate version complete additional assignments. Limited to 30.
S. E. Murcott

11.475 Navigating Power in Water and Sanitation Planning
Prereq: Open to undergraduates with permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit
Informs and prepares students to navigate the explicit and implicit power dynamics among stakeholders in decision-making processes that govern the planning and delivery of water and sanitation systems. Through investigations of organization, regulation, financing, physical delivery, and research designs, students examine the trajectory of decisions that shape and influence the accessibility, affordability, and adequacy of water and sanitation services, particularly in vulnerable neighborhoods in mostly urban and peri-urban areas. Emphasis is placed on the importance of moving beyond the limited dimensions of supply and demand studies and gaining fluency in the multiplicative political-economic and social factors driving choices in water and sanitation systems planning. In-depth, globally comparative readings inform the course, and expose basic services in water and sanitation as a misnomer.
G. Carolini

11.476 Urbanizing China (New)
(Subject meets with 11.146)
Prereq: Permission of Instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-9 H-LEVEL Grad Credit
Discusses China’s daunting urban challenges: congestion and smog, housing affordability, land reform and urban financing, migrants and locals, and social and spatial inequality. Provides examples of laudable achievements and diverse and innovative responses across more than six hundred cities. Presents China’s urbanization as the joint result of natural socioeconomic processes and conscious actions by governments, markets, and the public. Presents multidisciplinary approaches and alternative narratives. Examines the intricate interaction between state and market in China’s context, yielding a variety of state-market ‘cocktails’ devised and experimented in different cities in response to local problems, each involving a multilayered projection onto urban space. Students taking graduate version complete additional assignments.
J. Zhao

11.477j Energy and Infrastructure Technologies
(Same subject as 1.286j)
Prereq: 14.01 or permission of instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit
Examines efforts in developing and advanced nations and regions to create, finance, and regulate infrastructure from a variety of methodological and disciplinary perspectives. Explores how an energy crisis can be an opportunity for making fundamental changes to improve collapsing infrastructure networks. Introduces the challenges to modern society concerning energy security. Reviews the moral hazard aspects of infrastructure and the common arguments for withholding adequate support to the rebuilding of energy systems. Students taking the graduate version complete additional assignments.
K. R. Polenske

11.478 Behavior and Policy: Connections in Transportation (New)
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit
Examines the behavioral foundation for policy design, using urban transportation examples. Introduces multiple frameworks of understanding travel behavior (rational or irrational), contrasting the perspectives of classic economic theory with behavioral economics and social psychology, and suggests corresponding policy interventions. Presents a spectrum of ten instruments for positively influences behavior and improving welfare, including manipulating information and changing perceptions of time and space; pricing and framing; including emotions of pride and shame; exploiting peer pressure or enhancing self-control and motivation; and nudging and preference shaping. Challenges students to critique, design, implement and interpret experiments that nudge travel behavior. Brings behavioral insights to creative design of transport policies, making them efficient and equitable as well as simpler, consistent, transparent, acceptable, and adaptive to behavioral changes.
L. Susskind, D. Cunningham

11.479 Water, Sanitation, Hygiene, and Environmental Sanitation (WASH-ENV) in Low- and Middle-Income Countries
(Same subject as 1.851j)
Prereq: None
G (Spring)
Units arranged
See description under subject 1.851J.
Staff

11.480 Urbanization and Development
(Subject meets with 11.140)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-0-9
Examines developmental dynamics of rapidly urbanizing locales, with a special focus on the developing world. Case studies from India, China, Mexico, Brazil, and South Africa form the basis for discussion of social, spatial, political and economic changes in cities spurred by the decline of industry, the rise of services, and the proliferation of urban mega projects. Emphasizes the challenges of growing urban inequality, environmental risk, citizen displacement, insufficient housing, and the lack of effective institutions for metropolitan governance. Students taking graduate version complete additional assignments.
Staff
11.481J Analyzing and Accounting for Regional Economic Change
(Same subject as 1.284J, ESD.192J)
Prereq: 14.03, 14.04
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Spring)
3-0-9 H-LEVEL Grad Credit

Surveys theories of regional growth, factor mobility, clustering, restructuring, learning regions, and global supply chains from a political-economy perspective. Examines critiques of multipliers, linkages, and supply chains used to assess employment and environmental impacts, energy and infrastructure investments, and accounting issues related to the underground economy, work in the home, and environmental degradation. Assesses price indices, industrial location and employment measures, and shift-share analyses. Discussions of US and foreign applications.

K. R. Polenske

11.482J Regional Socioeconomic Impact Analyses and Modeling
(Same subject as 1.285J, ESD.193J)
Prereq: 11.481J or permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
2-1-9 H-LEVEL Grad Credit

Reviews regional economic theories and models and provides students with experience in using alternative economic impact assessment models on microcomputers. Problem sets are oriented around infrastructure, housing, energy, and environmental issues. Students work with a client generally in Boston and make a presentation to the client. Emphasis on written and oral presentation skills.

K. R. Polenske

11.483J Housing and Land Use in Rapidly Urbanizing Regions
Prereq: Permission of instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit

Studies current urban controversies over affordable housing, land redevelopment, and public space, with special attention to property rights. Reviews how law, economics, sociology and planning theories frame these issues and interplay with them through spatial approaches of urban design and geography. Explores cases that use property rights strategies to increase economic growth and social justice, providing insight for future design and policymaking. Topics include land trusts for affordable housing, mixed-use public space, and critical cartography.

Y. Hong

11.484 Project Appraisal in Developing Countries
(Subject meets with 11.144)
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

Covers techniques of financial analysis of investment expenditures, as well as the economic and distributive appraisal of development projects. Critical analysis of these tools in the political economy of international development is discussed. Topics include appraisal’s role in the project cycle, planning under conditions of uncertainty, constraints in data quality and the limits of rational analysis, and the coordination of an interdisciplinary appraisal team. Students taking graduate version complete additional assignments. Enrollment limited; preference to majors.

Staff

11.487 Innovative Budgeting and Finance for the Public Sector
(Subject meets with 11.147)
Prereq: None
G (Spring)
3-0-9

Examines globally relevant challenges of adequately and effectively attending to public sector responsibilities for basic services with limited resources, particularly in the contexts of fiscal crises, rapid population growth, as well as shrinkage, through: an introduction to methods and processes of budgeting, accounting, and financial mobilization in the public sector; use of case studies and practice exercises to explore revenue strategies and to gain fiscal analytical competencies; study of pioneering examples of promising budget and accounting processes as well as innovative funding mobilization via taxation, capital markets, and experimental experiences with mechanisms such as land-value capture. Students taking graduate version are expected to explore the subject in greater depth.

G. Carolini

11.491J Economic Development and Policy Analysis
(Same subject as 17.176J)
Prereq: 11.701
G (Fall)
Not offered regularly; consult department
3-0-9 H-LEVEL Grad Credit

Examines the process of economic development to understand why some countries or regions within countries have increased their incomes and reduced their poverty faster than others. Economic development is treated as a process of learning, as countries weigh theories and role models as guides for policy formulation and institution building. Historical and empirical examination of three role models for development/underdevelopment, as formulated by the Third World’s new intelligentsia that emerged after de-colonization: the OPEC development role model, the East Asian role model, and the Brazilian role model.

Staff

11.493J Legal Aspects of Property and Land Use
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-9

Examines legal and institutional arrangements for the establishment, transfer, and control over property under American and selected comparative systems including India and South Africa.

11.490 Law and Development
Prereq: Permission of instructor
Acad Year 2014–2015: G (Spring)
Acad Year 2015–2016: Not offered
2-0-10 H-LEVEL Grad Credit

Examines the role of law in development and introduces economic and legal theories. Topics include formality/informality of property, contracts and bargaining in the shadow of the law, institutions for transparency and accountability, legitimation of law, sequencing of legal reform, and international economic law aspects. Studies the roles of property rights in economic development, the judiciary and the bureaucracy in development, and law in aid policy. Includes selected country case studies. Limited to 15.

B. Rajagopal

11.480J Urban Development in Conflict Cities: Planning Challenges and Policy Innovations
Prereq: Permission of Instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit

Examines urban development challenges in conflict cities. Case studies used to examine the basic infrastructural, governance, social, and economic dilemmas facing citizens and local officials. First half of course focuses on the national and transnational context in which urban conflict is likely to persist; the impacts of conflict on social, political, economic, and institutional capacities of citizens, markets, and states, both local and national; and the growing involvement of multilateral development agencies in identifying urban conflict as a barrier to economic growth. Course ends with a focus on policy innovations, and examination of potential planning, design, and policy solutions.

J. Samper Escobar
Focuses on key issues of property and land use law regarding planning and economic development. Emphasizes efficient resource use; institutional, entitlement and social relational approaches to property; distributional and other social aspects; and the relationship between property, culture, and democracy.

B. Rajagopal

11.495 Governance and Law in Developing Countries
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
2-0-10 H-LEVEL Grad Credit

Examines the multiple dimensions of governance in international development with a focus on the role of legal norms and institutions in the balance between state and the market. Analyzes changes in the distribution of authority, political and legal, as a result of economic globalization. Topics include the role and reform of the state, the role of civil society and markets, global governance, good governance, the role of the judiciary and legal culture in development and tools for measuring governance performance.

B. Rajagopal

11.496 Law, Social Movements, and Public Policy: Comparative and International Experience
(Subject meets with 11.166)
Prereq: Permission of instructor
G (Spring)
3-0-9

Studies the interaction between law, courts, and social movements in shaping domestic and global public policy. Examines how groups mobilize to use law to affect change and why they succeed and fail. Uses case studies to explore the interplay between law, social movements, and public policy in current areas such as gender, race, labor, trade, environment, and human rights. Introduces the theories of public policy, social movements, law and society, and transnational studies. Students taking the graduate version complete additional assignments.

B. Rajagopal

11.497 Human Rights in Theory and Practice
(Subject meets with 11.164J, 17.391J)
Prereq: None
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
3-0-9

Provides a rigorous and critical introduction to the history, foundation, structure, and operation of the human rights movement. Focuses on key ideas, actors, methods, and sources, and critically evaluates the field. Addresses current debates in human rights, including torture, security, democracy promotion, the place of rights in development and globalization, women’s rights, ethnic, religious and racial discrimination and conflict, humanitarian intervention, post-conflict rebuilding, transitional justice, terrorism, and ethical issues in science and technology. Requires familiarity with global affairs or ethics and social justice issues. Students taking graduate version are expected to write a research paper.

B. Rajagopal

11.520 Workshop on Geographic Information Systems
Prereq: 11.205 or permission of instructor
G (Fall; partial term)
2-2-2 H-LEVEL Grad Credit

An introduction to geographic information systems (GIS) as applied to urban and regional planning, community development, and local government. Emphasis on learning GIS technology and spatial analysis techniques through extensive hands-on exercises using real-world data sets such as the US census of population and housing. Includes a small project on an urban planning problem involving the selection of appropriate methods, the use of primary and secondary data, computer-based modeling, and spatial analysis. Enrollment limited; preference to MCP students.

S. Williams

11.521 Spatial Database Management and Advanced Geographic Information Systems
Prereq: Permission of instructor; or 11.520 and Coreq: 11.220
G (Spring)
3-3-6 H-LEVEL Grad Credit

Extends the computing and geographic information systems (GIS) skills developed in 11.520 to include spatial data management in client/server environments and advanced GIS techniques. First half covers the content of 11.523, introducing database management concepts, SQL (Structured Query Language), and enterprise-class database management software. Second half explores advanced features and the customization features of GIS software that perform analyses for decision support that go beyond basic thematic mapping. Includes the half-term GIS project of 11.524 that studies a real-world planning issue.

J. Ferreira

11.522 Research Seminar on Urban Information Systems
Prereq: 11.521; 11.520 or 11.525
G (Fall)
2-4-6 H-LEVEL Grad Credit
Can be repeated for credit

Advanced research seminar enhances computer and analytic skills developed in other subjects in this sequence. Students present a structured discussion of journal articles representative of their current research interests involving urban information systems and complete a short research project. Suggested research projects include topics related to ongoing UIS Group research.

J. Ferreira

11.523 Fundamentals of Spatial Database Management
Prereq: Permission of instructor
G (Spring; first half of term)
2-2-2 H-LEVEL Grad Credit
Credit cannot also be received for 11.521, 11.524

The fundamentals of database management systems as applied to spatial analysis. Includes extensive hands-on exercises using real-world planning data. Introduces database management concepts, SQL (Structured Query Language), and enterprise-class database software. Same content as first half of 11.521.

J. Ferreira

11.524 Advanced Geographic Information System Project
Prereq: 11.523 or permission of instructor
G (Spring; second half of term)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit
Credit cannot also be received for 11.521, 11.523

Learning and utilizing advanced geographic information system techniques in studio/lab setting with real-world client problem and complex digital spatial data infrastructure. Projects typically use the client and infrastructure setting for 11.521. Credit cannot also be received for 11.521 in the same term.

J. Ferreira

11.526J Comparative Land Use and Transportation Planning
(Same subject as 1.251J)
Prereq: Permission of Instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

Focuses on the integration of land use and transportation planning, drawing from cases in
both industrialized and developing countries. Reviews underlying theories, analytical techniques, and the empirical evidence of the land use-transportation relationship at the metropolitan, intra-metropolitan, and micro-scales. Also covers the various ways of measuring urban structure, form, and the “built environment.” Develops students’ skills to assess relevant policies, interventions and impacts.

C. Zegras

11.527 Advanced Seminar in Transportation Finance
Prereq: Permission of instructor
Acad Year 2014–2015: Not offered
Acad Year 2015–2016: G (Fall)
2-1-9 H-LEVEL Grad Credit

Focuses on the theory and practice of transportation system finance, examining the range of relevant topics including basic public finance, politics, institutional structures, externalities, pricing, and the role of advanced technologies. Primarily oriented around land-based, surface transportation, although in their research students are welcome to examine air and maritime modes according to their interests. Explores issues across a range of contexts, including North America, Europe, Latin America, and Asia.

C. Zegras

11.533 Ecological Planning with GIS
Prereq: 11.205
G (Spring)
3-3-6

Provides a practical introduction to spatial environmental assessment and planning methods, from landscape to regional scales. Lectures and discussions focus on key concepts in landscape ecology as well as the data and methods needed to incorporate these concepts in environmental planning. Weekly lab exercises demonstrate how natural systems are represented in modern geographic information systems, how to synthesize information using overlay analysis and suitability modeling, and design methods that build on the resulting syntheses. Features raster GIS analysis methods.

Staff

11.540J Urban Transportation Planning
(Same subject as 1.252J, ESD.225J)
Prereq: Permission of instructor
G (Fall)
3-0-9 H-LEVEL Grad Credit

See description under subject 1.252J.

Staff

11.541J Public Transportation Systems
(Same subject as 1.258J, ESD.226J)
Prereq: 1.201 or permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

See description under subject 1.258J.

Staff

11.543J Transportation Policy, the Environment, and Livable Communities
(Same subject as 1.253J, ESD.222J)
Prereq: Same subject as 1.153
G (Spring)
3-0-9 H-LEVEL Grad Credit

See description under subject 1.253J.

J. Coughlin

11.544J Transportation Systems Analysis: Performance and Optimization
(Same subject as 1.200J, ESD.21J)
Prereq: 1.010, permission of instructor
G (Fall)
3-1-8 H-LEVEL Grad Credit

See description under subject 1.200J.

C. Barnhart, A. R. Odoni, C. Osorio

11.545J Transportation Systems Analysis: Demand and Economics
(Same subject as 1.201J, ESD.210J)
Prereq: Permission of Instructor
G (Fall)
3-1-8 H-LEVEL Grad Credit

See description under subject 1.201J.

M. Ben-Akiva

11.601 Introduction to Environmental Policy and Planning
Prereq: None
G (Fall)
3-0-9

Required introductory subject for graduate students pursuing environmental policy and planning as their specialization in the MCP Program. Also open to other graduate students interested in environmental policymaking and the practice of environmental planning. Taught comparatively, with numerous references to examples from around the world. Four major areas of focus: National Environmental Policymaking, Environmental Ethics, Environmental Forecasting and Analysis Techniques, and Strategies for Collaborative Decision-making.

L. Susskind

11.630J Environmental Law, Policy, and Economics: Pollution Prevention and Control
(Same subject as 1.811J, ESD.133J)
(Same subject as 1.812J, ESD.134J)
Prereq: 1.801J, 11.021J, 17.393J
G (Fall)
3-0-9 H-LEVEL Grad Credit

See description under subject 1.811J.

N. Ashford, C. Caldart

11.631J Regulation of Chemicals, Radiation, and Biotechnology
(Same subject as 1.812J, ESD.134J)
Prereq: 1.801J, 11.021J, 17.393J
G (Fall)
3-0-9 H-LEVEL Grad Credit

See description under subject 1.812J.

N. Ashford, C. Caldart

11.701 Introduction to International Development Planning
Prereq: None
G (Fall)
3-0-9

Studies interaction between planners and institutions at different scales, from local to global/transnational. Emphasizes a historical and institutional approaches to development planning. Includes an overview of theories of development, state, organizational arrangements, and implementation mechanisms. Covers current topics in development planning, such as decentralization, participatory planning, urban-rural linkages, corruption, legal institutions and post-conflict development. Analyzes various roles planners play in different institutional contexts. Restricted to first-year MCP and SPURS students.

B. Rajagopal

TUTORIALS, RESEARCH, AND FIELDWORK SUBJECTS

11.800 Doctoral Research Seminar
Prereq: Permission of instructor
G (Spring)
3-0-9 H-LEVEL Grad Credit

Required subject for all entering PhD students. Dual focus is on formulating researchable questions (to help students write their first-year papers) and understanding how research knowledge comes to be influential in the world or not influential. Explores ways to make research
knowledge more accessible, credible, and useful in the realm of public policy and practice. Addresses the politics of the policymaking process, the power of framing and agenda-setting, how knowledge diffuses along knowledge and influence networks, and how varied types of knowledge shape decision-making and action.

Staff

11.901 Independent Study: Urban Studies and Planning
Prereq: Permission of instructor
G (Fall, IAP, Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

11.902 Independent Study: Urban Studies and Planning
Prereq: Permission of instructor
G (Fall, IAP, Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

Opportunity for independent study under regular supervision by a faculty member.

Staff

11.903 Supervised Readings in Urban Studies
Prereq: Permission of instructor
G (Fall, IAP, Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

11.904 Supervised Readings in Urban Studies
Prereq: Permission of instructor
G (Fall, Spring, Summer)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

Reading and discussion of topics in urban studies and planning.

Staff

11.905 Research Seminar in Urban Studies and Planning
Prereq: Permission of instructor
G (Fall, IAP, Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

11.906 Research Seminar in Urban Studies and Planning
Prereq: None
G (Fall, IAP, Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

Special research issues in urban planning.

Staff

11.907 Urban Fieldwork
Prereq: Permission of instructor
G (Fall, IAP, Spring)
Units arranged [P/D/F] H-LEVEL Grad Credit
Can be repeated for credit

11.908 Urban Fieldwork
Prereq: None
G (Fall, IAP, Spring)
Units arranged
Can be repeated for credit

Practical application of planning techniques to towns, cities, and regions, including problems of replanning, redevelopment, and renewal of existing communities. Includes internships, under staff supervision, in municipal and state agencies and departments.

Staff

11.909 Graduate Tutorial
Prereq: None
G (Spring)
Units arranged [P/D/F]
Can be repeated for credit

Planned programs of instruction for a minimum of three students on a planning topic not covered in regular subjects of instruction. Registration subject to prior arrangement with appropriate faculty member.

Staff

11.910 Doctoral Tutorial
Prereq: None
G (Spring)
Units arranged [P/D/F]
Can be repeated for credit

Planned programs of instruction for a minimum of three students on a planning topic not covered in regular subjects of instruction. Registration subject to prior arrangement with appropriate faculty member.

Staff

11.960 Independent Study: Real Estate
Prereq: None
G (Fall, IAP, Spring, Summer)
Units arranged [P/D/F]
Can be repeated for credit

11.961 Independent Study: Real Estate
Prereq: None
G (Fall, IAP, Spring, Summer)
Units arranged
Can be repeated for credit

Opportunity for independent study under regular supervision by a faculty member.

Staff

11.962 Fieldwork: Real Estate
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer)
Units arranged [P/D/F]
Can be repeated for credit

Practical application of real estate techniques in the field.

Staff

11.963 Independent Study: Real Estate
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

11.964 Independent Study: Real Estate
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer)
Units arranged [P/D/F] H-LEVEL Grad Credit
Can be repeated for credit

Opportunity for independent study under regular supervision by a faculty member.

Staff

11.985 Summer Field Work
Prereq: None
G (Summer)
Units arranged [P/D/F]
Can be repeated for credit

Practical application of planning techniques over the summer with prior arrangement.

S. Wellford

11.5940–11.5944 Special Subject: Urban Studies and Planning
Prereq: Permission of instructor
G (Fall)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

For graduate students wishing to pursue further study in advanced areas of urban studies and city and regional planning not covered in regular subjects of instruction.

M. Kothari

11.5945–11.5949 Special Subject: Urban Studies and Planning
Prereq: Permission of instructor
G (Spring)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

For graduate students wishing to pursue further study in advanced areas of urban studies and city and regional planning not covered in regular subjects of instruction.

Staff
Prereq: Permission of instructor
G (Spring)
Units arranged [P/D/F]
Can be repeated for credit
For graduate students wishing to pursue further study in advanced areas of urban studies and city and regional planning not covered in regular subjects of instruction.
Staff

11.S958 Special Seminar: Urban Studies and Planning
Prereq: Permission of instructor
G (Spring)
Units arranged [P/D/F] H-LEVEL Grad Credit
Can be repeated for credit
Prereq: Permission of instructor
G (Spring)
Units arranged [P/D/F] H-LEVEL Grad Credit
Can be repeated for credit
For graduate students wishing to pursue further study in advanced areas of urban studies and city and regional planning not covered in regular subjects of instruction.
Staff

11.S965 Special Subject: Real Estate
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer)
Units arranged [P/D/F] H-LEVEL Grad Credit
Can be repeated for credit

11.S966, 11.S967 Special Subject: Real Estate
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit

11.S968, 11.S969 Special Seminar: Real Estate
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer; first half of term)
Units arranged [P/D/F]
Can be repeated for credit
Small group study of advanced subjects under staff supervision. For graduate students wishing to pursue further study in advanced areas of real estate not covered in regular subjects of instruction.
Staff

11.THG Graduate Thesis
Prereq: Permission of instructor
G (Fall, IAP, Spring, Summer)
Units arranged H-LEVEL Grad Credit
Can be repeated for credit
Program of research and writing of thesis; to be arranged by the student with supervising committee.
Staff
Bachelor of Science in Planning/Course 11

General Institute Requirements (GIRs)  Subjects
Science Requirement  6
Humanities, Arts, and Social Sciences Requirement [four subjects can be satisfied by subjects in the Departmental Program]  8
Restricted Electives in Science and Technology (REST) Requirement  2
Laboratory Requirement [can be satisfied by 11.188 in the Departmental Program]  1
Total GIR Subjects Required for SB Degree  17

Communication Requirement
The program includes a Communication Requirement of 4 subjects: 2 subjects designated as Communication Intensive in Humanities, Arts, and Social Sciences (CI-H); and 2 subjects designated as Communication Intensive in the Major (CI-M).

PLUS Departmental Program  Units
Subject names below are followed by credit units, and by prerequisites, if any (corequisites in italics)

Required Subjects  69
11.001J Introduction to Urban Design and Development, 12, HASS-H
11.002J Making Public Policy, 12, HASS-S, CI-H
11.011 The Art and Science of Negotiation, 12, HASS-S
11.123 Big Plans and Mega-Urban Landscapes, 9, HASS-S
14.01 Principles of Microeconomics, 12, HASS-S
11.188 Urban Planning and Social Science Laboratory, 12, LAB, CI-M

Planned Electives  57–60
Course 11 majors are required to formulate or select one stream of coursework for concentration. They can select from the following recommended options or create their own stream tailored to a particular set of urban, policy, or planning concerns.

Environmental Policy
11.003J Methods of Policy Analysis, 12, HASS-S; 11.002J; 14.01
11.016J The Once and Future City, 12, HASS-H, CI-H
11.021 Environmental Law, Policy, and Economics: Pollution Prevention and Control, 12, HASS-S
11.022J Regulation of Chemicals, Radiation, and Biotechnology, 12; permission of Instructor
11.164J Energy Decisions, Markets, and Policies, 12, HASS-S; 14.01*
11.165 Energy and Infrastructure Technologies, 12, HASS-S; 14.01*

Urban History and Society
11.073J American Urban History I, 9, HASS-H; CI-H
11.074J American Urban History II, 9, HASS-H; CI-H
11.075J Riots, Strikes, and Conspiracies in American History, 12, HASS-H; CI-H
11.089J Migration and Immigration in US History, 12, HASS-S
11.086J Downtown, 9, HASS-H
11.150J Metropolis: A Comparative History of New York City, 12, HASS-H
11.152J The Ghetto: From Venice to Harlem, 12, HASS-S

International Development
11.005 Introduction to International Development, 12, HASS-S
11.025 D-Lab: Development, 12, HASS-S
11.140 Urbanization and Development, 12
11.144 Project Appraisal in Developing Countries, 12
11.147 Innovative Budgeting and Finance for the Public Sector, 12, HASS-S; permission of Instructor
11.164J Human Rights in Theory and Practice, 12, HASS-S; permission of instructor
11.165 Energy and Infrastructure Technologies, 12, HASS-S; 14.01*
11.166 Law, Social Movements, and Public Policy, 12, HASS-S; permission of instructor

Urban Field Experience
Declared majors are encouraged to take the optional urban field experience subject.
11.027 City to City: Comparing, Researching, and Writing about Cities (CI-M) is taught in the spring and includes a trip during spring break. This course may be taken multiple times, as the content differs each year, but may only be counted once as a planned elective.

Thesis  24
Majors are required to write a senior thesis or complete a senior project. The thesis/project writing process is accompanied by a required undergraduate thesis preparation seminar, which meets in the fall.
11.ThT Thesis Research Design Seminar, 12, CI-M
<table>
<thead>
<tr>
<th>Departmental Program Units That Also Satisfy the GIRs</th>
<th>(60)</th>
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<tbody>
<tr>
<td>Unrestricted Electives</td>
<td>87–90</td>
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Total Units Beyond the GIRs Required for SB Degree 180

No subject can be counted both as part of the 17-subject GIRs and as part of the 180 units required beyond the GIRs. Every subject in the student’s departmental program will count toward one or the other, but not both.

Notes

*Alternate prerequisites and corequisites are listed in the subject description.

Course 11 majors are not permitted to have a HASS concentration in Urban Studies.

For an explanation of credit units, or hours, please refer to the online help of the MIT Subject Listing & Schedule, [http://student.mit.edu/catalog/index.cgi](http://student.mit.edu/catalog/index.cgi).