COMMUNITY AND REGIONAL PLANNING (C R P)

Courses primarily for undergraduates:

C R P 201: The North American Metropolis

(3-0) Cr. 3. F.S.

Examination of the evolution of American urban centers from the colonial era to the present. Considers the demographic changes and social movements underway in urban America and explores how an understanding of the history of cities provides us with knowledge that we can use to improve our cities today. Meets U.S. Diversity Requirement

C R P 291: World Cities and Globalization

(3-0) Cr. 3. F.S.

World cities and globalization in developed and developing countries. Topics include globalization, world cities and regions, uneven economic development, the international division of labor, multinational corporations, international environmentalism, tourism, popular culture and place- based identity.

Meets International Perspectives Requirement.

C R P 293: Environmental Planning

(Cross-listed with ENV S). (3-0) Cr. 3. F.S.

Comprehensive overview of the field of environmental relationships and the efforts being made to organize, control, and coordinate environmental, aesthetic, and cultural characteristics of land, air, and water.

C R P 301: Urban Analytical Methods

(3-2) Cr. 4. S.

Prereq: STAT 101

An introduction to the methods and analytical techniques used by planners to study community change. Course includes identification of key sources of planning information and data. Students learn to use quantitative methods for analysis of population, land use, economic and transportation data. Students learn to apply basic analytic methods to community problems and learn the art of effective written, graphic, and oral presentation of data.

C R P 320: Urban Geography

(3-0) Cr. 3. F.S.

An introduction to urban geography. Study of urban centers, including people and infrastructure. Investigation of the origin and evolution of urban areas and the processes that shape urban change. Topics include urban form, and the social, economic, political, cultural, and institutional factors that shape cities.

C R P 330: Practicum

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

Prereq: Major in community and regional planning

Structured work experience under close supervision of a professional planner. Practical planning experience; relationships between theory and practice, professional responsibilities, and the scope of various planning roles.

C R P 331: Professional Practice Seminar

(2-0) Cr. 2. F.

Prereq: CRP 301 and junior classification

Preparation for working as a planning professional; development of resume and portfolio; discussion of professional ethics and expectations of employers and clients; presentations from planning professionals, and discussion of the range of career choices within the planning profession.

C R P 376: Rural, Urban and Regional Economics

(Cross-listed with ECON). (3-0) Cr. 3.

Prereq: ECON 101

Firm location with respect to regional resources, transport, scale economies, externalities, and policies. Measures of local comparative advantage and specialization. Spatial markets. Population location considering jobs, wages, commuting, and local amenities. Business, residential, and farm land use and value. Migration. Other topics may include market failure, regulation, the product cycle, theories of rural and urban development, developmental policy, firm recruiting, local public goods and public finance, schools, poverty, segregation, and crime.

C R P 383: Theory of the Planning Process

(3-0) Cr. 3. F.

Prereq: Junior classification

The nature of planning and its relation to social and economic planning; levels of planning, place of planning in decision making; steps in the planning process, uses and limitation of knowledge in planning, relation of facts and values.

C R P 391: Field Travel

Cr. 1-2. Repeatable. F.S. Prereq: CRP major and permission of instructor

Observation of professional practice and community or regional problems and issues. Offered on a satisfactory-fail basis only.

C R P 410: Professional Work Experience

Cr. R. F.S.SS. Prereq: Permission of department chair Approved professional work experience.

C R P 416: Urban Design and Practice

(Dual-listed with C R P 516). (3-6) Cr. 6. S. Prereq: C R P 301

Principles of urban design and their application to residential and commercial development in studio projects.

C R P 417: Urban Revitalization

(Dual-listed with C R P 517). (3-0) Cr. 3. Alt. S., offered odd-numbered years.

Prereq: Junior classification

Planning methods available to further revitalization and preservation efforts, with particular attention to housing and neighborhoods. Relationship between neighborhood change and urban development process; public policy implications.

C R P 429: Planning in Developing Countries

(Dual-listed with C R P 529). (3-0) Cr. 3. F.S.

Introduction to issues in planning and governance in an international setting. Problems and strategies may include population movement and change, economic globalization, urban growth, rural development, and housing.

C R P 432: Community Planning Studio

(1-6) Cr. 4-6. F.S.

Prereq: C R P 201, C R P 301, C R P 383, or permission of instructor. Integration of planning methods and theory in dealing with a community planning problem. Analysis of problem and formulation of strategies for

C R P 435: Planning in Small Towns

(Dual-listed with C R P 535). (3-0) Cr. 3. Alt. F., offered even-numbered years.

implementation. Preparation of a community planning report.

Prereq: Junior classification

Contemporary planning problems in small towns and the design of viable strategies to enhance their social and economic position in today's society.

C R P 436: Community Economic Development

(Dual-listed with C R P 536). (3-0) Cr. 3. Alt. F., offered odd-numbered years.

The nature and process of economic development in the context of community development. Recent changes and trends and their implications for local and regional development. Selected case studies and applications. Contemporary community economic development issues.

C R P 442: Site Development

(Dual-listed with C R P 542). (3-0) Cr. 3. S.

Introduction to site development including site review. Studio project integrating concept, finance, selection, analysis, and design.

C R P 445: Transportation Policy and Planning

(Dual-listed with C R P 545). (3-0) Cr. 3. F.

Prereq: Junior classification; CRP 545 prerequisite: Graduate classification Comprehensive overview of key policy issues related to transportation planning and investment in the United States and abroad. Policy issues explored include safety, environmental impact, sustainable communities, and economic development. Policy analysis and planning are studied in conjunction with each policy issue explored. Issues of concern to state, metropolitan, and local governments.

C R P 450: Geodesign

(3-0) Cr. 3. S.

Prereq: CRP 251 or equivalent or permission of the instructor This course provides an opportunity for students to learn about the fundamental concepts of Geodesign. Geodesign focuses on using a set of techniques and technologies, which can enable stages of project conceptualization, data collection and visualization, spatial analysis, design creation, simulation and stakeholders participation and collaboration. Students read articles discussing Geodesign and watch lectures and presentations given at Geodsign Summits in the USA and Europe. They study applications and study cases in which Geodesign was used and applied. They select a study case and work in interdisciplinary teams to apply learned theoretical Geodesign methodologies and approaches. Students may use any GIS software, ESRI CityEngine, ESRI GeoPlanner and/or Agent-Based Modeling in their studies of the study case.

C R P 451: Introduction to Geographic Information Systems (2-2) Cr. 3. F.S.SS.

Introduction to geographic information systems, including discussions of GIS hardware, software, data structures, data acquisition, data conversion, data presentation, analytical techniques, and implementation procedures. Laboratory emphasizes practical applications and uses of GIS.

C R P 452: Geographic Data Management and Planning Analysis

(Dual-listed with C R P 552). (2-2) Cr. 3. F.S.

Prereq: C R P 351 or equivalent

Extensive coverage of geo-relational database concept and design, GIS database creation and maintenance, geographic data manipulation and analysis. GIS output generation and geographic data presentation. Laboratory emphasizes practical applications and uses of GIS.

C R P 454: Fundamentals of Remote Sensing

(Dual-listed with C R P 554). (Cross-listed with L A). (3-0) Cr. 3. F. *Prereq: CRP 351 or equivalent or permission of the instructor* Introduction to remote sensing techniques needed for basic analysis of satellite images, including: filtering and conflation techniques, stacking, pan sharpening, image rectification, image enhancement, unsupervised and supervised classification. Practical applications in a variety of topics to understand how to interpret images.

C R P 456: GIS Programming and Automation

(Dual-listed with C R P 556). (2-2) Cr. 3. F.

Prereq: CRP 351 or CRP 551 or NREM 345 or NREM 546 or GEOL 552 Introduction to automated geoprocessing in Geographic Information Systems. Focus on learning scripting language and object-oriented programming, automation of custom-designed geoprocessing scripts, and application toward student research and/or interests.

C R P 458: Web Mapping/GIS

(Dual-listed with C R P 558). (Cross-listed with L A). (2-2) Cr. 3. *Prereq: CRP 451/551, LA 302. GEOL 452/552 or instructor permission.* Use and development of online mapping tools to support participatory GIS, Volunteered Geographic Information, information sharing, geodesign and decision making actions. Geoprocessing and Web Scripting/coding and user interface design. Laboratory emphasis practical applications and uses of Web GIS.

C R P 459: Digital Design Methods for Landscape Architecture

(Dual-listed with C R P 559). (Cross-listed with L A). (3-0) Cr. 3. S. Introduction to digital tools used by landscape architects for design communication, visualization, and design development. Include 2D drafting, 3D modeling, image CAD, geospatial data handling (GIS), and animation. Emphasis on concepts and workflow interoperability.

C R P 460: Social Justice and Planning

(Dual-listed with C R P 560). (3-0) Cr. 3. Alt. S., offered even-numbered years.

Investigation of the topic of social justice as it relates to the challenge of planning more socially just urban societies, emphasizing the importance of social justice issues to planning in a globalized world. Includes a range of issues and case studies of local social justice initiatives, both US and global. Students will complete individual service learning projects as part of the course requirement.

C R P 475: Grant Writing

(Dual-listed with C R P 575). (1-0) Cr. 1. F.

A short introduction to effective grant writing for the public and nonprofit sectors. Includes identifying appropriate funding sources for an organization, identifying goals and objectives, and budgeting.

C R P 479: Public Finance and Planning

(Dual-listed with C R P 579). (3-0) Cr. 3. S.

Effective management of state and local government finance critical to successful community and regional planning. Economic concepts, topics in budgeting, revenue, expenditure, and financing, analytical techniques, economic impact, and case studies. Understanding of economic assessment in planning and understanding of various linkages between planning and public finance.

C R P 484: Sustainable Communities

(Dual-listed with C R P 584). (Cross-listed with ENV S). (3-0) Cr. 3. S. *Prereq: Junior classification*

The history and theory of sustainable community planning. Procedural and substantive dimensions. Case studies of communities engaged in sustainability planning. Use and development of indicators.

C R P 490: Independent Study

Cr. 1-3. Repeatable. F.S.SS.

Prereq: Written approval of instructor and department chair on required form Investigation of an approved topic commensurate with student's interest and ability. Offered on a satisfactory-fail basis only.

C R P 490H: Independent Study: Honors

Cr. 1-3. Repeatable. F.S.SS.

Prereq: Written approval of instructor and department chair on required form Investigation of an approved topic commensurate with student's interest and ability. Offered on a satisfactory-fail basis only.

C R P 491: Environmental Law and Planning

(Dual-listed with C R P 591). (Cross-listed with ENV S, L A). (3-0) Cr. 3. S. *Prereq:* 6 credits in natural sciences

Environmental law and policy as applied in planning at the local and state levels. Brownfields, environmental justice, water quality, air quality, wetland and floodplain management, and local government involvement in ecological protection through land use planning and other programs.

C R P 492: Planning Law, Administration and Implementation (3-0) Cr. 3. F.

Prereq: Junior classification

The basis in constitutional, common, and statutory law for the powers of plan implementation. Problems of balancing public and private interests as revealed in the study of leading court cases. Administration of planning agencies and programs.

C R P 494: Senior Seminar in Planning

Cr. 1-3. Repeatable, maximum of 2 times. F.S. *Prereq: Senior classification*

An advanced forum for seniors that focuses upon recent trends and important issues affecting planning today. Topics addressed will vary. A demonstration of understanding of current issues and their effects upon planning applications is expected.

Courses primarily for graduate students, open to qualified undergraduates:

C R P 510: Professional Work Experience

Cr. R. F.S.SS. Prereq: Permission of department chair Approved professional work experience.

C R P 516: Urban Design and Practice

(Dual-listed with C R P 416). (3-6) Cr. 6. S. *Prereq: C R P 301*

Principles of urban design and their application to residential and commercial development in studio projects.

C R P 517: Urban Revitalization

(Dual-listed with C R P 417). (3-0) Cr. 3. Alt. S., offered odd-numbered years.

Prereq: Junior classification

Planning methods available to further revitalization and preservation efforts, with particular attention to housing and neighborhoods. Relationship between neighborhood change and urban development process; public policy implications.

C R P 519: Middle Eastern Cities

(Cross-listed with ARCH). (3-0) Cr. 3.

Prereq: Graduate or Senior classification

Introduction to basic academic writings on Middle Eastern cities in addition to other contemporary cultural productions of the region. Study of various aspects of Middle Eastern life and the built environments that this life produces.

Meets International Perspectives Requirement.

C R P 529: Planning in Developing Countries

(Dual-listed with C R P 429). (3-0) Cr. 3. F.S.

Introduction to issues in planning and governance in an international setting. Problems and strategies may include population movement and change, economic globalization, urban growth, rural development, and housing.

C R P 530: Practicum

Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

Prereq: Graduate classification in Community and Regional Planning Practical planning experience. Structured work in range of tasks under close supervision of a professional planner. Relationships between theory and practice, exposure to variety of roles in functioning specialties. Offered on a satisfactory-fail basis only.

C R P 532: Community Planning Studio

(3-6) Cr. 4-6. F.

Prereq: C R P 564 or equivalent

Comprehension and analysis of various geographic contexts pertinent to community planning and the use of planning theory, tools and techniques in an applied setting. Process of making a community plan: historical patterns, current conditions and strategies for planning.

C R P 535: Planning in Small Towns

(Dual-listed with C R P 435). (3-0) Cr. 3. Alt. F., offered even-numbered years.

Prereq: Junior classification

Contemporary planning problems in small towns and the design of viable strategies to enhance their social and economic position in today's society.

C R P 536: Community Economic Development

(Dual-listed with C R P 436). (3-0) Cr. 3. Alt. F., offered odd-numbered years.

The nature and process of economic development in the context of community development. Recent changes and trends and their implications for local and regional development. Selected case studies and applications. Contemporary community economic development issues.

C R P 542: Site Development

(Dual-listed with C R P 442). (3-0) Cr. 3. S.

Introduction to site development including site review. Studio project integrating concept, finance, selection, analysis, and design.

C R P 545: Transportation Policy and Planning

(Dual-listed with C R P 445). (3-0) Cr. 3. F.

Prereq: Junior classification; CRP 545 prerequisite: Graduate classification Comprehensive overview of key policy issues related to transportation planning and investment in the United States and abroad. Policy issues explored include safety, environmental impact, sustainable communities, and economic development. Policy analysis and planning are studied in conjunction with each policy issue explored. Issues of concern to state, metropolitan, and local governments.

C R P 550: Making Resilient Environments

(Cross-listed with SUS E). (3-0) Cr. 3. S.

Prereq: senior or graduate standing.

Major theories and ideas revolving around the concept of resilience. Assessing the social and political processes associated with policy making for resilience. Application of the concept of resilience in order to understand and evaluate environments. Evaluate the different approaches toward resilience and develop an understanding of the relationship between sustainability and resilience. Case studies of communities that proactively prepare for, absorb, recorver from, and adapt to actual or potential future adverse events.

C R P 551: Introduction to Geographic Information Systems

(2-2) Cr. 3. F.S.SS.

Introduction to geographic information systems, including discussions of GIS hardware, software, data structures, data acquisition, data conversion, data presentation, analytical techniques, and implementation procedures. Laboratory emphasizes practical applications and uses of GIS.

C R P 552: Geographic Data Management and Planning Analysis

(Dual-listed with C R P 452). (2-2) Cr. 3. F.S.

Prereq: C R P 351 or equivalent

Extensive coverage of geo-relational database concept and design, GIS database creation and maintenance, geographic data manipulation and analysis. GIS output generation and geographic data presentation. Laboratory emphasizes practical applications and uses of GIS.

C R P 553: Analytical Planning/GIS

(2-2) Cr. 3. F.

Prereq: C R P 451/C R P 551

Integration of exploratory, participatory and predictive spatial analyses and 3D visualization into the planning process. GIS tools and techniques are used to automate decision analysis and facilitate future planning in analyzing and visualizing planning actions. Laboratory emphasizes practical uses of GIS tools and techniques.

C R P 554: Fundamentals of Remote Sensing

(Dual-listed with C R P 454). (Cross-listed with L A). (3-0) Cr. 3. F. *Prereq: CRP 351 or equivalent or permission of the instructor* Introduction to remote sensing techniques needed for basic analysis of satellite images, including: filtering and conflation techniques, stacking, pan sharpening, image rectification, image enhancement, unsupervised and supervised classification. Practical applications in a variety of topics to understand how to interpret images.

C R P 556: GIS Programming and Automation

(Dual-listed with C R P 456). (2-2) Cr. 3. F.

Prereq: CRP 351 or CRP 551 or NREM 345 or NREM 546 or GEOL 552 Introduction to automated geoprocessing in Geographic Information Systems. Focus on learning scripting language and object-oriented programming, automation of custom-designed geoprocessing scripts, and application toward student research and/or interests.

C R P 558: Web Mapping/GIS

(Dual-listed with C R P 458). (Cross-listed with L A). (2-2) Cr. 3. *Prereq: CRP 451/551, LA 302. GEOL 452/552 or instructor permission.* Use and development of online mapping tools to support participatory GIS, Volunteered Geographic Information, information sharing, geodesign and decision making actions. Geoprocessing and Web Scripting/coding and user interface design. Laboratory emphasis practical applications and uses of Web GIS.

C R P 559: Digital Design Methods for Landscape Architecture

(Dual-listed with C R P 459). (Cross-listed with L A). (3-0) Cr. 3. S. Introduction to digital tools used by landscape architects for design communication, visualization, and design development. Include 2D drafting, 3D modeling, image CAD, geospatial data handling (GIS), and animation. Emphasis on concepts and workflow interoperability.

C R P 560: Social Justice and Planning

(Dual-listed with C R P 460). (3-0) Cr. 3. Alt. S., offered even-numbered years.

Investigation of the topic of social justice as it relates to the challenge of planning more socially just urban societies, emphasizing the importance of social justice issues to planning in a globalized world. Includes a range of issues and case studies of local social justice initiatives, both US and global. Students will complete individual service learning projects as part of the course requirement.

C R P 561: Planning Theory

(3-0) Cr. 3. S.

Use and development of theory/action relationship in planning practice. Competing normative theories of planning and their evolution, key components and fundamental critiques. Exploration of planning frameworks and approaches, including comprehensive planning; incrementalism; advocacy; communicative rationality; and others.

C R P 563: Planning the American Metropolis

(3-0) Cr. 3. F.

Focus on the historical role of planning in the shaping of American cities and regions, from the beginning of the Republic to the present. Examine the legacy of planning by exploring the intersection of design, politics and policy. Investigate the factors and the processes that produce the built environment.

C R P 564: Introduction to Analytical Methods for Planning (3-0) Cr. 3. F.

Applications of analytical methods in planning with emphasis on the collection, description, analysis, presentation, and interpretation of planning data. Introduction to descriptive statistics. Sources of planning information and data including primary and secondary data types and sources. Demographic analysis, population projection techniques for planning at local and regional levels.

C R P 566: Policy Analysis and Planning

(3-0) Cr. 3. F.

Principles and methods for analyzing community problems and policies including forecasting, efficiency and equity measures, cost/benefit, political feasibility, and sensitivity analysis. Examination of social, political, economic, and environmental values and their manifestation in decision making methods used in planning. Application of tools used to analyze planning problems, project evaluation and public policies.

C R P 568: Planning and Development

(3-0) Cr. 3. S.

Prereq: C R P 564 or equivalent

Exploration and evaluation of the techniques, processes, and professional skills required to effectively manage land use change at various scales. Land classification systems; land supply and needs inventory for residential uses and commercial and employment centers; capacity and needs analysis for public infrastructure. Includes land use planning project(s) designed to apply the methods explored in this and other courses.

C R P 575: Grant Writing

(Dual-listed with C R P 475). (1-0) Cr. 1. F.

A short introduction to effective grant writing for the public and nonprofit sectors. Includes identifying appropriate funding sources for an organization, identifying goals and objectives, and budgeting.

C R P 579: Public Finance and Planning

(Dual-listed with C R P 479). (3-0) Cr. 3. S.

Effective management of state and local government finance critical to successful community and regional planning. Economic concepts, topics in budgeting, revenue, expenditure, and financing, analytical techniques, economic impact, and case studies. Understanding of economic assessment in planning and understanding of various linkages between planning and public finance.

C R P 584: Sustainable Communities

(Dual-listed with C R P 484). (3-0) Cr. 3. S.

Prereq: Junior classification

The history and theory of sustainable community planning. Procedural and substantive dimensions. Case studies of communities engaged in sustainability planning. Use and development of indicators.

C R P 590: Special Topics

Cr. 1-3. Repeatable. F.S.SS.

Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590A: Special Topics: Planning Law, Administration and Implementation

Cr. 1-3. Repeatable. F.S.SS.

Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590B: Special Topics: Economic Development

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590C: Special Topics: Urban Design

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590D: Special Topics: Housing and Urban Revitalization

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590H: Special Topics: Environmental Planning

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 5901: Special Topics: Land Use and Transportation Planning

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590N: Special Topics: International Planning

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 5900: Special Topics: Spatial Analytical Methods

Cr. 1-3. Repeatable. F.S.SS.

Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590P: Special Topics: Planning in Small Towns

Cr. 1-3. Repeatable. F.S.SS.

Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590Q: Special Topics: Diversity and Equity in Planning

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 590R: Special Topics: Geographic Information Systems

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification and written approval of instructor and department chair on required form

C R P 591: Environmental Law and Planning

(Dual-listed with C R P 491). (Cross-listed with L A). (3-0) Cr. 3. S. *Prereq:* 6 credits in natural sciences

Environmental law and policy as applied in planning at the local and state levels. Brownfields, environmental justice, water quality, air quality, wetland and floodplain management, and local government involvement in ecological protection through land use planning and other programs.

C R P 592: Land Use and Development Regulation Law

(3-0) Cr. 3. F.

An in-depth analysis of the legal constructs that shape the practice of planning and plan implementation in the United States. An exploration of how land use regulations are applied to reconcile the competing needs and diverse uses of land. The positive and negative consequences of developing and implementing regulatory controls will be addressed.

C R P 595: Seminar in GIS Applications/Research

(1-0) Cr. 1. F.S.

Prereq: 9 credits in GIS Certificate program

Discussion and demonstration of current GIS applications and research in multiple disciplines. Offered on a satisfactory-fail basis only.

C R P 599: Professional Planning Report

Cr. arr. Repeatable. Independent planning project with practical application, including research element.

Courses for graduate students:

C R P 698: Capstone Studio

(1-6) Cr. 4. S. *Prereq: Permission of instructor.* Synthesis and integration of core planning knowledge into professional work in a team setting.

C R P 699: Research

Cr. arr. Repeatable.