URSP 102. Introduction to Human Geography. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An introduction to human geography from a global perspective, emphasizing settlement patterns, human-environment interactions, cultural variations, political transitions and population change in the global economy.

URSP 108. Uncovering Richmond. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An introduction to the dramatic changes Richmond has undergone in recent decades and how those changes mirror trends in cities across the country. The student will discover the role of politics, public safety, education and other important issues in the development of the city through course lectures, readings, discussion and presentations by guest speakers.

URSP 116. Introduction to the City. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduction to the various theories of urbanism and attempt to offer solutions to the problems of urban life in modern civilization. The course will survey the major works of those who have studied cities or offered solutions and alternatives to existing urban structures. The works of noted social reformers, political analysts, economists, and architects as well as urban planners will be examined through lectures, readings, films, slides, discussions and field trips (when feasible).

URSP 120. Urban Issues in Film. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces students to a variety of themes in urban studies through the medium of film. Focusing on a selection of films and related readings, the course exposes students to critiques of the socioeconomic, historical, political and structural aspects of cities and regions.

URSP 203. Physical Geography: Weather, Climate and Biogeography. 3 Hours.
Semester courses; 3 lecture hours. 3 credits. Analysis of the interrelated systems of the earth. Content includes the earth in space, atmosphere, climate and vegetation.

URSP 204. Physical Geography: Geomorphology and Soils. 3 Hours.
Semester courses; 3 lecture hours. 3 credits. Analysis of the interrelated systems of the earth. Content includes earth materials, tectonics, weathering, erosion, landforms and soils.

URSP 245. Housing and Community Revitalization. 3 Hours.
Semester course; 3 lecture hours. 3 credits. The purpose of this course is to examine housing issues as a major determinant of the make-up and the quality of community life in modern American society. Attention is given to the public and private forces that influence various components of the housing issue, such as: demand for housing; housing availability to various economic and social groups; housing design and quality (including new construction, rehabilitation, historic preservation, and adaptive re-use), housing finance and the relationship of housing to planning in metropolitan areas.

URSP 261. Design of the City. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Architecture, space and activities play a special role in the overall design of the city. These elements are analyzed to understand their interrelationships and importance to a city's visual character. Architectural styles, civic art, effects of space on the individual and methods for designing cities will be discussed. The class is for those who want to understand urban design elements and for those who will be involved in city design.

URSP 303. World Regions. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An examination of the various regions of the earth, including land forms, climate, resources, peoples, agriculture and urban conditions. Regions to be selected each semester from Anglo-America, Latin America, western Europe, Eastern Europe, the former USSR, Middle East and North Africa, Africa (south of the Sahara), Indian subcontinent, China, Japan, Southeast Asia, and Oceania. May be taken only once for credit. Crosslisted as: INTL 303.

URSP 304. Urban Social Systems. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A study of the growth and development of neighborhoods, cities and metropolitan systems. Analyzes origins of community interests and factors that affect the ability of communities to further their interests. Particular attention is given to how patterns of service delivery and the placement of public facilities affect community interest and whether federal or municipal departments are able to set adequate community service standards.

URSP 306. Economic Geography. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Explores the workings of regional economies through analysis of industries and occupations. Studies the reasons for variation in regional economic characteristics and examines policies and strategies for enhancing regional economic conditions. Course relies heavily on the use of Microsoft Excel; proficiency with using this program is required.

URSP 310. Introduction to Urban and Regional Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: URSP 116 or permission of instructor. Introduction to the theory and practice of governmental planning in the U.S. with emphasis on urban and regional planning. Surveys the history of planning, current planning practice and the ethical responsibilities of planners.

URSP 312. History of Human Settlement. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A cultural and historical geography of human migration and settlement over the earth. Topics may include agricultural and urban systems, exploration, colonization and imperialism, and changing relationships with the environment, during and since the Middle Ages. Crosslisted as: ANTH 312.

URSP 313. Research and Field Methods in Urban and Regional Studies. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: STAT 210. Introduces students to a variety of field and research techniques used to gather and analyze information to study urban and regional issues. Key topics include designing a research project, developing and implementing surveys, conducting focus groups and observation, analyzing data statistically, interpreting and reporting results, and utilizing secondary information.

URSP 315. The Evolution of American Cities. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A general survey of how cities developed in the United States and the factors that contributed to the process of urbanization. Emphasis is placed on the public attitudes and values that have dominated particular periods of history and how these values affected the efforts to urbanize. The American city is examined as a vital force in the economic, social and political development of modern America, as the major location for conflict between people of all persuasions, and as the home of much of what is meant by American "civilization."
URSP 316. Urban Life in Modern America. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Restricted to nonmajors. Examines how a modern city functions, the public services rendered within the city and the impact of public policy on the city. The city is treated as a system consisting of economic, social and political activities that influence and are influenced by the physical/demographic environment. Each activity is studied separately with the cause-effect relationships among the activities highlighted by an analysis of public service delivery and, more generally, urban public policy.

URSP 321. Urban Economics. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: ECON 203 with a minimum grade of B or ECON 210. An introduction to urban economics, with an emphasis on the economics of agglomeration and the role of externalities in the urban economy. Economic analysis of the provision of urban public services and urban public financing, especially in politically fragmented areas. Crosslisted as: ECON 321.

URSP 322. Urban Finance. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: GEOG/URSP 306. Treats the local government from a practical management perspective as an organization in a political-economic environment. The nature of city expenditures and sources of revenues are explored. Budgeting and taxing decision-making processes are explored in depth. Economic impacts of these decisions on citizens are analyzed and implications for practice drawn.

URSP 331. Geography of Latin America and the Caribbean. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines the physical and human geography of Latin America and the Caribbean from an interdisciplinary perspective. A systems approach is used to concentrate on particular topics, themes and patterns that have broader relevance to the overall region or subregions (e.g. Central America, the Lesser Antilles, the Andes, Amazonia) rather than on the details of each country. However, in relation to some topics, case studies are used that may focus on a particular country.

URSP 332. Environmental Management. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: URSP 204. An interdisciplinary review of domestic and international environmental problems and their underlying causes, current management frameworks, alternative management approaches and strategies, and barriers to their implementation. Other topics include: environmental history and economics, population growth, natural resources use, biodiversity, pollution. Crosslisted as: ENVS 332.

URSP 333. Geography of Africa. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A study of the land forms, climate, peoples, livelihoods, settlement patterns and cultural groupings of sub-Saharan Africa. Crosslisted as: AFAM 333/INTL 333.

URSP 334. Regional Geography of ____. 3 Hours.
Semester course; 3 lecture hours. 3 credits. A study of the land forms, climate, resources, peoples, agricultural and urban conditions in a specific region such as North America, Europe, Latin America, the Middle East and India, the USSR and Eastern Europe. See the Schedule of Classes for specific region to be studied each semester. Crosslisted as: INTL 334.

URSP 340. World Cities Outside of North America. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An examination of urban habitats in a variety of geographical regions with emphasis on their differences and their common experiences. Crosslisted as: INTL 340.

URSP 350. Great Cities of the World. 3 Hours.
Semester course; 3 lecture hours. 3 credits. May be repeated under different topics for a total of 6 credits. Enrollment restricted to students with sophomore standing or with permission of instructor. An interdisciplinary course with a focus on the origin, expansion and significance of one or more cities, the specifics of its/their culture and the role of language. Particular emphasis will be placed on relating the physical, social and economic aspects of the city's growth and development to the cultural expression of urbanism. Crosslisted as: FRLG 345/INTL 345.

URSP 360. Community and Regional Analysis and GIS. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces students to the core functions and applications of geographic information systems. Trains students in the management, modeling, analysis and visualization of urban and regional georeferenced data. The GIS techniques covered include the classification and symbolization of geographic features, data querying, table and spatial joining, spatial selection, projections, creation and editing of spatial features, geocoding, spatial analysis, and mapping.

URSP 391. Special Topics in Urban Studies. 1-3 Hours.
Semester course; 1, 2 or 3 credits. Prerequisite: because of the changing subject matter to be treated in this course, permission of the instructor is required. Students will have an opportunity to examine in detail some questions of significance. See the Schedule of Classes for the specific topic to be offered each semester.

URSP 392. Independent Study. 1-3 Hours.
Semester course; 1-3 lecture hours. 1-3 credits. Prerequisite: junior or senior standing is required. Under supervision of a faculty adviser, who must approve the student taking the course, a student studies a topic of interest.

URSP 397. Independent Study. 2-3 Hours.
Semester courses; 2 or 3 lecture hours. 2 or 3 credits. Prerequisite: junior or senior standing is required. Under supervision of a faculty adviser, whose consent is required to register, study a topic of concern to the student. Examines the role of cities in development of a variety of geographical regions outside of North America.

URSP 398. Independent Study. 2-3 Hours.
Semester courses; 2 or 3 lecture hours. 2 or 3 credits. Prerequisite: junior or senior standing is required. Under supervision of a faculty adviser, whose consent is required to register, study a topic of concern to the student. Examines the role of cities in development of a variety of geographical regions outside of North America.

URSP 413. Policy Implementation. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An examination of the administrative setting of government and its policy impacts on public programs, policy design and redesign, and evaluation and monitoring.

URSP 425. Labor, Employment and Regional Development. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines the role of employment and the workforce in regional development from social, economic and geographic perspectives. Explores the factors impacting U.S. employment patterns, such as the green economy, immigration and technological change, and their implications for workers and regional economies. Also examines policy approaches to address labor and workforce issues with special consideration of disadvantaged groups and communities.
URSP 428. Land Use and Infrastructure Planning. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisite: URSP 310.  
Explores how the integration of land use, transportation and other  
infrastructures (e.g., water supply, waste water and storm water) in urban  
and regional planning can improve development patterns to ensure  
sustainability and livability. Examines specific professional planning  
techniques such as site plan review, subdivision permitting and capital  
 improvements planning.

URSP 440. Senior Capstone Seminar in Urban and Regional Studies. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisites: URSP 310 and  
URSP 313. Enrollment also restricted to students with senior standing.  
Requires students to synthesize knowledge gained in previous major  
courses and apply it through one or more field-based exercises. Also  
examines issues related to career planning.

URSP 461. Applied Planning Studio. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Prerequisites: all core  
courses in the urban and regional studies program. Applying the  
principles and theories of urban studies, students work as a group in the  
preparation of a plan to address a real community problem.

URSP 502. Global Economic Change and Development. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Enrollment requires  
permission of instructor. Explores the factors, both historical  
and contemporary, that have influenced the socioeconomic and  
environmental characteristics of national and subnational regions, mainly  
in the developing world. Analyzes development problems and strategies  
from various theoretical perspectives and examines the impacts of policy  
and planning interventions on regional conditions.

URSP 517. Historic Preservation in Planning. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. The course surveys  
the process of historic preservation that includes the evaluation of  
sites, identification of architectural styles, the adaptive use of sites  
and structures, and the various sources available for implementing  
preservation proposals in government or the private sector. Preservation  
is considered as a tool in the planning process; and its application to  
neighborhoods, downtowns, and other city districts is considered.

URSP 520. Park Planning. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Explores the general  
approaches and strategies for planning recreation areas and facilities.  
Topics include specific principles of design relating to outdoor recreation  
facilities; standards relative to space requirements, locations and  
programs; and trends in site design and planning.

URSP 521. Introduction to Geographic Information Systems. 3 Hours.  
Semester course; 2 lecture and 2 laboratory hours. 3 credits. An  
introduction to creating and using geographically referenced databases  
for urban and environmental analysis and planning. Includes geographic  
and remote sensing data structures, global positioning systems, spatial  
analysis, geographic data standards, public domain software and data  
resources, and principles of cartography design. Lab exercises in the  
use of geographic information systems software tools. Crosslisted as:  
ENVS 521.

URSP 525. Site Planning and Graphics. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Addresses the environmental  
impacts and capacity of environmental systems in relation to the site  
requirements of various urban and rural situations. Introduces the use of  
graphics as an aid in presenting and analyzing planning and design ideas,  
maps and plans.

URSP 541. Urban Public Policy-making Processes. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Discusses the politics  
of urban life. Examines the physical, demographic and economic  
environments in which conflict resolution occurs, as well as the actors on  
the local, state and federal levels that participate in the political process.

URSP 545. Sustainable Energy Policy and Planning. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Discusses current energy  
production and consumption trends and related economic, environmental  
and social issues. Reviews energy planning and policy approaches from  
the international to local levels. Analyzes and evaluates different types of  
energy systems and existing and proposed energy policies.

URSP 557. The American Suburb. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Provides students with an  
understanding of the suburban movement in America, the elements of  
suburban growth and an awareness of current and emerging approaches  
to suburban planning and design. Includes neotraditional design, transit  
oriented development, new urbanism and master planned communities. A  
working knowledge of the U.S. Census is needed for some assignments.

URSP 591. Special Topics in Urban and Regional Studies and Planning.  
1-3 Hours.  
Semester course; 1-3 lecture hours. 1-3 credits. May be repeated for  
credit. Students will have an opportunity to examine in detail some  
questions of significance in the field of urban and regional studies and/or  
planning. See the Schedule of Classes for the prerequisites and specific  
topics to be offered each semester.

URSP 605. Urban Planning History. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Discusses the historical  
context of planning solutions to contemporary urban problems by  
examining the rich planning tradition since the mid-nineteenth century  
in the U.S. Significant plans, people and movements in the history  
of planning are discussed in relation to the evolving traditions of the  
profession.

URSP 610. Introduction to Planning. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Introduces students to the  
planning profession. Provides an overview of the urban system and the  
history of planning, and covers the basics of comprehensive planning,  
including the context, process, agents, methods, components, and  
implementation. Prepares students for taking more specialized planning  
courses by introducing the sub-areas of planning, such as transportation  
planning, land use planning, environmental planning, housing, and urban  
design.

URSP 611. Principles of Urban Design. 3 Hours.  
Semester course; 3 lecture hours. 3 credits. Principles of urban design  
at the micro- and macro-scale. Expression of planning objectives in  
physical design, with emphasis on the relationship between urban design  
at various scales and the needs of individuals and groups.

URSP 621. Introduction to Geographic Information Systems. 3 Hours.  
Semester course; 2 lecture and 2 laboratory hours 3 credits. Introduces  
the components, capabilities, and functionalities of Geographic  
Information Systems. In addition to the concepts upon which GIS is  
based, how it works and what it does, this course introduces cartographic  
techniques necessary to design and construct effective maps with  
an emphasis on thematic mapping. It also examines the processing,  
compilation and symbolization of spatial data and the application of  
related analytical techniques. Laboratory work emphasizes practical  
applications and uses of ArcGIS and the spatial analyst extension.
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URSP 622. Community Socioeconomic Analysis Using GIS. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Introduces students to data sources and database management for community analysis using geographic information systems. Includes an overview of database structures, public domain software and data resources, descriptive statistical analysis, population projection, graphic presentation of data, and principles of cartographic design. Laboratory exercises using GIS software and public domain data to describe communities and identify planning issues. Laboratory work emphasizes practical applications and uses of ArcGIS.

URSP 623. Research Methods for Government and Public Affairs. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduction to the scope and methods of applied research for the public sector. Focuses on problem structuring through logical methods, exploring problems through observation and other methods of data collection, analyzing and summarizing findings using both qualitative and quantitative methods. Crosslisted as: GVPA 623/URSP 623/CRJS 623.

URSP 625. Spatial Database Management and GIS Modeling. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: URSP 621 or 622, or permission of the instructor. Introduces principles and applications of Geographic Information Science and GIS to transportation. Students discuss the fundamental scientific principles of capturing, representing, integrating, processing and analyzing digital geographic information about transportation infrastructure and systems. Concentrates on the applications of GIS-T software, tools and related technologies to transportation planning, intelligent transportation systems, environmental and hazards analysis and logistics.

URSP 626. Transportation Analytics and Modeling. 3 Hours.
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Introduces conventional travel demand forecasting techniques, i.e., the Urban Transportation Modeling System. UTMS typically consists of trip generation, trip distribution, mode choice and trip assignment. Land-use modeling and post-processing procedures will also be introduced. Additionally, other latest modeling developments, such as activity/tour-based modeling, 4D post-processing and land use/transportation integration models will also be explored. Case studies of the Virginia Transportation Modeling and its Cube Voyager applications are included.

URSP 627. GIS Applications in Urban Design. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: URSP 621 or 622, or permission of the instructor. Covers GIS tools and techniques in relation to 3D visualization, decision analysis, program evaluation and Internet-GIS. Emphasizes the integration of exploratory/predictive spatial analyses and 3D visualization into the decision-making process. GIS tools and techniques are used to automate decision analysis and facilitate future visioning in analyzing and visualizing decision actions. Laboratory work emphasizes practical applications and uses of ArcGIS, ArcIMS and the Scenario 360 software suite.

URSP 628. Land Use Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces students to the context, substance, practical skills, and implementation of land use planning. Covers such topics as land capacity, land use system and design, land use controls, state and regional growth management, resource land preservation, rural growth management, urban containment, and facility planning.

URSP 630. Strategic Planning and Management in the Public Sector. 3 Hours.
3 lecture hours. 3 credits. Explores the benefits and limitations of strategic planning and management in the public sector, examines approaches to strategic management, especially in terms of the role and behavior of top management, and provides an introduction to the analytic and process methods used in strategic planning and management. Crosslisted as: PADM 630.

URSP 632. Planning Theory and Processes. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines major traditions in the theory of planning in the context of actual planning processes and outcomes. Explores in depth the political, economic, and institutional constraints to effective planning and plan implementation. Discusses the planners' ethical dilemmas. Crosslisted as: GVPA 632.

URSP 635. Legal and Legislative Foundations of Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Delineates the legal and legislative basis for planning at local, state, and federal levels. Judicial precedents in land use controls and environmental protection are investigated, including private controls, traditional zoning, administration of zoning ordinances, new flexible zoning concepts, development timing and growth controls, exclusionary land use practices, subdivision controls, and eminent domain regulations for environmentally sensitive areas, and environmental review.

URSP 637. Sustainable Community Development. 3 Hours.
Semester course; 3 lecture hours. 3 credits. This course includes both theoretical and practical aspects of sustainable development and its relationship to land-use planning. Through examination of the literature, class discussion, focused exercises and guest speakers, students will develop the skills needed to evaluate and propose activities to plan for sustainable development. The course begins with an overview of the origins and definitions of sustainability and developing operational principles of sustainable development. The three "Es" of sustainability (environment, equity and economics) are then explored and connected to the role of the planner in influencing the balance between these dimensions in practice. A variety of tools and initiatives for sustainable practices are introduced, followed by examination of standards for measuring progress toward sustainable goals. Finally, through the evaluation of case studies and construction of policy recommendations, students will propose guidance for adapting local government function and modifying regulations and policies for implementing and governing sustainable communities.

URSP 641. Citizen Participation and Negotiation. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Studying the theory and practice of citizen participation and negotiation, planners learn to work with citizens in a democratic process while practicing respect for differing views.

URSP 643. Housing Policy. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines federal, state, and local housing policy. Discusses the issues of affordable housing, homelessness, and the private sector's contribution to housing.

URSP 645. Sustainable Energy Planning and Policy. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Discusses current energy production and consumption trends and related economic, environmental and social issues. Reviews energy planning and policy approaches from the international to local levels. Analyzes and evaluates different types of energy systems and existing and proposed energy policies.
URSP 647. Adaptive Reuse of Buildings. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Describes from a public sector perspective identification for new uses, evaluation of benefits and preparation of implementation proposals for recycling older buildings. Discusses methods used to develop the necessary design guidelines as well as analyze these opportunities that can be a catalyst for urban revitalization.

URSP 650. Natural Resources and Environmental Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines key problems and challenges linked to the use and abuse of natural resources, both nationally and globally, through urbanization, agriculture, coastal zone development, waste generation and other human activity. Students explore these problems in terms of the biophysical processes to which they relate, as well as their underlying political-economic and sociocultural causes. Also studied are policy and planning strategies aimed at more efficient and sustainable use of natural resources and the environment.

URSP 651. Transportation Policy and Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Provides an introduction to the urban transportation system. Sets the scene by exploring core concepts, providing an overview of passenger and freight movements in the urban context, describing the history of transportation and urban form and assessing the likely impact of information technology on travel patterns and urban form. Introduces the urban transportation planning process and contemporary trends in this process, places the planning process within the political context and provides an overview of the use of GIS in transportation planning. Course will also address pressing policy issues such as public transportation, land use/transportation integration, clean vehicles, clean fuels, land use, energy, finance, equity and environmental impacts.

URSP 652. Environmental Analysis. 3 Hours.
Semester course; 1 lecture and 4 laboratory hours. 3 credits. Prerequisite: URSP 650. Familiarizes students with methods to carry out an environmental analysis. Provides a deeper understanding of environmental issues.

URSP 653. Transportation Projects. 3 Hours.
3 credits. Directed-research course in which students will complete a professional transportation project for a local or state government agency or nonprofit organization. For example, students might evaluate the effectiveness of a new high occupancy vehicle/toll lane in northern Virginia; develop an emergency evacuation plan for a small or mid sized city; help a local government evaluate the likely transportation impacts of a new shopping mall; assist a local bus system in the development of more cost-effective transit routes; or finish a traffic-modeling and GIS application project.

URSP 654. Environmental Remote Sensing. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: ENVS 602, or permission of the instructor. This course provides a basic and applied understanding on the use of digital remote sensor data to detect, identify and characterize earth resources. Students are required to demonstrate an understanding of the spectral attributes of soils, vegetation and water resources through various labs involving both image- and non-image-based optical spectral data. Crosslisted as: ENVS 654/BIOL 654.

URSP 655. Environmental Policy and Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Investigates the environmental protection role of urban and regional planning, including the ways in which local planning implements and enforces state- and federal-level environmental policies. Explores the role of planners in environmental assessment, i.e. evaluating the environmental impacts of public and private sector development.

URSP 658. Transportation Finance. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces urban transportation financing principles, procedures and funding mechanisms. Explores existing governmental institutions, intergovernmental relations and laws/regulations pertaining to transportation financing. Also details urban transportation financing procedures, such as fund estimates, Call for Projects, fund programming and contract management, and the auditing process. In particular, the Local Assistance Program and Transportation Improvement Program in the Virginia Department of Transportation will be emphasized. Innovative financing mechanisms and procedures will also be incorporated. More recent state-of-the-practice funding mechanisms used by VDOT will be introduced through guest lectures by VDOT administrators and other practitioners.

URSP 659. Transportation Project Development and Evaluation. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces urban transportation project development and evaluation concepts, principles, methodologies and procedures. Related transportation laws, regulations and guidelines will be covered. Some case studies in the greater Richmond area will also be included to help students understand real-world transportation development and implementation processes.

URSP 662. Foundations for Development Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Introduces public planners to the nature and development of the urban economy. Uses case study analysis of an economy’s industrial structure, labor market, and other features. Considers the roles of public planners in maintaining a healthy economy.

URSP 664. Urban Economic Development Policy. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Prerequisite: URSP 662 or permission of the instructor. Examines the economic development planning and implementation processes through theory and case studies in urban settings. Special topics include economic development institutions and practices, small business development programs, labor force development, community-based development, and sustainable development strategies.

URSP 666. Urban Commercial Revitalization. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Examines renewal of declining commercial areas in cities and towns as tools in the planning process. Discusses and applies through fieldwork, market studies and other analysis methods, strategies for revitalization, public and private project financing and development.

URSP 672. Food Systems, Rural Development and Landscape Conservation. 3 Hours.
Semester course; 3 lecture hours. 3 credits. An interdisciplinary analysis of the socioeconomic and environmental issues facing rural regions, mainly of the United States, and their relationship to the modern food system and other factors. Also examines policy and planning strategies that can help improve rural economic conditions, conserve rural resources and landscapes and achieve food system sustainability.
URSP 681. International Urban Policy and Planning. 3 Hours.
Semester course; 3 lecture hours. 3 credits. Offers a comparative analysis of planning practices and policies in both developing and developed countries. Covers such topics as local implications of globalization, regional development strategies, urban governance and management, urban economic policies, sustainable development and urban infrastructure and shelter delivery.

URSP 691. Topics in Urban and Regional Planning. 1-3 Hours.
Semester course; 1, 2 or 3 credits. Students will have an opportunity to examine in detail some questions of significance in the field of urban and/or regional planning. See the Schedule of Classes for the specific topics to be offered each semester.

URSP 761. Planning Studio. 3 Hours.
Semester course; 1 lecture and 4 laboratory hours. 3 credits.
Prerequisites: All core courses except URSP 762 and 764. Involves students as a group in a community-based planning project.

URSP 762. Professional Plan. 3 Hours.
Semester course; 1 lecture and 4 laboratory hours. 3 credits.
Prerequisites: URSP 761, URSP 797 and permission of instructor.
Requires individual students to apply theory and methodology gained from the core courses to solve selected planning problems. Extended time may be granted with a grade of PR. Final grade of A, B, C, D or F will be awarded upon completion.

URSP 764. Thesis or Projects. 2-6 Hours.
2-6 credits. Prerequisites: Appropriate research methods course, a 3-credit URSP 797 and permission of instructor. Planning, preparation, completion, and presentation of a thesis or project. URSP 764 is an acceptable substitute for URSP 762. Consent of instructor and chair required for this substitution.

URSP 794. Planning Practicum Seminar. 3 Hours.
Semester course; 3 credits. Provides an opportunity for a structured analysis of the student’s internship experience. Professional skills are enhanced through lectures, assignments and discussions.

URSP 797. Directed Research. 1-3 Hours.
1-3 credits. May be repeated for a maximum of 6 credits. Prerequisites: Permission of instructor and graduate standing. Independent research into planning problems, issues, and theories.