DEPARTMENT OF CITY AND REGIONAL PLANNING (GRAD)

Carolina Planning is one of the most established and well-respected planning programs in the country, with an alumni network that spans the globe. Its faculty members, world-class scholars leading cutting-edge research, are redefining the field of planning.

City and regional planning is an interdisciplinary field that seeks to improve the quality of life for people in human settlements. Planners are involved, for example, in forecasting alternative futures of a city or region, guiding the type and location of new development, analyzing transportation systems, encouraging economic development, protecting the environment, mediating diverse interests, and revitalizing urban neighborhoods. They are involved in designing solutions to pressing societal problems such as urban sprawl, unemployment, homelessness, environmental pollution, and urban decay.

City and regional planners work for a variety of public, nonprofit, and private organizations. In the public sector, local, state, and federal governments all employ city and regional planners. In the nonprofit sector, planners work for national, state, and local advocacy groups promoting sustainable development. In the private sector, planners work for development companies and consulting firms.

Two graduate programs are offered in city and regional planning:

The Professional Master's Degree Program

The program leading to the degree of master of city and regional planning prepares the candidate for professional planning practice. The curriculum covers social and institutional problems and provides students with training in planning, public policy research, and management skills.

The Doctoral Program

The doctoral program in planning provides training in research methods, planning theory, and areas of specialization that enable graduates to contribute to the development of substantive theory, knowledge, and scholarship in planning; to formulate and evaluate innovative public policy; and to administer research programs in domestic and international contexts. The program is small but highly selective and individualized. It is ideal for mature students from a variety of backgrounds.

Degrees Offered

The department offers two degrees: the master of city and regional planning (M.C.R.P) and the doctor of philosophy (Ph.D.) in planning. The two-year master's degree program prepares students for the professional practice of planning. The Ph.D. program prepares students for careers in research and university teaching in planning. The two graduate degree programs are largely independent.

City and Regional Planning, Master's Program (M.C.R.P)

The program leading to the degree of master of city and regional planning prepares the candidate for professional planning practice. The curriculum covers social and institutional problems and provides students with training in planning, public policy research, and management skills.

Satisfactory completion of the degree requires completion of a minimum of 51 credit hours, including an area of specialization and a master's project in that area. The normal course load is 12 to 15 credit hours per semester. Thirty-nine of the required 51 credits must be taken in the Department of City and Regional Planning.

Coursework for the degree is divided into core requirements, area of specialization, and electives. Each student is assisted by a faculty advisor in designing an educational program. The advisor helps select courses appropriate for the student's educational interests and goals.

General Course Requirements

All master's degree students are expected to meet certain general course requirements. These consist of courses covering planning theory, urban theory, applied microeconomics, analytical methods, law, and a planning workshop. These basic course topics constitute a core of knowledge and skills necessary to completion of the master's degree program.

The planning theory requirement is met by completing PLAN#704. The analytical methods requirement is met by completing PLAN#720. PLAN#714#fulfills the urban theory requirement. The economics requirement is met by completing PLAN#710. All students are required to take a law course. There are many ways to fulfill this requirement. The department offers PLAN#724#(Law for Planners) once a year. Students should consult their advisors and instructors in other programs (e.g., LAW and MBA) to ensure that they can enroll in specific courses. Students enroll in a planning workshop (PLAN#823) during their second year.

Areas of Specialization

Each student develops an area of specialization in planning in consultation with faculty advisors. The area of specialization identifies the fields of professional practice in which the student expects to develop competence and begin a professional career.

Areas of specialization offered by the department reflect a combination of current practice, employment opportunities, available faculty resources, and longer-term societal needs. As these factors change, specialization content is adjusted. Specialization offers different blends of technical knowledge, planning and management skills, philosophies about the role of the planner, and theories for understanding relevant problems and contexts.

The department offers four specializations associated with professional planning practice. Sustainable and equitable development are overarching concepts for these specializations. Each emphasizes equity, environmental quality, economic viability, and social participation, and grapples with the interconnections among these dimensions.

• Economic development focuses on planning for functional and sustainable regional economies and issues of income and jobs for central city areas.
• Housing and community development is concerned with the supply of affordable housing, the revitalization of urban neighborhoods, project development, and central city redevelopment.
• Land use and environmental planning addresses growth management at the urban and regional scales, environmental management, and policy analysis with emphasis on water resources.
• Transportation planning provides concepts and tools relevant to transportation policy and planning and in-depth knowledge of the reciprocal relationship between transportation decisions and land development.

It is also possible for master’s students in city and regional planning to take additional courses in other University departments. These courses could be part of University-wide programs, such as graduate certificate programs in international development and in geographic information systems, or as part of a program in a given department such as the Department of Public Policy’s minor. Taking a real estate or urban design track within the Department of City and Regional Planning is also an option.

Generally, specialization courses account for 15 credit hours. Thus, in the 51-credit-hour program, about two-thirds of the credits fulfill basic requirements or specialization requirements, while the rest are electives chosen by the student in consultation with faculty advisors.

**General Electives**

Additional courses are required beyond the general required courses and courses in the area of specialization. General electives may be used to

1. complement and support the area of specialization,
2. specialize in another area of professional planning,
3. develop skills in a discipline (e.g., economics, design, management) or another professional program represented on campus (e.g., public administration, health administration, environmental engineering, or business), or
4. develop general competence for professional practice through courses selected both within the department and from the regular offerings of the University.

Up to 12 credits may be taken outside the department.

**Summary of Course Requirements**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Total Credits</th>
<th>Number of Credits That Must Be Taken in DCRP</th>
<th>Number of Credits That Must Be Taken Outside of DCRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Theory</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Urban Spatial Structure</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Economic Theory</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Planning Methods</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Law</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Problem-Solving Workshop</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Area of Specialization</td>
<td>15</td>
<td>12-15</td>
<td>0-3</td>
</tr>
<tr>
<td>Elective/Supporting Courses</td>
<td>15</td>
<td>6-9</td>
<td>9-12</td>
</tr>
<tr>
<td>Masters Project</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Master’s Project**

The required master’s project constitutes original work involving substantial independent research and analysis of a topic related to planning practice. The requirement may be met by a paper of standard format. The requirement can also be fulfilled with a product in some other form, such as a plan or audiovisual presentation. Ordinarily students submit an individually prepared paper. The student submits the paper topic and outline to the director of the student’s focus area. The director approves the topic and assigns a faculty member to serve as major advisor for the project. The student may invite another faculty member to serve as a reader. Both must approve the final project. The project is completed during the final semester in residence and is filed by the department as part of the permanent record of the student’s work.

**Dual-Degree Programs**

**Bachelor (Any Major at UNC) + M.C.R.P.**

Students can complete this dual degree with any major at UNC and can finish both the undergraduate and graduate degrees in as little as 5 years. Students begin taking graduate-level planning courses in their third year at UNC, and also apply for pre-admission to the M.C.R.P. program in their third year at UNC.

To apply to the dual degree program, please contact:

Dr. Roberto Quercia, Director of Undergraduate Studies
Sarah Ward, Student Services Manager

**Master of Environmental Management at Duke + M.C.R.P.**

The dual degree program in environmental management and urban planning is the first of its kind, uniting two top-ranked programs to offer students a unique and highly sought-after mix of skills and knowledge and prepare them for a wide range of exciting careers in the private and public sectors, including environmental policy and finance, renewable energy, and urban sustainability.

Students must apply and be admitted to both the M.C.R.P. program at UNC and the M.E.M. program at Duke (https://nicholas.duke.edu/academics/masters-programs/master-environmental-management/) independently. Students will earn both degrees in three years of study—one year at Duke, one year at UNC—and the third year will be a mix.

For more information:

- [applygp.duke.edu/apply](http://applygp.duke.edu/apply/)
- [admissions@nicholas.duke.edu](mailto:admissions@nicholas.duke.edu)

**Law (J.D.) + M.C.R.P.**

Students may pursue the J.D. and M.C.R.P. degrees together. Taken concurrently, the two degrees may be obtained in four years rather than the five years ordinarily required. The program seeks to develop professionals capable of dealing with both the legal and planning aspects of urban and regional development and policy. Coursework is designed to prepare students for a variety of professional roles in which knowledge of planning methodology and process, coupled with the analytical skills and professional expertise of the lawyer, are essential. Graduates join private law firms, consulting firms, and public legal and planning staffs.

To enter this program, students must apply separately to the School of Law and to the Department of City and Regional Planning, and must be accepted independently by both. Students entering the program spend their entire first year in either the planning department or the law school, and students must make this choice at the time of admission. The second year is normally spent full time in the program not selected in the first year. After the first two years, the student has an additional 43
semester credits to complete in the law school and 12 semester credits to complete in planning.

For more information:
- https://law.unc.edu/admissions/
- law_admissions@unc.edu

Business (M.B.A.) + M.C.R.P.
The Kenan-Flagler Business School and the Department of City and Regional Planning offer a dual-degree program leading to the M.B.A. and M.C.R.P. degrees, usually in three years. The program builds management and planning skills that enable graduates to pursue rewarding, flexible, and socially useful careers in the private, nonprofit, or public sectors. Graduates work in real estate and economic development consulting, financial institutions, and entrepreneurial firms. Increasingly, applicants to the business and planning program want to pursue career paths that combine planning and management and seek the flexibility to move between jobs in the public and private sectors.

To enter this program, students must apply separately to both the Department of City and Regional Planning and the Kenan-Flagler Business School, and must be accepted independently by both. Students entering the program spend their first year in either the planning department or the business school. The second year is spent full time in the other program. In the third year, students take courses in both business and planning. Sufficient electives can be taken in planning and business so that a curriculum can be tailored to each student's career objectives. Admission to the business school is based on demonstrated potential for responsible leadership, the quality of the student's academic transcripts, and the applicant’s score on the Graduate Management Admission Test (GMAT), administered by the Educational Testing Service of Princeton, NJ.

For more information:
- https://www.kenan-flagler.unc.edu/programs/mba/full-time-mba/admissions/
- mba_info@unc.edu

Public Administration (M.P.A.) + M.C.R.P.
This dual-degree program prepares professionals who want the flexibility of moving between planning and management positions in government. The Department of City and Regional Planning and the Public Administration program in the School of Government collaborate to enable students to receive both the M.C.R.P. and the M.P.A. degrees in three years and a summer that includes a professional field experience in public administration.

The intent of the combined program is to ensure that students have two complete and complementary, but distinct, areas of training. The M.P.A. requirements ensure adequate training in public management. The M.C.R.P. requirements ensure adequate training in core planning knowledge and skills, and in an area of planning specialization.

Students must obtain admission to both the M.P.A. and M.C.R.P. programs independently. With prior approval from faculty advisors in both programs, students may then count certain courses toward both degrees. The combined program requires a total of 75 semester credit hours. Students are advised to gain approval from faculty advisors for their specific program of courses during the first semester of residence to ensure that they can meet all requirements of both programs within three years.

For more information:
- Cara Robinson, Director of Admissions, cararob@sog.unc.edu

Public Health (M.P.H.) + M.C.R.P.
The dual degree program between the Department of City and Regional Planning and the Gillings School of Global Public Health (SPH) allows students to connect the public health and urban planning fields through professional training that will encourage greater intersections in professional practice.

To enter these programs, students must apply separately to the Department of City and Regional Planning and the departments in the Gillings School of Global Public Health and must be accepted independently by both. Students entering the program spend their entire first year either in the SPH or the Department of City and Regional Planning. The second year is spent full time in the other program. In the third year, students take both public health and planning courses. Students should be able to complete both programs in three years (instead of four years). At the end of the program students are expected to complete master’s projects or other capstone requirements for each department that demonstrate mastery of the two fields and an understanding of the interconnections between the fields.

For more information:
- https://sph.unc.edu/students/admissions/
- Karla Townley-Tilson, Director of the M.P.H. Program, kttilson@unc.edu

Landscape Architecture at North Carolina State University + M.C.R.P.
The dual-degree program in landscape architecture and planning strengthens the design dimension of the planning curriculum, and creates a venue for working closely with the College of Design at North Carolina State University. The Department of Landscape Architecture offers two graduate program tracks leading to the master of landscape architecture (M.L.A.), both of which emphasize creative problem solving and a long-term commitment to responsible design. The curriculum provides the professional skills needed to deal with the human and natural forces that shape the land. The department is especially concerned with the protection, restoration, enhancement, and regeneration of the natural and cultural environments in urban, rural, and wilderness settings.

To enter this program, students apply to each department separately and must gain admission to both. The amount of time required for the M.L.A. will depend on whether the student is pursuing the First Professional Degree track (82 credits) or Advanced Studies track (42 credits). Usually students will be able to reduce the time needed to attain both the M.C.R.P. and the M.L.A. by about one year by taking coursework in each department that counts toward the other department’s degree program.

For more information:
- https://design.ncsu.edu/landscape-architecture/academics/mla-admissions/
City and Regional Planning, Doctoral Program (Ph.D.)

The doctoral program in planning provides training in research methods, planning theory, and areas of specialization that enable graduates to contribute to the development of substantive theory, knowledge, and scholarship in planning; to formulate and evaluate innovative public policy; and to administer research programs in domestic and international contexts. The program is small but highly selective and individualized. It is ideal for mature students from a variety of backgrounds.

The Ph.D. degree requires a minimum of 36 credits. A master’s degree in planning is not required, although most doctoral students have previous graduate work or work experience in planning or a related field. Students must fulfill four semesters of residence. In practice, doctoral candidates who hold master’s degrees in planning or a related field generally require four semesters of formal course work in residence before beginning the dissertation. Other candidates may require five or more semesters, depending on their preparation.

Each student develops an individualized course of study to reflect a specific area of interest and career aspirations. Areas of specialization and appropriate course work are determined jointly by the student, program advisor and the student’s program committee. Programs are designed to meet the student’s needs and build on prior academic training, for which substantial departmental or University faculty resources are available. Courses in the area of specialization must be mutually reinforcing and coherent; must provide the student for expertise in some body of knowledge, methodology, or problem area; and must provide the student with the appropriate research methods, research design, and knowledge base to do scholarly research. The comprehensive exams, taken at the end of coursework, require knowledge of planning theory, research design, research methods, and the student’s specific area of specialization.

### Course Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAN 805</td>
<td>Theory of Planning II</td>
<td>3</td>
</tr>
<tr>
<td>PLAN 800</td>
<td>Research Design</td>
<td>3</td>
</tr>
<tr>
<td>PLCY 801</td>
<td>Design of Policy-Oriented Research</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 707</td>
<td>Measurement and Data Collection</td>
<td></td>
</tr>
<tr>
<td>EDUC 922</td>
<td>Mixed Methods Research</td>
<td></td>
</tr>
<tr>
<td>SOWO 921</td>
<td>Qualitative Analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alternative course approved by committee</td>
<td></td>
</tr>
<tr>
<td>ANTH 860</td>
<td>Art of Ethnography</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 808</td>
<td>Researching and Writing Lives</td>
<td></td>
</tr>
<tr>
<td>ANTH 809</td>
<td>Ethnographic Methods</td>
<td></td>
</tr>
<tr>
<td>COMP 918</td>
<td>Research Administration for Scientists</td>
<td></td>
</tr>
<tr>
<td>EDUC 830</td>
<td>Field Techniques in Educational Research</td>
<td></td>
</tr>
<tr>
<td>HPM 886</td>
<td>Advanced Health Services Research Methods Applications</td>
<td></td>
</tr>
<tr>
<td>SOCI 761</td>
<td>Questionnaire Design</td>
<td></td>
</tr>
<tr>
<td>SOCI 762</td>
<td>Case Studies in Surveys</td>
<td></td>
</tr>
<tr>
<td>SOCI 814</td>
<td>Comparative and Historical Analysis Exploration</td>
<td></td>
</tr>
<tr>
<td>HBEH 710</td>
<td>Community Capacity, Competence, and Power</td>
<td></td>
</tr>
<tr>
<td>HBEH 754</td>
<td>Advanced Qualitative Research Methods in Health Behavior and Health Research</td>
<td></td>
</tr>
<tr>
<td>EDUC 868</td>
<td>Advanced Qualitative Analysis and Interpretation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alternative course approved by committee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Two courses in quantitative methods</td>
<td>6</td>
</tr>
<tr>
<td>BIOS 662</td>
<td>Intermediate Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>BIOS 664</td>
<td>Sample Survey Methodology</td>
<td></td>
</tr>
<tr>
<td>COMP 755</td>
<td>Machine Learning</td>
<td></td>
</tr>
<tr>
<td>ECON 700</td>
<td>Basic Quantitative Techniques</td>
<td></td>
</tr>
<tr>
<td>ECON 770</td>
<td>Introduction to Econometric Theory</td>
<td></td>
</tr>
<tr>
<td>ECON 771</td>
<td>Econometrics</td>
<td></td>
</tr>
<tr>
<td>ECON 870</td>
<td>Advanced Econometrics</td>
<td></td>
</tr>
<tr>
<td>ECON 873</td>
<td>Microeconometrics</td>
<td></td>
</tr>
<tr>
<td>PLCY 888</td>
<td>Advanced Economic Analysis for Public Policy I</td>
<td></td>
</tr>
<tr>
<td>PLCY 889</td>
<td>Advanced Economic Analysis for Public Policy II</td>
<td></td>
</tr>
<tr>
<td>PLCY 882</td>
<td>Advanced Panel Data Methodology for Public Policy</td>
<td></td>
</tr>
<tr>
<td>HPM 880</td>
<td>Principles of Health Policy Research Methods</td>
<td></td>
</tr>
<tr>
<td>HPM 881</td>
<td>Linear Regression Models</td>
<td></td>
</tr>
<tr>
<td>HPM 882</td>
<td>Advanced Methodology in Health Policy and Management</td>
<td></td>
</tr>
<tr>
<td>HPM 883</td>
<td>Analysis of Categorical Data</td>
<td></td>
</tr>
<tr>
<td>POLI 783</td>
<td>Probability and Statistics</td>
<td></td>
</tr>
<tr>
<td>POLI 784</td>
<td>Regression Models</td>
<td></td>
</tr>
<tr>
<td>POLI 786</td>
<td>Time Series Analysis of Political Data</td>
<td></td>
</tr>
<tr>
<td>SOCI 708</td>
<td>Statistics for Sociologists</td>
<td></td>
</tr>
<tr>
<td>SOCI 709</td>
<td>Linear Regression Models</td>
<td></td>
</tr>
<tr>
<td>SOCI 711</td>
<td>Analysis of Categorical Data</td>
<td></td>
</tr>
<tr>
<td>SOCI 717</td>
<td>Structural Equations with Latent Variables</td>
<td></td>
</tr>
<tr>
<td>SOCI 718</td>
<td>Longitudinal and Multilevel Data Analysis</td>
<td></td>
</tr>
<tr>
<td>SOCI 754</td>
<td>Survey Sampling</td>
<td></td>
</tr>
<tr>
<td>SOWO 916</td>
<td>Structural Equation Modeling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alternative course approved by committee</td>
<td></td>
</tr>
</tbody>
</table>

### Specialization

Courses defined by student with faculty advisor and Program Committee.

### Thesis/Substitute or Dissertation

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAN 994</td>
<td>Doctoral Research and Dissertation</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Hours** 36

**Milestones**

The following list of non-course degree requirements must be completed; view this list of standard milestone definitions (http://catalog.unc.edu/graduate/degree-programs/#milestonetext) for more information.

**Program Conference**

The student, with the help of the faculty advisor, defines an area of specialization, identifies the appropriate research methodology for that area, and works out the program in detail. This means making up a list of the courses for the area of specialization and the research methods area, including when courses will be taken. In selecting appropriate courses, the student and advisor should consult with other relevant faculty members within and outside the department. Upon agreement
by the advisor that the program is ready, the student makes a formal proposal of his or her doctoral program.

Comprehensive Exam Memo
This document is written by the student and reviewed by each committee member and, once agreed upon, signed by the committee chair. The purpose of this memo is to foster an agreement between the student and the committee regarding the scope and details of the student’s comprehensive exam. To that end, the memo will indicate exam dates, time limits for each question, editing schedules, and any other issue the student and faculty may deem necessary. Attached to the memo will be final versions of the reading lists which will have been previously agreed upon by the student and the committee.

Comprehensive Exams
Comprehensive doctoral exams consist of two parts:

1. Written exam (doctoral written examination): The written exam is intended to assess students’ knowledge of the material covered in his or her coursework as well as the application of that knowledge. The inclusion of substantial amounts of material not covered in coursework is discouraged. This exam should not be focused only on the student’s possible dissertation topic, but rather test general knowledge in his or her areas of interest.
2. Oral exam (prospectus oral examination): The oral exam is a forum for the student to further demonstrate synthetic knowledge of specified subject matters and demonstrate readiness for an independent research project.

Proposal Defense
The proposal outlines the student’s plan for his or her final dissertation research. The student must form a committee of faculty to advise, review, and approve the proposal, and ultimately, the final dissertation.

Dissertation Defense
The dissertation defense consists of two parts:

1. Written dissertation document (approved doctoral dissertation)
2. Oral defense (dissertation defense): The oral defense is a forum for the student to discuss the results and implications of his or her research

Recommended Checklist
• Teaching experience: Most Ph.D. students serve as teaching assistants during their time in the program.

Research Programs in Urban and Regional Studies
Through the Center for Urban and Regional Studies, the Water Resources Research Institute, the Carolina Population Center, the Institute for the Environment, the Institute for Economic Development, the Highway Safety Research Center, and members of the faculty, graduate students in the Department of City and Regional Planning and in related departments collaborate on research in a range of subject areas concerning planning, human behavior, and the environment.

Established in 1953 and later expanded under a grant from the Ford Foundation, the program of the Center for Urban and Regional Studies is concerned with theoretical and empirical research in urban processes and area development. The center has a permanent staff for planning and administration of its program and for the development of an interdisciplinary research-oriented program of services to local and state governments in North Carolina and elsewhere. The department’s faculty use the center to pursue research interests and collaborate with faculty members of other University departments on research projects.

In 1964, the Water Resources Research Institute was established to support research on all aspects of water resources, including the planning, programming, and analysis of urban and regional systems for development and control of quantity and quality of water and related land use. The institute serves as a focal point for faculty and student research and interdisciplinary seminars relating to water resources.

The Carolina Population Center (CPC), established in 1966, provides coordination of the interdisciplinary program in population research and training. The center provides population research services to faculty doing research in the social, behavioral, and health sciences in the United States and abroad. Departmental faculty and students are engaged in international research through the CPC.

The Institute for Economic Development was created in 1971 within the Extension Division of the University to sponsor the Basic Economic Development course. Now under the auspices of the Department of City and Regional Planning, the institute promises to strengthen the department's research and teaching mission and to enlarge its service capacity.

The Institute for the Environment is UNC–Chapel Hill's focal point for interdisciplinary environmental research, educational programs, and service activities for faculty, staff, and students. As such, the institute leverages the collective strength of UNC’s environmental expertise to reach beyond campus to develop and implement innovative solutions to the world’s environmental and energy challenges. Its mission is

1. to strengthen environmental research capacity across UNC by supporting a multidisciplinary community of scholars that enhances collaboration, increases sharing of knowledge, and identifies solutions to the world’s critical environmental problems.
2. to work in partnership across UNC and external partners to coordinate and deliver 21st-century educational programs that provide students with the experience and skills to thrive in a growing global economy; and
3. to put new environmental knowledge into action by engaging and serving communities, here in North Carolina and around the world.

The Highway Safety Research Center (HSRC) is dedicated to improving transportation safety, with a major emphasis on highway safety. The center conducts basic and applied research that increases knowledge and contributes to reducing death, injury, and related societal costs. HSRC works to translate developed knowledge into practical interventions that can be applied at local, state, national, and international levels. HSRC conducts research in the three major areas of the highway safety problem: the driver/occupant, the vehicle, and the roadway. HSRC produces guidebooks, brochures, how-to manuals, news releases, public service announcements, and newsletters to communicate highway safety information to research colleagues, safety advocates, government officials, and motorists.

In addition to these activities organized under an institute or center, faculty members are engaged in research projects administered by the department.

Several other facilities in the nearby Research Triangle Park enrich and support the department's teaching and research programs:
The Research Triangle Institute (RTI) is a not-for-profit corporation that conducts research under contract to departments of federal, state, and local governments; public service agencies; foundations; and industry clients ranging from local firms to national corporations. RTI was created as a separately operated affiliate of the three major universities that form the Research Triangle. Initial start-up funding for RTI was provided through a grant from the Research Triangle Foundation. The institute is organized into major groups whose areas of capability span social and economic systems and human resources, statistical sciences, survey research, chemistry and life sciences, energy, engineering, and environmental sciences.

The Environmental Research Center of the U.S. Environmental Protection Agency (EPA), the largest field installation of the EPA, was dedicated in December 1971. Today it is an international center of scientific expertise in environmental research.

The Triangle Universities Center for Advanced Studies, Incorporated (TUCASI) represents an additional effort in the Research Triangle to capitalize on the presence in a small radius of three major doctoral research institutions, their facilities, libraries, and auxiliary resources. TUCASI is a joint activity of the University of North Carolina at Chapel Hill, Duke University in Durham, and North Carolina State University in Raleigh. TUCASI is the parent body that sponsors development of advanced study enterprises on its 120-acre campus within the Research Triangle Park. The center, chartered in 1975, is governed by a board of trustees, representing the constituent universities, the Research Triangle Foundation, and elected members.

The National Humanities Center (NHC) was the first resident activity on the TUCASI campus. The center opened in 1978 as an institute for advanced study in history, literature, philosophy, and other fields of the humanities. Each year, approximately 45 leading scholars from the United States and other nations come to the NHC to pursue individual research and engage in interdisciplinary seminars, lectures, and conferences. Their work results in books, articles, and other contributions to learning. Grants from major foundations, corporations, the National Endowment for the Humanities, the major universities in the Triangle, and individuals support the center’s program funding and administrative costs.

The UNC Institute for Transportation Research and Education (ITRE) is part of North Carolina State University. Its responsibilities include facilitation of transportation-related programs throughout the 17 UNC system campuses. Included among ITRE’s activities are workshops, short courses, research projects, and training programs for transportation professionals throughout North Carolina.

### Professors

- **Todd BenDor**, Land Use and Environmental Planning and Policy, Spatial Analysis
- **Nikhil Kaza**, Land Use and Environmental Planning and Policy, Energy and Environment, Planning Theory
- **Emil E. Malizia**, Real Estate Development, Economic Development and Finance
- **Noreen McDonald**, Transportation Planning
- **Roberto G. Quercia**, Housing Finance, Housing Policy
- **William M. Rohe**, Social Behavioral Aspects of Urban Development, Neighborhood Planning and Development
- **Yan Song**, Geographic Information Systems, Urban Spatial Analysis, Land Use and Site Planning
- **Meenu Tewari**, Microeconomics, International Planning

Dale Whittington (joint appointment with the Gillings School of Global Public Health), Environmental Planning, Public Investment Theory, International Planning

### Associate Professors

- **Danielle Spurlock**, Land Use and Environmental Planning, Public Health, Social Justice, and Dispute Resolution
- **Andrew Whittemore**, Land Use and Urban Design

### Assistant Professors

- **Ashley Hernandez**, Housing and Community Development, Gentrification, Diversity and Inequality in Cities
- **Miyuki Hino**, Land Use and Environmental Planning, Climate Change, Flooding, Coastal Resilience
- **Noah Kittner**, Land Use and Environmental Planning, Sustainable Energy Systems
- **Matt Palm**, Transportation Planning, Public Transit, Transportation Equity
- **Donald Planey**, Teaching Assistant Professor, Economic Development
- **Alainna Thomas**, Transportation Planning, Transportation Policy, International Transportation

### Adjunct Professors

- **Michele Berger**, Women’s and Gender Studies
- **Maryann P. Feldman**, Public Policy, Innovation, Entrepreneurship, and Economic Growth

### Professors Emeriti

- **Richard N.L. Andrews**
- **Raymond J. Burby**
- **F. Stuart Chapin Jr.**
- **David R. Godschalk**
- **Edward J. Kaiser**

Please visit the department’s website for a current listing (http://planning.unc.edu/academics/) of graduate and undergraduate courses offered.

### PLAN

**Advanced Undergraduate and Graduate-level Courses**

**PLAN 420. Community Design and Green Architecture. 3 Credits.** The impact of building on the environment and health will be examined by looking at the major areas of: land use planning, water resource use, energy, materials and indoor environment.

**Rules & Requirements**

Grading Status: Letter grade.

Same as: ENEC 420.
PLAN 428. Global Cities: Space, Power, and Identity in the Built Environment. 3 Credits.
This course addresses questions of power, politics, and identity in the urban environment, with a focus on the emergence of key selected global cities and the processes that both created them historically and which are currently transforming them locally and globally.

Rules & Requirements
IDEAs in Action Gen Ed: FC-GLOBAL or FC-VALUES, RESEARCH.
Making Connections Gen Ed: SS, GL.
Repeat Rules: May be repeated for credit. 6 total credits. 2 total completions.
Grading Status: Letter grade.
Same as: GEOG 428.

PLAN 491. Introduction to GIS. 3 Credits.
Stresses the spatial analysis and modeling capabilities of organizing data within a geographic information system. (GISci)

Rules & Requirements
Requisites: Prerequisite, GEOG 370; permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.
Same as: GEOG 491.

PLAN 526. Principles of Public Finance for Public Policy and Planning. 1.5 Credits.
Provides the foundation of state and local government finance necessary to understand new developments in the provision of infrastructure for economic development.

Rules & Requirements
Grading Status: Letter grade.

PLAN 539. Understanding and Planning for Freight Flows. 3 Credits.
This course introduces students to the unique characteristics of freight transportation and the impact of urban and regional planning. Freight transport, which is a critical segment of supply chains, is undergoing dramatic changes. The impact of e-Commerce is revealed in the constant re-organization of supply chains and the need for freight transport to respond accordingly.

Rules & Requirements
Grading Status: Letter grade.

PLAN 547. Energy, Transportation, and Land Use. 3 Credits.
This course explores the reciprocal connections between energy (production/conversion, distribution, and use), land use, environment, and transportation. Evaluation of federal, state, and local policies on energy conservation and alternative energy sources are emphasized. Students gain skills to analyze impacts, interdependencies, and uncertainties of various energy conservation measures and production technologies.

Rules & Requirements
Grading Status: Letter grade.
Same as: ENEC 547.

PLAN 548. Sustainable Energy Systems. 3 Credits.
This course will provide an introduction to urgent topics related to energy, sustainability, and the environment. The course material will focus on new technologies, policies, and plans in cities and different governing bodies in the energy system with a focus on developing tools to analyze energy for its sustainability, impact on people, the environment, and the economy.

Rules & Requirements
Grading Status: Letter grade.
Same as: ENEC 548, ENVR 548.

PLAN 550. Evolution of the American City. 3 Credits.
Examines shaping the urban built environments of the United States from the colonial era to present day. Critically examines forces that shaped our cities, and studies the values, ideals, and motivations underlying efforts to plan and direct physical development of American cities.

Rules & Requirements
Making Connections Gen Ed: SS.
Grading Status: Letter grade.

PLAN 562. Seminar on The Ethics and Politics of New Urban Analytics. 3 Credits.
While there is no consistent definition of what smart cities are, urban spaces blanketed with ubiquitous and heterogeneous sensor networks that are constantly monitoring the vitality of the city are becoming common place. Such continuous surveillance raises deep political and ethical questions as well as questions about institutional reconfiguration. We will examine urban analytics platforms and interrogate them from a variety of lenses, including privacy, equity, and probity. Previously offered as PLAN 673.

Rules & Requirements
Grading Status: Letter grade.

PLAN 573. We’re Everywhere: The Life of LGBTQ+ Spaces in the US. 1.5 Credits.
Since the end of the Second World War, if not before, more and more cities of the United States have come to feature spaces identified by members of LGBTQ communities and their heterosexual, cis-gendered counterparts, as gay, lesbian, or queer. This class introduces students to the social, political, and economic life of LGBTQ spaces in the United States, and asks students to consider their importance and the merits of planning for their improvement and/or conservation.

Rules & Requirements
Grading Status: Letter grade.

PLAN 574. Political Economy of Poverty and Inequality. 3 Credits.
Introduces students to the political economy of poverty alleviation programs. Uses comparative cases to explore what types of projects, tasks, and environments lead to effective and equitable outcomes, and why.

Rules & Requirements
Grading Status: Letter grade.
PLAN 575. Real Estate Development. 3 Credits.
Rigorous examination of real estate development from the entrepreneurial and public perspectives. Emphasis on risk management and the inherent uncertainties of development. The four dimensions of real estate are addressed: economic/market, legal/institutional, physical, and financial. Previously offered as PLAN 375

Rules & Requirements
- IDEAs in Action Gen Ed: HI-INTERN.
Grading Status: Letter grade.

PLAN 576. Urbanism in the Global South. 3 Credits.
This course introduces concepts and themes on the development of urbanism in the "Global South". Students engage with current debates over urbanism in the Global South, including looking at urban inequalities in contemporary cities. Through the course, students will be able to compare and critically analyze formations of contemporary urbanism in selected cities in the Global South from a comparative perspective.

Rules & Requirements
- IDEAs in Action Gen Ed: FC-GLOBAL.
Grading Status: Letter grade.
Same as: AAAD 492.

PLAN 590. Special Topics Seminar. 1-9 Credits.
Original research, fieldwork, readings, or discussion of selected planning issues under guidance of a member of the faculty.

Rules & Requirements
- Repeat Rules: May be repeated for credit; may be repeated in the same term for different topics; 9 total credits. 3 total completions.
Grading Status: Letter grade.

PLAN 591. Applied Issues in Geographic Information Systems. 3 Credits.
Applied issues in the use of geographic information systems in terrain analysis, medical geography, biophysical analysis, and population geography.

Rules & Requirements
- Requisites: Prerequisite, GEOG 370 or 491.
Grading Status: Letter grade.

PLAN 596. Independent Study. 1-9 Credits.
This course permits full-time undergraduate students enrolled in the Department of City and Regional Planning who wish to pursue independent research or an independent project to do so under the direction of a member of the department faculty.

Rules & Requirements
- Repeat Rules: May be repeated for credit; may be repeated in the same term for different topics; 9 total credits. 3 total completions.
Grading Status: Letter grade.

PLAN 635. Energy Modeling for Environment and Public Health. 3 Credits.
Recommended preparation, MATH 231. This course will equip students with an overview of contemporary issues in energy modeling and energy systems analysis, with a focus on environmental and public health impacts of energy systems. Students will gain exposure to a variety of research methodologies, analytical tools, and applications of energy modeling applied to environmental and public health related problems such as climate change, air pollution, and water footprints of energy systems.

Rules & Requirements
- Grading Status: Letter grade.
- Same as: ENVR 635, ENEC 635.

PLAN 636. Urban Transportation Planning. 3 Credits.
Fundamental characteristics of the urban transportation system as a component of urban structure. Methodologies for the analysis of transportation problems, planning urban transportation, and the evaluation of plans.

Rules & Requirements
- Grading Status: Letter grade.

PLAN 637. Public Transportation. 3 Credits.
Alternative public urban transportation systems including mass transit, innovative transit services, and paratransit, examined from economic, land use, social, technical, and policy perspectives.

Rules & Requirements
- Grading Status: Letter grade.

PLAN 638. Pedestrian and Bike Transportation. 3 Credits.
This graduate-level course examines the importance of multimodal transportation planning and provides a comprehensive overview of best planning practices to support increased walking and bicycling.

Rules & Requirements
- Grading Status: Letter grade.

PLAN 639. Complete, Safe, Equitable Streets. 3 Credits.
This course will interrogate the role of streets in communities paying particular attention to how streets contribute to mobility, accessibility, economic vibrancy, social cohesion, and safety from crime and traffic danger. We will consider how different people are affected by streets and transport policy.

Rules & Requirements
- IDEAs in Action Gen Ed: HI-INTERN.
Grading Status: Letter grade.

PLAN 640. Roadways for a Safer Future. 1 Credits.
Deaths and serious injuries from traffic crashes have been rising steadily on US roadways in recent years. Despite growing investment in safe walking and bicycling facilities, pedestrians and bicyclists bear a disproportionate share of these deaths and injuries. Through a combination of field work, lectures, and facilitated discussions, the Roadways for a Safer Future course introduces students to data collection, analysis, and communication techniques that are critical for understanding and advancing road safety for all.

Rules & Requirements
- IDEAs in Action Gen Ed: HI-INTERN.
Grading Status: Letter grade.
**PLAN 641. Watershed Planning. 3 Credits.**
This course explores the functions of ecosystems, land development activities that impact such functions, and the land use management tools to create strategies for mitigating and restoring environmental damage. Course goals include understanding the ecological context of planning and how ecological principles may inform planning decisions. Prepares planners to engage effectively with biologists, natural resource managers, park managers, and other professionals from the natural sciences.

**Rules & Requirements**
- **Grading Status:** Letter grade.
- **Same as:** BIOS 600, ENEC 562, STOR 155, PLCY 460 or equivalent.

---

**PLAN 647. Coastal Management Policy. 3 Credits.**
This course is an introduction to coastal management with a particular focus on managing the risks from natural hazards and climate change. It is designed for undergraduate juniors and seniors and graduate students. The focus of this class is on understanding the challenges that coastal communities face, how coasts are currently managed, and different strategies for responding in a rapidly changing world. Previously offered as PLAN 747. Juniors, Seniors, and Graduate students only.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-NATSCI.
- **Grading Status:** Letter grade.

---

**PLAN 651. Urban Form and the Design of Cities. 3 Credits.**
Lecture course on comparative urbanism and the global evolution of the city form. Examines values and ideas embedded in urban landscapes, seeking to understand how social, economic, and political forces have influenced the development of cities through history.

**Rules & Requirements**
- **Grading Status:** Letter grade.

---

**PLAN 652. Site Planning and Urban Design. 3 Credits.**
This course examines site planning as a means of addressing concerns related to urban development including hydrology, vegetation, land use, urban form, access, regulation, and community priorities. Students conduct an analysis of a site and propose a plan for a hypothetical mixed-use development. Students learn the basics of the 3D modeling software, SketchUp.

**Rules & Requirements**
- **Grading Status:** Letter grade.

---

**PLAN 655. Planning for Natural Hazards and Climate Risk. 3 Credits.**
An introduction to the human dimensions of natural hazards and climate change adaptation. What can we do to reduce losses from floods, fires, and other extreme weather events? How can we minimize the impacts of climate change? The focus of this course is on understanding how governance institutions, policies, politics, from individual to international influences the risks communities face. Previously offered as PLAN 755. Juniors, seniors and graduate students only.

**Rules & Requirements**
- **Grading Status:** Letter grade.

---

**PLAN 656. Climate Change Impacts and Adaptation. 3 Credits.**
An introduction to climate change impacts and adaptation for undergraduate juniors and seniors and graduate students. The focus of this course is understanding how social and environmental systems interact to create risk and damage. This course prepares students to design and implement adaptation strategies for organizations of all types, from businesses to government agencies. Students will learn to integrate information about climate hazards, natural systems, built infrastructure, and socioeconomic systems. Previously offered as PLAN 756. Restricted to juniors, seniors, and graduate students only.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-NATSCI.
- **Grading Status:** Letter grade.

---

**PLAN 657. Gender Issues in Planning and Development. 3 Credits.**
Permission of the instructor required for undergraduates. Examination of the environmental and health risks, policy institutions, processes, instruments, policy analysis, and major elements of American environmental policy. Lectures and case studies.

**Rules & Requirements**
- **Grading Status:** Letter grade.
- **Same as:** WGST 662.

---

**PLAN 658. Planning Equitable Economies. 3 Credits.**
Introduction to basic theories, concepts, and strategies employed to pursue local and regional economic development. Clarifies similarities and distinctions with related planning perspectives including community development, investigates the economic logic behind various development initiatives, and reviews basic principles for critically examining alternative policies and programs. Previously offered as PLAN 770.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-POWER.
- **Grading Status:** Letter grade.

---

**PLAN 660. Making Connections Gen Ed:** SS.
- **Grading Status:** Letter grade.

---

**PLAN 661. Urban Form and the Design of Cities. 3 Credits.**
Lecture course on comparative urbanism and the global evolution of the city form. Examines values and ideas embedded in urban landscapes, seeking to understand how social, economic, and political forces have influenced the development of cities through history.

**Rules & Requirements**
- **Grading Status:** Letter grade.

---

**PLAN 662. Diversity and Inequality in Cities. 3 Credits.**
Permission of instructor needed for undergraduates. Introduces students in planning to issues related to diversity and inequality. Different aspects of diversity (e.g., gender, class, race, ethnicity, sexuality, nationality/citizenship) will be explored. Examines the relationship between diversity and the unequal distribution of resources and life trajectories.

**Rules & Requirements**
- **Making Connections Gen Ed:** SS.
- **Grading Status:** Letter grade.

---

**PLAN 663. Planning Equitable Economies. 3 Credits.**
Introduction to basic theories, concepts, and strategies employed to pursue local and regional economic development. Clarifies similarities and distinctions with related planning perspectives including community development, investigates the economic logic behind various development initiatives, and reviews basic principles for critically examining alternative policies and programs. Previously offered as PLAN 770.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-POWER.
- **Grading Status:** Letter grade.

---

**PLAN 664. Planning Equitable Economies. 3 Credits.**
Introduction to basic theories, concepts, and strategies employed to pursue local and regional economic development. Clarifies similarities and distinctions with related planning perspectives including community development, investigates the economic logic behind various development initiatives, and reviews basic principles for critically examining alternative policies and programs. Previously offered as PLAN 770.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-POWER.
- **Grading Status:** Letter grade.

---

**PLAN 665. Planning for Natural Hazards and Climate Risk. 3 Credits.**
An introduction to the human dimensions of natural hazards and climate change adaptation. What can we do to reduce losses from floods, fires, and other extreme weather events? How can we minimize the impacts of climate change? The focus of this course is on understanding how governance institutions, policies, politics, from individual to international influences the risks communities face. Previously offered as PLAN 755. Juniors, seniors and graduate students only.

**Rules & Requirements**
- **Grading Status:** Letter grade.

---

**PLAN 666. Planning Equitable Economies. 3 Credits.**
Introduction to basic theories, concepts, and strategies employed to pursue local and regional economic development. Clarifies similarities and distinctions with related planning perspectives including community development, investigates the economic logic behind various development initiatives, and reviews basic principles for critically examining alternative policies and programs. Previously offered as PLAN 770.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-POWER.
- **Grading Status:** Letter grade.

---

**PLAN 667. Planning Equitable Economies. 3 Credits.**
Introduction to basic theories, concepts, and strategies employed to pursue local and regional economic development. Clarifies similarities and distinctions with related planning perspectives including community development, investigates the economic logic behind various development initiatives, and reviews basic principles for critically examining alternative policies and programs. Previously offered as PLAN 770.

**Rules & Requirements**
- **IDEAs in Action Gen Ed:** FC-POWER.
- **Grading Status:** Letter grade.
**PLAN 672. Urban Data Analytics. 3 Credits.**
This is a survey course about different techniques used in assembling, managing, analyzing, and predicting using heterogeneous data sets in urban environments. These include point, polygon, raster, vector, text, image, and network data; data sets with high cadence and high spatial resolution; and data sets that are inherently messy and incomplete. The emphasis is on practical urban analytics.

**Rules & Requirements**
**Grading Status:** Letter grade.

**PLAN 677. Perspectives on Economic Development. 3 Credits.**
Fundamental concepts of economic development including growth, trade, product-cycle, flexible specialization, and entrepreneurship theories applied to local contexts. Economic development issues addressed in the North American, South American, European, or South Asian contexts.

**Rules & Requirements**
**IDEAs in Action Gen Ed:** FC-KNOWING.
**Grading Status:** Letter grade.

**PLAN 685. Water and Sanitation Planning and Policy in Less Developed Countries. 3 Credits.**
Permission of the instructor. Seminar on policy and planning approaches for providing improved community water and sanitation services in developed countries. Topics include the choice of appropriate technology and level of service, pricing, metering, and connection charges; cost recovery and targeting subsidies to the poor; water venting; community participation in the management and operation of water systems; and rent-seeking behavior in the provision of water supplies.

**Rules & Requirements**
**Grading Status:** Letter grade.
**Same as:** ENVR 685.

**PLAN 687. International Development and Social Change. 3 Credits.**
Permission of the instructor. Course explores effect of the global economy on national and community development, effect of environmental degradation processes on development, and strategies to guide social change.

**Rules & Requirements**
**Grading Status:** Letter grade.

**PLAN 691H. Honors Seminar in Urban and Regional Studies. 3 Credits.**
Permission of the instructor. An overview of the subject matter and methods of investigation for the study of cities and regions. Presentations of original papers prepared by students.

**Rules & Requirements**
**IDEAs in Action Gen Ed:** RESEARCH.
**Making Connections Gen Ed:** EE: Mentored Research.
**Grading Status:** Letter grade.

**Graduate-level Courses**

**PLAN 701. Research Methods. 1-6 Credits.**
Course combines material learned in other courses (theory/philosophy, methods, and their substantive area of interest). Familiarizes students with the skills necessary to conduct research and critically review and understand evaluation reports.

**Rules & Requirements**
**Grading Status:** Letter grade.

**PLAN 704. Theory of Planning. 3 Credits.**
The logic of planning as a professional activity. Critical overview of current process theories leading students to develop a personal philosophy applicable to their work as planners.

**Rules & Requirements**
**Grading Status:** Letter grade.

**PLAN 710. Microeconomics for Planning and Public Policy Analysis. 3 Credits.**
Introduction to principles of demand and supply, elasticity, marginal utility opportunity cost, pricing, production decisions, and profit maximization, cost-benefit analysis, financial appraisal, role of government, and market instruments for environmental protection.

**Rules & Requirements**
**Repeatability:** May be repeated for credit; may be repeated in the same term for different topics.
**Grading Status:** Letter grade.

**PLAN 714. Urban Spatial Structure. 3 Credits.**
Theories and empirical evidence of the contemporary spatial development of metropolitan areas. Industrial, residential, and commercial location; neighborhood change; the role of technological change and public policies; and normative perspectives.

**Rules & Requirements**
**Repeatability:** May be repeated for credit; may be repeated in the same term for different topics.
**Grading Status:** Letter grade.

**PLAN 720. Planning Methods. 1.5 Credits.**
Permission of the instructor for undergraduates. More in-depth treatment of topics covered in PLAN 720. Particular emphasis on techniques of multiple regression analysis, forecasting, categorical data analysis, and spatial data analysis.

**Rules & Requirements**
**Repeatability:** May be repeated for credit; may be repeated in the same term for different topics.
**Grading Status:** Letter grade.

**PLAN 722. Systems Thinking and Modeling for Planners. 1.5 Credits.**
This course will introduce systems thinking and system dynamics computer simulation modeling, a computer-aided approach to policy analysis and design. The goal of this course is to enhance knowledge and skills in understanding and analyzing the complex feedback dynamics in social, economic, and environmental problems.

**Rules & Requirements**
**Grading Status:** Letter grade.

**PLAN 724. Introduction to Law for Planners. 3 Credits.**
Governmental institutions, real property, constitutional law, land use law, and environmental law.

**Rules & Requirements**
**Grading Status:** Letter grade.
PLAN 725. Development Dispute Resolution. 3 Credits.
Contemporary methods of resolving development disputes through negotiation, bargaining, and mediation. Techniques and skills applicable to solving controversies over planning and implementation of public and private development projects.

Rules & Requirements
Grading Status: Letter grade.

PLAN 730. Data Collection Methods. 3 Credits.
Reviews alternative data collection techniques used in surveys, concentrating on the impact these techniques have on the quality of survey data. Topics covered include errors associated with nonresponse, interviewing, and data processing.

Rules & Requirements
Grading Status: Letter grade.
Same as: SOCI 760, POLI 860.

PLAN 731. Questionnaire Design. 3 Credits.
Examines the stages of questionnaire design including developmental interviewing, question writing, question evaluation, pretesting, questionnaire ordering, and formatting. Reviews the literature on questionnaire construction. Provides hands-on experience in developing questionnaires.

Rules & Requirements
Grading Status: Letter grade.
Same as: SOCI 761, POLI 861.

PLAN 735. Community Revitalization Applied. 3 Credits.
Students apply their skills in business, planning, or public administration to actual community revitalization projects in North Carolina communities. Projects require an understanding of community development methods, the real estate development process, and public-private partnerships. Students will manage client relationships and learn how their skills contribute to solving community challenges. This course is ideal for first year graduate students.

Rules & Requirements
Repeat Rules: May be repeated for credit. 3 total credits. 1 total completions.
Grading Status: Letter grade.
Same as: PUBA 735.

PLAN 738. Transportation Policy and Planning. 3 Credits.
Examination of active transportation planning and policy questions: land use relationships, modal comparisons, environmental quality, transportation demand management, paratransit planning, the transportation needs of special populations, and international comparisons.

Rules & Requirements
Requisites: Prerequisite, PLAN 636; permission of the instructor for students lacking the prerequisite.
Grading Status: Letter grade.

PLAN 739. Transportation Planning Models. 3 Credits.
Permission of the instructor for undergraduates. The transportation planning process; data collection, trip generation, modal choice, trip distribution and assignment. Social, economic, and environmental impacts of transportation. Innovative modeling techniques.

Rules & Requirements
Grading Status: Letter grade.

PLAN 740. Land Use and Environmental Policy. 3 Credits.
History, institutional setting, rationale of state and local land use, and environmental policies. Program and policy frameworks, political and market processes, resource utilization concepts, and contemporary development and resource management.

Rules & Requirements
Grading Status: Letter grade.

PLAN 744. Development and Environmental Management. 3 Credits.
Coordination of public powers and private actions to implement development plans and conserve environmental resources. Regulatory, public investment, incentive, and policy instruments used in land use and environmental guidance systems.

Rules & Requirements
Grading Status: Letter grade.

PLAN 745. Development Impact Assessment. 3 Credits.
Methods for data management and predictive analysis of the environmental, transportation, and other infrastructure; fiscal and social impacts of land development projects. Impact mitigation measures are also examined.

Rules & Requirements
Grading Status: Letter grade.

PLAN 754. Natural Hazards Resilience Speaker Series. 1 Credits.
Invited practitioners and scholars will discuss a range of pertinent topics, including research findings and experience in practice tied to disaster management and climate change adaptation. Speakers will include a range of officials, scholars, private sector representatives, media members, politicians, advocates, community leaders, and members of various professional associations.

Rules & Requirements
Grading Status: Letter grade.

PLAN 757. Planning for Historical Preservation. 3 Credits.
Concepts, processes, and policies for historic preservation; its role in the community planning and development process.

Rules & Requirements
Grading Status: Letter grade.
PLAN 760. Real Estate Investment and Affordable Housing. 3 Credits.
Fundamentals and techniques of real estate investment analysis, including cases and computer modeling; applications of the public interest in private investment decisions; tax and other public policies influencing real estate investments; and affordable housing.

Rules & Requirements
Grading Status: Letter grade.

PLAN 761. Housing and Public Policy. 3 Credits.
A theory-based course in housing and market dynamics; the justification for government intervention and the operations of the mortgage market and construction industry. Students develop skills for housing market and policy analysis.

Rules & Requirements
Grading Status: Letter grade.

PLAN 762. Central City Revitalization. 3 Credits.
Analyzes central cities over past twenty years and factors affecting their growth or decline. Analyzes how economic, social, physical conditions of central cities can be improved through large-scale urban-planning efforts.

Rules & Requirements
Grading Status: Letter grade.

PLAN 763. Urban Neighborhood Revitalization. 3 Credits.

Rules & Requirements
Grading Status: Letter grade.

PLAN 764. Community Development & Revitalization Techniques. 3 Credits.
Community revitalization requires mastery of community development methods, the real estate development process, and public-private partnerships. Techniques include demographic trend analysis, stakeholder identification, government entitlement review, area and parcel analysis, market research, and pro forma financial analysis.

Rules & Requirements
Grading Status: Letter grade. 
Same as: PUBA 734.

PLAN 765. Real Estate Development. 3 Credits.
The dynamics of real property development from the developer’s perspective covering market research, government relations, site planning, financing, investment analysis, construction and project management, and marketing.

Rules & Requirements
Grading Status: Letter grade.

PLAN 766. Housing Law. 3 Credits.

Rules & Requirements
Grading Status: Letter grade.

PLAN 767. Diversity and Inequalities in Cities. 3 Credits.
Introduces students in planning to issues related to diversity and inequality. Different aspects of diversity (e.g., gender, class, race, ethnicity, sexuality, nationality/citizenship) will be explored. Examines the relationship between diversity and the unequal distribution of resources and life trajectories.

Rules & Requirements
Grading Status: Letter grade.

PLAN 769. Housing & Community Development Planning and Policy. 3 Credits.
This graduate course will explore issues of housing and community development policy and planning issues at the national, state, and local level in the United States. It will provide an overview of the historic and contemporary housing planning and policy issues that have shaped communities and households.

Rules & Requirements
Grading Status: Letter grade.

PLAN 771. Urban Planning and Community Development. 3 Credits.
Analyzes and presents a perspective capable of understanding, developing, and implementing plans for urban and community development projects and processes. Examines the policy and operations of local, state, and federal programs involved in urban and community development.

Rules & Requirements
Grading Status: Letter grade.

PLAN 773. Economic Development Seminar. 3 Credits.
Fundamental concepts and theories applied to local economic development including growth, trade, product-cycle, flexible specialization, and entrepreneurship theories. Urban and regional economic development issues addressed in the North American, South American, European, or South Asian contexts.

Rules & Requirements
Grading Status: Letter grade.

PLAN 774. Planning for Jobs. 3 Credits.
This graduate seminar examines the policy and planning implications of changing labor market conditions and their impact on U.S. workers, especially the working poor.

Rules & Requirements
Grading Status: Letter grade.

PLAN 776. Development Finance. 3 Credits.
Community development financial institutions and loan funds for local asset building and wealth creation. Investment analysis to structure and finance local projects. Real estate and business development cases.

Rules & Requirements
Grading Status: Letter grade.

PLAN 781. Water Resources Planning and Policy Analysis. 3 Credits.
Water resources planning and management. Federal and state water resources policies. Analytical skills to identify environmental problems associated with urban water resources development.

Rules & Requirements
Grading Status: Letter grade. 
Same as: ENVR 781.

PLAN 785. Public Investment Theory. 3 Credits.
Basic theory, process, and techniques of public investment planning and decision making, involving synthesis of economic, political, and technologic aspects. Theory underlying benefit-cost analysis, adaptation to a descriptive and normative model for planning public projects and programs.

Rules & Requirements
Requisites: Prerequisite, PLAN 710.
Grading Status: Letter grade.
Same as: ENVR 785.
PLAN 786. Environmental Quality Management. 3 Credits.
Planning and analysis of regional environmental system with a focus on management of mass flows that affect the quality of the regional environment.

Rules & Requirements
Grading Status: Letter grade.
Same as: ENVR 786.

PLAN 787. Applied Environmental Finance: How to Pay for Environmental Services. 3 Credits.
How can governments, communities, organizations, and businesses fund environmental services? This applied course reviews the diverse tools and strategies that environmental service providers use to pay for programs. The course will focus on environmental services related to: drinking Water, wastewater, storm-water, watershed protection, energy efficiency, renewable energy, sustainability, and wetlands.

Rules & Requirements
Grading Status: Letter grade.
Same as: PUBA 787, ENVR 787.

PLAN 788. Advanced Economic Analysis for Public Policy I. 3 Credits.
This course introduces microeconomic theory using multivariate calculus and constrained optimization. Topics covered include consumer theory, producer theory, market equilibrium, taxes, and market power. Applied public policy examples are incorporated.

Rules & Requirements
Grading Status: Letter grade.
Same as: PLCY 888.

PLAN 789. Advanced Economic Analysis for Public Policy II. 3 Credits.
This course provides further applications of economic theory to public policy including risk and uncertainty, information economics, general equilibrium and welfare policy, externalities, public goods and taxation, and game theory.

Rules & Requirements
Requisites: Prerequisite, PLCY 888.
Grading Status: Letter grade.
Same as: PLCY 889.

PLAN 793. Planning Seminar. 1-15 Credits.
Original research, fieldwork, readings, or discussion of selected planning issues under guidance of a member of the faculty.

Rules & Requirements
Repeat Rules: May be repeated for credit. 15 total credits. 15 total completions.
Grading Status: Letter grade.

PLAN 800. Research Design. 3 Credits.
This course provides an introduction to research design methods for planning and applied policy research. The design of a research endeavor is arguably the most important part of the investigation, together with what data is collected, how it is collected, and how the data are analyzed.

Rules & Requirements
Grading Status: Letter grade.

PLAN 801. Design of Policy-Oriented Research. 3 Credits.
Logic of designing research for the analysis of planning problems and the formulation of public policies. Elements of research design, case study, survey research, quasi-experimental designs, and the social experiment are covered.

Rules & Requirements
Grading Status: Letter grade.
Same as: PLCY 801.

PLAN 802. Advanced Seminar in Research Design: Data, Methods, and Evaluation. 3 Credits.
Three main objectives: to deepen students' understanding of important issues and topics in the design of empirical research, to further develop students' ability to critically evaluate research designs and policy-related products, and to aid in developing a research paper, dissertation, or other product.

Rules & Requirements
Grading Status: Letter grade.

PLAN 805. Theory of Planning II. 3 Credits.
Construction of methodologies for evaluating various theories of planning and intensive analysis of the North American planning theory literature. Doctoral-level introduction to the area.

Rules & Requirements
Grading Status: Letter grade.

PLAN 823. Planning Workshop. 3 Credits.
Problem-solving, client-based courses designed to give students experience in applying planning theory and methods to actual problem situations in economic development, housing and community development, real estate, environmental planning, and land use and transportation.

Rules & Requirements
Repeat Rules: May be repeated for credit.
Grading Status: Letter grade.

PLAN 890. Special Topics in Planning and Urbanism. 1-3 Credits.
Reading, lectures, and discussions to provide opportunities to develop new concepts and courses in various city and regional planning topics.

Rules & Requirements
Repeat Rules: May be repeated for credit.
Grading Status: Letter grade.

PLAN 891. Special Topics in Planning and Urbanism. 3 Credits.
Reading, lectures, and discussions to provide opportunities to develop new concepts and courses in various city and regional planning topics.

Rules & Requirements
Grading Status: Letter grade.

PLAN 896. Independent Study. 1-15 Credits.
This course permits full-time graduate students enrolled in the Department of City and Regional Planning who wish to pursue independent research or an independent project to do so under the direction of a member of the department faculty.

Rules & Requirements
Repeat Rules: May be repeated for credit; may be repeated in the same term for different topics.
Grading Status: Letter grade.
PLAN 911. Ph.D. Research Seminar. 1-15 Credits.
Original research, fieldwork, readings, or discussion of selected planning issues under guidance of a member of the faculty.

Rules & Requirements
Repeat Rules: May be repeated for credit.
Grading Status: Letter grade.

PLAN 992. Master's (Non-Thesis). 3 Credits.
The master's project is original work, involving a substantial degree of independent research and/or analysis. May be a research paper, critical essay, development and evaluation of a program, project, or plan.

Rules & Requirements
Repeat Rules: May be repeated for credit.

PLAN 994. Doctoral Research and Dissertation. 3 Credits.

Rules & Requirements
Repeat Rules: May be repeated for credit.

Contact Information
Department of City and Regional Planning
Visit Program Website (http://www.planning.unc.edu)

Chair
Yan Song
ys@email.unc.edu

Associate Chair, Director of the Master's Program
Andrew Whittemore
awhittem@email.unc.edu

Student Services Manager
Sarah Ward
sarahw1@unc.edu

Associate Director of Graduate Programs
Sandra Lazo de la Vega
sandral@unc.edu

Director of the Ph.D. Program
Todd BenDor
bendor@unc.edu

Director of Undergraduate Studies
Roberto Quercia
quercia@email.unc.edu