The Department of Landscape Architecture and Urban Planning in the College of Architecture offers degrees in three distinct but related disciplines that take you all the way from working with community residents to envision their future to literally laying the groundwork for a new urban place. It is the only department of its kind in the nation—no place else offers this unique combination of disciplines.

**PLAN.** Urban planning is “the application of foresight to action,” according to former American Planning Association President Stuart Meck. Planners work with residents and stakeholders as facilitators and guides to identify a desired future. Planners apply analytical skills to assess current social, economic, and environmental conditions and identify needed changes to help a community move toward this future. They create tools—policies, programs, or projects—that allow the community to realize its plans. Planners must be excellent communicators, problem solvers, and spatial thinkers.

**DESIGN.** Landscape architecture is the profession which applies artistic and scientific principles to the research, planning, design and management of both natural and built environments (ASLA). Landscape architects assess the characteristics of the built and natural environment to design physical solutions that address both existing problems and future needs. As designers, landscape architects seek solutions that are both functional AND beautiful. They must understand both the natural and social ecology of the place. Landscape architecture blends both engineering and creativity to design places that enhance beauty and function and mitigate vulnerabilities and challenges.

**DEVELOP.** Land developers create building sites and/or the leased or owned space for those sites. They negotiate between cities, business owners, investors, and financiers to meet the demand for new structures and activities within a community. Developers must assess location, suitability, and market for particular parcels within a community to determine the appropriate use and cost for new residential, retail, commercial, or industrial development.

Undergraduate degrees include the Bachelor of Landscape Architecture and the BS in Urban and Regional Planning. Professional degrees include the Master of Landscape Architecture, the Master of Urban Planning, and the Master in Land and Property Development. We also offer a doctorate in Urban and Regional Science. Dual degrees and articulated degrees (Bachelor + Masters) are available.

**Faculty**

Anderson, Sammy K, Executive Associate Professor
Land Arch & Urban Planning
PHD, Texas A&M University, 1993

Bardenhagen, Eric K, Assistant Professor
Land Arch & Urban Planning
PHD, Texas A&M University, 2011
MLA, Texas A&M University, 1999

Berke, Philip R, Professor
Land Arch & Urban Planning
PHD, Texas A&M University, 1981

Booth, Geoffrey J, Associate Professor
Land Arch & Urban Planning
MA, University of Queensland, 1987

Brown, Robert D, Professor
Land Arch & Urban Planning
PHD, University of Guelph, 1985
MLA, University of Guelph, 1982

Cooper Jr, John T, Associate Professor of the Practice
Land Arch & Urban Planning
PR1, University of North Carolina - Chapel Hill, 2004

Dvorak, Bruce D, Associate Professor
Land Arch & Urban Planning
MLA, University of Illinois at Urbana-Champaign, 1994

Giusti, Cecilia Hundskopf, Associate Professor
Land Arch & Urban Planning
PHD, The University of Texas - Austin, 2001

Goddard, Tara B, Assistant Professor
Land Arch & Urban Planning
PHD, Portland State University, 2017

Huang, Chang S, Associate Professor
Land Arch & Urban Planning
PHD, University of Pennsylvania, 1995
MLA, Pennsylvania State University, 1992

Hurst, Kenneth R, Lecturer
Land Arch & Urban Planning
PHD, Texas A&M University, 2016
MLA, University of Oklahoma, 1988

Jourdan, Dawn E, Professor
Land Arch & Urban Planning
PHD, Florida State University, 2004
JD, University of Kansas, 2000

Kim, Bo Ah, Assistant Lecturer
Land Arch & Urban Planning
PHD, Texas A&M University, 2016

Kim, Yang M, Lecturer
Land Arch & Urban Planning
MLA, Texas A&M University, 2010

Lee, Chanam, Professor
Land Arch & Urban Planning
PHD, University of Washington, 2004
MLA, Texas A&M University, 1999

Li, Dongying, Assistant Professor
Land Arch & Urban Planning
PHD, University of Illinois - Champaign, 2016
Li, Wei, Assistant Professor
Land Arch & Urban Planning
PHD, University of California, Irvine, 2011

Lorente, Paula, Assistant Lecturer
Land Arch & Urban Planning
PHD, Texas A&M University, 2016

Martin, June C, Instructional Associate Professor
Land Arch & Urban Planning
MS, University of Georgia, 2002

Merrill, Jeremy, Assistant Professor
Land Arch & Urban Planning
PHD, Kansas State University, 2014
MLA, Kansas State University, 2009

Mickelson, Kimberley, Visiting Associate Professor
Land Arch & Urban Planning
JD, The University of Texas School of Law, 1986

Ndubisi, Forster O, Professor
Land Arch & Urban Planning
PHD, University of Waterloo, 1987

Newman, Galen D, Associate Professor
Land Arch & Urban Planning
PHD, Clemson University, 2010
MLA, Auburn University, 2006

Noh, Youngre, Instructional Assistant Professor
Land Arch & Urban Planning
PHD, Texas A&M University, 2015

Peacock, Walter Gillis, Professor
Land Arch & Urban Planning
PHD, University of Georgia, 1986

Reid, Russell W, Assistant Professor of the Practice
Land Arch & Urban Planning
MAR, Texas A&M University, 2001

Roberts, Andrea R, Assistant Professor
Land Arch & Urban Planning
PHD, University of Texas - Austin, 2016

Rodiek, Jon, Professor
Land Arch & Urban Planning
PHD, University of Massachusetts, Amherst, 1974
MLA, University of Massachusetts, 1968

Rogers, George O, Professor
Land Arch & Urban Planning
PHD, University of Pittsburgh, 1983

Teal, Michael, Assistant Professor of the Practice
Land Arch & Urban Planning
MLA, Texas A&M University, 1996

Van Zandt, Shannon S, Professor
Land Arch & Urban Planning
PHD, University of North Carolina at Chapel Hill, 2004

Varni, James Walter, Research Professor
Land Arch & Urban Planning
PHD, University of California, Los Angeles, 1976

Woodruff, Sierra C, Assistant Professor
Land Arch & Urban Planning
PHD, University of North Carolina at Chapel Hill, 2017

Wunneburger, Douglas F, Instructional Associate Professor
Land Arch & Urban Planning
PHD, Texas A&M University, 1992

Masters

- Master of Land and Property Development in Land and Property Development (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/architecture/landscape-architecture-urban-planning/land-property-development-masters)
- Master of Landscape Architecture in Landscape Architecture (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/architecture/landscape-architecture-urban-planning/mla)
- Master of Urban Planning in Urban and Regional Planning (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/architecture/landscape-architecture-urban-planning/ms-urban-planning)

Doctoral

- Doctor of Philosophy in Urban and Regional Science (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/architecture/landscape-architecture-urban-planning/urban-regional-science-phd)

Certificates

- Sustainable Urbanism Certificate (http://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/architecture/landscape-architecture-urban-planning/sustainable-urbanism-certificate)

Courses

Land and Property Development Courses (p. 2)
Landscape Architecture Courses (p. 4)
Urban and Regional Science Courses (p. 5)
Urban Planning Courses (p. 6)

Land and Property Development Courses

LDEV 485 Directed Studies
Credits 1 to 6. 1 to 6 Other Hours.
Individual instruction in selected aspects of land development not adequately covered by other courses with stress on reports and readings in selected areas of land development.
Prerequisite: Junior classification or approval of instructor.

LDEV 489 Special Topics in...
Credits 1 to 6. 1 to 6 Lecture Hours.
Selected topics in an identified area of land and real estate development. May be repeated for credit.
Prerequisite: Junior classification or approval of instructor.
LDEV 661 Development and the Environment  
Credits 3. 3 Lecture Hours.  
Land development in the context of environment sustainability, human well being and business profitability to foster a restorative economy; environmental easement and site analysis; state, federal and international regulatory issues; and human ecology and the future of land development.  
Prerequisite: Graduate classification.

LDEV 663 Introduction to Project Management  
Credits 3. 3 Lecture Hours.  
Project management processes for planning, scheduling, cost estimating resource leveling, cost control and post-completion evaluation; issues in project organizational environments, documentation, quality control safety.  
Prerequisite: Graduate classification.

LDEV 664 Market Analysis for Development  
Credits 3. 3 Lecture Hours.  
Techniques and data sources for market analysis for development; analysis for housing development; trade area analysis and market analysis for retail development; analysis for office, industrial parks and for specialized development.  
Prerequisite: Graduate classification.

LDEV 665 Land Development Trends  
Credits 3. 3 Lecture Hours.  
Exploration of a variety of specialized topics associated with emerging trends in the land development industry.  
Prerequisite: Graduate classification.

LDEV 667 Design and Development Economy  
Credits 3. 3 Lecture Hours.  
Interface between the physical and financial dimensions in the design and development process to achieve building and project economics; creating a physical product and a financial venture that responds to social and environmental concerns and to market economy and feasibility analysis.  
Prerequisite: Graduate classification.

LDEV 668 Land Development Practice  
Credits 3. 3 Lecture Hours.  
Strategies, methods and techniques of land development including: site selection criteria, urban infrastructure; market evaluation; conceptual arrangement of land uses and structures; conceptual design and regulatory considerations; lending institutions; location theory; value theories; regulatory agencies.  
Prerequisite: LDEV 667.

LDEV 669 Income Property Land Development  
Credits 3. 3 Lecture Hours.  
Exploration of the characteristics of real estate as an investment, venture and capital structures, the development process, site and financial feasibility, and project funding; strategies, methods and technologies for investment property development utilizing current developments.  
Prerequisite: Graduate classification.

LDEV 671 Sustainable Development  
Credits 3. 3 Lecture Hours.  
Sustainability perspectives about values, rights, property and what constitutes an optimum human environment; sustainability principles and case studies emphasizing on-the-ground, incentive-based land development that balances economic growth with environmental quality.  
Prerequisite: Graduate classification.

LDEV 672 Public-Private Project Funding  
Credits 3. 3 Lecture Hours.  
Financing and related issues in public-private development projects; explores structuring, valuing and managing projects and investigates the interaction between suppliers, operators, lenders and contractors; introduction to financial tools: loans, credit, interest rates and financial models.

LDEV 673 International Development Planning  
Credits 3. 3 Lecture Hours.  
International variations in urban growth and land development strategies: savings, aid and trade policy options for cities and regions; international co-development programs; application of planning and urban land development professions in contemporary global context.  
Prerequisite: Graduate classification.

LDEV 677 Development Feasibility and Design  
Credits 3. 1 Lecture Hour. 6 Lab Hours.  
Selected residential and non-residential development projects of varying size analyzed by multidisciplinary teams with respect to the following: economic feasibility and cash flow; site analysis; and design concept.  
Prerequisite: Approval of instructor.

LDEV 681 Seminar  
Credit 1. 1 Lecture Hour.  
College of Architecture research activities pertaining to land and real estate development; preparation and presentation of required final paper for MS in Land Development examination.  
Prerequisite: Graduate classification in land development.

LDEV 684 Professional Internship  
Credits 1 to 12. 1 to 12 Other Hours.  
Professional practice under approved arrangement with public or private land or real estate development agencies in the United States or abroad.  
Prerequisites: Approval of committee chair and program coordinator.

LDEV 685 Directed Studies  
Credits 1 to 12. 1 to 12 Other Hours.  
Individual and group problems dealing with application of strategic plan development theory in practice: opportunities to select international or domestic development projects of special interest.  
Prerequisite: Approval of instructor.

LDEV 687 Development Feasibility and Design II  
Credits 3. 1 Lecture Hour. 6 Lab Hours.  
Plans and venture structures for selected residential and non-residential development projects of varying size analyzed by multidisciplinary teams with respect to the following: economic feasibility and cash flow and site and design plans and costs.  
Prerequisite: LDEV 687 or approval of instructor.

LDEV 689 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours.  
Selected topics in an identified area of land development. May be repeated for credit.  
Prerequisite: Approval of instructor.

LDEV 691 Research  
Credits 1 to 23. 1 to 23 Other Hours.  
PhD research and preparation of dissertation.  
Prerequisite: Doctoral classification.
LDEV 693 Professional Study  
Credits 1 to 6. 1 to 6 Other Hours.  
Approved professional case study of project organization in the USA or abroad undertaken as terminal requirement for the Master of Science in land development degree, non-thesis option.  
**Prerequisites:** Approval of committee chair and associate department head.

## Landscape Architecture Courses

### LAND 601 Landscape Architectural Design Theory and Application I  
Credits 5. 2 Lecture Hours. 9 Lab Hours.  
First design studio course for career-change students; basic theories, principles, applications of landscape architectural design; design process; context-sensitive design; evidence based design; form-making skills; form-function-meaning relationships; spatial scale and dimensions; elements of natural and built environments; behavioral, psychosocial, policy and ecological factors in design; communication of design ideas.  
**Prerequisites:** Graduate classification and approval of instructor.  

### LAND 602 Landscape Architectural Design Theory and Application II  
Credits 5. 2 Lecture Hours. 9 Lab Hours.  
Application of ecological concepts to site planning and site design, form and space making using natural features, and practical issues including social and political, technological and economic influences on ecological design.  
**Prerequisites:** LAND 601.

### LAND 603 Principle, Procedures and Techniques of Land Use  
Credits 6. 2 Lecture Hours. 12 Lab Hours.  
A continuation of LAND 601-602 sequence for career-change students; resolution of land problems that typically occur on a site; exploration of land use planning concepts and landscape ecology techniques; application of knowledge and skills acquired during the first year to a complex land development studio project.  
**Prerequisites:** LAND 602 and approval of instructor.

### LAND 612 Landscape Architectural Site Engineering and Development  
Credits 4. 2 Lecture Hours. 6 Lab Hours.  
First construction studio course; concepts, theories and techniques of site development; aspects of site engineering and consideration of earth bound elements in land development; contours, landform, grading design, drainage principles, cut and fill computations, basic hydraulics and hydrology, stormwater management, landscape construction materials.  
**Prerequisite:** Approval of instructor.

### LAND 614 Landscape Architectural Construction  
Credits 3. 2 Lecture Hours. 4 Lab Hours.  
Second construction studio course; sustainable water management techniques in landscape development; theory, principles and techniques of low impact development; basic elements of landscape architectural construction; construction document preparation, working drawings, project layout and design; theory and principles of irrigation and lighting design. Field trips required.  
**Prerequisite:** LAND 612.

### LAND 620 Open Space and Land Use Planning I  
Credits 5. 2 Lecture Hours. 9 Lab Hours.  
Creation of land use planning strategies for large land parcels; site inventory, analysis program formulation and design detailing sequenced into the production of a comprehensive master plan; consideration of issues in sustainability, environmental protection, growth management and resource utilization.  
**Prerequisite:** LAND 601, LAND 602, LAND 603 or approval by instructor.  

### LAND 621 Open Space and Land Use Planning II  
Credits 5. 2 Lecture Hours. 9 Lab Hours.  
Projects with various scales; site selection, program formulation, theory, master planning and detailed design applied to topics of community design and development, and healthy communities; evidence based design methodology, techniques of professional design documentation and presentation.  
**Prerequisite:** LAND 620 or approval by instructor.

### LAND 630 Development of Landscape Architecture  
Credits 3. 3 Lecture Hours.  
Overview of the history of human settlement, land use and landscape architecture outside of North America.  
**Prerequisite:** Graduate classification.

### LAND 632/PLAN 632 Design for Active Living  
Credits 3. 3 Lecture Hours.  
Understanding the forms and characteristics of the built environment and the influence on human behaviors, lifestyles and health; theoretical and empirical insights into the issues of physical activity, obesity, and automobile dependency; focus on how changes in the built environment help address these issues.  
**Prerequisite:** Graduate classification or approval of instructor.  
**Cross Listing:** PLAN 632/LAND 632.

### LAND 635/PLAN 635 Concepts in Ecological Planning and Design  
Credits 3. 3 Lecture Hours.  
Reviews selected ecological concepts and explores integration into ecological/landscape planning, design using a historical perspective; historical and contemporary approach to provide in-depth understanding of how they can better mediate between human actions and natural process.  
**Prerequisite(s):** Graduate classification.  
**Cross Listing:** PLAN 635/LAND 635.

### LAND 640 Research Methods in Landscape Architecture  
Credits 3. 3 Lecture Hours.  
Research methods including theory, hypothesis formulation, design, data collection, measurement and report writing; equates research activity to landscape architecture and the interaction between people and their physical environment.  
**Prerequisite:** LAND 603 or equivalent.

### LAND 645 Practice Diversity in Landscape Architecture  
Credits 3. 3 Lecture Hours.  
An exploration of the diversity of practice opportunities within the profession of Landscape Architecture; individual roles within those areas of practice and the skills required to function successfully within them.  
**Prerequisites:** Graduate classification and approval of instructor.

### LAND 664 Professional Practice  
Credits 3. 3 Lecture Hours.  
Introduction to the procedures, management and ethical frameworks in which professional landscape architectural practice occurs; topics include forms of practice, employment issues, proposal preparation, fee and contract structures, project management, roles of the landscape architect, presentations and public participation, legal and ethical responsibilities.  
**Prerequisites:** Graduate classification and approval of instructor.

### LAND 655 Landscape Architectural Communication  
Credits 3. 2 Lecture Hours. 4 Lab Hours.  
Graphic communication techniques required to expand landscape architectural concepts and designs including plan graphics, analysis and inventory graphics, perspective drawings, sketch composition, rendering media, color scanning, use of software and desktop.
LAND 661 Visual Quality for Design and Planning  
Credits 3. 3 Lecture Hours.  
Emphasis on social science perspectives for analyzing visual quality in built and natural landscapes, and effects of visual surroundings on human well-being and health; the content reflects a balance of theory, scientific research evidence and practical applications in areas of landscape architecture, architecture, urban planning and park design.  
Prerequisite: Graduate classification.

LAND 681 Seminar  
Credit 1. 1 Lecture Hour.  
Analysis and criticism of selected landscape architectural projects. Lectures, reports and discussions.  
Prerequisite: Graduate classification in landscape architecture.

LAND 684 Professional Internship  
Credits 1 to 8. 1 to 8 Other Hours.  
LAND 684 is sequenced for graduation; must be completed prior to the final year of advanced study in the summer; student is required to take a work position in an approved office for a minimum of ten weeks at forty hours/week.  
Prerequisite: Approval of faculty.

LAND 685 Directed Studies  
Credits 1 to 6. 1 to 6 Other Hours.  
Advanced study in an individual landscape architecture course with a selected faculty member; focus on a topic mutually derived by the student and faculty member; requires the production of a professional response solution.  
Prerequisite: Approval of instructor.

LAND 689 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.  
Selected topics in an identified area of landscape architecture. May be repeated for credit.  
Prerequisite: Approval of instructor.

LAND 691 Research  
Credits 1 to 23. 1 to 23 Other Hours.  
Research for and preparation of dissertation.  
Prerequisite: Doctoral classification.

LAND 693 Professional Study  
Credits 1 to 23. 1 to 23 Other Hours.  
Terminal studio to be taken by the qualified master of landscape architecture candidate; requires preparation of a proposal describing the topic, an outlined method, procedures and timeline to be submitted to committee; approved and completed study requires a defense and separate public presentation.  
Prerequisite: Approval of landscape architecture faculty.

Urban and Regional Science Courses

URSC 601 Foundations of Research in Urban and Regional Science  
Credits 3. 3 Lecture Hours.  
Introduction to the research process and its application to problems in urban, planning and regional science; presentation of philosophy and logic underlying the scientific method; critical analysis of planning and design literature according to each step of the research process; problem definition, hypothesis development, study design, analysis and interpretation of the findings.

URSC 602 Research Methods in Urban and Regional Science  
Credits 3. 3 Lecture Hours.  
Basic empirical research methods used in urban, planning and regional science research: experimental, survey and case study designs; comparisons of various methods; application of techniques in sample selection, data collection and analytical approaches.  
Prerequisite: URSC 641 or STAT 651 or approval of instructor.

URSC 631 Foundations of Planning Thought  
Credits 3. 3 Lecture Hours.  
Examines a series of foundational issues in planning and design theory; includes the definition of planning problems, rationality, modernism and post modernism, the validation of value judgments, relations with future generations, multiculturalism and gender justice in liberal democratic societies.  
Prerequisite: Doctoral classification or approval of instructor.

URSC 632 Structure and Functions of Cities and Regions  
Credits 3. 3 Lecture Hours.  
Surveys the design, financial, natural, physical, political and social parameters that influence the development of cities and regions, including presentation of theories about cities and regions, organization of, planning to shape them, and public and private sector plans for structure and function of cities and regions.  
Prerequisite: Doctoral classification or approval of instructor.

URSC 641 Analytic Methods in Landscape and Urban Research I  
Credits 3. 3 Lecture Hours.  
Explicitly address linking theory, measurement, data set development and data analysis issues critical for conducting research in urban and regional planning and landscape architecture.  
Prerequisites: Doctoral classification or approval of instructor.

URSC 642 Analytic Methods in Landscape and Urban Research II  
Credits 3. 3 Lecture Hours.  
Provides a survey of hands on experiences with advanced techniques and procedures related to conceptual measurement and operational issues, data set development and manipulation and data analysis issues critical for conducting academic research.  
Prerequisites: STAT 651, CARC 601, URSC 641, or approval of instructor.

URSC 681 Seminar  
Credit 1. 1 Lecture Hour.  
Oral communication of current research and selected topics in urban and regional science to include lectures, presentations, interviews and discussions.  
Prerequisite: Approval of instructor.

URSC 682 Seminar  
Credit 1. 1 Lecture Hour.  
Written communication of current research and selected topics in urban and regional science to include posters, articles, reports and books.  
Prerequisite: Approval of instructor.

URSC 685 Directed Studies  
Credits 1 to 6. 1 to 6 Other Hours.  
Directed study of selected problems within urban and regional science.  
Prerequisite: Approval of instructor.

URSC 689 Special Topic in...  
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.  
Selected topics in and identified area of urban and regional science. May be repeated for credit.  
Prerequisite: Approval of instructor.
Urban Planning Courses

PLAN 601 Introduction to Planning
Credit 1. 1 Lecture Hour.
Will give an overview of the field of planning, the main areas of concentration/employment within the field, the faculty, their areas of expertise, etc.
Prerequisite: All MUP students in their first semester.

PLAN 604 Planning Methods I
Credits 3. 3 Lecture Hours.
Fundamental concepts and methods used in urban and regional research; qualitative and quantitative research designs; measurement and scaling; sampling; data collection; data file construction; introduction to data analysis and statistical inference.
Prerequisite: Graduate classification.

PLAN 610 Structure and Function of Urban Settlements
Credits 3. 3 Lecture Hours.
The study of urbanization and how geographic, economic, sociological and political factors give rise to changes in the structure and functions of cities, how the movement of people, products, services and capital create unique urban patterns of land use and infrastructure with implications for long-term livability and sustainability.
Prerequisites: Graduate classification.

PLAN 612 Transportation in City Planning
Credits 3. 2 Lecture Hours. 3 Lab Hours.
Influence of transportation in shaping urban form; relationships between land use and transportation; conceptual layout of street systems; trends in urban development, site development, circulation and relationships to the street system; guidelines for the redevelopment of existing streets and the adjacent land.

PLAN 613 Planning Methods and Techniques
Credits 3. 3 Lecture Hours.
Methods and techniques of research, data collection and analysis; coordination of planning process with public policy and plan implementation.

PLAN 616 Analyzing Risk/Hazard and Public Policy
Credits 3. 3 Lecture Hours.
Evaluation and development of risk analysis, including risk assessment, perception of risk, risk communication and risk management; the mitigation of risk, involving technology, emergency management, disaster preparedness; emphasizes the relationship with risk analysis in public policy, participation, emergency preparedness, hazard mitigation and the management of risk.
Prerequisite: Graduate classification.

PLAN 623 Development Planning in Third World Countries
Credits 3. 3 Lecture Hours.
Examines historical, political, economic, social and cultural dimensions of "Third World" development problems; application of planning methods and techniques toward long-term solutions in the context of unfolding contemporary world events; considers the role of international lending institutions, technical assistance and funding requirements in developing countries.

PLAN 624 Digital Communication in Landscape Architecture and Urban Planning
Credits 3. 2 Lecture Hours. 4 Lab Hours.
Learn, develop, and apply fundamental knowledge and skills throughout the process of environmental design and planning; base map preparing, site plan designing, cross-section drawing, 2-dimensional plan rendering, 3-dimensional model rendering and poster presentation.

PLAN 625 Geographical Information Systems in Landscape and Urban Planning
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Provides an understanding of GIS fundamentals; basic concepts, principles and functions; essential skills for applying GIS in various fields such as urban planning, landscape architecture, land development, environment studies, transportation and hazard management; based on learning through class projects.
Prerequisite: Graduate classification.

PLAN 626 Advanced GIS in Landscape Architecture and Urban Planning
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Continuation of GIS in Landscape Architecture and Urban Planning PLAN 625; topics include advanced spatial analysis technology: emphasis on urban planning, landscape architecture, land development, hazard management and related applications to issues.
Prerequisite: PLAN 625.

PLAN 627 Economic Development
Credits 3. 3 Lecture Hours.
Examines the strategies employed in the pursuit of local economic development. Discusses basic principals for critically assessing alternative development policies and programs; reflects on the goals and objectives of economic development efforts; and identifies tools for structuring and financing local projects.

PLAN 629 Neighborhood Revitalization
Credits 3. 3 Lecture Hours.
Addresses the social, political and economic theory of neighborhoods—their growth, function and design; an understanding of how neighborhoods experience change, as well as the consequences of this change for residents.

PLAN 630 Survey of Health Planning Processes
Credits 3. 3 Lecture Hours.
Considers evolution and development of the health care system in the U.S. and how hospitals and other health service institutions go about developing strategic planning systems.

PLAN 631 Health Systems Planning and Policy
Credits 3. 3 Lecture Hours.
Specific health planning issues; distribution of manpower and facilities, financial resources, local-federal partnership, system’s organization and governance.

PLAN 632/LAND 632 Design for Active Living
Credits 3. 3 Lecture Hours. 0 Lab Hours.
Understanding the forms and characteristics of the built environment and the influence on human behaviors, lifestyles and health; theoretical and empirical insights into the issues of physical activity, obesity, and automobile dependency; focus on how changes in the built environment help address these issues.
Prerequisite: Graduate classification or approval of instructor.
Cross Listing: LAND 632/PLAN 632.
PLAN 633 Planning for Healthy Communities  
Credits 3. 3 Lecture Hours.  
An introduction to issues involved in planning healthy cities/communities; by exploring experiences initiated by the World Health Organization and subsequent international experiences, attention is given to the healthy cities/communities movement in the United States and the case studies of programs at local, state and national levels.

PLAN 634 Environmental Health Policy and Planning  
Credits 3. 3 Lecture Hours.  
Interdisciplinary perspective of environmental risk analysis methods and policy implications; federal and state agencies and programs involved in developing and implementing environmental health policies and monitoring environmental health hazards; historical and economic context of environmental health legislation; framework for policy making process and criteria to determine effectiveness and outcomes.  
Prerequisite: Graduate classification.

PLAN 635/LAND 635 Concepts in Ecological Planning and Design  
Credits 3. 3 Lecture Hours.  
Reviews selected ecological concepts and explores integration into ecological/landscape planning, design using a historical perspective; historical and contemporary approach to provide and in-depth understanding of how they can better mediate between human actions and natural process.  
Prerequisite(s): Graduate classification.  
Cross Listing: LAND 635/PLAN 635.

PLAN 640 Law and Legislation Related to Planning  
Credits 3. 3 Lecture Hours.  
Legislative process and planning legislation; enabling legislation and legal tools of planner: zoning, subdivision ordinances, eminent domain, extraterritorial jurisdiction and other related planning instruments.

PLAN 641 Problems of Environmental Planning Administration  
Credits 3. 3 Lecture Hours.  
State and federal legislation pertaining to environmental consumer protective aspects of urban planning; review of administrative procedures; major judicial decisions.

PLAN 642 Planning for Coastal Sustainability and Resiliency  
Credits 3. 3 Lecture Hours.  
Principles of resiliency and sustainability in coastal areas; examination of issues from ecological, social, economic, organizational, planning and built-environment perspectives; application of principles to realistic problems, settings and solutions.  
Prerequisite: Graduate classification.

PLAN 647 Disaster Recovery and Hazard Mitigation  
Credits 3. 3 Lecture Hours.  
Interdisciplinary study of the impacts of environmental disasters; describes process of disaster recovery and examines methods of reducing future vulnerability; analyzes regulation, market mechanisms, and public education as methods for implementing mitigation measures.  
Prerequisite: Graduate classification.

PLAN 649 Organizational and Community Response to Crises and Disasters  
Credits 3. 3 Lecture Hours.  
Introduction to the study of organized and community planning and response to natural and technological disasters and social crisis; focus upon emergency preparedness and response; practical issues, planning for emergency management and existing research literature of basic disaster at the organization and community levels.  
Prerequisite: Graduate classification.

PLAN 650 Disaster Response Planning  
Credits 3. 3 Lecture Hours.  
Mitigation, preparedness, response and recovery strategies; roles of the Federal Emergency Management Agency, the Governor’s Division of Emergency Management, the National Weather Service and the American Red Cross.

PLAN 654 Planning Administration and Management  
Credit 1. 1 Lecture Hour.  
Issues of professional practice in public and private sectors.

PLAN 656 Housing and Community  
Credits 3. 3 Lecture Hours.  
Housing, its development, planning, marketing, designing, financing, and production; social and design history and contemporary issues of American housing development, urban renewal, neighborhood structure and community facilities.

PLAN 658 Plan Implementation  
Credits 3. 3 Lecture Hours.  
Techniques of implementing major urban development programs and plans; capital improvements programming and budgeting; overview of regulatory measures including zoning and subdivision regulations; public involvement process; and fiscal planning.

PLAN 661 Information and Communication in Planning  
Credits 3. 2 Lecture Hours. 2 Lab Hours.  
Types and sources of planning related information; use of verbal, printed and electronic media in communicating planning information and formulating alternative solutions to community development problems.

PLAN 662 Applied Planning I  
Credits 3. 1 Lecture Hour. 6 Lab Hours.  
Acquisition, analysis, and management of information pertaining to urban and regional planning in a case specific scenario; issue analysis; formulation of goals and objectives, and policies; consensus building; includes all tasks leading up to the preparation of an urban, regional or strategic plan.

PLAN 663 Applied Planning II  
Credits 3. 1 Lecture Hour. 6 Lab Hours.  
Preparation of a major plan or planning document for a specific subject associated with the field of urban and regional planning including the environment; land use; urban design; transportation systems; housing and community facilities; infrastructure systems; growth management systems; urban image; and other topics.  
Prerequisite: PLAN 662 or approval of instructor.

PLAN 664 Planning Theory and History  
Credits 3. 3 Lecture Hours.  
A critical examination of the justifications for and major alternative approaches to planning in the public domain, beginning with the fundamental historical intentions of and projects in city planning within industrial societies and tracing the subsequent development of planning as political reform, political analysis, social mobilization and other modern variants.

PLAN 665 Plan Making  
Credits 3. 3 Lecture Hours.  
Introduction to a wide variety of styles and methodologies employed by the urban and regional planner; planning styles reviewed include: comprehensive land use planning; policies planning; strategic planning; regional planning; and private sector corporate planning. Emphasis is given to the actual review and content analysis of plans.
PLAN 667 Site Planning  
Credits 3. 2 Lecture Hours. 4 Lab Hours.  
Introduction to physical planning and design aspects of city planning; the relationship between urban design and city/regional planning; the history of design paradigm; essential tools and applications for physical planning; and site planning and design of physical attributes.

PLAN 669 Urban Infrastructure Planning  
Credits 3. 2 Lecture Hours. 2 Lab Hours.  
Identification of urban infrastructure requirements; criteria for utility location and design; projection of the conversion of land to urban uses; estimating demand for urban services; anticipating the effect of urbanization on storm runoff; and municipal practice in financing infrastructure extensions.

PLAN 670 Urban Public Transportation Planning  
Credits 3. 2 Lecture Hours. 3 Lab Hours.  
Planning, operations, fiscal, management and legal aspects of urban, rural and regional public transportation modes; preparation of transportation systems program elements.

PLAN 673 Design for Sustainable Transportation  
Credits 3. 3 Lecture Hours.  
Introduce planning and design principles, techniques, and examples for achieving sustainable transportation; transit-oriented development, neo-traditional design, traffic calming, non-motorized travel, and smart growth; car sharing, parking pricing, location efficient mortgage, and alternative vehicles and fuel technologies.  
Prerequisite: Graduate classification.

PLAN 674 Transportation System Analysis  
Credits 3. 3 Lecture Hours.  
Introduces basic concepts and techniques of modeling, analyzing and solving problems in transportation systems planning, operations, management and design within a unified framework for transportation systems analysis; includes: disaggregate demand theory and application, activity analysis and land use forecasting, network optimization stochastic processes, queuing models and simulation.  
Prerequisite: CVEN 672 or approval of instructor.

PLAN 675 Theory of Planning and Urbanism  
Credits 3. 3 Lecture Hours.  
Theories of planning and urbanization in world literature; physical community design as expression of ideology and cultural value systems.

PLAN 676 Transportation Investment Decisions  
Credits 3. 3 Lecture Hours.  
The course provides the graduate-level student with an overview of the elements of transportation investment decisions including transportation supply, demand, finance, and economic impact.

PLAN 678 Applied Transportation Studio: Site Planning and Traffic Impact  
Credits 3. 3 Lecture Hours.  
Practical overview of urban planning and transportation topics including transportation-land use, functional classification, thoroughfare and land use planning, site planning, traffic impact analysis, access management and site design.  
Prerequisite: Approval of instructor.

PLAN 681 Seminar  
Credit 1. 1 Lecture Hour.  
Reports and discussions of current research and selected topics in urban and regional planning.  
Prerequisite: Approval of instructor.