URBAN PLANNING AND LANDSCAPE ARCHITECTURE

College of Social Science

Urban Planning U P

103. Design of Cities
Spring. 3(3-0)

Definition of planning; objectives and accomplishments of the urban designer; basic design principles of space, scale and circulation applied to the physical pattern of cities.

231. Evolution of Urban Communities
Fall, Spring. 3(3-0)

Basis for particular overall forms in urban settlements. Intermrelationships of various cultural influences and theoretical urban concepts to contemporary communities in the United States and foreign areas.

232. Contemporary Urban Development
Fall. 3(3-0) 231 recommended.
Current patterns, trends and problems indicated in the development and renewal of established urban centers and new urban growth.

233. The Role of Planning in Urban Development
Spring. 3(3-0) 231 recommended.
Influence upon urban and regional development exerted by various types of governmental and private organizations.

243. Planning Communication
Fall, Spring. 3(2-2)

Development of planning materials using basic skills of graphic presentation, writing, and oral reporting. Methods of graphic analysis and reproduction will be emphasized.

311. Site Planning and Construction I
Winter. 5(3-6)
Elementary problems emphasizing physical development of specific sites involving population densities, architectural forms, grading, public utilities, traffic and parking, and functioning street patterns.

342. Research Methods in Planning
Winter. 5(3-0) SSC 211
Methods for investigation and analysis of urban phenomena; models, data and techniques used in mathematical, graphical and logical analysis.

351. Spatial Design
Fall. 5(3-4) 233, 243.
Urban community functional physical elements at various scales. Laboratory work on planning problems related to human activity flow, terrain and structures, including land subdivision design.

352. Urban Design Problems
Winter. 5(0-9) 351.
Application of the physical design processes from the scale of individual element groupings to complete community units in a two and three dimensional context.

363. Comprehensive Planning Process
Spring. 3(3-0) 233, 342.
Theory and application of coordinated planning for urban development, including policies and development plan formulation, programming, evaluation, review and revision of policies and plans.

400. Urban Development and Planning
Fall, Spring. 3(3-0) Credit may not be earned in U P 233 or 231 and 400.

Urban planning and urban design; project development and design. Emphasis will be placed on the physical development of the city as it relates to function and structure.

431. International Housing Developments
Fall. 3(3-0)

Importance and types of governmental housing programs in reference to urban design, financial policies and land issues. Projects and programs selected primarily from underdeveloped countries.

433. Man and His Shelter
Fall, Spring. 3(3-0)

Interdisciplinary approach to man and his shelter; influence of shelter in the community, housing as a cultural, economic, and institutional force; future developments and needs.

461A. Comprehensive Planning
Fall. 4(0-8) 362.
Collection, analysis and synthesis of planning information for an established urban area and region. Formulation of comprehensive physical development policies and plans and implementation programs.

461B. Comprehensive Planning
Winter. 4(0-8) 461A.
Continuation of 461A.

461C. Comprehensive Planning
Spring. 4(0-8) 461B, 471.
Continuation of 461B.

471. Ecological Basis for Planning
Fall. 3(3-0) Seniors.
Ecological principles, relationships and interaction between natural and man-made elements of the environment; critical review of environmental planning projects at local, state and national levels.

472. Urban Development Regulation
Winter. 3(3-0) Seniors.
Public and private regulations basic to regulations influencing urban development; state enabling legislation and regulations, local ordinances, especially for zoning and subdivision regulations.

473. Urban Development Programs
Spring. 3(3-0) 472.
Programs influencing urban development, including direct development projects, technical and financing assistance, administrative regulations by federal and state agencies; National, state and regional programs.

490. Independent Studies in Urban Planning
Fall, Winter, Spring. 2(2-0) Senior majors, approval of department.

800. Special Problems
Fall, Winter, Spring, Summer. 2 to 6 credits. May enroll for a maximum of 6 credits. Approval of school.

801. City and Regional Design
Fall. 3(3-0) 490.

Urban growth patterns; types, roles and design theory of new cities; techniques and organization for urban growth; selection of subject areas will be made according to the class composition.
Descriptions — Urban Planning and Landscape Architecture of Courses

820. Research Methods
Fall. 3(3-0) 342 or 400 and approval of school.
Examination of research methods useful in application to components of urbanization as population, land use, housing, business facilities, industrial development, traffic, recreation, and critical aspects of community structure.

821. Seminar in Housing and Urban Renewal
Winter. 3(3-0) 433.
Regulation, stimulation, salvage, and replacement of housing through public policy and administrative procedures. Increasing role of private initiative as partner to public action through preservation, rehabilitation, and redevelopment practices. Evaluation of trends and needs; analysis of case studies.

822. Urban Circulation
Fall. 3(3-0) 342 or 400 and approval of school.
Functional requirements and interrelationships of all means for the movement of people and goods in urban areas as they affect the physical pattern of the community.

830. Legal Bases for Planning
Winter. 3(3-0) 473; approval of school.
Analysis of legislation pertinent to planning, emphasis on legislation for city and regional planning bodies and creation of special authorities with general planning responsibilities.

831. Zoning and Land Subdivision Regulation
Fall. 3(3-0) 830 or approval of school.
Ordinance structure and planning theory as expressed in tests of ordinances. Selected court cases.

832. Administration and Professional Practice
Spring. 3(3-0) Majors or approval of school.
Expanding scope of urban planning and implications for administration, organizations for administration; relationship to governmental operations, to other professions, to public. Staff functions and responsibilities; administrative instruments; practice of the consultant; professional ethics.

899. Research
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 15 credits.
Individual student research on a topic of critical importance to urban planning that will demonstrate student's competence and make a contribution to the knowledge of the field.

Landscape Architecture

100. Environmental Perception
Fall, Spring. 3(3-0)
Environmental design concepts, orientation to landscape architecture, including environmental inventories, objectives and aspects of public and private professional practice, and scope and types of landscape development projects.

110. Fundamentals of Design
Fall, Winter. 5(2-6)
Analysis and application of elements and principles of design in two and three dimensional expressions to abstract and spatial design compositions for environmental requirements.

120. Graphic Communication
Winter. Spring. 4(1-6)
Basic technical skills for graphic communications, mechanical and free-hand drafting and lettering, sketching, perspective drawings, use of graphic symbols, dimensioning, rendering, media and techniques, and reproduction methods.

201. Site Planning Theory
Spring. 3(3-0)
Elements, principles and concepts for site development, including area orientation, orientation and siting of buildings, circulation and parking systems, spatial definitions, and detail design considerations.

230. Landform Design
Fall, Winter. 4(2-4) Majors or approval of department.
Elements and principles of site grading, relief visualization, contour interpretation, land form units, surface drainage, slope calculations, and earthwork quality determinations.

240. Landscape Design Methods
Winter. 4(1-0) Majors or approval of department.
Considerations and techniques of landscape design, including natural, cultural and perceptual inventories, site and program analyses, development of design concepts, with verbal and graphic expressions. Field trips required.

241. Site Planning Studio
Spring. 3(3-6) Majors and 301 concurrently, or approval of department.
Applications of site planning theory and landscape design methods to representative site development projects involving buildings, uses areas, land, water and plant forms, with verbal and graphic expressions. Field trips required.

250. Introductory Planting Design
Winter. 4(2-4) Majors or approval of department.
Principles of and procedures for arrangement of plant compositions, emphasizing the perceptual characteristics of plants by means of models, sketches and plans, and potential applications to landscape developments. Field trips required.

253. Community Design Theory
Fall. 2(2-0)
Ecological and cultural elements and concepts of community development, including data surveys, legal controls, design standards and site planning requirements for community facilities.

300. Housing Design Theory
Winter. 2(2-0)
Concepts, principles and regulations for the development of housing areas, including ecological considerations, cultural implications, housing forms, types of developments, legal controls, and site planning requirements and procedures.

305. Recreation Design Theory
Spring. 2(2-0)
Ecological and cultural considerations for development of open space and recreation areas, resource characteristics and limitations activity requirements, recreation systems, site design standards, and recreational land use programs and policies.

321. Advanced Graphic Communication
Fall. 4(1-0) Junior majors.
Development of proficiency in landscape delineation and rendering techniques, including specialized media and formats for visual presentations of design concepts, analyses and perceptions.

333. Site Construction
Spring. 4(2-4) Junior majors.
Materials and methods for construction of landscape developments, including details, layouts, construction drawings, specifications and cost estimating procedures.

343. Design of Community Facilities
Fall. 3(0-6) Junior majors and 303 concurrently.
Applications of community design theory and landscape design methods to representative community developments, such as institutions, commercial, civic and industrial site design projects, with written, oral and graphic representations. Field trips required.

344. Design of Housing Developments
Winter. 3(0-6) Junior majors and 304 concurrently.
Applications of housing design theory and site planning principles and methods to representative housing developments, such as residential land subdivisions, multifamily complexes and planned unit developments, with written, oral and graphic representations. Field trips required.

345. Design of Recreation Areas
Spring. 3(0-6) Junior majors and 305 concurrently.
Applications of recreation design theory, site planning principles and procedures to representative recreational land developments, parks, special recreation use areas, with verbal and graphic expressions. Field trips required.

353. Functional Planting Design
Spring. 4(2-4) Junior majors.
Principles and procedures for selection and arrangement of plant materials for specific uses, including climate modification, spatial definition, circulation control, soil and water conservation, etc., as expressed by planting plans and specifications.

360. Architectural Design Theory
Winter. 2(2-4)
Physical and visual properties of construction materials, structural elements and systems, siting of buildings, form-space relationships and related principles of architectural design.

362. Architectural Design Studio
Winter. 3(0-6) Majors or approval of department.
Application of architectural design theory to representative building types and situations, with emphasis on structural and spatial form and site relationships of simple buildings. Field trips required.

370. History of Environmental Development
Winter. 3(0-6)
Significant natural conditions and cultural events which have influenced man's attempts to organize and design his physical environment, as expressed in historic landscape development styles and movements.
401. **Regional Design Theory**  
_Fall_. 2(2-0)  
Concepts and policies affecting natural resource conservation, selection and location of significant human use areas, landscape development considerations and their environmental implications.

403. **Urban Design Theory**  
_Winter_. 2(2-0)  
Concepts and procedures for the organization, design and development of public and private urban forms and spaces, including survey of urban elements, cultural, ecological and aesthetic considerations, and interdisciplinary collaboration.

423. **Professional Graphics**  
_Spring_. 4(1-6) 321.  
Applications of advanced sketching, perspective and rendering techniques for typical professional presentations, including prints, reproductions, photography and multi-media audio-visual communications.

430. **Special Projects in Environmental Design**  
_Summer_. 5(2-6) 322, 345.  
The improvement of man’s physical environment as taught by a sequence of highly regarded professional practitioners and educators in the environmental design professions.

432. **Site Engineering**  
_Winter_. 4(2-4) Senior majors and C E 251.  
Principles and procedures for design of site development systems, horizontal and vertical road alignments, storm and sanitary sewers, site utilities and computer applications for preparation of site construction drawings.

441. **Regional Landscape Design**  
_Fall_. 3(0-6) Senior majors and 401 concurrently.  
Applications of regional design theory and landscape design methods to representative large scale land use and development projects, resource conservation, environmental restoration, and accommodation of various human activities. Field trips required.

443. **Urban Landscape Design**  
_Winter_. 3(0-6) Senior majors and 403 concurrently.  
Applications of urban design theory and landscape design methods to representative urban development projects, public plazas, pedestrian malls, civic and cultural complexes, etc., with written, oral and graphic representations. Field trips required.

451. **Ecological Planting Design**  
_Fall_. 4(2-4) 250. 353 and HRT 211, 212.  
Selection, utilization and arrangement of natural materials for various site development purposes, with emphasis on consideration of natural environmental factors which affect plant growth and location for distinctive sites and uses. Field trips required.

453. **Architectural Design II**  
_Fall_. 4(1-6) 360, 362.  
Design of buildings and their groupings in relation to the landscape, including structural systems, form-space compositions, and applications to representative landscape development projects. Field trips required.

471. **History of Landscape Architecture**  
_Fall_. 3(0-0)  
Environmental design concepts and projects from 1850 to the present time, with emphasis on the development of the profession and practice of landscape architecture in the United States.

480. **Professional Practice**  
_Winter_. 3(3-0) Senior majors.  
Principles and procedures of professional landscape architectural practice, including ethics, client relations, registration, inter-professional collaboration and organization of operations for design implementation. Field trips required.

483. **Landscape Architecture Seminar**  
_Spring_. 3(4-0) Senior majors.  
Research presentation and discussion of significant current issues, trends, events and opportunities relating to contemporary theories and practices of landscape architecture.

490. **Special Problems**  
Fall, Winter, Spring, Summer. 2 to 5 credits.  
May re-enroll for a maximum of 8 credits.  
Approval of school.

499. **Landscape Architecture Design Thesis**  
_Spring, Summer_. 5(1-8) Senior majors.  
Demonstration of analytical, creative and technical competencies in the development of methods and/or concepts leading to design solutions for contemporary landscape architecture problems.

501. **Graduate Landscape Architecture I**  
_Fall, Winter, Spring_. Fall, Summer. 5 to 12 credits.  
A series of complex problems of variable subject matter adjusted to the interests and needs of each individual student and designed to emphasize the various phases of landscape architecture such as plant materials and planting design, drafting and delineation, surveying and construction, contracts, specifications and reports, architecture and city planning and landscape design.

502. **Graduate Landscape Architecture II**  
_Fall, Winter, Spring_. Fall, Summer. 5 to 12 credits. 801.  
Continuation of 501.

503. **Graduate Landscape Architecture III**  
_Fall, Winter, Spring_. Fall, Summer. 5 to 12 credits. 802.  
Continuation of 802.

504. **Comprehensive Problem**  
_Fall, Winter, Spring, Summer_. Variable credit. May re-enroll for a maximum of 15 credits. 803.  
Development of a terminal, creative project of subject matter selected by the student and approved by the department, involving the various phases of landscape architecture and submitted to the faculty as evidence of mastery of the principles of his profession.

**VETERINARY MEDICINE**

500. **Veterinary Medical Communication**  
_Fall, Spring_. 1(1-0) Admission to the professional veterinary program.

Seminars on professional speaking and writing, research design and data interpretation, and client relations.

502. **Nervous System and Epidemiology**  
_Summer_. 5(5-0) Fifth-term Veterinary Medicine students.  
Normal and abnormal neural structure and function in animals with emphasis on clinical neurology and neuropathology. Principles of epidemiology and their application in the study of diseases in animal populations.

504. **Urinary and Hematopoietic Systems**  
_Summer_. 7(5-6) Fifth-term Veterinary Medicine students.  
Integrated approach to the understanding of the urinary system in health and disease of animals. Pathogenesis, diagnosis, and clinical management of diseases of the hematopoietic and lymphoid organs and tissues.

510. **Survey of Infectious Agents**  
_Fall_. 4(4-0) Sixth-term Veterinary Medicine students.  
Host-microorganism relationship in diseases of animals: laboratory diagnosis, treatment, control, and public health significance will be emphasized.

512. **Metabolic Diseases and Endocrinology**  
_Fall_. 2(2-0) Sixth-term Veterinary Medicine students.  
Biochemical and physiological basis of metabolic and endocrine diseases of animals including diagnosis, treatment, and management.

514. **Cardiovascular and Respiratory Systems**  
_Fall_. 7(5-6) Sixth-term Veterinary Medicine students.  
Pathogenesis, diagnosis, and management of cardiovascular and respiratory diseases of animals: anatomical, physiological, and pathological principles providing basis for medical and surgical treatment will be emphasized.

516. **Reproductive System**  
_Fall_. 5(4-3) Sixth-term Veterinary Medicine students.  
Reproductive diseases of animals with emphasis on general structure and function, endocrine interrelationships, methods for examination of mammary gland and reproductive tract, diagnosis, and treatment.

518. **Diagnostic and Surgical Procedures**  
_Fall_. 20(6) Sixth-term Veterinary Medicine student.  
Demonstration and performance of some procedures applicable to nervous, reproductive, and respiratory systems.

520. **Veterinary Public Health**  
_Winter_. 3(3-0) Seventh-term Veterinary Medicine students.  
Public health aspects of veterinary medicine: the nature of laws, ordinances, and regulations; and veterinary medicine's role in the protection of the environment, ecology, and conditions of food hygiene.

522. **Digestive System and Nutrition**  
_Winter_. 9(6-9) Seventh-term Veterinary Medicine student.  
Pathogenesis, diagnosis, and treatment of diseases of the alimentary tract and digestive organs of animals. Recognition and rational therapy of nutritional diseases in animals.