Courses

434. Stage Costume Design
Fall, Winter, Spring. 4(4-0). Approval of department.
Theory of costume design. Costume design problems.

435. Stage Scenery Design
Spring. 3(3-0)
Theory of and special problems in stage design.

436. Stage Lighting Design
Fall, Winter. 4(4-0). Approval of department.
Theory and practice in lighting design and equipment.

477. Development of Theatre I
Fall. 3(3-0)
Evolution of physical theatre and dramatic literature from 900 B.C. to 1770 with emphasis on theatre as a performing art.

478. Development of Theatre II
Spring. 3(3-0)
Crisis in theatre forms from 1770 to the present with emphasis on theatre as a performing art.

492. Directing Plays for Children
Spring. 2(2-0)
Directing plays for the child audience with special emphasis on staging techniques, child audience psychology and play selection.

483. Theatre Organization and Management
Fall. 3(3-0). Approval of department.
Administration, organization and philosophy of theatre.

804. Problems in Theatrical Design
Fall, Winter, Spring, Summer. 4(4-0)
Problems in theatre design-costumes, scenery, lighting, architecture, properties, sound.

805. Studies in Comparative Theatre and Drama
Fall, Winter, Spring. 3(3-0)
Comparative study of selected playwrights, movements, trends and developments in world drama from the beginnings to the present day.

806. Advanced Directing Practices
Winter. 4(4-0)
Directing practice in acting.

809. Acting Theory
Fall. 2(2-0)
Discussion of the theories, processes, techniques, and styles of acting set forth in the writings of prominent performers, teachers, and critics.

URBAN PLANNING AND LANDSCAPE ARCHITECTURE

College of Social Science

Urban Planning

200. Introduction to Urban Planning
Fall, Winter. 3(3-0)
The field of urban planning. Development of cities and roles cities have played. Role of the urban planner, with current and emerging roles in planning. Problems facing cities today.

231. Evolution of Urban Communities (5)
Fall, Spring, Summer. 4(4-0)
Forces which promoted urban development and shaped urban areas throughout human history. Relationships of these continuing influences to current urban concerns. Historical bases of cultural factors in contemporary urbanism.

243. Planning Communication
Fall. 4(2-4)
Development and presentation of planning materials emphasizing the coordination of speaking, writing, and graphic skills.

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

335. Power, Policy, and the Metropolis
(U.M.S. 335) Spring. 4(4-0) Juniors.
Critical issues in power and decision making at a local level. Issues in central cities, suburbs, and metropolitan regions. Stresses the interaction between policy and social and economic forces.

341. Urban Planning Methods of Analysis
Fall. 3(3-0) Juniors in urban planning or approval of school.
Types of urban planning variables and methods of application to planning studies. Study design for basic planning investigations, and technique of investigation.
824. Legal Bases for Planning
Winter. 3(0-3) U & P 473, approval of school.
Analysis of legislation pertinent to planning; emphasis upon legislation for city and regional planning bodies and creation of special authorities with general planning responsibilities.

828. Planning Presentation Techniques
Fall. 3(1-4) Approval of school.
Communication skills utilized by planners to present policy proposals to governmental decision makers and citizens. Speaking, writing, and small group leadership is integrated with essential planning graphic skills.

830. Development Project Evaluation
Spring. 3(2-2) Approval of school.
Planning evaluation methods and processes employed in the review of urban development proposals and projects, site plans, and public policies.

834. Planning Practicum I: Field Studies
Fall. 3(0-6) Completion of the first year MUP Core Program or approval of school.
Field study emphasis in the collection, analysis, and synthesis of information by individual students or student groups, to develop solutions to specific urban problems.

835. Planning Practicum II: Plan Making and Implementation
Winter. 3(0-6) U & P 834.
Based on study and research done in U & P 834, the preparation of plans appropriate to the study area and subject. The design of statutory measures and administrative policies for implementation.

836. Introduction to Design
Winter. 3(0-6) U & P 828 or approval of school.
Studio course emphasizing the role of planning in shaping the process of urban growth and development, and the role of physical form and structure in influencing cultural patterns.

840. Administration and Professional Practice
Winter of even-numbered years. 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.

842. An International Comparative Study of Urban Planning
Winter of odd-numbered years. 3(3-0) 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.

850. Housing Program Planning
Spring of even-numbered years. 4(2-4) Approval of school.
Regulation, stimulation, salvage, and replacement of housing through public policy and administrative procedures; increasing role of private initiative as partner to public action through conservation, rehabilitation, and redevelopment practices; evaluation of trends and needs; analysis of case studies.

854. Urban Transportation Planning
Spring of even-numbered years. 4(2-4) Approval of school.
Examination of travel, land use, and transportation networks. Transportation planning data, processes, and plans, and their implication on theory and practice of metropolitan planning. Field work in current transportation issues.

855. Urban Land Policy and Regulation
Spring of odd-numbered years. 4(2-4) Approval of school.
Public land use policy and legislation, and implementing governmental actions. Land use controls exercised by several levels of government. Field work in development and application of land use control instruments.

862. Development Planning and Administration
Spring of odd-numbered years. 4(2-4) Approval of school.
Measurement of urban obsolescence and deterioration with accompanying analysis of symptoms and causes for a selected community. Comprehensive plan for urban renewal and development objectives will be developed and one or more project areas will be studied and processed in accordance with most effective techniques and administrative procedures. Emphasis to be placed on the objective of unified, revitalized community development.

889. Master's Research
Fall, Winter, Spring, Summer, 2 or 3 credits. Approval of school.
The research component of the Plan B option for the MUP degree.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. Variable credit. May enroll for a maximum of 15 credits. Approval of school.

100. Environmental Perception
Fall. 3(0-0)
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, Spring. 4(2-4)
Analysis and application of elements and principles of design in two and three dimensional expressions to abstract and spatial design compositions for environmental requirements.
346. Project Site Design
Winter. 4(1-0) L A 341.
Application of site planning principles and landscape design methods to representative site development projects, with emphasis on housing and recreational requirements and opportunities.

348. Public Site Design
Spring. 4(1-0) L A 346.
Application of site planning principles and landscape design methods to comprehensive site development projects, with emphasis on public and institutional requirements and opportunities.

353. Planting Plans
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, and soil and water conservation, as expressed by planting plans and specifications.

370. History of Environmental Development
Fall. 3(2-2)
Significant natural conditions and cultural events which have influenced attempts to organize and design the physical environment, as expressed in historic landscape development styles and movements.

390. Landscape Architecture Field Studies
Fall, Winter, Spring. 2 to 4 credits. May reenroll for a maximum of 8 credits. Approval of school. Field trips to contemporary and historical site and regional zones within or outside the United States. Prior and post study required.

401. Landscape Management
Winter. 3(3-0)
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. 3(3-0)
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) L A 321.
Applications of advanced sketching, perspective and rendering techniques for typical professional presentations, including prints, reproductions, photography and multi-media audio-visual communications.

437. Design Implementation
Winter. 4(1-6) Senior majors, L A 480 concurrently.
Preparation of a complete package of contract documents for a representative site development project, including typical construction drawings, specifications and cost estimates.

442. Comprehensive Landscape Design
Spring. 6(1-0) L A senior major.
Applications of regional and urban design theory and landscape design methods to representative large scale regional and urban landscape development projects.

471. History of Landscape Architecture
Spring. 2(2-2)
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(2-2) Senior majors, L A 437 concurrently.
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(2-2) 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. 2 to 5 credits. May reenroll for a maximum of 12 credits. Approval of school. Investigation, for advanced undergraduate students in landscape architecture, developed from special interest areas.

499. Landscape Architecture Design Thesis
Fall. 4(0-8) L A Senior major.
Demonstration of analytical, creative and technical competencies in the development of methods and/or concepts leading to design solutions for contemporary landscape architecture problems.

VETERINARY MEDICINE V M (COLLEGE OF)

511. Introduction to Veterinary Medicine I
(V M 500A.) Fall. 2(2-0) First-term Veterinary Medicine students.
Species and breed identification, predisposition for specific diseases, feeding, restraint and handling of small domestic animals, unusual pets, and laboratory animals.

517. Perspectives in Veterinary Medicine
Fall. 1(1-0) First-term Veterinary Medicine students.
Ethical principles, historical background and organization of the veterinary profession.

521. Introduction to Veterinary Medicine II
(S08B.) Spring. 4(3-4) Third-term Veterinary Medicine students.
Restraint, physical examination and diagnostic procedures in food animals and horses. Fundamentals of equine conformation, gaits, shoeing and routine medical care.

531. Animal Behavior
(Spring. 3(3-0) Third-term Veterinary Medicine students.
Emphasis on behavior of animals relating to disease prevention and treatment. Lectures, discussions and demonstrations on veterinary ethology including animal communications, reproduction, restraint, handling, housing and feeding habits.

540. Metabolic Diseases and Endocrinology
(503.) Winter. 2(2-4) Fifth-term Veterinary Medicine students.
Biochemical and physiological basis of metabolic and endocrine diseases of animals including diagnosis, treatment and management.

542. Principles of Radiology
Fall. 2(2-4) Fourth-term Veterinary Medicine students.

544. Veterinary Epidemiology
Fall. 4(4-0) Fourth-term Veterinary Medicine students.

550. Preventive Veterinary Medicine and Public Health
(530.) Winter. 4(4-0) Fifth-term Veterinary Medicine students.
Public health aspects of veterinary medicine. Preventive and regulatory medicine including meat and milk hygiene, water supply and treatment, solid and liquid waste treatment and disposal and zoonosis.

560. Urinary System
(S07.) Spring. 3(3-0) Sixth-term Veterinary Medicine students.
Normal and abnormal structure and function, diagnostic methods, and the medical and surgical manipulation of the urinary system.

561. Core of Medicine Laboratories I
Spring. 2(0-6) Sixth-term Veterinary Medicine students.
Classification diagnosis and treatment of diseases of the urinary, hematopoietic, nervous, integumentary and visual systems of animals.

562. Hematopoietic System
(Spring. 2(2-4) Sixth-term Veterinary Medicine students.
Normal structure and function of the hematopoietic system and pathophysiologic effects of hematopoietic diseases. Clinical manifestations, laboratory evaluation and medical management.

563. Visual System
(Spring. 2(2-4) Sixth-term Veterinary Medicine students.
Methods of examination, diagnosis, and treatment of ocular diseases.

564. Survey of Infectious Agents
(Spring. 4(4-0) Sixth-term Veterinary Medicine students.
Host-microorganism relationship in diseases of animals; laboratory diagnosis, treatment, control, and public health significance.