UP

Courses

# 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 (S)

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.

# 335. Power, Policy, and the Metropolis (UMS 335.) Winter. 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.

### 342. Research Methods in Planning Winter. 4(4-0) U P 341.

Methods for investigation and analysis of urban phenomena; models, data and techniques used in mathematical, graphical and logical analysis.

# 351. Spatial Design

Winter, Spring. 4(2-4) U P 200; L A 120 or BCM 215.

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 Spring. 4(0-8) U P 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) U P 233.

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. 3(3-0) Credit may not be earned in U P 233 and U P 400. Juniors. Not open to majors in Urban Planning.

Planning as a governmental function in a democratic society. Powers and responsibilities for guiding urban growth and change. Processes of planning and its implementation. Development regulations and public facilities planning.

# 410. Computer Applications in Planning and Landscape Architecture

Spring. 3(2-2) CPS 115 or CPS 120, approval of school.

Computers in planning and landscape microcomputers and interactive terminals. Application of various programs and software: simulation models, scheduling techniques, project assessment and management, spread sheets, data base management, word processing.

### 431. Housing: Developing Societies Fall. 3(3-0)

Housing programs relative to public policy, urban development, population characteristics and change, financing, land and tenancy issues. Projects as examples of public and private initiatives. Comparative analyses of housing systems.

### 432. Housing: Industrialized Societies

(RES 465.) Winter. 4(4-0) Juniors. Interdepartmental with the Department of Human Environment and Design.

Comparison of urban housing policies in selected countries, such as Great Britain, Italy, Poland, the Soviet Union, the Scandinavian countries, the United States, and the Federal Republic of Germany.

# 433. Housing: United States Spring. 3(3-0)

Interdisciplinary approach to housing as a societal institution; cultural, physical and economic characteristics of housing; housing problems, governmental policies and assisted housing programs. Future developments, policy alternatives and needs.

# 442. Foundations of Urban Policy (UMS 432.) Fall. 4(4-0) Juniors.

Historical and political foundations of contemporary urban policy, stressing federal policies from public housing to general revenue sharing. Role of power and influence in policymaking process.

# 443. Urban Policy Analysis

(UMS 433.) Winter. 4(4-0) U P 342 or approval of school.

The nature of contemporary American urban public policy. The institutions and processes that affect urban policy. Theory and methodology of public policy analysis relating to select urban issues.

# 450. Social Planning

Winter. 3(2-2) UP 363, UP 400 or graduate students.

Definition of Social Planning. Techniques for identifying problems of resource access, and survey of attributes and skills necessary to improve delivery and participation. Field work with neighborhood organizations and planning agencies. Field trips required.

# 460. Planning Practice

Spring.  $\overline{3}(3-0)$  Senior urban planning major or U P 400.

Administration of urban planning in relationship to governmental operations, other professions and the public. Emphasis on staff functions and responsibilities, consultant practice, and professional ethics.

# 461A. Comprehensive Planning Fall. 4(0-8) U P 363.

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) U P 461A.

Continuation of U P 461A.

# 462. Fiscal Planning

(362.) Winter. 3(3-0) U P 363 or U P

400 or approval of school. Analysis of costs associated with plan implementation, redevelopment, and preservation. Relationship between the bugeting process and the fiscal implications of planning.

# 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. 4(2-4) U P 461B, U P 472. Current governmental programs affecting urban development and renewal, grants process, proposal preparation. Application of appropriate programs to laboratory community as parts of comprehensive planning implementation strategy.

#### 480. Historic Preservation

Winter. 3(3-0) Seniors, approval of department. Interdepartmental with and administered by History of Art.

History and philosophy of historic preservation; the new attitude toward preservation—historic districts and neighborhoods—adaptive use, documentation and tools for preservation; a project based on field research.

#### 489. Internship in Urban Planning

Fall, Winter, Spring, Summer. 2(0-8) or 3(0-12) or 4(0-16) May reenroll for a maximum of 8 credits. Senior majors; approval of school.

Individual experience in approved agencies and departments in the Lansing area.

#### 490. Independent Studies in Urban Planning

Fall, Winter, Spring, Summer. 2 credits. May reenroll for a maximum of 4 credits. Senior majors, approval of school.

# 800. Special Problems

Fall, Winter, Spring, Summer. 2 to 6 credits. May reenroll for maximum of 6 credits. Approval of school.

# 803. Contemporary Urban Politics, Policy and Planning

Winter. 3(3-0) Approval of school. The contemporary role of federal urban policy, and relationships between selected key areas of urban policy and urban planning. Approved through Summer 1986.

# 808. Background of Urban Development Plannning

Fall. 3(3-0)

American urban development from 1620 to the present, including shifts in technology and social forces that influenced development patterns. Problems faced by the professional planner are emphasized.

# 811. Advanced Quantitative Methods in Geography and Planning

Spring. 4(4-0) Approval of department, GEO 427. Interdepartmental with and administered by the Department of Geography. Statistical and mathematical approaches to spatial distributions and areal data.

# of Courses

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# 814. Research Methods in Urban and Regional Analysis

Winter. 3(3-0) U P 427 or approval of school. Interdepartmental with the Department of Geography.

Basic quantitative techniques used in urban and regional analysis and planning, including statistical, linear, and network methods. Introduction to computer use.

# 815. Application of Research Methods to Planning and Analysis

Spring. 3(3-0) UP 814. Interdepartmental with the Department of Geography. Applied techniques used in planning research. Analysis and forecasting of urban population, economic activity, and land use. Analysis of transportation and other community facilities.

# 816. The Planning Process

Fall. 3(3-0)

Basic research and survey methods, and procedures used by the professional planner in developing a comprehensive plan.

# 818. Planning Process Theory

Winter. 3(3-0) Approval of school.

Planning as a decision-making process, methods for defining goals in public and private planning programs, role of planning in public policy, formulation, planning for positive human-environment relationships.

# 819. Theories of Urban Forms and Structure

Spring. 3(3-0) Approval of school. Interdepartmental with the Department of Geography.

Idealized urban forms, theories and models in urban form as it relates to function and location of urban activities.

# 824. Legal Bases for Planning

Winter. 3(3-0) UP 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 experience 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 a

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.

# 858. 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. Internship in Urban Planning

Fall, Winter, Spring, Summer. 2(0-8) or 3(0-12) or 4(0-16) May reenroll for a maximum of 8 credits. Graduate students in Urban Planning; approval of school.

Individual experience in approved agencies and departments in the Lansing area.

#### 897. Special Topics in Urban Planning

Fall, Spring. 2 to 4 credits. May reenroll for a maximum of 6 credits if different topic is taken.

Issues pertaining to urban planning as they arise out of current research, planning practice or the interplay of national issues and urban problems.

#### 898. 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 reenroll for a maximum of 15 credits. Approval of school.

# Landscape Architecture

# 100. Environmental Perception Fall, Spring. 3(3-0)

Environmental design concepts, orientation to landscape architecture, objectives and aspects of public and private professional practice, and scope and types of landscape development projects.

# 110. Fundamentals of Design Fall. 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.

# 120. Graphic Communication Fall. 4(2-4)

Technical skills for graphic communication, freehand, mechanical drafting and lettering, sketching and perspective drawing; use of graphic symbols, diagrams, matrices and charts; rendering media, techniques, presentation and reproduction methods.

# 201. Site Planning Fall. 3(3-0)

Elements, principles and concepts for site development, including use area organization, orientation and siting of buildings, circulation and parking systems, spatial definitions, and detail design considerations.

# 230. Landform Design

Winter. 4(2-4) Provisional majors; or approval of school.

Elements and principles of site grading, relief visualization, contour interpretation, land form units, surface drainage, slope calculations, and earthwork quality determinations.

# 233. Site Construction

(L A 333.) Winter. 4(2-4) Provisional majors.

Materials and methods for construction of landscape developments, including details, layouts, construction drawings, specifications and cost estimating procedures.

# 240. Landscape Design Methods

Winter. 3(2-2) Provisional majors; or approval of school.

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.

# 243. Basic Site Design

(341.) Spring. 4(2-4) Provisional majors; or approval of school.

Applications of site planning theory and landscape design methods to representative site development projects involving buildings, use areas, land, water and plant forms, with verbal and graphic expressions. Field trips required.

#### 321. Advanced Graphic Communication

# Winter. 4(1-6) 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.

# 332. Site Engineering (432.) Fall. 3(2-2) Majors.

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.

# 342. Recreation Site Design

Fall. 4(2-4) L A 240, Landscape Architecture majors or approval of school. Ecological and cultural considerations, resource characteristics, activity requirements, recreation systems and site design standards; with ap-

tion systems and site design standards; with applications of design process to representative recreation site developments, parks and special use areas.

# 346. Housing Site Design

Winter. 4(2-4) Landscape Architecture or Urban Planning majors; or approval of school.

Application of site planning principles and landscape design methods to representative site development projects, with emphasis on housing requirements and opportunities.

# 348. Community Projects Design Spring. 4(2-4) 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.

# 350. Planting Design Theory

(LA 250.) Fall. 4(2-4) HRT 212, Junior majors; or approval of school.

Principles of and procedures for arrangement of plant compositions, emphasizing the perceptual chartacteristics of plants by means of models, sketches and plans, and potential applications to landscape developments. Field trips required.

# 353. Planting Plans

Spring. 3(2-2) 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 Spring. 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. Environmental Land Planning Winter. 3(3-0)

Principles and methods of ecologically based land planning, stressing management and natural resources in relationship to growth and development; includes current environmental planning and development at local and state levels.

# 401A. Environmental Planning Application

Winter. 1(0-2) L A 401 concurrently. Sample design exercises applying environmental land planning theory from L A 401 to select landscapes.

### 403. Urban Design Theory Spring. 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.

# 403A. Urban Design Applications

Spring. 1(0-2) L A 403 concurrently. Sample design exercises applying urban design theory from L A 403 to select urban landscapes.

# 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 audiovisual communications.

# 437. Design Implementation

Winter. 4(1-6) Senior majors, L A 480 concurrently; CPS 115 or CPS 120.

Preparation of a complete package of contract documents including the use of computer technology for a representative site development project including typical construction drawings, specifications and cost estimates.

# 471. History of Landscape Architecture Winter. 3(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. 4(3-2) Senior majors, L A 437 concurrently.

Principles and procedures of professional office practice, including ethics, client relations, registration, inter-professional collaboration project management and marketing of professional services.

# 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.

# 489. Landscape Architecture Internship

Fall, Winter, Spring, Summer. 2(0-8) or 3(0-12) or 4(0-16) May reenroll for a maximum of 8 credits. Juniors, approval of school. Supervised experience in approved public agencies and professional offices. Bi-weekly conferences.

# 490. Special Problems

Fall, Winter, Spring, Summer. 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(1-6) Senior majors; or approval of school.

Demonstration of analytical, creative and technical competencies in the development of methods and/or concepts leading to design solutions for contemporary landscape architecture problems for public service projects.

# VETERINARY MEDICINE V M (COLLEGE OF)

# 511. Introduction to Veterinary Medicine I

Fall. 2(2-0) First-term Veterinary Medicine students.

Species and breed identification, predisposition for specific diseases, basic care and 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

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

Winter. 2(2-0) Fifth-term Veterinary Medicine students.

Biochemical and physiological basis of metabolic and endocrine diseases of animals including diagnosis, treatment and management.