

URBAN PLANNING UP

**School of Planning,
Design and Construction
College of Social Science**

- 100 The City**
Spring. 3(3-0)
Evolution, character, dimensions and elements of cities.
- 201 The Role of Planning in Urban and Regional Development**
Fall, Spring. 4(4-0)
Contemporary urban issues, historical contexts, and the role of planning in the solutions of the problems faced by cities and their surrounding regions.
- 314 Methods for Investigation of Urban Systems**
Spring. 4(3-2) Interdepartmental with Geography. P:M: (STT 201 and CSE 101) RB: (UP 201)
Models, approaches, and techniques for urban and regional problem analysis, research, program evaluation, and project management. Application of related computer software.
- 324 Visual Communication and the Design Process**
Fall. 4(2-4) P:M: (UP 201 or concurrently) R: Open only to sophomores or juniors or seniors in Urban and Regional Planning. SA: UP 231, UP 233, UP 334
Expressing concepts in visual terms for solutions to physical planning projects: graphic techniques and reproduction. Using the design process for solving land use problems: inventory, analysis, synthesis, community input and strategies for implementation.
- 343 Planning Theory: Ethics and Politics (W)**
Spring. 4(4-0) P:M: (UP 201 or concurrently) and completion of Tier I writing requirement. R: Open only to sophomores or juniors or seniors in the College of Social Science. SA: UP 344
Political impact of community decision-making on planning. Ethics and values of professional practice. Gender, equity, and diversity issues within this context will be explored.
- 353 Land Use Planning**
Fall. 4(4-0) P:M: (UP 201 or concurrently) RB: (PLS 100) SA: UP 323
Principles and techniques of land use planning, including role of social, economic and political systems. Comprehensive planning, neighborhood/sector planning, practical tools for land regulation and environmentally sensitive development.
- 365 Planning Law (W)**
Spring. 3(3-0) P:M: (UP 201) and completion of Tier I writing requirement. R: Open only to juniors or seniors in Urban and Regional Planning or Interdisciplinary Studies in Social Science majors. SA: UP 465
Statutory and case law for local government planning and development regulation.
- 400 Special Topics in Urban Planning**
Fall, Spring. 2 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:M: Completion of Tier I writing requirement. R: Open only to juniors or seniors or graduate students in Urban and Regional Planning.
Issues and problems in contemporary urban planning.

- 408 Comparative Urban Development Planning**
Spring. 3(3-0) RB: (UP 201) R: Open only to majors in Urban and Regional Planning.
Community planning concepts and practices, tools and techniques in different countries. Case studies.
- 413 Urban Geography**
Fall. 3(3-0) Interdepartmental with Geography. Administered by Department of Geography. R: Not open to freshmen or sophomores.
Theories and models of urban spatial form. Underlying structures and processes. Socio-spatial dimensions of modern urbanism. Differentiation and locational conflict in residential, commercial, and industrial space.
- 414 Geography of Transportation**
Fall of odd years. 3(3-0) Interdepartmental with Geography. Administered by Department of Geography. P:M: (GEO 113) R: Not open to freshmen.
Spatial principles of transportation. Theories of interaction, network structures, and location-allocation models. Role of transport and transport planning.
- 415 Location Theory and Land Use Analysis**
Fall. 3(3-0) Interdepartmental with Geography. Administered by Department of Geography. P:M: (GEO 113 or UP 201) RB: One of the prerequisites or an introductory ECON course. R: Not open to freshmen or sophomores.
Classical and neoclassical, static and dynamic models of industrial location and spatial organization. Land rent theory. Central place theory. Multi-locational organization. Growth transmission.
- 418 The Ghetto**
Fall of odd years. 3(3-0) Interdepartmental with Geography. Administered by Department of Geography. R: Not open to freshmen or sophomores.
Analysis of the ghetto including its spatial organization and structure. Distribution of racial and ethnic populations. Emphasis on U.S. cities.
- 425 Problems in Geographic Information Science (W)**
Spring. 3(2-2) Interdepartmental with Geography. P:M: (GEO 325) or (GEO 492)
Advanced theoretical and technical issues in geographic information science utilizing a problems oriented approach. Development and implementation of geographic information science solutions and formal documentation of work.
- 439 Golf Course Planning and Design**
Fall of even years. 3(3-0) Interdepartmental with Landscape Architecture. RB: (LA 342) R: Open only to majors in Urban and Regional Planning.
History, planning, and design of the golf course as a component of the community. Environmental, regulatory, technical, and financing issues.
- 454 Local Economic Planning**
Fall. 3(3-0) P:M: (UP 353 and EC 201) RB: (UP 201) R: Open only to seniors in the College of Social Science. SA: UP 354
The economic component of comprehensive community planning. Taxation and services delivery. Fiscal health and physical and social development of a community.

- 457 Local Economic Development**
Fall. 3(2-2) R: Open only to juniors or seniors.
Principles and techniques of local economic development planning. Impacts of state, federal, and global economic policies and programs.
- 458 Housing and Real Estate Development**
Spring of even years. 3(2-2)
Real estate development process from idea inception to asset management. Finance, organization, design and implementation. Housing, social impacts, and public sector involvement.
- 463 Introduction to Quantitative Methods for Geographers and Planners**
Fall. 3(3-0) Interdepartmental with Geography. Administered by Department of Geography. RB: Completion of University mathematics requirement. R: Open only to majors in Geography, Urban Planning, and Landscape Architecture.
Quantitative techniques in the analysis and classification of spatial data.
- 478 Urban Transportation Planning**
Spring. 3(3-0) Interdepartmental with Geography. R: Open only to juniors or seniors in Urban and Regional Planning or Geography or approval of department.
Principles of decision-making in urban transportation planning. Demand and supply analysis, social and environmental impacts, implementation programs. Use of computer models.
- 480 Internship in Urban Planning**
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to majors in Urban and Regional Planning or approval of department.
Supervised planning experience in a professional setting.
- 490 Independent Study in Urban Planning**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Not open to freshmen or sophomores. Approval of department.
Faculty-supervised individual study in aspects of urban planning.
- 494 Planning Practicum**
Spring. 4(0-8) P:M: (UP 365 and UP 454) SA: UP 494A, UP 494B
Collection, analysis and synthesis of planning information for an established urban or regional area. Problem identification and alternative plan formulation. Formulation of comprehensive physical development policies and plans, implementation of programs.
- 800 Special Topics in Urban Planning**
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in Urban and Regional Planning.
Issues and current research in urban planning.
- 801 Concepts and Issues in Planning and Development**
Fall. 4(4-0)
Urban and regional planning and development. History of the planning profession. Current urban issues and planning approaches.

- 814 Applied Research Methods for Planning and Development**
Spring. 3(2-2) Interdepartmental with Geography. RB: (UP 813) R: Open only to graduate students in Urban and Regional Planning, Public Administration, and Geography. Techniques in urban and regional planning analysis. Forecasting models. Methods of urban project evaluation.
- 823 Urban Land Management**
Fall. 4(4-0) RB: (UP 801 or concurrently) Concepts, principles, tools, and techniques of urban and regional land management. Land use planning, public facilities, infrastructure location, and environmental sensitivity in land management.
- 834 Urban Design and Project Development**
Spring. 3(1-4) RB: (UP 801) R: Open only to graduate students in Urban and Regional Planning. Design of development projects. Integration of structures, spaces, activities, and design elements in various urban settings.
- 838 Land Use Law**
Spring. 3(3-0) Interdepartmental with Resource Development; Agricultural Economics; Forestry. Administered by Department of Community, Agriculture, Recreation and Resource Studies. RB: (RD 430) Public and private land use controls in the U.S. Civil rights, housing, energy problems, growth management, waste management, and land conservation. Cases, statutes and other regulations.
- 844 Decision Theory for Urban Planning and Development**
Spring. 4(4-0) RB: (UP 801) or two graduate courses in the Master of Public Administration program. The planning and development process. Decision making in a political context. Professional ethics and practice. Gender, class, race and ethnicity in relationship to planning and development.
- 848 Urban Policy Analysis**
Spring. 3(3-0) History of national urban policy. Developmental stages in processing new public policies.
- 854 Economics of Planning and Development**
Spring. 3(3-0) Interdepartmental with Geography. RB: (UP 801) The physical urban environment and local economic development.
- 865 Planning and Development Law**
Fall. 3(3-0) RB: (UP 801) Constitutional and statutory bases for planning and development. Effects of case law on design, administration, and implementation of regulations.
- 868 Growth Management and Environmental Planning**
Fall. 3(3-0) P:M: (UP 865 or concurrently and UP 801 or concurrently and UP 823) R: Open only to graduate students in Urban and Regional Planning or Urban and Regional Planning-Urban Studies or Geography. SA: UP 468 Principles and techniques of growth management and environmental planning, with a focus on land use issues. Selected environmental regulation topics relevant to planning in urban areas.

- 889 Master's Research**
Fall, Spring, Summer. 3 credits. RB: (UP 897 or concurrently) R: Open only to master's students in the Urban and Regional Planning major. Approval of department. Supervised individual research for Plan B master's program.
- 890 Independent Study**
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department. Faculty-supervised study in aspects of urban planning.
- 893 Internship in Urban Planning**
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department. Supervised individual experience in approved agencies and departments in the Lansing area.
- 894 Planning Practicum**
Fall. 4(0-8) RB: (UP 801 and UP 823 and UP 865) R: Open only to second-year master's students in the Urban and Regional Planning major. SA: UP 894A, UP 894B Professional practice in the collection, analysis and synthesis of information by students or student groups under faculty supervision. Developing solutions to specific urban problems.
- 897 Research Writing Seminar**
Fall. 2(2-0) R: Open only to second-year master's students in the Urban and Regional Planning major. Research writing and presentation methods.
- 899 Master's Thesis Research**
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (UP 897) or concurrently. R: Approval of department. Master's thesis research.

- 130 Comparative Anatomy for Veterinary Technicians**
Fall. 2(1-2) P:M: (BS111 and BS111L) R: Open only to Veterinary Technology majors. Approval of college. Gross anatomy of the common animal species encountered in veterinary medicine. Overview of the functional anatomy of the musculoskeletal, digestive, cardiovascular, cutaneous, respiratory, urogenital, nervous, and endocrine systems and the special senses.
- 140 Pharmacology for Veterinary Technicians**
Fall. 2(2-0) P:M: (MTH 103 or MTH 110 or MTH 116) R: Open only to Veterinary Technology majors. Approval of college. Fundamentals of characteristics, classification and usage of veterinary pharmaceuticals. Introduction to and application of dosage and formulation calculations.
- 150 Hospital Procedures and Communication**
Spring. 2(2-0) P:M: (VM 110 and VM 140) R: Open only to Veterinary Technology majors. Development of various modalities of professional and client communication skills.
- 155 Veterinary Technology Careers and Professional Development**
Fall. 1(1-0) R: Open only to Veterinary Technology majors. Approval of college. Career options in veterinary technology, discussion of professional, ethical and legal considerations. Portfolio development, resume and cover-letter writing skills.
- 160 Small Animal Nursing Skills**
Spring. 2(1-3) P:M: (VM 110 and VM 130 and VM 140) R: Open only to Veterinary Technology majors. Small animal nursing including principles of restraint, physical examination, medical management techniques, and behavior of common companion animals. Recognition of common canine and feline breeds.

- 165 Large Animal and Laboratory Animal Nursing Care Techniques**
Fall. 2(1-2) P:M: (VM 110 and VM 130 and VM 140) R: Open only to Veterinary Technology majors. Fundamentals of the handling of equine, food animal and laboratory animal species. Breed identification, specimen collection, physical exam, medication administration and other nursing care procedures relevant to the species.
- 170 Hematology and Immunology for Veterinary Technicians**
Spring. 2(2-0) P:M: (VM 110 and VM 120) R: Open only to Veterinary Technology majors. C: VM 175 concurrently. Structure and function of normal blood cells, cellular and humoral immunity, mechanisms of hemostasis, blood group serology, transfusion medicine and vaccinology.
- 175 Clinical Pathology Laboratory I for Veterinary Technicians**
Spring. 1(0-2) P:M: (VM 110 and VM 120) R: Open only to Veterinary Technology majors. C: VM 170 concurrently. Veterinary clinical pathology laboratory including diagnostic procedures in hematology, serology and ELISA methodology.

VETERINARY MEDICINE

College of Veterinary Medicine

- 101 Veterinary Medicine in Society**
Spring. 1(1-0) Role of the veterinary profession in animal and human health. Impact of veterinary medicine on society.
- 110 Veterinary Medical Terminology**
Fall. 1(1-0) R: Open only to Veterinary Technology majors. Approval of college. Veterinary medical terminology, focusing on fundamental recognition, interpretation and usage of medical terms.
- 120 Applied Biochemistry and Nutrients for Veterinary Technicians**
Fall. 2(2-0) P:M: (BS 111 and BS111L) R: Open only to Veterinary Technology majors. Approval of college. Basic fundamentals of cell structure and metabolism. Energy metabolism, nutrients and nutrient requirements of common domestic species.