

**B. MEDIEVAL AND RENAISSANCE
THEATRE HISTORY**

Spring of even-numbered years. 3(3-0)

The history of the development, visual appearance, and operation of the western theatre from C.900 to 1605 A.D.

**C. THE BAROQUE THEATRE AND ITS
HERITAGE**

Winter of odd-numbered years. 3(3-0)

The history of the development of the Baroque Theatre.

**D. AMERICAN THEATRE HISTORY AND
THE ROMANTIC PERIOD**

Spring of odd-numbered years. 3(3-0)

The history of the American theatre and its origins in the Romantic period; emphasis upon the phenomenon of romanticism and the evolution of the American theatre.

803. Practicum in Theatre Arts

A. ACTING

Fall, Winter, Spring. 3(2-2) May re-enroll for a maximum of 12 credits. Approval of department.

Graduate practicum in acting.

B. ARCHITECTURE AND DESIGN

Spring. 4(2-2)

Graduate practicum in costume, scenery, lighting and architectural design.

C. DIRECTING

Winter. 4(2-2) Approval of department.

Graduate practicum in directing.

D. PLAYWRITING

Spring. 4(2-2)

Graduate practicum in playwriting.

**810. Introduction to Research
Methods**

Fall, Summer. 4(3-0)

Nature of graduate study and of research in the several areas of speech.

899. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

921. Readings in Theatre

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

930. Seminar in Theatre

Fall, Winter, Spring, Summer. 3 credits. May re-enroll for a maximum of 12 credits.

990. Special Problems—Theatre

Fall, Winter, Spring, Summer. 1 to 6 credits.

Special projects in speech communication and in speech as related to other fields.

999. Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

UNIVERSITY COLLEGE U C

499. Great Issues

Fall, Winter, Spring, Summer. 4(2-1)

May re-enroll for a maximum of 12 credits if different topic is taken. Seniors.

Analysis and discussion of selected problems challenging the modern world. Those chosen for discussion are profound and persistent issues which cross conventional academic disciplines. A faculty team selected from the various colleges of the University gives the lectures and supervises discussions, readings and reports.

**URBAN PLANNING AND
LANDSCAPE ARCHITECTURE**

College of Social Science

Urban Planning U P

103. Design of Cities

(101.) 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. Interrelationships of various cultural influences and theoretical urban concepts to contemporary communities in the United States and foreign areas.

**232. Contemporary Urban
Development**

Winter. 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(5-0) STT 201.

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)

Planning concepts and powers used to guide contemporary urban growth and alleviate common problems. Major topics will be the zoning commission, comprehensive plan, zoning, land development, parks, school location.

**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) Interdepartmental with the Textiles, Clothing and Related Arts Department.

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

461A. Comprehensive Planning

Fall. 4(0-8) 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) 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.

Governmental programs influencing urban development, including direct development projects, technical and financing assistance, administrative regulations by federal and state agencies. National, state and regional programs.

800. Special Problems

Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 15 credits. Approval of school.

801. City and Regional Design

Practical application of city and regional planning theory and principles to specific and representative case studies. Work will include field research, design analysis, and presentation of workable recommendations as to appropriate objections and actions for solutions.

A. URBAN DESIGN.

Winter. 6 credits. Approval of school.

Design projects for functions relating to selected community activities. Commercial, industrial, residential, institutional, and transportation land uses will be utilized for design study in appropriate dimensions.

B. METROPOLITAN REGIONS.

Spring. 6 credits. 471 and approval of school.

Selected problems of metropolitan functions of present and future significance. Interregional and interregional relationships of primary functional importance; such as, open spaces, economic development, community patterns, transportation, and associated land uses.

C. URBAN RENEWAL AND DEVELOPMENT.

Summer. 6 credits. 821 or 433 and 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.

802. Urban Planning Methods

Fall. 4(4-0)

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

803. Spatial Design

Fall. 4(0-6)

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 man's cultural patterns.

810. Planning Theory

A. THEORY OF THE PLANNING PROCESS

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

Influential schools of thought, planning as a decision-making process, methods for defining goals in public and private programs, and the role of planning in formulating public policies.

B. THEORIES OF URBAN FORMS AND STRUCTURE

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

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

812. Application of the Social Sciences in Urban Planning

Spring. 3(3-0) Non-majors: approval of school.

Evaluation of social science concepts, methods, and knowledge on the basis of their implications and applications in community planning and development. Participation by faculty and graduate students from appropriate Social Sciences and Urban Planning.

813. An International Comparative Study of Urban Planning

Winter, Spring. 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.

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 conservation, 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 upon 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 texts 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

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101. Fundamentals of Environmental Development

Fall, Winter, Spring. 3(3-0)

Elemental patterns of man's contemporary physical environment both natural and man-made in relation to his needs and technical capabilities, with interprofessional interpretation.

123. Graphic Communication

Fall, Winter, Spring. 3(1-4)

Development of basic graphic skills in visual communication involving freehand and instrumental drawing. Demonstration of various media and techniques of graphic reproduction. Studio assignments include elementary perspective and the preparation of drawings, charts and models.

141. Theory of Design

Fall, Winter, Spring. 4(2-4)

Analysis and application of design principles, with studio projects incorporating various graphic and three-dimensional means of expression, emphasizing their significance to architecture and landscape architecture.

202. History of Environmental Development

Fall, Spring. 4(3-0)

Man's attempt to create his own physical environment, emphasizing economic, political social, ecological and aesthetic relationships, with particular reference to architecture, landscape architecture and urban planning.

224. Landscape Delineation

Winter, Spring. 4(1-6) 123.

Continuation of 123. Graphic presentations, using various media, of complex projects with emphasis on sketch techniques and perspective through the use of charts.

242. Elementary Landscape Design

Fall, Spring. 4(1-6) 101, 123, 141.

Landscape architectural design, through lectures and studio projects, involving aesthetic-functional relationships.

254. Architectural Design

Fall, Winter. 4(1-6) 101, 123 and 141 or EGR 463.

Lectures, discussion, assigned readings and studio projects in architectural design, with emphasis on elementary structures and their sites.

255. Architectural Design

Spring. 4(1-6)

Continuation of 254 emphasizing larger, more complex structures and sites, structural systems and grouping of buildings.

317. Planting Design

Fall, Winter. 3(1-4) 242; HRT 211, 212.

Evaluation of plants as elements of design, their use in landscape composition and the techniques of preparing planting plans.

318. Planting Design

Spring. 4(1-6) 317.

Continuation of 317, involving larger and more complex projects, with emphasis on ecological consideration.

330. Design Implementation: Theory and Application I

Fall. 3(1-4) 242; C E 251.

Introduction to materials, grading and site improvement details.

- 331. Design Implementation: Theory and Application II**
Winter. 4(1-6) 330.
Continuation of grading and introduction to surface drainage, quantity estimates, and horizontal and vertical road alignments.
- 332. Design Implementation: Theory and Application III**
(432) Spring. 3(1-4) 331, 345.
Problems of intermediate complexity in site engineering and an introduction to contract documents including working drawings and specification.
- 343. Intermediate Landscape Design**
Fall. 4(1-6) 242, 330; HRT 212.
Continuation of 242, with concentration on investigation, analysis and synthesis in the design of moderately complex landscape projects.
- 344. Intermediate Landscape Design**
Winter. 4(1-6) 343.
Continuation of 343 with emphasis on more complex landscape architectural projects.
- 345. Intermediate Landscape Design**
Spring. 4(1-6) 344.
Continuation of 344, with concentration on the design of broad scale landscape architectural projects.
- 421. Selected Topics**
(471.) Fall. 4(4-0) Senior majors.
Critical examination of theories and applications of landscape architecture through lectures, discussions, oral presentations and written reports.
- 430. Advanced Landscape Design**
(480.) Fall, Winter, Spring, Summer. 4(1-6) May re-enroll for a maximum of 16 credits. 224, 318, 331, 345.
Lectures and studio projects involving investigation, analysis, solution and presentation relative to the physical aspects of environmental design.
- 440. Graphic Communication**
Fall. 3(0-6) Bachelor of Science in Landscape Architecture.
Development and perfection of individual delineation techniques as applied to landscape design projects.
- 445. Design Theory and Implementation—Natural Materials**
Fall. 3(0-6) Bachelor of Science in Landscape Architecture.
Designs, working drawings and specifications related to the use of vegetation and other natural materials on various projects in a wide range of scales.
- 450. Architectural Design**
Winter. 4(0-6) Bachelor of Science in Landscape Architecture.
Lectures, discussions, assigned readings, written reports, and studio projects in architectural design, emphasizing complex architectural planning, form structure and site relationships.
- 455. History of Landscape Design**
Winter. 3(3-0) Bachelor of Science in Landscape Architecture.
Significant movements, personalities, and projects in landscape design, from ancient to contemporary times, with emphasis on the development of the current practice of landscape architecture.

- 460. Research Methods**
Winter. 3(3-0) Bachelor of Science in Landscape Architecture.
Review of traditional and proven research methods in the physical and social sciences utilizing representative case studies as applied to environmental considerations.
- 465. Seminar**
Spring. 3(3-0) Bachelor of Science in Landscape Architecture.
Professional philosophy of landscape architecture; the social responsibility of the landscape architect; administrative processes and methods essential for effective professional practice.
- 470. Design Theory and Implementation—Construction**
Spring. 3(3-0) Bachelor of Science in Landscape Architecture.
Comprehensive site projects involving construction plans, working drawings, contract documents, cost estimates and office practice.
- 475. Comprehensive Design**
Fall, Winter, Spring. 4(0-8) Must be repeated for a total of twelve credits. Bachelor of Science in Landscape Architecture.
Studio projects and discussions emphasizing the synthesis of landscape architectural principles and related disciplines as applied to a wide range of design scales and sites in both urban and regional contexts.
- 485. Professional Contact**
Summer. 4(0-8) Bachelor of Science in Landscape Architecture.
Similar to 475, but taught by a sequence of highly regarded professional practitioners and educators in the environmental design professions.
- 490. Special Problems**
Fall, Winter, Spring, Summer. 2 to 5 credits. May re-enroll for a maximum of 8 credits. Approval of school.
Investigation, for advanced undergraduate students in landscape architecture, developed from special interest areas.
- 801. Graduate Landscape Architecture I**
Fall, Winter, Spring. 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.
- 802. Graduate Landscape Architecture II**
Fall, Winter, Spring. 5 to 12 credits.
Continuation of 801.
- 803. Graduate Landscape Architecture III**
Fall, Winter, Spring. 5 to 12 credits.
Continuation of 802.
- 804. 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 his mastery of the principles of his profession.

ZOOLOGY

ZOL

College of Human Medicine
College of Natural Science

- 200. Resource Ecology and Man**
For course description, see Interdisciplinary Courses.
- 204. Natural History of Birds**
Fall. 4(2-6) N S 193; not open to zoology majors.
Identification of Michigan birds in field and laboratory, including life histories, habits, and consideration of their economics, aesthetic and recreational value.
- 301. Nature and Man**
Spring. 4(2-6) N S 193; not open to zoology majors.
Relates man to his natural environment. Chief emphasis on identifying characteristic animal life in broad areas of nature and how man fits or misfits into these. Lectures, laboratory and field trips illustrate this relationship.
- 302. Vertebrate Life of the Past**
Fall. 3(3-0) Not open to zoology majors. Interdepartmental with and administered by the Geology Department.
Fossil vertebrates from fish to man.
- 305. Biology of Vertebrates**
Fall. 5(3-6) B S 212.
Primarily concerned with natural history of vertebrates. Topics include morphological characteristics and relationships, ecology, zoogeography, and behavior of higher animals. Laboratory involves recognition of representative species within various groups.
- 315. Comparative Anatomy of Vertebrates**
Winter. 3(3-0) B S 212.
Comparative anatomy and evolution of vertebrates. The dogfish and a mammal dissected in the laboratory.
- 316. Comparative Anatomy Laboratory**
Winter. 2(0-6) 315 or concurrently.
- 317. Principles of Development**
Fall, Spring. 3(3-0) B S 212.
Development of animals, especially vertebrates. Principles are illustrated by modern experimental studies of developmental problems.
- 318. Principles of Development Laboratory**
Fall, Spring. 2(0-6) 317 or concurrently; B S 212.
Principles of development illustrated by analysis of the ontogeny of selected organisms.
- 341. Human Heredity**
Fall, Winter, Spring, Summer. 4(3-3) N S 193; Sophomores; not open to zoology majors. Students may not receive credit in more than one of the following: 341, 441, 459.
Inheritance of human, physical, physiological, and psychological traits, and forces that influence human evolution. Foundation is laid on which applications of heredity in fields of education, sociology, anthropology, psychology, dentistry, and medicine must rest. Course includes field trips to state institutions.