**Descriptions—Theatre of Courses**

490. **Independent Study**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course.
R: Not open to freshmen and sophomores. Approval of department required.
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.
QA: THR 499A

492. **Senior Seminar**
Spring. 2(0-0)
P: THR 491; 15 credits in Theatre. R: Open only to seniors in Theatre. Contemporary theatre, dance, and performance theory and practice.

494. **Performance Tour**
Fall, Spring. 3(0-6) A student may earn a maximum of 6 credits in all enrollments for this course.
R: Acceptance into cast of touring production, Rehearsal and participation in the various departmental touring productions.
QA: THR 499A

**Theatre Research Methodology**
Fall. 3(3-0)
P: Open only to graduate students in Theatre. Research techniques appropriate to theatre. Library resources.
QA: THR 800

801. **Practicum in Theatre Arts: Acting**
Fall, Spring. 3(3-0) A student may earn a maximum of 18 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Acting skills and techniques, including improvisation and Stanislavskian techniques.
QA: THR 801A

802. **Stage Voice**
Fall. 2(0-1) A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Principles and exercises for developing the speaking voice. Application to selected dramatic texts.
QA: THR 802

803. **Acting Theory**
Spring of odd-numbered years. 3(3-0)
P: Open only to graduate students in Theatre. Theories, processes, techniques, and styles of acting set forth in the writings of prominent performers, teachers, and critics.
QA: THR 803

811. **Problems in Theatre Design**
Spring. 3(2-2) A student may earn a maximum of 15 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Approaches to design problems in costumes, scenery, lighting, architecture, properties, or sound.
QA: THR 804

812. **20th Century Theatrical Design**
Fall of odd-numbered years. 3(3-0)
P: Open only to graduate students in Theatre. Scenic design concepts of 20th century through selected work of Appia, Crippa, and others.
QA: THR 811

813. **Period Resources for Directors and Designers**
Fall of even-numbered years. 3(3-0)
P: Open only to graduate students in Theatre. Methodology for researching historical customs and artifacts that directors and designers adapt for use in sets, props, costumes, and directing.
QA: THR 815

831. **Studies in Theatre History**
Fall of odd-numbered years. Spring of even-numbered years. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Selected periods and genres of world theatre history. Theatre as cultural expression and as performance art. Topics vary.
QA: THR 805

832. **Studies in Comparative Theatre and Drama**
Fall, Spring. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with English. Comparative study of selected playwrights, developments, movements, and trends in world drama from their beginnings to the present.
QA: THR 805

833. **Dramatic Theory and Criticism**
Fall of odd-numbered years. 3(3-0) A student may earn a maximum of 12 credits in all enrollments for this course.
R: Open only to graduate students in Theatre.

841. **Advanced Directing Practices**
Spring of odd-numbered years. 3(2-2) A student may earn a maximum of 6 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Directing theory and practice in contemporary theatre, including research and experimentation.
QA: THR 806

890. **Independent Study**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Open only to graduate students in Theatre or approval of department. Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings.
QA: THR 890

894. **Special Projects in Theatre**
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Directed research leading to a master's thesis. Usual of department.
QA: THR 890

899. **Master's Thesis Research**
Fall, Spring. Summer. 2 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.
R: Open only to graduate students in Theatre. Directed research leading to a master's thesis. Usual of department.
QA: THR 899

990. **Doctoral Independent Study**
Fall, Spring. Summer. 1 to 4 credits. A student may earn a maximum of 24 credits in all enrollments for this course.
R: Open only to graduate students in Theatre or approval of department. Special projects, directed reading, and research arranged by an individual doctoral student and a faculty member in areas supplementing the regular course offerings.
QA: THR 990

999. **Doctoral Dissertation Research**
Fall, Spring. Summer. 1 to 6 credits. A student may earn a maximum of 30 credits in all enrollments for this course.
R: Open only to doctoral students in Theatre.
QA: ENG 999

**Urban Planning**

College of Social Science

201. **The Role of Planning in Urban and Regional Development**
Fall. 3(3-0) Contemporary urban issues, historical contexts, and the role of planning in the solutions of the problems faced by cities and their surrounding regions.
QA: UP 200 or UP 400

211. **Presentation Techniques**
Fall. 2(0-4) R: Open only to students in College of Social Science. Not open to students with credit in LA 220. Use of graphic, photographic, video, and computer generated media to make presentations to clients and community.
QA: LA 120

223. **Site Design for Planners and Developers**
Fall. 2(0-4) P: UP 231. R: Open only to students in the College of Social Science. Designing a site for a development project: soils, drainage, elevations, views, topography, utilities, wetlands, and other elements.
QA: LA 201

313. **Data Collection and Evaluation Analysis for Urban Planners**
Fall. 3(2-0) P: CPS 130 or CPS 130 or CPS 131; UP 201. Data gathering analysis, information presentation, basic techniques of urban planning. Application of related computer programs and software.
QA: CPS 100 or CPS 115 or CPS 115 QA: UP 341

314. **Methods for Investigation of Urban Systems**
Spring. 3(2-0) P: UP 313. Models, approaches, and techniques for urban and regional problems analysis and plan formulation.
QA: UP 341 QA: UP 342

323. **Land and Environmental Planning**
Fall. 3(3-0) P: UP 201. Principles and techniques of environmental and land use planning. Environmentally sensitive management of growth and change at both urban and regional levels.
QA: UP 200 QA: UP 363

334. **Real Estate Project Design**
Spring. 4(2-4) P: UP 233. Subdivision design, criteria, and standards. Integrating activities, structures, and spaces on parcels of varying sizes and configurations.
QA: LA 190, LA 201 QA: UP 351

344. **Ethics and Politics in Planning**
Spring. 3(0-0) P: UP 201. Political impact of community decision-making on planning. Ethics and values of professional practice.
QA: UP 200 QA: UP 363, UP 443

354. **Local Economic Planning**
Spring. 3(3-0) P: UP 201, EC 201 or approval of department. The economic component of comprehensive community planning. Taxation and services delivery. Fiscal health and physical and social development of a community.
QA: UP 360 or UP 400 QA: UP 462

400. **Special Topics in Urban Planning**
Fall of odd-numbered years. 2 to 4 credits. R: Open only to juniors and seniors in Urban and Regional Planning. Issues and problems in contemporary urban planning.
Urban Planning—Descriptions of Courses

408. Comparative Urban Development Planning
Spring. 3(3-0)
P: UP 201. R: Open only to majors in Urban and Regional Planning, or Urban and Regional Planning: Urban Studies.
Community planning concepts and practices, tools and techniques in different countries. Case studies.
QP: UP 200 or UP 400 or UP 608

Fall. 3(2-2)
P: UP 314 or approval of department. R: Open only to majors in Urban and Regional Planning, or Urban and Regional Planning: Urban Studies or Public Administration.
Systems and methods for surveillance, monitoring, management and evaluation of development projects, social programs and public policies.
QP: UP 342 or UP 815 QA: UP 410

427. Mine Land Reclamation Planning
Fall of odd-numbered years. 3(3-0)
QP: UP 200 or UP 490 or UP 816

428. Principles of Regional Planning
Fall. 3(3-0)
P: GEO 113 or UP 201. R: Not open to freshmen and sophomores.
QP: GEO 218

437. Urban Design
Fall of even-numbered years. 3(1-4)
P: UP 354 or LA 473 concurrently. R: Not open to freshmen and sophomores.
Urban design theory and application of physical design principles at various scales. Design of urban open space systems, building groupings, urban linkage, and site details in studio projects.
QP: UP 351 QA: UP 352

439. Golf Course Planning and Design
Fall of even-numbered years. 3(3-0) Interdepartmental with Landscape Architecture.
P: UP 344 or LA 342. R: Open only to seniors and graduate students in Urban and Regional Planning or Urban and Regional Planning: Urban Studies or Landscape Architecture.
History, planning, and design of the golf course as a component of the community. Environmental, regulatory, technical, and financing issues.
QP: UP 364 QA: UP 364

457. Local Economic Development
Fall. 3(2-2)
P: UP 354. R: Open only to juniors and seniors.
Principles and techniques of local economic development planning. Impacts of state, federal, and global economic policies and programs.
QP: UP 462 or UP 473 QA: UP 862

459. Housing and Real Estate Development
Spring of odd-numbered years. 3(2-2)
P: UP 351.
Real estate development process from idea inception to asset management. Finance, organization, design and implementation. Housing, social impacts, and public sector involvement.
QP: UP 462 or UP 475 or UP 493

485. Planning Law I
Fall. 3(2-2)
QP: UP 200 or UP 400, UP 335 or UP 808 QA: UP 472

486. Planning Law II
Spring. 3(3-0)
P: UP 465.
Advanced topics in urban planning legislation and case law.
QP: UP 472 or UP 824

478. Urban Transportation Planning
Spring. 3(3-0)
P: UP 201, UP 314. R: Open only to majors in Urban and Regional Planning, or approval of department.
Principles of decision-making in urban transportation planning, transportation demand and supply analysis, social and environmental impacts, implementation programs. Use of computer models.
QP: UP 200, UP 342 or UP 808, UP 815

490. 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: Not open to freshmen and sophomores. Approval of department.
Supervised planning experience in a professional setting.
QA: UP 489

483. Historic Preservation and Preservation Planning in the U.S.
Fall. 4(4-0) Interdepartmental with History of Art and Landscape Architecture.
R: Not open to freshmen and seniors. Approval of department.
History and philosophy of the preservation of buildings, structures, and objects significant to the heritage of this nation. Preservation as a planning tool for local governments.
QA: HA 480, HA 481

485. Senior Planning Practicum I
Fall. 3(0-6)
R: Open only to seniors in Urban and Regional Planning.
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.
QA: UP 461A

486. Senior Planning Practicum II
Spring. 3(0-6)
P: UP 465.
Further collection, analysis, and synthesis of planning information.
QP: UP 461A QA: UP 461B

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 and sophomores. Approval of department.
Faculty-supervised individual study in aspects of urban planning.
QA: UP 490

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.
QA: UP 897

801. Concepts and Issues in Planning and Development
Spring. 3(3-0)
P: UP 201.
Urban and regional planning and development. History of the planning profession. Current urban issues and planning approaches.
QA: UP 808

813. Quantitative Methods for Urban Planning
Fall. 3(2-2)
R: Open only to graduate students in Urban and Regional Planning, Public Administration, and Geography.
Quantitative techniques for the analysis and classification of data for urban planners.
QA: UP 427

814. Applied Research Methods for Planning and Development
Spring. 3(2-2)
P: 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.
QP: GEO 427 QA: UP 815

823. Urban Land Management
Fall. 3(3-0)
P: UP 801 or concurrently.
Concepts, principles, tools, and techniques of urban and regional land management. Land use planning, public approval of department, location, and environmental sensitivity in land management.
QP: UP 808 QA: UP 818

834. Urban Design and Project Development
Spring. 3(1-4)
P: 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.
QP: UP 828 QA: UP 836

844. Decision Theory for Urban Planning and Development
Spring. 3(3-0)
P: UP 801 or R: two graduate courses in the Master of Public Administration program.
Planning and development process. Political decision-making in the planning context. Professional ethics and practice.
QP: UP 809 QA: UP 816, UP 818

848. Urban Policy Analysis
Spring. 3(3-0)
History of national urban policy. Developmental stages in processing new public policies.
QA: UP 805

854. Economics of Planning and Development
Spring. 3(3-0)
P: UP 801.
The physical urban environment and local economic development.
QP: UP 808 QA: UP 462, UP 473

865. Planning and Development Law
Fall. 3(3-0)
P: UP 801.
Constitutional and statutory bases for planning and development. Effects of case law on design, administration, and implementation of regulations.
QP: UP 818 or UP 808 QA: UP 824

889. Master's Research
Fall, Spring, Summer. 3 credits.
R: Open only to graduate students in Urban and Regional Planning. Approval of department.
Supervised individual research for the Master's program.
QA: UP 898

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.
QA: UP 890

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.
QA: UP 893
894A. Planning Practicum I   Fall, 2(0-4)
R: Open only to graduate students in Urban Planning. Professional practice in the collection, analysis, and synthesis of information by students or student groups under faculty supervision. Developing solutions to specific urban problems.
QA: UP 834

894B. Planning Practicum II   Spring, 2(0-4)
P: UP 894A. R: Open only to graduate students in Urban Planning. Professional practice in the preparation of plans appropriate to the study area and subject master examined in UP 894A. Designing statutory measures and administrative policies for implementation.
QP: UP 834 QA: UP 855

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.
R: Approval of department.
QA: UP 899

VETERINARY MEDICINE VM
College of Veterinary Medicine

200. Veterinary Systems Biology and Medical Science I   Spring, 7(1-4)
QA: VM 020, VM 022, VM 029

201. Veterinary Systems Biology and Medical Science II   Spring, 7(4-0)
P: MTH 116, CEM 142. R: Approval of college. Multidisciplinary approach to the hematopoetic and cardiovascular systems of animals. Integration of anatomy, physiology, pathophysiology, pharmacology, and nursing care related to health and disease.
QA: VM 020, VM 021, VM 023

410. Veterinary Technology Clerkship in Anesthesiology   Fall, Spring, Summer. 3 credits.
QA: VM 059

411. Veterinary Technology Clerkship in Radiology   Fall, Spring, Summer. 3 credits.
QA: VM 070

412. Veterinary Technology Clerkship in Companion Animal Medicine   Fall, Spring, Summer. 3 credits.
P: VM 302, VM 303, VM 304. R: Approval of college. Application of principles and techniques in restraint, examination, nursing care, monitoring, and preventative medicine of companion animals.
QA: VM 029

413. Veterinary Technology Clerkship in Companion Animal Surgery   Fall, Spring, Summer. 3 credits.
QA: VM 070

414. Veterinary Technology Clerkship in Equine Medicine and Surgery   Fall, Spring, Summer. 3 credits.
QA: VM 082

450. Veterinary Technology Clerkship in Emergency Medicine   Fall, Spring, Summer. 3 credits.
P: VM 412. R: Approval of college. Application of principles and techniques in emergency medicine.
QA: VM 050

451. Veterinary Technology Clerkship in Cardiology   Fall, Spring, Summer. 3 credits.
QA: VM 060

542. Veterinary Technology Clerkship in Neonatology   Fall, Spring, Summer. 3 credits.
QA: VM 050

543. Veterinary Technology Clerkship in Ophthalmology   Fall, Spring, Summer. 3 credits.
QA: VM 070

454. Veterinary Technology Clerkship in Critical Care   Fall, Spring, Summer. 3 credits.
QA: VM 059

460. Veterinary Technology Clerkship in Equine Anesthesiology   Fall, Spring, Summer. 3 credits.
QA: VM 060

461. Veterinary Technology Clerkship in Equine Field Service   Fall, Spring, Summer. 3 credits.
QA: VM 062

462. Veterinary Technology Clerkship in Advanced Equine Medicine and Surgery   Fall, Spring, Summer. 3 credits.

470. Veterinary Technology Clerkship in Food Animal Medicine   Fall, Spring, Summer. 3 credits.
P: VM 302, VM 303, VM 304. R: Approval of college. Application of principles and techniques in food animal medicine.
QA: VM 062

471. Veterinary Technology Clerkship in Production Medicine   Fall, Spring, Summer. 3 credits.
QA: VM 062

472. Veterinary Technology Clerkship in Food Animal Anesthesiology   Fall, Spring, Summer. 3 credits.
P: VM 410, VM 470. R: Approval of college. Application of principles and techniques in food animal anesthesiology.

490. Veterinary Technology Clerkship in Clinical Pathology   Fall, Spring, Summer. 3 credits.

481. Veterinary Clerkship in Microbiology   Fall, Spring, Summer. 3 credits.

482. Veterinary Technology Clerkship in Neurology   Fall, Spring, Summer. 3 credits.
P: VM 302, VM 303, VM 304. R: Approval of college. Application of principles and techniques in postmortem examination of common domestic species with emphasis on specimen description, collection, and submission.

511. Veterinary Perspectives I   Fall, 2(1-2)
R: Open only to graduate-professional students in College of Veterinary Medicine.
Animal handling, restraint, and physical examination.

512. Veterinary Integrative Problem Solving I   Fall, 1(1-0)
R: Open only to graduate-professional students in College of Veterinary Medicine.
Integration of subject material from concurrent semester courses.

521. Veterinary Perspectives II   Spring, 2(2-0)
R: Open only to graduate-professional students in College of Veterinary Medicine. Not open to students with credit in VM 590. Not open to students with credit in VM 590. Veterinary medical history and ethics. Client communication and animal behavior.
QA: VM 590

522. Veterinary Integrative Problem Solving II   Spring, 3(2-0)
R: Open only to graduate-professional students in College of Veterinary Medicine. Integration of subject material from concurrent and previous semester courses.

523. Veterinary Epidemiology   Fall, 3(3-0)
P: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine. R: Not open to students with credit in VM 549. Basic epidemiologic theory and study design. Veterinary descriptive and inferential biostatistics. Production veterinary medicine.
QA: VM 544