453. Labanotation
Fall of even-numbered years. 3(2-2)
R: Not open to freshmen and sophomores.
Theory and practice of labanotation with emphasis on notating movement, reading notated scores, and analyzing movement theory.
QA: THR 493

454. Choreography and Dance Production
Spring of even-numbered years. 3(2-2)
QP: THR 404 ATHR 401B QA: THR 404 THR 405

455. History of Dance to 1900
Fall of even-numbered years. 3(3-0)
R: Not open to freshmen and sophomores.
Overview and anthropological perspective on selected ethnic forms of dance. Emphasis on dance idioms and dance artists as cultural expressions.
QA: THR 493

456. History of Dance since 1900
Spring of odd-numbered years. 3(3-0)
R: Not open to freshmen and sophomores.
Overview and anthropological perspective on dance. Modern dance artists and theorists. Contributions of theatrical dance forms.
QA: THR 494

480. Senior Seminar
Spring. 212-0)
P: THR 341 plus 15 credits in Theatre
R: Senior Theatre
Contemporary theatre, dance and performance theory and practice for theatre seniors.

490. Independent Study
Fall, Spring, Summer. 1 to 4 credits.
R: Approval of the Department
Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.
QA: THR 499A

494. Performance Tour
Fall, Spring. 3(0-4)
R: Acceptance into cast of touring production.
Rehearsal for and participation in the various departmental touring productions.
QA: THR 489

800. Theatre Research Methodology
Fall. 3(3-0)
R: Theatre
Research techniques appropriate to theatre. Initial planning for Thesis or Dissertation.
QA: THR 800

801. Practicum in Theatre Arts: Acting
Fall, Spring. 3(0-8)
R: Theatre
Acting technique including improvisation, Stanislavskian techniques, to develop diverse acting skills.
QA: THR 803A

802. Stage Voice
Fall. 2(0-6)
R: Theatre
Study and practice of principles and exercises for development of the speaking voice for actors. Application to selected dramatic texts.
QA: THR 802

803. Acting Theory
Spring of even-numbered years. 3(3-0)
R: Theatre
Theories, processes, techniques, and styles of acting set forth in the writings of prominent performers, teachers and critics.
QA: THR 809

811. Problems in Theatre Design
Fall, Spring. 3(2-2) May reenroll for a maximum of 15 credits.
Characteristics and approaches toward the solution of design problems in costume, scenery, lighting, architecture, property and sound.
QA: THR 804

812. Twentieth Century Theatrical Design
Fall of odd-numbered years. 3(3-0)
Scenic design concepts of 20th century through selected work of Appin, Craig and others to the present day.
QA: THR 814

813*. Period Research & Resources for Directors and Designers
Fall of even-numbered years. 3(3-0)
Methodology for researching historical artifacts and customs that directors and designers will adapt for use in sets, props, costumes and directing.
QA: THR 815

814. Studies in Theatre History
Fall, Spring. 3(0-3) May reenroll for a maximum of 12 credits.
Selected periods and genres of world theatre history emphasizing the theatre as a cultural expression and a performance art.
QA: THR 808

815. Dramatic Theory and Criticism
Fall. 3(3-0)
P: THR 800 or Approval of Department
Dramatic criticism and theory from the early Greek to the present.
QA: THR 806

816. Advanced Directing Practices
Spring of odd-numbered years. 3(2-2)
May reenroll for a maximum of 6 credits.
Directing theory and practice in contemporary theatre including research and experimentation.
QA: THR 806

890. Independent Study
Fall, Spring, Summer. 1 to 4 credits.
R: Approval of the 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

899. Master's Thesis Research–Plan A
Fall, Spring, Summer. 2 to 4 credits.
R: Approval of the Department
Directed research leading to a master's thesis, used in partial fulfillment of plan A master's degree requirements.
QA: THR 899

990. Doctoral Independent Study
Fall, Spring, Summer. 1 to 4 credits.
R: Approval of the Department
Special projects, directed reading, and research arranged by an individual doctoral candidate and a faculty member in areas supplementing the regular course offerings.
QA: THR 990

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 4 credits.
R: Approval of the Department
QA: ENG 999

URBAN PLANNING UP

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

231*. Presentation Techniques for Planning and Design Professionals
Fall. 2(0-8)
Uses of graphic, photographic video and computer generated media to make presentations to clientele and community groups.
QA: LA 120

231A*. Presentation Techniques for Planning and Design Professionals
Fall. 2(0-8)
Uses of graphic, photographic video and computer generated media to make presentations to clientele and community groups.
QA: LA 120

231B*. Site Design for Planners and Developers
Fall. 2(0-8)
P: UP 231A C: LA 220 R: Social Science
Soils, drainage, elevations, view, topography, utilities, wetlands, and other elements considered in designing a site for a development project.
QA: LA 120

233*. Site Design for Planners and Developers
Fall. 2(0-8)
P: UP 231A R: Social Science
Soils, drainage, elevations, view, topography, utilities, wetlands, and other elements considered in designing a site for a development project.
QA: LA 120

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313*. Introduction to Data Analysis for Planners
Fall. 3(2-2)
P: UP 314 or course
Introduction to data analysis, data gathering, information presentation, and use of basic techniques of planning investigation. Application of related computer programs and software.
QP: CPS 100 OR CPS 1120
QA: UP 341

314*. Methods for Investigation of Urban Systems
Spring. 3(2-2)
P: UP 313, or department approved
Models, approaches and techniques for urban and regional problem analysis and plan formulation.
QP: 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.
QP: UP 300 QA: UP 363

334*. Real Estate Project Design
Spring. CR (02-04)
P: LA 240 or UP 231 and UP 233
Subdivision design, criteria, and standards, integrating activities, structures, and spaces on parcels of varying sizes and configurations.
QP: LA 120 ANDLA 201 QA: UP 351

344*. Ethics and Policies in Planning
Spring. 3(3-0)
Introduction to the planning process. Theories of decision-making in the local planning environment. Ethics and values of professional practice.
QP: UP 200 QA: UP 363 AND UP 443

354*. Local Economic Planning
Spring. 3(3-0)
P: UP 201
The local economy and the economic component of comprehensive community planning. Taxation and services delivery. Relationship of fiscal health to physical and social development of a community.
QP: UP 200 ORUP 400 QA: UP 462

400*. Special Topics in Urban Planning
Fall. of odd-numbered years. 2 to 4 credits.
P: Approval of Program
QP: N/A QA: N/A

408*. International Development Planning
Spring. 3(3-0)
P: UP 201 or UP 801 R: Juniors and above.
Community planning concepts and practices in different countries. Tools and techniques in a variety of political, social, and cultural settings. Problems and responses to world issues. Case studies.
QP: UP 200 ORUP 400 ORUP 808

410*. Principles of Regional Planning
Fall. 3(3-0)
P: GEO 113 R: Juniors and above
QP: GEO 213

417*. Information Systems and Program Evaluation in Urban Planning
Fall. 3(2-2)
P: UP 314 or UP 814 or PLS 802 or PLS 803 R: Junior & Senior
Systems and methods for surveillance, monitoring, management and evaluation of development projects, social programs and public policies.
QP: UP 342 ORUP 815 QA: UP 410

426*. Land Reclamation Planning
Fall. 3(3-0)
P: UP 354 or UP 801 R: Urban Planning, Landscape Architecture & Resource Development
Issues, procedures and opportunities in mine land reclamation.
QP: UP 200 ORUP 400 ORUP 816

429*. Principles of Regional Planning
Fall. 3(3-0)
P: UP 342 or UP 808
Relationship of fiscal health and values of professional practice.

436*. Urban Design
Fall. 3(1-4)
P: UP 354 R: Not open to freshmen. Urban design theory and application of physical design principles at various scales. Design of urban spaces systems, building groupings, urban linkage, and site details in studio projects.
QP: UP 351 QA: UP 352

457*. Economic Development
Fall. 3(2-2)
P: UP 354 or UP 854 or EC 806C R: Juniors & Seniors
Principles and techniques of local economic development planning. Up 201 related to global economy and federal and state economic development policies and programs on local economic development.
QP: UP 462 ORUP 473 QA: UP 862

458*. Housing and Real Estate Development
Spring. 3(2-2)
P: UP 354 or UP 854
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 ORUP 473 ORUP 485

465*. Planning Law
Fall. 3(0-2)
P: UP 201 or UP 801
Statutory and case law for local government planning and development regulation.
QP: UP 200 ORUP 400 ORUP 473 ORUP 808

467*. Advanced Planning Law
Spring. 3(3-0)
P: UP 485 QA: UP 865
Advanced topics in urban planning legislation and case law.
QP: UP 472 ORUP 824

475*. Urban Transportation Planning
Spring. 3(3-0)
P: Up (UP 301 and 314) or (UP 801 and UP 814) R: Junior or Senior
Principles of decision-making in urban transportation planning. Demand and supply analysis, social and environmental impacts, implementation procedures.
QP: (UP 300 ANDUP 340 ORUP 808

480*. Internship in Urban Planning
Fall, Spring, Summer. 2 to 4 credits.
P: Approval of Program
QA: UP 489

485*. Senior Planning Practicum I
Fall. 3(0-6)
P: UP 485
R: Seniors Urban 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)
Continuation of UP 485.
QP: UP 461A QA: UP 461B

490*. Independent Study in Urban Planning
Fall, Spring, Summer. 1 to 4 credits.
May reenroll for a maximum of 8 credits.
R: Not open to freshmen and sophomores. Approval of department. Faculty-supervised individual study in aspects of urban planning.
QA: UP 490

499*. Independent Study in Urban Planning
Fall, Spring, Summer. 1 to 4 credits.
May reenroll for a maximum of 8 credits.
P: Approval.
Research under the supervision of an Urban Planning faculty member.
QA: UP 490

500*. Special Topics in Urban Planning
Fall, Spring, Summer. 2 to 4 credits.
May reenroll for a maximum of 6 credits.
R: Graduate Students
Issues and current research in urban planning.
QA: UP 808

513*. Quantitative Methods for Urban Planning
Fall, Spring. 2 to 4 credits.
R: Graduate status
Quantitative techniques for the analysis and classification of data for urban planners.
QA: UP 427

514*. Applied Research Methods for Planning and Development
Spring. 3(2-2)
P: UP 813 R: Graduate Students
Techniques in urban and regional planning analysis. Forecasting models. Methods of urban project evaluation.
QA: UP 427 QA: UP 815

515*. Urban Land Management
Fall. 3(0-6)
P: 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.
QP: UP 808 QA: UP 816

Courses with an asterisk (*) have not been approved by the University Committee on Curriculum.
### Descriptions of Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Units</th>
<th>Semester(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>834*</td>
<td>Urban Design and Project Development</td>
<td>Spring. 3(1-4)</td>
<td>2</td>
<td>UP 801</td>
<td>Design of development projects. Integration of structures, spaces, activities, and design elements in various urban settings. QP: UP 828 QA: UP 836</td>
</tr>
<tr>
<td>844*</td>
<td>Decision Theory for Urban Planning and Development</td>
<td>Spring. 3(3-0)</td>
<td>2</td>
<td>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.</td>
<td>QP: UP 808 QA: UP 818 UP 818</td>
</tr>
<tr>
<td>848*</td>
<td>Urban Policy Analysis</td>
<td>Spring. 3(3-0)</td>
<td>2</td>
<td>R: Graduate Students</td>
<td>History of national urban policy. Stages in the public policy process and the development of new policies. QA: UP 803</td>
</tr>
<tr>
<td>854*</td>
<td>Economics of Planning and Development</td>
<td>Spring. 3(3-0)</td>
<td>2</td>
<td>UP 801</td>
<td>The physical urban environment and local economic development. QP: UP 808 QA: UP 842 OR UP 473</td>
</tr>
<tr>
<td>867*</td>
<td>Planning and Development Law</td>
<td>Fall. 3(3-0)</td>
<td>2</td>
<td>UP 801</td>
<td>Constitutional and statutory bases for planning and development. Effects of case law on design, administration and implementation of regulations. Experience in legal research. QP: UP 816 OR UP 808 QA: UP 824 UP 472</td>
</tr>
<tr>
<td>889*</td>
<td>Master's Research</td>
<td>Fall, Spring, Summer. 3(0-3)</td>
<td>2</td>
<td>R: Approval of Program R: Graduate Students</td>
<td>QA: UP 898</td>
</tr>
<tr>
<td>890*</td>
<td>Independent Study</td>
<td>Fall, Spring, Summer. 2 to 4 credits.</td>
<td>2</td>
<td>R: Approval of department.</td>
<td>Faculty-supervised study in aspects of urban planning. QA: UP 800</td>
</tr>
<tr>
<td>893*</td>
<td>Internship in Urban Planning</td>
<td>Fall, Spring, Summer. 2 to 4 credits.</td>
<td>2</td>
<td>May reenroll for a maximum of 8 credits.</td>
<td>P: Approval of department. Supervised individual experience in approved agencies and departments in the Lansing area. QA: UP 899</td>
</tr>
<tr>
<td>894A*</td>
<td>Planning Practicum I</td>
<td>Fall. 2(0-4)</td>
<td>2</td>
<td>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.</td>
<td>QA: UP 834</td>
</tr>
<tr>
<td>894B*</td>
<td>Planning Practicum II</td>
<td>Spring. 2(0-4)</td>
<td>2</td>
<td>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 matter examined.</td>
<td>QA: UP 834 QA: UP 835</td>
</tr>
<tr>
<td>899*</td>
<td>Master's Thesis Research</td>
<td>Fall, Spring, Summer. 1 to 4 credits.</td>
<td>2</td>
<td>P: Approval of program</td>
<td>QA: UP 899</td>
</tr>
</tbody>
</table>

#### VETERINARY MEDICINE (VM)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Units</th>
<th>Semester(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>511*</td>
<td>Veterinary Perspectives I</td>
<td>Fall. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Animal handling, restraint and physical examination.</td>
<td></td>
</tr>
<tr>
<td>512*</td>
<td>Veterinary Perspectives II</td>
<td>Spring. 2(2-2)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Integration of subject material from concurrent semester courses.</td>
<td></td>
</tr>
<tr>
<td>521*</td>
<td>Veterinary Integrative Problem Solving I</td>
<td>Fall. 1(1-0)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Veterinary medical ethics, history, client communication, and animal behavior.</td>
<td></td>
</tr>
<tr>
<td>522*</td>
<td>Veterinary Integrative Problem Solving II</td>
<td>Spring. 2(2-2)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Integration of subject material from concurrent and previous semester courses.</td>
<td></td>
</tr>
<tr>
<td>531*</td>
<td>Veterinary Integrative Problem Solving III</td>
<td>Fall. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Veterinary medical ethics, history, client communication, and animal behavior.</td>
<td></td>
</tr>
<tr>
<td>532*</td>
<td>Veterinary Integrative Problem Solving IV</td>
<td>Spring. 2(2-2)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Integration of subject material from concurrent and previous semester courses.</td>
<td></td>
</tr>
</tbody>
</table>

#### Veterinary Public Health

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Units</th>
<th>Semester(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>543*</td>
<td>Veterinary Epidemiology</td>
<td>Fall. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Veterinary environmental and occupational health; milk hygiene; meat hygiene; veterinary public health; control of zoonotic diseases.</td>
<td></td>
</tr>
<tr>
<td>544*</td>
<td>Veterinary Integrative Problem Solving V</td>
<td>Spring. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Cardiovascular diseases of domestic animals with emphasis on pathogenesis and principles of diagnosis and treatment.</td>
<td></td>
</tr>
<tr>
<td>545*</td>
<td>Principles of Anesthesia and Surgery</td>
<td>Spring. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine Veterinary Medicine none</td>
<td>Principles and techniques of administering anesthetic agents; fundamentals of surgery including principles of sterile technique, tissue handling, suture patterns, wound healing and postoperative care.</td>
<td></td>
</tr>
<tr>
<td>546*</td>
<td>Musculoskeletal Diseases</td>
<td>Spring. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine Veterinary Medicine none</td>
<td>Musculoskeletal diseases of domestic animals, with emphasis on pathogenesis and principles of diagnosis and treatment.</td>
<td></td>
</tr>
<tr>
<td>547*</td>
<td>Respiratory Diseases</td>
<td>Spring. 2(2-0)</td>
<td>P: Admission to the College of Veterinary Medicine. R: College of Veterinary Medicine Veterinary Medicine none</td>
<td>Respiratory diseases of domestic animals, with emphasis on pathogenesis and principles of diagnosis and treatment.</td>
<td></td>
</tr>
<tr>
<td>549*</td>
<td>Veterinary Epidemiology</td>
<td>Fall. 3(3-0)</td>
<td>P: Completion of Year 1 of the College of Veterinary Medicine. R: Year 2 College of Veterinary Medicine Veterinary Medicine none</td>
<td>Fundamentals of veterinary epidemiology. Non-clinical and clinical veterinary epidemiology. Principles of disease investigation.</td>
<td></td>
</tr>
</tbody>
</table>

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