

- 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 VM

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.

Veterinary Medicine—VM

- 176 Clinical Pathology Laboratory II for Veterinary Technicians**
Fall. 1(0-2) P:M: (VM 175 and VM 170) R:
Open only to Veterinary Technology majors.
Comprehensive veterinary clinical pathology laboratory, including diagnostic procedures in urology, dermatology, cytology, and advanced methods in hematology
- 210 Surgical Nursing for Veterinary Technicians**
Fall. 2(2-0) P:M: (VM 160) R: Open only to Veterinary Technology majors. C: VM 215 concurrently, VM 303 concurrently.
Role of the veterinary technician as a member of the veterinary surgical team.
- 215 Surgical Nursing and Anesthetic Management Laboratory**
Fall. 1(0-4) R: Open only to Veterinary Technology majors. C: VM 210 concurrently, VM 303 concurrently.
Principles and techniques in veterinary surgical nursing and anesthesia.
- 245 Parasitology for Veterinary Technicians**
Spring. 2(1-2) P:M: (VM 140 and VM 175) RB: (VM 250) R: Open only to Veterinary Technology majors.
Parasites of veterinary and public health importance, including gross and microscopic morphology, transmission, and control.
- 250 Veterinary Comparative Clinical Physiology**
Spring. 5(5-0) P:M: (VM 110 and VM 120 and VM 130) R: Open only to Veterinary Technology majors.
Function, regulation and integration of organs and organ systems of common domestic species. Concepts with clinical relevance.
- 255 Small Animal Diseases and Management**
Fall. 3(3-0) P:M: (VM 160 and VM 170 and VM 250) R: Open only to Veterinary Technology majors.
Pathophysiology, transmission, diagnostic process, clinical management and prevention of canine and feline diseases.
- 265 Dentistry Techniques for Veterinary Technicians**
Spring. 1(0-4) P:M: (VM 215) R: Open only to Veterinary Technology majors.
Veterinary dental techniques and oral cavity assessment for companion animals.
- 270 Health Care Development for Veterinary Technicians**
Spring. 1(0-3) P:M: (VM 210 and VM 215 and VM 255) R: Open only to Veterinary Technology majors.
Service-oriented approach to the health care development in an operational animal care facility.
- 275 Large Animal Diseases and Management**
Spring. 3(3-0) P:M: (VM 165 and VM 170 and VM 250) R: Open only to Veterinary Technology majors.
Diseases, husbandry, preventative health care and client education for equine and food animal species.
- 285 Clinical Nutrition for Veterinary Technologists**
Fall. 1(1-0) P:M: (VM 250) R: Open only to Veterinary Technology majors.
Nutritional assessment and management of common domestic species in veterinary medicine.
- 290 Special Studies in Veterinary Medicine**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to Pre-Veterinary and Veterinary Technology majors.
Faculty-directed individual study on an experimental, theoretical or applied problem. May involve a supervised off-campus experience.
- 295 Biomedical Research and Regulatory Issues for Veterinary Technologists**
Fall. 1(1-0) P:M: (VM 150) R: Open only to Veterinary Technology majors.
Principles and techniques of biomedical research, governance and regulation of animal care and use.
- 303 Anesthesiology for Veterinary Technicians**
Fall. 2(2-0) P:M: (VM 140 and VM 250) R: Open only to Veterinary Technology majors. C: VM 215 concurrently, VM 210 concurrently.
Pharmacologic action of preanesthetic and anesthetic drugs. Principles and techniques of induction, maintenance, monitoring, and recovery of the patient. Humane methods of euthanasia.
- 304 Radiology for Veterinary Technicians**
Spring. 2(2-0) P:M: (VM 110 and VM 130) R: Open only to Veterinary Technology majors.
Production of radiographs, components of the x-ray machine, use of screens and grids, handling film, imaging quality, film processing, patient positioning, and radiation safety.
- 305 Hospital Practice Management for Veterinary Technologists**
Spring. 2(2-0) P:M: (VM 150 and VM 155) R: Open only to Veterinary Technology majors.
Veterinary practice economics, personnel management, inventory control and marketing techniques.
- 310 Advanced Clinical Pathology Techniques**
Spring. 1(0-2) P:M: (VM 175 and VM 176) R: Open only to Veterinary Technology majors.
Advanced cytologic techniques including sample collection, processing and evaluation.
- 369 Introduction to Zoo and Aquarium Science**
Spring. 3(3-0) Interdepartmental with Zoology; Landscape Architecture; Fisheries and Wildlife. Administered by Department of Zoology. P:M: (BS 110 or LBS 144 or LBS 148H)
Fundamentals of zoo and aquarium operations including research, interpretation, design, nutrition, captive breeding, conservation, ethics and management.
- 410 Veterinary Technology Clerkship in Anesthesiology**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in anesthesiology.
- 411 Veterinary Technology Clerkship in Radiology**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in radiology.
- 412 Veterinary Technology Clerkship in Companion Animal Medicine**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) R: Open only to Veterinary Technology Majors who have completed the preclinical coursework.
Application of principles and techniques in restraint, examination, nursing care, monitoring, and preventive medicine of companion animals.
- 413 Veterinary Technology Clerkship in Companion Animal Surgery**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in surgical nursing.
- 414 Veterinary Technology Clerkship in Equine Medicine and Surgery**
Fall, Spring, Summer. 3 credits. P:M: (VM 415) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in equine medicine and surgery.
- 415 Veterinary Technician Clerkship in Food Animal and Equine Medicine and Surgery**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in food animal and equine medicine and surgery.
- 450 Veterinary Technology Clerkship in Emergency Medicine**
Fall, Spring, Summer. 3 credits. P:M: (VM 412) RB: (VM 410 and VM 411 and VM 413) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in emergency medicine.
- 451 Veterinary Technology Clerkship in Cardiology**
Fall, Spring, Summer. 3 credits. P:M: (VM 412) RB: (VM 410 and VM 411 and VM 413) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in cardiology.
- 452 Veterinary Technology Clerkship in Neurology**
Fall, Spring, Summer. 3 credits. P:M: (VM 412) RB: (VM 410 and VM 411 and VM 413) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in neurology and physical therapy.

- 453 Veterinary Technology Clerkship in Ophthalmology**
Fall, Spring, Summer. 3 credits. P:M: (VM412 and VM 413) RB: (VM 410) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in ophthalmology.
- 454 Veterinary Technology Clerkship in Critical Care**
Fall, Spring, Summer. 3 credits. P:M: (VM 412) RB: (VM 410 and VM 411 and VM 413) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in critical care.
- 466 Veterinary Technology Clerkship in Large Animal Anesthesia**
Fall, Spring, Summer. 3 credits. P:M: (VM 410 and VM 415) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors. SA: VM 460, VM 472
Application of principles and techniques of food animal and equine anesthesiology.
- 470 Veterinary Technology Clerkship in Food Animal Medicine**
Fall, Spring, Summer. 3 credits. P:M: (VM 415) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in food animal medicine.
- 480 Veterinary Technology Clerkship in Clinical Pathology**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in clinical pathology.
- 482 Veterinary Technology Clerkship in Necropsy**
Fall, Spring, Summer. 3 credits. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in postmortem examination of common domestic species with emphasis on specimen description, collection, and submission.
- 483 Veterinary Technology Clerkship in Biomedical Research**
Fall, Spring, Summer. 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: (VM 410 and VM 482) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in biomedical research involving laboratory animals.
- 484 Veterinary Technology Clerkship in Zoo and Wildlife Medicine**
Fall, Spring, Summer. 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: (VM 410) Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in zoo and wildlife medicine.
- 486 Veterinary Technology Clerkship in Clinical Parasitology**
Fall, Spring, Summer. 3 credits. P:M: (VM 245) RB: Completion of preclinical coursework. R: Open only to Veterinary Technology majors.
Application of principles and techniques in clinical parasitology.
- 487 Veterinary Technology Clerkship in Dermatology**
Fall, Spring, Summer. 3 credits. R: Open only to Veterinary Technology majors who have completed the pre-clinical coursework.
Application of principles and techniques in dermatology.
- 490 Veterinary Technology Clerkship in Special Problems**
Fall, Spring, Summer. 3 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P:M: (VM 270 and VM 275 and VM 303 and VM 304) RB: Completion of the didactic core curriculum. R: Open only to Veterinary Technology majors.
Application of principles and techniques in experimental, therapeutic, or laboratory medicine.
- 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.
Veterinary medical history and ethics. Client communication and animal behavior.
- 522 Veterinary Integrative Problem Solving II**
Spring. 3(3-0) R: Open only to graduate-professional students in College of Veterinary Medicine.
Integration of subject material from concurrent and previous semester courses.
- 532 Veterinary Integrative Problem Solving III**
Fall. 3(1-4) R: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine.
Integration of subject material from concurrent and previous semester courses.
- 533 Veterinary Epidemiology**
Fall. 3(3-0) RB: Completion of semester 2 of the graduate-professional program in the college of Veterinary Medicine. Not open to students with credit in VM 549.
Basic epidemiologic theory and study design. Veterinary descriptive and inferential biostatistics. Production veterinary medicine.
- 541 Veterinary Perspectives III**
Spring. 2(2-0) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 602.
Concepts and principles of veterinary practice management.
- 542 Veterinary Integrative Problem Solving IV**
Spring. 3(2-3) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine.
Integration of subject material from concurrent and previous courses.
- 543 Cardiovascular Diseases**
Spring. 2(2-0) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine.
Cardiovascular diseases of domestic animals. Pathogenesis, diagnosis, and treatment.
- 544 Veterinary Public Health**
Spring. 2(2-0) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine.
Veterinary environmental and occupational and public health. Milk and meat hygiene. Control of zoonotic diseases.
- 545 Principles of Anesthesia and Surgery**
Spring. 4(3-2) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 570 or VM 578.
Administering anesthetic agents. Fundamentals of surgery: sterile technique, tissue handling, suture patterns, wound healing, postoperative care.
- 546 Musculoskeletal Diseases**
Spring. 5(5-0) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 582 or VM 592.
Musculoskeletal diseases of domestic animals. Pathogenesis, diagnosis, and treatment.
- 547 Respiratory Diseases**
Spring. 2(2-0) RB: Completion of semester 2 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 574.
Respiratory diseases of domestic animals. Pathogenesis, diagnosis, and treatment.
- 552 Veterinary Integrative Problem Solving V**
Fall. 3(2-3) RB: Completion of semester 4 of the graduate-professional program in the College of Veterinary Medicine.
Integration of subject material from concurrent and previous semester courses.
- 553 Theriogenology and Urinary Diseases**
Fall. 5(4-2) RB: Completion of semester 4 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 560 or VM 580.
Urogenital diseases of domestic animals. Pathogenesis, diagnosis, and treatment.

Veterinary Medicine—VM

- 554 Hematological, Oncological and Dermatological Diseases**
Fall. 3(3-0) RB: Completion of semester 4 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 562 or VM 568.
Hematological, oncological and dermatological diseases of domestic animals. Pathogenesis, clinical presentation, diagnosis and treatment.
- 555 Neurological and Ophthalmological Diseases**
Fall. 3(3-0) RB: Completion of semester 4 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 563 or VM 566.
Neurological and ophthalmological diseases of domestic animals. Pathogenesis, diagnosis, and treatment.
- 556 Digestive, Metabolic and Endocrinological Diseases**
Fall. 5(5-0) RB: Completion of semester 4 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 540 or VM 576 or VM 586.
Digestive, metabolic, and endocrinological diseases of domestic animals. Pathogenesis, diagnosis, and treatment.
- 557 Operative Surgery**
Fall. 2(1-3) RB: Completion of semester 4 of the graduate-professional program in the College of Veterinary Medicine. Not open to students with credit in VM 578 or VM 588 or VM 596.
Soft tissue and orthopedic surgery of domestic animals: preoperative evaluation, surgery, and postoperative care.
- 611 Veterinary Externship**
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Completion of 5 semesters of the graduate-professional program in the College of Veterinary Medicine.
Clinical or research experience in an off-campus setting.
- 690 Special Problems in Veterinary Medicine**
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate-professional students in the College of Veterinary Medicine.
Individual study directed by a faculty member on an experimental, theoretical, or applied problem. May involve off-campus experience in a preceptorial mode.
- 692 Career Development and Business Skills**
Spring. 3 credits. RB: Open only to graduate-professional students who have completed semester 5 of the graduate professional program in the College of Veterinary Medicine.
Development of leadership, business and interpersonal skills, career planning, and goal setting.

- 810 Food Safety Introduction and Professional Management**
Fall, Spring, Summer. 2 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. RB: One year of college level science including one semester of microbiology. R: Open only to students in the Master of Science degree in Food Safety or approval of college.
Various food safety topics. Organizational, managerial, leadership and communication skills.
- 811 Evolution and Ecology of Foodborne Pathogens**
Spring. 3 credits. R: Open only to students in the Master of Science degree in Food Safety or approval of college.
Evolution of foodborne pathogens. Ecology of microbial organisms found in the food chain from introduction through human consumption.
- 812 Food Safety Toxicology**
Spring. 3 credits. R: Open only to students in the Master of Science degree in Food Safety or approval of college.
Nature and properties of toxic substances through the food chain. Nature and magnitude of hazards to human health.
- 813 Special Studies in Food Safety**
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Open only to students in the Master of Science degree in Food Safety or approval of college.
Faculty supervised independent study on an experimental, theoretical or applied project. May involve on-campus or off-campus experience.
- 815 Applied Project in Food Safety**
Fall, Spring, Summer. 6 credits. P:M: (VM 810) R: Open only to students in the Master of Science degree in Food Safety or approval of college.
Faculty directed student project.
- 818 The Epidemiology of Zoonotic Diseases**
Spring of odd years. 3(3-0) Interdepartmental with Epidemiology. Administered by Department of Epidemiology. RB: (EPI 810) R: Open only to master's students in the Epidemiology major or approval of department.
Human susceptibility to diseases of animals. Modes of transmission, surveillance, and strategies for prevention of specific zoonotic diseases.
- 820 Current Topics in Comparative Medicine and Integrative Biology**
Spring. 1 to 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: Enrollment in graduate-professional program or graduate program in the biomedical sciences.
Topics in comparative medicine using recently published literature to illustrate concepts.
- 828 Food Safety Seminar Series**
Fall, Spring. 1(1-0) Interdepartmental with Agriculture and Natural Resources; Natural Science; Social Science. RB: Enrollment in graduate program in related discipline
Selected current topics covering the broad areas of food safety as they relate to production, processing, transport, microbiology, toxicology, and social and human dimensions.

- 829 Problems in Food Safety**
Fall. 1(1-0) Interdepartmental with Agriculture and Natural Resources; Natural Science; Social Science. RB: Enrollment in graduate program in related discipline
In-depth discussion of selected problems in food safety.
- 899 Master's Thesis Research**
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 18 credits in all enrollments for this course.
Masters thesis research.
- 999 Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 36 credits. A student may earn a maximum of 36 credits in all enrollments for this course.
Doctoral dissertation research.

WOMEN'S STUDIES WS

Women, Gender, and Social Justice College of Arts and Letters

- 201 Introduction to Women's Studies**
Fall, Spring, Summer. 4(4-0)
Diversity of women's situations in social, cultural, historical and international contexts. Focus on women as victims of oppression and as agents. Concepts basic to feminist thought: gender systems, patriarchy.
- 202 Introduction to Contemporary Feminist Theories**
Fall. 3(3-0) P:M: (WS 201) RB: Or approval of program. R: Not open to freshmen.
Contemporary feminist theories of patriarchy, oppression, liberation, sexuality, and the meaning of "woman." Influences of liberalism, Marxism, Freud. Intersections of sex, race, class, and ethnicity. Theories by women of color.
- 203 Bibliographic Methods for Women's Studies Research**
Fall of odd years. 3(3-0) P:M: Completion of Tier I writing requirement.
Women's studies as interdisciplinary knowledge. Bibliographic and reference sources. Library organization of information. Research problems.
- 204 Lesbian, Bisexual, and Gay Studies: Psychological and Cultural Issues**
Spring of odd years. 3(3-0) Interdepartmental with Psychology.
Nature, origins, and development of sexual orientation and sexual identity in the context of personality, culture, and society. Multicultural and feminist perspectives on the relationship between sexual orientation and gender, race, class, ethnicity, and religion.