Veterinary Medicine—VM

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. R: 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, Summer. 2 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Only open 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.

810 Food Safety Introduction and Professional Management
Fall, Spring, Summer. 3 credits. A student may earn a maximum of 6 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 food 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.

813 Special Studies in Food Safety
Spring. 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. 2(2-0) 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.
Selected topics in comparative medicine using recently published literature to illustrate concepts. Topics will change with instructor from semester to semester.

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

Women's Studies Program
College of Arts and Letters
College of Social Science

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.

204 Lesbian, Bisexual, and Gay Studies: Psychological and Cultural Issues
Spring of odd years. 3(3-0) Interdepartmental with Psychology.

211 Introduction to Gender and Environmental Issues
Spring. 3(3-0) Interdepartmental with Fisheries and Wildlife; Forestry; Environmental Economics and Policy; Resource Development. Administered by Department of Fisheries and Wildlife. R: Not open to freshmen. SA: PRM 211
The concept of gender. Overview of environment and habitat. Historical gender roles in environmental management. Gender-based theoretical perspectives. Case studies on developing and developed countries. Environmental management with emphasis on fisheries, wildlife and wetlands.

Women environmental professionals.

225 Women and Language
Fall. 3(3-0) Interdepartmental with Linguistics. Administered by Department of Linguistics and Germanic, Slavic, Asian and African Languages.
Women and language in societies around the world. Issues such as status and verbal politeness, importance of names, gender differences in language use, women's multilingualism, sexism language, gendered language development in children.

301 Sexual Violence Against Women and Children: Theory and Response
Spring. 3(3-0) RB: (WS 201 Or WS 202 Or WS 203) R: Not open to freshmen.
Sexual violence against women and children from theoretical and applied perspectives. Rape, battering, incest and sexual harassment. Intersection of race, class, gender and violence. Individual and collective strategies to prevent or deter assault, race, class, gender and violence.

302 Jewish Women's Experiences and Writings
Fall of even years. 3(3-0) RB: (WS 201 Or WS 202 Or WS 203) R: Not open to freshmen.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>321</td>
<td>Lesbian Cultures and Identities</td>
<td>Lesbian history, lesbian cultures/communities, and the construction of lesbian identity.</td>
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<td>322</td>
<td>Lesbian Literature, Arts and Popular Culture</td>
<td>Lesbian writers and artists as contributors to popular and high culture.</td>
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<tr>
<td>400</td>
<td>Women in Classical Greek Society</td>
<td>Spring of odd years. 3(3-0) Interdepartmental with Classical Studies. Administered by Department of Romance and Classical Languages. R: Not open to freshmen or sophomores. Image, role, and status of women in Greek society as seen through literary sources.</td>
</tr>
<tr>
<td>403</td>
<td>Women and Change in Developing Countries</td>
<td>Fall of odd years. 3(3-0) Interdepartmental with Fisheries and Wildlife. R: (WS 201 or WS 202 or WS 203) R: Not open to freshmen or sophomores. Law in the United States as a vehicle for structuring and maintaining women's social roles, and for social change.</td>
</tr>
<tr>
<td>413</td>
<td>Families in Historical Perspective</td>
<td>Fall. 3(3-0) Interdepartmental with History. Administered by Department of History. R: Not open to freshmen. Family forms and socio-economic change in Europe and the United States. Gender, childhood, courtship, sexual relations, marriage, divorce, childbearing, and old age in peasant, industrial, and postindustrial society. War, welfare state, and the family. The marginalized: vagrants, foundlings, immigrants, and single mothers.</td>
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<tr>
<td>420</td>
<td>History of Sexuality since the 18th Century</td>
<td>Fall, Spring. 3(3-0) Interdepartmental with History. Administered by Department of History. R: Not open to freshmen. Changing gender roles, sex in the Victorian era, prostitution, pornography, birth control, emergence of homo- and heterosexuality, sex under fascism, the sexual revolution, contemporary conflicts.</td>
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<tr>
<td>425</td>
<td>Women and Criminal Justice</td>
<td>Spring of even years. 3(3-0) Interdepartmental with Criminal Justice. Administered by School of Criminal Justice. R: (CJ 220 Or WS 201) R: Open only to juniors or seniors. Theories on women's victimization and criminality. Women's experiences as victims, offenders, and criminal justice employees. Laws and their effects on the rights of women in the criminal justice system.</td>
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<tr>
<td>462</td>
<td>Theory and Practice of Feminist Literary Criticism</td>
<td>Spring. 3(3-0) Interdepartmental with English. Administered by Department of English. P:M: (ENG 353 or ENG 379 or WS 202) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of English or Women's Studies Program or English disciplinary minor. Feminist literary critical theory and its implications for reading and studying literature.</td>
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<tr>
<td>490</td>
<td>Independent Study</td>
<td>Fall, Spring. 1 to 3 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: (WS 201 or WS 202 or WS 203) R: Open only to juniors or seniors; approval of program. Individual reading and research on women and gender.</td>
</tr>
<tr>
<td>491</td>
<td>Special Topics</td>
<td>Fall, Spring. 3 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: (WS 201 Or WS 202 Or WS 203) R: Not open to freshmen or sophomores. In-depth study of special topic emphasizing women and gender.</td>
</tr>
<tr>
<td>492</td>
<td>Women's Studies Senior Seminar (W)</td>
<td>Spring. 4(4-0) P:M: (WS 201 and WS 203) and completion of Tier I writing requirement. R: Not open to freshmen or sophomores. Synthesis and elaboration of ideas and perspectives central to women's studies. Current areas of interest and research in feminist scholarship.</td>
</tr>
<tr>
<td>493</td>
<td>Internship</td>
<td>Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. R: (WS 201 or WS 202 or WS 203) R: Not open to freshmen or sophomores. Approval of program. Integration of feminist knowledge through work experience related to women's concerns. Experience in legislative, community, or educational settings.</td>
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**ZOOLOGY**

**Department of Zoology**

**College of Natural Science**

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<tr>
<td>101</td>
<td>Preview of Zoology</td>
<td>Fall, Spring. 1(1-0) R: Open only to freshmen in the Zoology major. Zoology as a discipline. Availability of diverse career options. Integration of human and technical skills in scientific problem solving.</td>
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<tr>
<td>111L</td>
<td>Cell and Molecular Biology Laboratory</td>
<td>Fall, Spring, Summer. 2(1-3) Interdepartmental with Biological Science; Microbiology and Molecular Genetics; Plant Biology. Administered by Natural Science. R: Not open to students with credit in LBS 159H. Principles and applications of common techniques used in cell and molecular biology.</td>
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<tr>
<td>141</td>
<td>Introductory Human Genetics</td>
<td>Fall, Spring. 3(3-0) R: Not open to students in the Biochemistry, Plant Biology, Entomology, Medical Technology, Clinical Laboratory Science, Physiology, Zoology, Microbiology, Biological Science-Interdepartmental, or Human Biology majors or to students in the corresponding Lyman Briggs School coordinate majors or to students in the Lyman Briggs School Biology field of concentration. Not open to students with credit in ZOL 341 or ZOL 344. Inheritance of human traits. Impact of genetic technology on society. Ethical and legal issues. Risks and benefits of genetic technology.</td>
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<tr>
<td>306</td>
<td>Invertebrate Biology</td>
<td>Fall. 4(3-3) P:M: (BS 110 or LBS 144 or LBS 148H) Systematics, morphology, and natural history of invertebrate animals. Identification of live and preserved specimens. Recognition of selected groups.</td>
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<tr>
<td>313</td>
<td>Animal Behavior</td>
<td>Fall, Spring. 3(3-0) P:M: (BS 110 or LBS 144 or LBS 148H) R: Not open to freshmen. SA: ZOL 213 Development, physiological mediation, adaptive significance and evolution of behavior.</td>
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<tr>
<td>316</td>
<td>General Parasitology</td>
<td>Spring. 3(3-0) P:M: (LBS 144 or LBS 145 or LBS 148H or LBS 149H or BS 110) or (BS 111 and BS 111L) Identification, life history, host-parasite relationships, and epidemiology of protozoan, helminth, acanthocephalan, copepod, and arthropod parasites of animals and humans.</td>
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