

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. 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.

- 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**
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.

- 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.

- 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, sexist 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.

Diverse experiences of Jewish women from a multidisciplinary perspective. Gender construction of Jewish and majority women and men. Generations of immigrant Jewish women. Anti-Semitism. Jewish feminism. Political and economic issues.

WOMEN'S STUDIES

WS

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.

321 Lesbian Cultures and Identities
Fall of even years. 3(3-0) RB: (WS 201 and WS 202)
Lesbian history, lesbian cultures/communities, and the construction of lesbian identity.

322 Lesbian Literature, Arts and Popular Culture
Fall of odd years. 3(3-0) RB: (WS 201 and WS 202)
Lesbian writers and artists as contributors to popular and high culture.

400 Women in Classical Greek Society
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.

401 Feminist Theory
Spring. 4(4-0) P:M: (WS 201 and WS 202)
R: Not open to freshmen or sophomores.
Integrative and multidisciplinary approaches to theory in women's studies. Conceptualization of sex and gender and the subordination of women. Feminist critique of theories of knowledge. Comparison of evolving feminist theories.

403 Women and Change in Developing Countries
Spring. 3(3-0) RB: (WS 201 Or WS 202 Or WS 203) R: Not open to freshmen or sophomores.
Effects of economic, political, and social change on women in developing countries. Interrelationships of gender, class, race, and nationality.

404 Women and the Law in the United States
Fall of odd years. Spring of odd years. 3(3-0) Interdepartmental with Fisheries and Wildlife. RB: (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.

413 Families in Historical Perspective
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.

420 History of Sexuality since the 18th Century
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.

425 Women and Criminal Justice
Spring of even years. 3(3-0)
Interdepartmental with Criminal Justice. Administered by School of Criminal Justice. RB: (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.

453 Women and Work: Issues and Policy Analysis
Spring. 3(3-0) Interdepartmental with Environmental Economics and Policy; Economics. Administered by Department of Agricultural Economics. RB: (EC 201 or EC 202 or EEP 201 or concurrently) R: Not open to freshmen or sophomores.

Current and past quantity and quality of women's participation in the labor force. Gender differentials in earnings and occupations. Employment discrimination. Laws, especially affirmative action laws. Social policy effects. International issues.

482 Theory and Practice of Feminist Literary Criticism
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.

490 Independent Study
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 8 credits in all enrollments for this course. RB: (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.

491 Special Topics
Fall, Spring. 3 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. RB: (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.

492 Women's Studies Senior Seminar (W)
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.

493 Internship
Fall, Spring, Summer. 2 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P:M: (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.

890 Individual Reading
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 program.

Faculty supervised graduate level reading in special topics.

ZOOLOGY

ZOL

Department of Zoology College of Natural Science

101 Preview of Zoology
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.

111L Cell and Molecular Biology Laboratory
Fall, Spring, Summer. 2(1-3)
Interdepartmental with Biological Science; Microbiology and Molecular Genetics; Plant Biology. Administered by Natural Science. P:M: (BS111 or concurrently) Not open to students with credit in LBS 159H.

Principles and applications of common techniques used in cell and molecular biology.

141 Introductory Human Genetics
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.

306 Invertebrate Biology
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.

313 Animal Behavior
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.

316 General Parasitology
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.