Description — Theatre
of Courses

437. Scene Painting
Fall of odd-numbered years. 3(0-6)
Majors or approval of department.
A "hands-on" course which introduces and
explores the styles, techniques and materials neces-
sary for painting scenery for the stage.

475. Black African Theatre Forms
Spring of even-numbered years. 3(0-6)
Approval of department.
Overview of selected Caribbean and African
playwrights. Examination of performance styles
and historical situations that may affect the
playwright.

477. Development of Theatre I
Fall of even-numbered years. 3(0-6)
Origins and evolution of Western physical theatre
from 500 B.C. to 1850 A.D. with emphasis on
theatre as a performance art and a social
expression.

478. Development of Theatre II
Fall of odd-numbered years. 3(0-6)
Crisis and change in theatre forms since 1850
with emphasis on the emergence of the stage
director and the influence of new technology.

479. Black American Theatre
Spring of odd-numbered years. 3(0-6)
Black American Theatre from its beginning in
ritual theatre and oral tradition of Africa through its re-creation in America.

480. American Theatre History
Spring of even-numbered years. 3(0-6)
Focus on major events and artists of the Ameri-
can Theatre from 1665 to the present.

481. Direction and Design: Styles
Spring of odd-numbered years. 3(0-6)
THR 303
Provide background in historic research skills
and historic production techniques.

483. Theatre Organization and
Management
Fall. 3(3-0)
Administration, organization and philosophy of
theatre.

489. Tour
Spring. 3(0-6) May reenroll for a maxi-
num of 6 credits. Approval of department.
Rehearsal for and participation in the various
departmental touring productions.

490. Theatres of India and Southeast
Asia
Winter of odd-numbered years. 3(0-6)
Origins and development of major theatre forms of
India and Southeast Asia supplemented by sig-
nificant plays illustrative of the courtly tradi-
tion, religious ritual and social revolution.

491. Theatres of China and Japan
Winter of even-numbered years. 3(0-6)
Origins and development of major theatre forms of
China and Japan supplemented by key plays and
their unique manner of presentation.

493. History of Dance I
Fall of even-numbered years. 3(3-0)
Approval of department.
Historical overview of dance from 1900. Emphasis
on various dance forms, artists and cultures.

494. History of Dance II
Winter of odd-numbered years. 3(3-0)
Approval of department.
The history of dance from 1900 to the present.
Focus on various dance forms, philosophies and
personalities, including those of the American
musical theatre.

499A. Readings in Special Theatre
Problems
Fall, Winter, Spring, Summer. 2 to 4
credits. May reenroll for a maximum of 12 cred-
its. Approval of department.
Independent study projects related to specific
problems in theatre production of an advanced
and/or experimental nature. Taught tutorially.

499B. Design Tutorial
Fall, Winter, Spring, Summer. 2 to 4
credits. May reenroll for a maximum of 12 cred-
its. Approval of department.
Independent study projects related to specific
problems in theatrical design of an advanced
and/or experimental nature. Taught tutorially.

499C. Directing Tutorial
Fall, Winter, Spring, Summer. 2 to 4
credits. May reenroll for a maximum of 12 cred-
its. Approval of department.
Independent study projects related to specific
problems in theatrical design of an advanced
and/or experimental nature. Taught tutorially.

499D. Children's Theatre Tutorial
Fall, Winter, Spring, Summer. 3 to 6
credits. May reenroll for a maximum of 12 cred-
its. Approval of department.
Independent study projects related to specific
problems in children's theatre or creative dra-
matics.

500. Theatre Methodology and
Research
Fall. 3(3-0)
Explores research techniques appropriate to the-
atre. Practical library projects strengthen skills
necessary to digest and relate data meaningfully
at all levels of theatre.

501A. Dramatic Theory and Criticism:
Greek to Neoclassic
Fall. 3(4-0) Approval of department.
Dramatic criticism and theory from Aristotle to
1770. Emphasis on classic contributions.

501B. Dramatic Theory and Criticism:
1800 to Present
Winter. 3(4-0) Approval of depart-
ment.
Dramatic criticism and theory from Roman-
ticism to the present day.

503A. Practicum in Theatre Arts: Acting
Fall, Winter, Spring, Summer. 3(0-10)
May reenroll for a maximum of 18 credits.
Approval of department.
Graduate practicum in acting.

504. Problems in Theatrical Design
Fall, Winter, Spring. 3(4-0)
May reenroll for a maximum of 20 credits.
Approval of department.
Problems in theatre design—costumes, scenery,
lighting, architecture, properties, sound.

505. Studies in Comparative Theatre
and Drama
Fall, Winter, Spring, Summer. 3(3-0)
May reenroll for a maximum of 12 credits.
Approval of department. Interdepartmental
with the Department of English.
Comparative study of selected playwrights,
movements, trends and developments in world
acting from the beginnings to the present day.

506. Advanced Directing Practices
Winter, Summer. 4(4-0) May reenroll
for a maximum of 12 credits. Approval of depart-
ment.
Directing theory and practice in the 20th cen-
tury. Study and laboratory experimentation.

508. Studies in Theatre History
Fall, Winter, Spring, Summer. 3(3-0)
May reenroll for a maximum of 18 credits.
Approval of department.
Selected periods in Western and Asian Theatre
History emphasizing the theatre as a cultural
expression and a performing art.

509. Acting Theory
Fall. 2(2-0) Approval of instructor.
Discussion of the theories, processes, techniques,
and styles of acting set forth in the writings of
prominent performers, teachers, and critics.

899. Master's Thesis Research
Fall, Winter, Spring, Summer. Varia-
tble credit. Approval of department.

900. Special Problems — Theatre
Fall, Winter, Spring, Summer. 1 to 6
credits. May reenroll for a maximum of 15 cred-
its.
Special problems in theatre research and experi-
mentation with emphasis on the relation of thea-
tre to other disciplines.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. Varia-
tble credit. Approval of department.

URBAN PLANNING
See Geography.

VETERINARY MEDICINE VM (COLLEGE OF)

512. Physical Examination and Animal
Handling I
Winter. 2(0-6) First year Veterinary
Medicine students.
Techniques for restraint and examination of
horses, poultry, dogs, cats, caged birds, inspec-
tions of production units.

515. Introduction to Veterinary
Practice and Animal Behavior
Winter. 3(2-0) First year Veterinary
Medicine students.
Animal behavior including patterns, inherit-
ance, learning, communication, sleep patterns,
social structure, physical examination, ingestive
and eliminative; human-animal bonding; solv-
ing behavior problems; medical record develop-
ment and establishing client relationships.
517. Perspectives in Veterinary Medicine
   Fall. 1(1-0) First-term Veterinary Medicine students.
   Ethical principles, historical background and organization of the veterinary profession.

521. Introduction to Veterinary Medicine II
   Spring. 4(3-4) Third-term Veterinary Medicine students.
   Restraint, physical examination and diagnostic procedures in food animals and horses. Fundamentals of equine conformation, gait, shoeing and routine medical care.
   Approved through Winter 1988.

540. Metabolic Diseases and Endocrinology
   Winter. 2(2-0) Fifth-term Veterinary Medicine students.
   Biochemical and physiological basis of metabolic and endocrine diseases of animals including diagnosis, treatment and management.

542. Principles of Radiology
   Fall. 2(2-0) Fourth-term Veterinary Medicine students.

544. Veterinary Epidemiology
   Fall. 4(4-0) Fourth-term Veterinary Medicine students.
   Meaning and relevance of biostatistics in veterinary medicine. Descriptive and inferential statistics. Study design and critical literature review. Disease determinants, ecology, distribution and populations at risk. Analytic-clinical investigative epidemiology.

550. Preventive Veterinary Medicine and Public Health
   Spring. 4(4-0) Sixth-term veterinary medicine students.
   Public health aspects of veterinary medicine. Preventive and regulatory medicine including meat and milk hygiene, water supply and treatment, solid and liquid waste treatment and disposal and zoos.

560. Urinary System
   Spring. 3(3-0) Sixth-term Veterinary Medicine students.
   Normal and abnormal structure and function, diagnostic methods, and the medical and surgical manipulation of the urinary system.

561. Core of Medicine Laboratories I
   Spring. 2(0-6) Sixth-term Veterinary Medicine students.
   Classification diagnosis and treatment of diseases of the urinary, hematopoietic, nervous, integumentary and visual systems of animals.

562. Hematopoietic System
   Spring. 2(2-0) Sixth-term Veterinary Medicine students.
   Normal structure and function of the hematopoietic system and pathophysiologic effects of hematopoietic diseases. Clinical manifestations, laboratory evaluation and medical management.

563. Visual System
   Spring. 2(2-0) Sixth-term Veterinary Medicine students.
   Methods of examination, diagnosis, and treatment of ocular diseases.

564. Survey of Infectious Agents
   Winter. 3(3-0) Fifth-term veterinary medicine students.
   Host-microorganism relationship in diseases of animals; laboratory diagnosis, treatment, control, and public health significance.

566. Nervous System
   Spring. 3(3-0) Sixth-term Veterinary Medicine students.
   Normal and abnormal neural structure and function in animals with emphasis on clinical neurology and neuropathology.

568. Integumentary System
   Spring. 3(3-0) Sixth-term Veterinary Medicine students.
   Diseases of the integumentary system of animals with emphasis on laboratory examinations, interpretations of pathological features, diagnosis and treatment.

570. Principles of Anesthesia
   Fall. 2(2-0) Seventh-term Veterinary Medicine students.

571. Core of Medicine Laboratories II
   Fall. 1(0-3) Seventh-term Veterinary Medicine students.
   Classification, diagnosis and treatment of diseases of the cardiovascular, respiratory and digestive systems of animals. Preanesthetic and anesthetic procedures and skills.

572. Cardiovascular System
   Fall. 3(3-0) Seventh-term Veterinary Medicine students.
   Pathogenesis, diagnosis, and management of cardiovascular diseases of animals. Anatomical, physiological, pathological and pharmacological principles providing basis for medical and surgical treatment. Diagnostic and surgical procedures and radiologic interpretation.

574. Respiratory System
   Winter. 4(4-0) Eighth-term Veterinary Medicine students.
   Pathogenesis, diagnosis, and management of respiratory diseases of animals; anatomical, physiological and surgical treatments. Diagnostic and surgical procedures and radiologic interpretation.

576. Digestive System I
   Fall. 4(4-0) Seventh-term Veterinary Medicine students.
   Pathogenesis, diagnosis, and treatment of diseases of the alimentary tract and digestive organs of small animals.

578. Principles of Surgery I
   Fall. 3(3-0) Seventh-term Veterinary Medicine students.
   Fundamentals of surgery. Common procedures used in soft tissue surgery with small animals.

580. Theriogenology
   Fall. 6(5-3) Seventh-term Veterinary Medicine students.
   Reproductive function and diseases of animals' genital structure and function and endocrine control. Examination, diagnosis and treatment of the mammary gland and reproductive tract.

590. Client Communication and Jurisprudence
   Spring. 2(2-0) Ninth-term Veterinary Medicine students.
   Communication and interviewing skills for effective client relations. Communication aspects of medical records and their use in medical problem solving. Legal responsibilities of the veterinary medical profession.

591. Core of Medicine Laboratories IV
   Spring. 2(0-6) Ninth-term Veterinary Medicine students.
   Diagnosis and treatment of common toxicologic conditions, musculoskeletal disorders and orthopedic conditions in animals.

592. Musculoskeletal System II
   Spring. 4(4-0) Eighth-term Veterinary Medicine students.
   Diagnosis, prognosis and management of musculoskeletal diseases of large animals. Anatomical relationships of normal to abnormal function. Surgical procedures applicable to the equine and ruminant. Radiographic diagnosis and interpretation of various lameness conditions.

594. Veterinary Toxicology
   Spring. 4(4-0) Ninth-term Veterinary Medicine students.
   Pharmacological basis and pathological features of diseases of animals caused by common toxic chemicals with emphasis on clinical manifestations, diagnosis, prevention, and treatment.

596. Diseases of Bones and Joints
   Spring. 3(3-0) Ninth-term Veterinary Medicine students.
   Anatomy and pathophysiology of diseases of bones and joints. Diagnosis, prognosis and treatment of abnormalities involving bones and joints.

602. Veterinary Practice Management
   Spring. 2(2-0) Ninth-term Veterinary Medicine students, approval of college.
   Establishment of a veterinary practice.
Description — Veterinary Medicine

Courses

610. Veterinary Externship
Fall, Winter, Spring, Summer. 6 to 12 credits. May enroll for a maximum of 12 credits. Veterinary Medicine students; completion of preclinical courses and approval of college. Students may not receive credit in both V M 610 and LCS 674. Clinical or research experience in an off-campus setting.

WOMEN'S STUDIES PROGRAM

College of Arts and Letters
College of Social Science

261. Introduction to Women's Studies: Women's Consciousness
(123.) Winter, Spring, 4(4-0) Interdepartmental with the colleges of Arts and Letters and Social Science.

Development of women's consciousness in various historical, cross-cultural and scientific contexts. Contexts basic to feminist thought are clarified. Critique of sexism in traditional scholarship.

300. Special Topics in Women's Studies
Spring of even-numbered years. 3(3-0) or 4(4-0) May enroll for a maximum of 6 credits if different topic is taken. Sophomores, W S 201 or approval of instructor. Interdepartmental with the colleges of Arts and Letters and Social Science.

Special topic emphasizing women and gender.

305. Women's Studies Internship
Fall, Winter, Spring, Summer. 2 to 4 credits. May enroll for a maximum of 4 credits. Six credits of women's studies courses, approval of Women's Studies Program. Interdepartmental with the colleges of Arts and Letters and Social Science.

Integration of feminist knowledge through work experience in legislative, community or educational settings.

401. Women's Studies Senior Level Seminar
Spring. 4(4-0) Juniors; W S 201 or six credits of ATL 181, ATL 182, ATL 183. Interdepartmental with the colleges of Arts and Letters and Social Science.

Synthesis of course work in women's studies. Emphasis on individualized research projects.

402. Feminist Theory
Fall. 4(4-0) Nine credits in women's studies courses, approval of instructor. Interdepartmental with the colleges of Arts and Letters and Social Science.

Integrative theoretical approaches to women's studies; ways of conceptualizing sex and gender; varieties of explanation of sexual inequality; feminist critiques of traditional knowledge.

409. Independent Study in Women's Studies
Fall, Winter, Spring, Summer. 1 to 4 credits. May enroll for a maximum of 8 credits. Juniors, approval of Women's Studies Program. Interdepartmental with the colleges of Arts and Letters and Social Science.

Individual reading and research on women and gender.

Winter. 3(3-0) Juniors or approval of department. Interdepartmental with and administered by the Department of Religious Studies.

Writings and thought of contemporary Jewish and Christian feminist theologians; views on scripture, God-language, patriarchy, ministry, spirituality, ethics. Scriptural reinterpretations; overview of women's role and place in world religions.

ZOLOGY

College of Human Medicine
College of Natural Science

203. Resource Ecology
(120.) Fall, Winter, Spring, Summer. 3(3-0) Interdepartmental with the departments of Fisheries and Wildlife, Forestry, Geography, and Resource Development. Administered by the Department of Fisheries and Wildlife.

Basic concepts of ecology which are the unifying basis for resource management, conservation policy and the analysis of environmental quality. Extensive use of guest lecturers.

301. Nature and Homo Sapiens
Spring. 4(4-0) Special topics of natural science; not open to zoology majors.

A case study approach which explores the interaction of technical, social, economic and legal influences on the management of contemporary environmental issues in Michigan.

302. Vertebrate Life of the Past
Fall. 3(3-0) One course in physical or biological science or Juniors. Interdepartmental with and administered by Geology.

Fossil vertebrates from fish to humans.

304. Biology, Behavior and Humans
Winter. 3(3-0) Juniors; not open to zoology majors.

Examines philosophical and biological issues which make the study of animal behavior relevant to humans. Emphasizes history of animal behavior, current theories, and experiments relating biological and environmental determinants of adaptive and non-adaptive behavior patterns.

305. Invertebrate Biology
Fall. 4(3-0) B S 212.

Systematics, morphology, and natural history of invertebrate animals. Laboratory includes identification of live and preserved animals and recognition of morphological characteristics of selected groups.

307. Vertebrate Biology

Systematics, morphology and natural history of vertebrate animals. Laboratory includes identification of live and preserved animals and recognition of morphological characteristics of selected groups.

313. Animal Behavior
Spring. 4(4-0). Given at W. K. Kellogg Biological Station Summer term of odd-numbered years. 4 credits. B S 211.

Description of the known behavior of the various vertebrate and invertebrate phyla with emphasis upon adaptive significance. Thus, special attention will be given to mating, defensive, and nutritive behavior. The genetics and ontogeny of behavioral patterns will be presented where known. Behavior will be related to the ecology of various animal populations.

317. Principles of Development
Fall, Spring, Summer. 3(3-0) B S 211.

Development of animals, especially vertebrates. Principles are illustrated by modern experimental studies of developmental problems.

318. Principles of Development Laboratory
Fall, Spring. 2(0-6) ZOL 317 or concurrently. B S 212.

Principles of development illustrated by analysis of the ontogeny of selected organisms.

337. The Fossil Record of Organic Evolution
Spring, 3(3-0) One course in a natural science; Juniors. Interdepartmental with and administered by Geology.


341. Human Heredity
Fall, Winter, 4(4-0) Sophomores. Not open to zoology majors. Students may not receive credit in more than one of the following: ZOL 341, ZOL 441.

Inheritance of human physiological, and psychological traits. Forces that influence human evolution. Applications of heredity in fields of education, sociology, anthropology, psychology, dentistry, and medicine.

359. Animal Ecology

Animals in relation to their environment. Factors affecting the distribution and abundance of animals. Interrelationships between climate, soils, vegetation, geologic history and animal life. Population characteristics as related to reproduction and mortality factors.

391. Zoological Problems
Fall, Winter, Spring, Summer. 1 to 8 credits. May enroll for a maximum of 12 credits. Juniors; B S 213; 6 credits in zoology; approval of department.

Advanced work in morphology, field zoology, genetics, mammalogy, ornithology, or ichthyology.

400H. Honors Work
Fall, Winter, Spring. 1 to 5 credits. May enroll for a maximum of 15 credits. Juniors; approval of department.