988. The Impact of Animal Resource Management upon the World's Developing Nations
Winter. 3(4-0)
For course description, see Interdisciplinary Courses.

502. Introduction to Veterinary Medicine II
Spring. 4(3-3) Admission to the professional veterinary program. Interdepartmental with and administered by the Small Animal Surgery and Medicine Department. Anesthetic principles, agents, and techniques. Basic surgical principles, including surgical technique, hemostasis, wound healing, suturing and suturing materials. Fundamentals of radiology.

503. Introduction to Veterinary Medicine III
Spring. 4(3-3) Admission to professional veterinary program. Interdepartmental with the Department of Small Animal Surgery and Medicine. Physical and systemic examination of the various domestic and laboratory species. Common restraint procedures, clinical skills, diagnostics and an approach to clients are included.

505. Large Animal Clinic I
Fall, Winter, Spring, Summer. 3(0-10) Eighth-term or ninth-term Veterinary Medicine students. Clinical instruction and experience in diagnosis, patient care, medication, surgery, disease prevention, and herd health.

521. Large Animal Surgery and Medicine I
(VSM 532.) Fall, Spring. 6(7-3) Seventh-term Veterinary Medicine students. Occurrence, etiology, symptomatology, diagnosis, prognosis, treatment and prevention of diseases of large domestic and laboratory animals. Discussion of diseases and laboratory animal species. Demonstration of laboratory experience in basic clinical skills including restraint, diagnosis, medication, and surgery.

522. Large Animal Surgery and Medicine II
(VSM 533.) Winter, Summer. 6(5-3) Occurrence, diagnosis and treatment of surgical diseases of large animals. Discussion of diseases of large domestic and laboratory animals. Demonstration of laboratory experience in advanced surgical techniques.

523. Large Animal Surgery and Medicine III
(VSM 534.) Fall, Spring. 7(7-0) Occurrence, diagnosis and treatment of surgical and reproductive diseases. Includes radiology and diseases of locomotion.

531. Meat Hygiene
(VSM 533.) Fall, Spring. 2(2-0) Ninth-term Veterinary Medicine students. Judging fitness of meat for human consumption based on a knowledge of bacteriology, parasitology and pathology. Organization and operation of meat inspection programs. Field trip required.

605. Large Animal Clinic II
(VSM 605.) Fall, Winter, Spring, Summer. 18(0-26) 805 Advanced clinical instruction and experience in diagnosis, patient care, medication, surgery, disease prevention, and herd health. Includes handling of clinic patients under direct supervision of staff veterinarians and ambulatory clinics.

624. Large Animal Surgery and Medicine IV
(VSM 631.) Winter, Summer. 4(4-0)
Etiology, pathogenesis, epidemiology, pathological changes, differential diagnosis, prevention, control and treatment of specific infectious diseases of large animals.

630. Veterinary Economics and Practice Management
(VSM 630.) Fall, Spring. 3(3-0) Veterinary medicine students. Management and business principles of veterinary medical practice.

809. Problems in Large Animal Surgery
(VSM 609.) Fall, Winter, Spring, Summer. Variable credit.

811. Problems in Large Animal Medicine
(VSM 611.) Fall, Winter, Spring, Summer. Variable credit.

813. Seminar
(VSM 613.) Fall, Winter, Spring. 1 credit.

823. Special Surgery
(VSM 623.) Spring. 3(1-6) May re-enroll for a maximum of 6 credits. Approval of department.

899. Research
(VSM 899.) Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 18 credits. Approval of department.

LATIN
See Romance Languages

LINGUISTICS AND ORIENTAL AND AFRICAN LANGUAGES

College of Arts and Letters

Courses in Chinese and Japanese on the 300 level or higher are normally conducted in the language.

Linguistics and Oriental and African Language Courses

299. Special Projects
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 12 credits. Approval of department.

499. Special Projects
Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 18 credits. Approval of department.

See Urban Planning and Landscape Architecture

LANDSCAPE ARCHITECTURE

See Urban Planning and Landscape Architecture

LARGE ANIMAL SURGERY AND MEDICINE

College of Veterinary Medicine

412. Livestock Hygiene and Disease Control
(VSM 412.) Winter. 3(3-0) Juniors: Agriculture majors. Fundamentals of health and disease in animals, control of infectious and parasitic diseases of animals to human health, disease prevention and role of veterinarian in preventive medicine.

A-102
African Languages — AFR

101. African Languages-Elementary
Fall. 5(3-2) May re-enroll for 101-102-103 sequence in more than one African language.
Continuation of 101.
Comprehension and speaking taught by a linguist with native informants. Offerings include Bemba, Hausa, Ibo, Pidgin, Swahili, Yoruba. These and other African languages are taught upon sufficient demand and availability of instructors.

102. African Languages-Elementary
Winter. 5(3-2) May re-enroll for 101-102-103 sequence in more than one African language.
Continuation of 101.

103. African Languages-Intermediate
Spring. 5(3-2) May re-enroll for 101-102-103 sequence in more than one African language.
Continuation of 102.

200H. Honors Work
Fall, Winter, Spring. 1 to 16 credits.
Approval of department.

201. Second-Year Chinese
Fall. 3(0-0) 103.
Conversation, reading, and writing at the intermediate level.

202. Second-Year Chinese
Winter. 3(0-0) 201.
Reading of advanced texts, introducing Chinese radicals and practice in the use of a Chinese dictionary.

203. Second-Year Chinese
Spring. 3(0-0) 202.
Continuation of 202; selected texts from Chinese newspapers, periodicals, and political journals.

221. Second-Year Conversation and Composition
Fall. 2(0-0) 103.
Conversation and composition at the intermediate level to supplement 201.

222. Second-Year Conversation and Composition
Winter. 2(0-0) 221.
Continuation of 221.

223. Second-Year Conversation and Composition
Spring. 2(0-0) 222.
Continuation of 222.

301. Readings in Modern Chinese Literature
Fall. 3(0-0) 203.
Selected short stories from authors of the twentieth century.

302. Readings in Modern Chinese Literature
Winter. 3(0-0) 301.
Selected essays from authors of the twentieth century.

303. Readings in Classical Chinese Literature
Spring. 3(0-0) 302.
Selections from the writings of the important philosophers, historians, and poets.

400H. Honors Work
Fall, Winter, Spring. Variable credit.
Approval of department.

401. Survey of Chinese Literature
Fall, Winter, Spring. 3(0-0) May re-enroll for a maximum of 9 credits. Oral comprehension and reading knowledge of Chinese language.
Survey of Chinese literature from earliest record to contemporary writings. Lectures and discussions conducted in Chinese. Most assigned readings in Chinese, some in English translation.

420. Oriental Literature in Translation
Fall, Winter, Spring. 3(0-0) May re-enroll for a maximum of 9 credits. Juniors or approval of department.
Development and influence of the ideas, forms and motifs of Far Eastern literatures in the literatures of the world.

431. Chinese Poetry
Fall. 3(0-0) Reading knowledge of Chinese.
Rise and development of Chinese poetry with particular attention to poetry of the Tang Dynasty.

432. Chinese Drama
Winter. 3(0-0) Reading knowledge of Chinese.
Special emphasis on dramas of the Yuan Dynasty.

433. Chinese Novels
Spring. 3(0-0) Reading knowledge of Chinese.
The most important vernacular novels.

Japanese — JAP

101. Elementary Japanese
Fall. 5(4-1) 103.
Spoken and written Japanese; emphasis on conversation and easy reading.

102. Elementary Japanese
Winter. 5(4-1) 103.
Continuation of 101.

103. Elementary Japanese
Spring. 5(4-1) 102.
Continuation of 102.

201. Second-Year Japanese
Fall. 3(0-0) 103.
A second-year course, stressing both oral and written Japanese.

202. Second-Year Japanese
Winter. 3(0-0) 201.
Continuation of 201.

203. Second-Year Japanese
Spring. 3(0-0) 202.
Continuation of 202.

221. Second-Year Composition
Fall. 2(0-0) 103.
Review grammar and composition to supplement 201.

222. Second-Year Composition
Winter. 2(0-0) 221.
Continuation of 221.

223. Second-Year Composition
Spring. 2(0-0) 222.
Continuation of 222.

400H. Honors Work
Fall, Winter, Spring. Variable credit.
Approval of department.
200. Language and Linguistics
Fall, Winter, Spring. 3(3-0)
Especially for students in areas other than linguistics, this course consists of an introduction to language and linguistics, emphasizing the application of linguistics to various other disciplines.

315. World Literature in English
Fall. 3(3-0) Interdepartmental with and administered by the English Department. Representative works, not from England or the United States, which were written originally in English, especially the English literature of present or former British Commonwealth nations, and nations from the Middle East and Africa.

316. World Literature in English Translation
Winter. 3(3-0) Interdepartmental with the English Department. Significant and characteristic works of the Orient, the Middle East, and Africa in English translation.

317. Genre and Themes in World Literature
Spring. 3(3-0) Interdepartmental with and administered by the English Department. Work will center each term around a single literary genre, type or theme. Typical examples: The Epic Literature of Revolt, Satire. Literary examples will be selected from several national literatures.

401. Introduction to Linguistics
Fall, Winter, Spring. 3(3-0) Juniors or approval of department. Not open to students with credit in 200.

402. Phonology
Fall, Winter, Spring. 3(3-0) 401
or approval of department.

403. Morphology
Fall, Winter, Spring. 3(3-0) 402 or concurrently.
Structure of words, covering the identification and classification of morphemes, morphologic alternation, and morphology in contemporary linguistic theories.

441. Introductory Readings in Linguistics
Fall, Winter, Spring. 3(3-0) 401.
Critical reading of basic texts of modern linguistics.

471. Principles and Methods of Historical Linguistics
Fall. 3(3-0) 403 or concurrently.
Types of linguistic change and the methods used by linguists to study the historical development of languages and language families.

511. History of Linguistics
Fall. 3(3-0) Approval of department.

580. Seminar in Linguistics
Fall, Winter, Spring. 3(3-0) May re-enroll for a maximum of 9 credits. Approval of department.

599. Research
Fall, Winter, Spring. Variable credit. Approval of instructor.

990. Seminar in Linguistics
Spring. 3(3-0) May re-enroll for a maximum of 9 credits in different areas Approval of department.

999. Research
Fall, Winter, Spring. Variable credit. Approval of instructor.

South Asian Languages

101. South Asian Languages—Elementary
Fall. 5(3-2) May re-enroll for 101-102-103 sequence in more than one South Asian Language.

102. South Asian Languages—Elementary
Winter. 5(3-2) May re-enroll for 101-102-103 sequence in more than one South Asian Language. 101.

103. South Asian Languages—Elementary
Spring. 5(3-2) May re-enroll for 101-102-103 sequence in more than one South Asian Language. 102.

201. South Asian Languages—Intermediate
Fall. 4(3-2) May re-enroll for 201-202-203 sequence in more than one South Asian Language. 103.

Continuation of 201.

Continuation of 101.

202. South Asian Languages—Intermediate
Winter. 4(3-2) May re-enroll for 201-202-203 sequence in more than one South Asian Language. 201.

Continuation of 201.

203. South Asian Languages—Intermediate
Spring. 4(3-2) May re-enroll for 201-202-203 sequence in more than one South Asian Language. 202.

Continuation of 202.

LYMAN BRIGGS COLLEGE

111. College Algebra
Fall. 5(5-0) Placement Test or approval of the college. Not open to students with credit in MTH 106, 109, or 111.
Topics covered include polynomial, trigonometric, exponential, and logarithmic functions, their inverses and their properties, and analytic geometry with an emphasis on conics.

112. Calculus I
Fall, Winter, Spring. 5(5-0) 111 or MTH 101-112. LBC 115 concurrently. Not open to students with credit in MTH 112.
Topics covered include sequences and their limits, derivatives of rational power functions,