652. Food Animal Clerkship I
(LSM 670.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, LCS 652, approval of department.
In-depth, supervised food animal medicine and surgery.

653. Large Animal Anesthesiology Clerkship
(LSM 656.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, approval of department.
Concepts and supervised practice in large animal anesthesiology.

660. Ambulatory Clerkship
(LSM 660.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, approval of department.
General medicine and surgery in large animals in field setting. Basic skills, diagnostic techniques and differential diagnosis. Clinical manipulative skills in theriogenology and minor surgery.

662. Introduction to Herd Health Clerkship
(LSM 662.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, LCS 660, approval of department.
Concepts and supervised practice in herd health programs. Emphasis on developing programs for food animal species and equine species.

664. Dairy Herd Health Clerkship
(LSM 664.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, LCS 660, approval of department.
Dairy farm and herd health management. Record keeping, general management, housing, nutrition, and mastitis control will be emphasized.

666. Equine Herd Health Clerkship
(LSM 666.) Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, LCS 660, approval of department.
Establishing and maintaining herd health programs for equine operations. Reproduction, parasite control, immunization, and diagnostic medicine and surgery in the field.

668. Swine Herd Health Clerkship
Fall, Winter, Spring, Summer. 4 credits. LCS 660, completion of 9 terms of professional program, approval of department.
Swine diseases and related production problems encountered in swine herd health programs.

670. Food Animal Clerkship I
(LSM 670.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, approval of department.
Concepts and supervised practice in food animal medicine. Emphasis on diagnosis, prognosis, treatment and disease prevention.

672. Food Animal Clerkship II
(LSM 672.) Fall, Winter, Spring, Summer. 4 credits. Completion of 9 terms of professional program, LCS 670, approval of department.
Advanced, supervised food animal surgery and medicine.

674. Preceptorial Clerkship
(LSM 674.) Fall, Winter, Spring, Summer. 8(0-24) to 16(0-48) May reenroll for a maximum of 16 credits. Completion of 9 terms of professional program, approval of department. Students may not receive credit in both V M 610 and LCS 674.
Applied large animal clinical science. Students participate in all activities in assigned private practice with practitioners with adjacent faculty appointments.

679. Problems in Large Animal Surgery
(LSM 680.) Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.
Elective work in selected surgical research problems compatible with student's interest and ability.

811. Problems in Large Animal Medicine
(LSM 811.) Fall, Winter, Spring, Summer. 2 to 4 credits. May reenroll for a maximum of 12 credits. Approval of department.
Elective work in selected medicine-related research problems compatible with student's interest and ability.

813. Seminar
(LSM 813.) Fall, Winter, Spring, 1 credit.

825. Fundamental Biomedical Experimental Techniques
(LSM 825.) Fall. 3(2-3) Students enrolled in a graduate degree program, approval of department.
Fundamentals of humane treatment of animals, anesthesia, aseptic techniques, instrumentation, suture materials and patterns, tissue handling and woundhealing for experimental animal research.

829. Master's Thesis Research
(LSM 889.) Fall, Winter, Spring, Summer. Variable credit. May reenroll for a maximum of 18 credits. Students enrolled in a graduate degree program, approval of department.
Research on thesis problems.

921. Pathology of Nutritional and Metabolic Diseases
(HNF 921, LSM 921.) Spring of odd-numbered years. 4(3-2) ANT 420, ANS 525, BCI 452, HNF 402 recommended. Interdepartmentally with Human Nutrition and Foods.
Development, physiopathology and morphological pathology of nutritional and metabolic diseases including carbohydrate, protein, fatty acid, vitamin and mineral deficiencies, their experimental induction and their medical or economic significance.

LATIN
See Romance and Classical Languages.

LINGUISTICS AND GERMANIC, SLAVIC, ASIAN AND AFRICAN LANGUAGES

Linguistics and Oriental and African Language Courses

299. Special Projects
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 12 credits. Approval of department.
Work in areas outside regular course offerings.

360. World Literature in English
Fall. 3(0-4) Interdepartmental with and administered by the Department of English.
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.

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

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

499. Special Projects
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 16 credits. Approval of department.
Work in areas outside regular course offerings.

African Languages

101. African Languages—Elementary
Fall. 4(4-1) May reenroll for AFR 101-102. A-121 sequence in more than one African language.
Comprehension and speaking taught by a linguist with native interlocutors. 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. 4(4-1) May reenroll for AFR 101-102. A-121 sequence in more than one African language. AFR 101.
Continuation of AFR 101.
Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages of Courses

103. African Languages—Elementary
Spring, 4(4-1) May reenroll for AFR 101-102-103 sequence in more than one African Language. AFR 102. Continuation of AFR 102.

200H. Honors Work
Fall, Winter, Spring, 1 to 6 credits. May reenroll for a maximum of 16 credits. Approval of department.

201. African Languages—Intermediate
Fall, 4(5-0) May reenroll for AFR 201-202-203 sequence in more than one African language. AFR 201 in appropriate language or approval of department. Continuation of African Languages—Elementary. Comprehension, speaking, reading and writing taught by a linguist with native informants. See AFR 101 for languages available.

202. African Languages—Intermediate

400H. Honors Work
Fall, Winter, Spring, 1 to 6 credits. May reenroll for a maximum of 18 credits. Approval of department.

418. Critical Issues in Contemporary Africa
Fall, Spring, 3(3-0) May reenroll for a maximum of 8 credits if different topics are taken. One course on African subject and approval of instructor. Interdepartmental with the departments of Anthropology, Geography, History, Political Science, and Sociology. Administered by the Department of History. Four separate multidisciplinary topics will be offered at different times: The Horn of Africa, Southern Africa, Africa and the Americas, Social Impact Studies.

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

450. African Languages—Advanced
Fall, Winter, Spring, 1 to 10 credits. May reenroll for a maximum of 15 credits. Approval of department. Advanced training or specialized research in particular African languages.

839. African Research
(FDC 535.) Fall, Winter, Spring, 2 to 4 credits. May reenroll for a maximum of 8 credits. Graduate standing or approval of instructor. Interdepartmental with the departments of Anthropology, Educational Administration, Geography, History, Political Science, and Sociology. Administered by the Department of Anthropology. African related archival and field research topics and methodologies viewed from perspective of relevant social science and humanistic disciplines associated with the African Studies Center.

Arabic

101. Elementary Arabic
Fall, 4(4-1) Introduction to Modern Standard Arabic, with pronunciation and conversation practice, reading and writing, and basic grammatical analysis.

102. Elementary Arabic
Winter, 4(4-1) AFR 101. Continuation of AFR 101.

103. Elementary Arabic
Spring, 4(4-1) AFR 102. Continuation of AFR 102.

201. Intermediate Arabic
Fall, 4(4-1) AFR 103.

202. Intermediate Arabic
Winter, 4(4-1) AFR 102.

203. Intermediate Arabic
Spring, 4(4-1) AFR 101.

Chinese

101. Elementary Chinese
Fall, 4(4-1) Introduction to Mandarin, the official spoken language of China, with emphasis on pronunciation and conversation practice.

102. Elementary Chinese
Winter, 4(4-1) CHS 102.

103. Elementary Chinese
Spring, 4(4-1) CHS 101.

202. Second-Year Chinese
Winter, 3(3-0) CHS 201. Reading and discussion of a broad range of cultural materials including expository and literary texts from the Chinese-speaking world. Further development of language skills.

203. Second-Year Chinese
Spring, 3(3-0) CHS 202.

211. Second-Year Conversation and Composition
Fall, Winter, Spring, 2(2-0) CHS 103.

301. Readings in Modern Chinese Literature
Fall, 3(3-0) CHS 301.

302. Readings in Modern Chinese Literature
Winter, 3(3-0) CHS 302.

400H. Honors Work
Fall, Winter, Spring, 1 to 10 credits. May reenroll for a maximum of 15 credits. Approval of department.

401. Survey of Chinese Literature
Fall, Winter, Spring, 3(3-0) May reenroll for a maximum of 6 credits. Oral command 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(3-0) May reenroll for a maximum of 8 credits. Oral command 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.
German and Russian Courses

Students who have had high school work in the foreign language in which they wish to continue their studies must take a placement examination in that language. Placement in the appropriate course is determined by the results of this examination. University credit is not given for courses waived by performance on the placement examination.

German Courses

Students who have had high school work in the foreign language in which they wish to continue their studies must take a placement examination in that language. Placement in the appropriate course is determined by the results of this examination. University credit is not given for courses waived by performance on the placement examination.

Elementary German

Fall, Winter, Spring, Summer. 4(4-0) Language, civilization, and culture development of language skills in contemporary German. Independent practice in the language laboratory.

Intermediate German

Fall, Winter, Spring, Summer. 4(4-0) GRM 101. Continuation of GRM 101.

Elementary German

Fall, Winter, Spring, Summer. 4(4-0) GRM 102. Continuation of GRM 103.

Intermediate German

Fall, Winter, Spring, Summer. 4(4-0) GRM 201. Reading and discussion of a broad range of cultural materials including expository and literary texts from the German-speaking world. Further development of language skills.

Intermediate German

Fall, Winter, Spring, Summer. 4(4-0) GRM 202. Reading and discussion of a broad range of cultural materials including expository and literary texts from the German-speaking world. Further development of language skills.

Intermediate German

Fall, Winter, Spring, Summer. 4(4-0) GRM 203. Reading and discussion of a broad range of cultural materials including expository and literary texts from the German-speaking world. Further development of language skills.

Intensive Second Year German

Spring. 15(15-0) GRM 103. Intensive second year, combining in one term the work of GRM 201, GRM 202, GRM 203.

German Literature in English Translation (A)

Fall. 3(3-0) Knowledge of German not required. Not applicable to major requirements. Continuation of GRM 241.

German Literature in English Translation (A)

Fall. 3(3-0) Knowledge of German not required. Not applicable to major requirements. Continuation of GRM 241.

Special Projects

Fall, Winter, Spring. 1 to 12 credits. May enroll for a maximum of 12 credits. Approval of department. Work in areas outside regular course offerings.

German Composition and Conversation

Fall. 3(3-0) GRM 203. Essential and difficult points of grammar reviewed. Written and oral reports; active participation in class discussion. Designed especially for students who plan to teach German.

German Composition and Conversation

Winter. 3(3-0) GRM 321. Continuation of GRM 321.
Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages

Courses

410. German Reading Skills
Fall, Winter, Spring, Summer. 3(3-0)
GRM 101 or graduate students or approval of department. Not open to undergraduates with credit in GRM 103 or higher.
Designed for those in scientific or other fields who wish to be able to read scholarly material. An intensive presentation of German grammar with emphasis on those features and techniques necessary for reading and translation.

411. German Reading Skills
Fall, Winter, Spring, Summer. 3(3-0)
GRM 101 or GRM 411 and approval of department.
Reading and translation of works in the student's field of interest. Completion of GRM 410 and GRM 411 with 3.0 or better will satisfy the Ph.D. reading requirement in most departments.

421. Advanced Composition and Conversation
Fall. 3(3-0) GRM 323 or GRM 333.
Thorough grammar review. Oral reports and discussion of cultural topics. Written papers with critiques.

425. German in International Business Communication IV
Winter. 3(3-0) GRM 323.
Continuation of GRM 333. The world of German economics and business. Lecture and discussion in German covering specific problems of German-American business communication arising from linguistic and cultural differences.

429. German Style
Spring. 3(3-0) GRM 421 or approval of department.
Principles of German style, based on representative selections from modern German cultural history. Conducted in German.

434. Contrasting Structures of English and German
Fall. 3(3-0)
Linguistic analysis of the structures of English and German. Recommended for those intending to teach German.

435. History of the German Language
Winter. 3(3-0) GRM 434 or LIN 401.
Survey of the development of Modern Standard German and its relationship to other Indo-European and Germanic languages.

437. The Contemporary German Scene
Spring. 3(3-0) GRM 337 or GRM 353 or approval of department.
The literary, artistic, intellectual, social, religious, economic, and political scene in present-day Germany with a study of its development from the recent past.

450. Special Topics in German Literature
Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken. GRM 337 or GRM 353 or approval of department.
Genre, theme, problem, or critical topic.

451. Studies in German Literature Before 1700
3(3-0) GRM 337 or GRM 353 or approval of department.
Early periods of German literature including Old High German, Middle High German (minnesang, the courtly epic, mysticism), the Reformation, and the baroque.

452. The Age of Goethe
Fall of even-numbered years. 3(3-0)
GRM 337 or GRM 353 and approval of department.
Development of eighteenth century literature; major works of Goethe and Schiller.

453. Romanticism and Realism
Fall of even-numbered years. 3(3-0)
GRM 337 or GRM 353 and approval of department.
Representative writers and texts of the two periods, Romanticism and Realism, 1785-1880. The study of literary structures, their interaction with changing society, and their impact on our time.

454. Naturalism and Early 20th Century Literature
Winter of odd-numbered years. 3(3-0)
GRM 337 or GRM 353 or approval of department.
Reading and interpretation of representative works of nineteenth and twentieth century authors, naturalism and expressionism. Methods and language of literary criticism.

455. Contemporary German Literature
Spring of even-numbered years. 3(3-0)
GRM 337 or GRM 353 or approval of department.
Representative German novels, dramas and poetry from 1945 to the present with emphasis on such authors as Durrenmatt, Frisch, Handke, Boll, Grass, Lenz, Mollcr, Hulck, Bobrowski and Wolf.

456. Major Authors in German Literature
Spring of odd-numbered years. 3(3-0)
May reenroll for a maximum of 9 credits if different topics are taken. GRM 337 or GRM 353 or approval of department.
The life and literary contributions of a selected German author such as Goethe, Schiller, Mann, Kafka, Frisch, Wolf.

499. Special Projects
Fall, Winter, Spring, Summer. 1 to 3 credits. May reenroll for a maximum of 18 credits. Approval of department.
Work in areas outside regular course offerings.

801. Introduction to Graduate Study
Fall of odd-numbered years. 3(3-0)
A seminar on the terminology and methods of literary criticism, and the bibliographical aids for literary and pedagogical research.

806. Teaching of the German Language
Fall, Winter, Spring. 1(1-0) May reenroll for a maximum of 3 credits. Graduate teaching assistant.
Problems of teaching German languages at the elementary and intermediate levels including such matters as textbook selection, teaching techniques and the preparation of examinations.

815. Middle High German Language
Fall of even-numbered years. 3(3-0)
Readings from the German language between 1050 and 1350, with emphasis upon the epic and lyric of the Classical period.

816. Old High German Language and Literature
Spring of even-numbered years. 3(3-0)
GRM 515 or approval of department.
German language from the beginnings to about 1050; reading and analysis of selections from Germanic, Isidor, Notker, Otfrid, Hildebrandlied, and other documents.

818. Middle High German Literature
Winter of odd-numbered years. 3(3-0)
Readings in Middle High German from the Court poet to Wernher der Gartner.

824. Eighteenth Century Literature
Fall of even-numbered years. 3(3-0)
Development of German literature from 1700 to 1770 with special emphasis on Lessing and Wieland.

826. German Classicism
Winter of odd-numbered years. 3(3-0)
Major works of Schiller and Goethe.

834. Nineteenth Century Literature
Fall of odd-numbered years. 3(3-0)
Representative literary masterpieces from Romanticism to Naturalism.

836. Twentieth Century Literature
Winter of even-numbered years. 3(3-0)
Representative works of drama, prose and lyric poetry from Naturalism to World War II.

860. Graduate Reading Course
Fall. Winter, Spring, Summer. 1 to 5 credits. May reenroll for a maximum of 15 credits. Approval of department.
Supervised reading course for investigation of special fields.

999. Master’s Thesis Research
Fall, Winter, Spring, Summer. Variable credit. Approval of department.

998. Seminar
Fall. Winter, Spring. 3(3-0) May reenroll for a maximum of 18 credits.
A particular writer, a major work, or a limited theme is chosen for intensive analysis.

999. Doctoral Dissertation Research
Fall, Winter, Spring. Summer. Variable credit. May reenroll for a maximum of 36 credits.

Hebrew

101. Elementary Hebrew
Fall. 4(4-1) Interdepartmental with the Department of Religious Studies.
Introduction to the Hebrew language, with pronunciation and conversation practice, reading and writing, and basic grammatical analysis of biblical and modern Hebrew.

102. Elementary Hebrew
Winter. 4(4-1) HEB 101. Interdepartmental with the Department of Religious Studies.
Continuation of HEB 101.

103. Elementary Hebrew
Spring. 4(4-1) HEB 102. Interdepartmental with the Department of Religious Studies.
Continuation of HEB 102.

201. Intermediate Hebrew
Fall. 4(4-1) HEB 163. Interdepartmental with the Department of Religious Studies.
Systematic review of grammar, oral practice and reading of modern pointed and unpointed texts. Root-finding skills and dictionary exercises.
Linguistics and Germanic, Slavic, Asian and African Languages — Descriptions of Courses

202. Intermediate Hebrew
Winter. 3(3-0) HEB 201. Interdepartmental with the Department of Religious Studies. Continuation of HEB 201.

203. Intermediate Hebrew
Spring. 3(4-1) HEB 202. Interdepartmental with the Department of Religious Studies. Continuation of HEB 202. Primarily unpointed Hebrew texts and newspapers.

Japanese

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

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

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

201. Second-Year Japanese
Fall. 3(3-0) JAP 103.
Reading and discussion of a broad range of cultural materials including expository and literary texts from the Japanese-speaking world. Further development of language skills.

202. Second-Year Japanese
Winter. 3(3-0) JAP 201.
Reading and discussion of a broad range of cultural materials including expository and literary texts from the Japanese-speaking world. Further development of language skills.

203. Second-Year Japanese
Spring. 3(3-0) JAP 202.
Reading and discussion of a broad range of cultural materials including expository and literary texts from the Japanese-speaking world. Further development of language skills.

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

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

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

100H. Honors Work
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 18 credits. Approval of department.

Linguistics

200. Language and Linguistics
Fall, Winter. 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.

250. Animal Communication and Language
Fall. 3(3-0)
Comparison of animal systems of communication in relation to the structural design of human language; types of signals and their content compared; development of human language compared with development of communication in animals.

250. Introduction to Sociolinguistics (A)
Winter. 4(4-0) Not open to students with credit in LIN 413. The association of linguistic features and choice among linguistic varieties with socio-cultural variables. Topics: small group interactions, styles and dialects, multilingualism, code-switching, language maintenance and shift, language policy.

401. Introduction to Linguistics
Fall, Winter, Spring, Summer. 4(4-0) Juniors or approval of department. Not open to students with credit in LIN 200. The scientific study of human languages. Basic goals, assumptions, terminology, and research results of modern theoretical and applied linguistics, with examples from a variety of languages.

402. Phonology
Fall, Winter. 3(3-0) LIN 200, LIN 401 or approval of department. Sounds and sound systems, emphasizing the four basic areas of articulatory phonetics, phonetic features and components, classical phonemics, and phonology in contemporary linguistic theories.

403. Morphology
Winter. 3(3-0) LIN 402 the previous term or approval of department. Structure of words, covering the identification and classification of morphemes, morphophonemics alternation, and morphology in contemporary linguistic theories.

404. Syntactic Phenomena
Spring. 3(3-0) LIN 200 or LIN 401. Essential syntactic phenomena in the languages of the world. Syntactic description of phrases, clauses, and sentences, and its relation to morphological structures and meaning structures.

408. History of Linguistics
Winter. 3(3-0) LIN 200 or LIN 401. The origin and development of linguistic studies from ancient India and Greece to the present. Provides a foundation for the understanding of contemporary issues in linguistics.

410. Child Language Acquisition
Fall. 3(3-0) LIN 200 or LIN 401 or approval of instructor. Linguistic issues, perspectives, and research on the acquisition of language, in spoken and written form, by children; phonology, morphology, syntax, semantics, and linguistic universals; implications for related disciplines.

415. Sociolinguistics Topics
Winter. 4(4-0) Juniors or approval of department. Not open to students with credit in LIN 200. Linguistic choices among different styles, dialects, and languages as socio-psychological symbols. Communicative competence, subjective speech evaluations, social dialects, socially motivated language change.

421. Articulatory Phonetics
Fall, Spring. 3(2-2) Approval of department. Development of phonetic skills for the learning and teaching of languages.

425. Field Methods
Fall. 3(3-0) May reenroll for a maximum of 9 credits. LIN 403 or approval of department. Methods of working with informants in order to gather linguistic information, processing and analyzing data, writing linguistic descriptions.

431. Introduction to Transformational Grammar
Winter. 4(4-0) LIN 200, LIN 401 or approval of department. Investigation of the origin and development of transformational theory of syntax; properties of deep structure, surface structure, and transformations; application of transformational concepts to native and foreign language learning.

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

490. Senior Research
Fall, Winter. 3(3-0)
Individual projects demonstrating ability to do independent research.

505. Foundations of Modern Linguistics
Fall of even-numbered years. 3(3-0) LIN 403. Critical reading of basic texts of modern linguistics from 1900 to the 1950s with primary emphasis on American writers.

815. Sociolinguistics Issues
Fall. 3(3-0) May reenroll for a maximum of 9 credits. LIN 415. Concentration for each offering on issue of current sociolinguistics theory/methodology. Representative topics: conversational/discourse strategies, motivation/attitudes toward linguistic variation, universal hypotheses and pidgins/creoles.

821. Phonological Analysis
Fall, Winter. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department. Advanced study of phonology, generally utilizing one of the following theories: stratificational, tagmemic, transformational.

831. Grammatical Analysis
Fall, Winter. 3(3-0) May reenroll for a maximum of 9 credits. Approval of department. Advanced study of syntax and related topics, generally utilizing one of the following theories: stratificational, tagmemic, transformational.

835. Semantics of Natural Languages
Spring. 3(3-0) LIN 431 or approval of department. Selected topics on the study of meaning in human languages. History, issues, and theories of semantics.

851. African Linguistics
Winter. 3(3-0) May reenroll for a maximum of 9 credits. LIN 401, LIN 402 or concurrently. Investigation of linguistic issues and phenomena in one or a group of African languages.
Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages of Courses

860. Special Projects
Fall, Winter, Spring, Summer. 1 to 6 credits. May enroll for a maximum of 16 credits. Approval of instructor. Supervised study, reading, and research in specializations areas of linguistics.

861. Second Language Acquisition
Spring. 3(3-0) LIN 401.
Research and general theories; universals; personal, social, neural, linguistic and other factors influencing second and foreign language acquisition/learning; comparisons with first language acquisition; methods of research.

865. Contrastive Analysis
Spring. 3(3-0) LIN 405.
The essentials of contrastive analysis, with emphasis on methods of making such analysis. The usefulness of and controversies concerning contrastive analysis will also be discussed.

871. Comparative Indo-European Linguistics
Fall of odd-numbered years. 3(3-0) LIN 471.
Comparative linguistics as applied to the investigation of the development and historical relationships of the languages of the Indo-European family.

880. Seminar in Linguistics
Fall, Winter, Spring. 3(3-0) May enroll for a maximum of 18 credits in different topics. Approval of department.
Advanced critical study of current topics in linguistics such as applications to other disciplines, aspects of linguistic theory, child language acquisition, contrastive analysis, structure of particular languages.

899. Master's Thesis Research
Fall, Winter, Spring. Variable credit. Approval of instructor.

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

Russian

RUS
Students who have had high school work in the foreign language in which they wish to continue their studies must take a placement examination in that language. Placement in the appropriate course is determined by the results of this examination. University credit is not given for courses waived by performance on the placement examination.

101. Elementary Russian
Fall, Winter, Spring. 4(4-1) May not receive credit for both RUS 101 and RUS 111, RUS 112.
Fundamentals of grammar, syntax, and pronunciation with graded readings. RUS 111 plus RUS 112 are the equivalent of RUS 101.

102. Elementary Russian
Fall, Winter, Spring. 4(4-1) RUS 101. May not receive credit for both RUS 102 and RUS 111, RUS 112.
Continuation of RUS 101. RUS 113 plus RUS 114 are the equivalent of RUS 102.

103. Elementary Russian
Fall, Winter, Spring. 4(4-1) RUS 102. May not receive credit for both RUS 103 and RUS 115, RUS 116.
Continuation of RUS 103. RUS 115 plus RUS 116 are the equivalent of RUS 103.

111. Elementary Russian
Fall. 2(2-1) May not receive credit for RUS 111 and RUS 101.
Fundamentals of grammar, syntax and pronunciation with graded readings. RUS 111 plus RUS 112 are the equivalent of RUS 101.

112. Elementary Russian
Winter. 2(2-1) RUS 111. May not receive credit for RUS 112 and RUS 101.
Continuation of RUS 111. RUS 111 plus RUS 112 are the equivalent of RUS 101.

113. Elementary Russian
Spring. 2(2-1) RUS 112 or RUS 101. May not receive credit for RUS 113 and RUS 102.
Continuation of RUS 112. RUS 113 plus RUS 114 are the equivalent of RUS 102.

114. Elementary Russian
Fall. 2(2-1) RUS 112. May not receive credit for RUS 114 and RUS 102.
Continuation of RUS 113. RUS 113 plus RUS 114 are the equivalent of RUS 102.

115. Elementary Russian
Winter. 2(2-1) RUS 114 or RUS 102.
May not receive credit for RUS 115 and RUS 103.
Continuation of RUS 114. RUS 115 plus RUS 116 are the equivalent of RUS 103.

116. Elementary Russian
Spring. 2(2-1) RUS 115. May not receive credit for RUS 116 and RUS 103.
Continuation of RUS 115. RUS 115 plus RUS 116 are the equivalent of RUS 103.

201. Intermediate Russian
Fall, Winter, Spring. 4(4-0) RUS 201.
Reading and discussion of a broad range of cultural materials including expository and literary texts from the Russian-speaking world. Further development of language skills.

202. Intermediate Russian
Fall, Winter, Spring. 4(4-0) RUS 202.
Reading and discussion of a broad range of cultural materials including expository and literary texts from the Russian-speaking world. Further development of language skills.

243. Masterpieces of Russian Literature in English Translation
Spring. 3(3-0) Knowledge of Russian not required.
Issues of conscience and courage in the twentieth century. Selections from the finest prose masterpieces of post-revolutionary twentieth century, including Sholokhov, Bulgakov, Solzhenitsyn.

299. Special Projects
Fall, Winter, Spring, Summer. 1 to 12 credits. May enroll for a maximum of 12 credits. Approval of department.
Work in areas outside regular course offerings.

301. Introduction to Russian Literature
Fall. 3(3-0) RUS 203 or approval of department.
Selections from representative works of major Russian authors, with concentration on the nineteenth century. Familiarization with essential Russian literary terminology.

302. Introduction to Russian Literature
Winter. 3(3-0) RUS 301.
Continuation of RUS 301.

303. Introduction to Russian Literature
Spring. 3(3-0) RUS 202.
Continuation of RUS 302.

321. Advanced Composition and Conversation
Fall. 3(3-0) RUS 203.
Review of finer points of grammar. Oral reports, tape recordings, intensive class discussion. Written exercises, translations into Russian, compositions.

322. Advanced Composition and Conversation
Winter. 3(3-0) RUS 321.
Continuation of RUS 321.

323. Advanced Composition and Conversation
Spring. 3(3-0) RUS 292.
Continuation of RUS 322.

325. Russian Civilization and Culture
Fall. 3(3-0) RUS 203.
Cultural heritage of the Russian people. Readings on history, geography, the arts, religion, ideologies.

326. Russian Civilization and Culture
Winter. 3(3-0) RUS 203.
Continuation of RUS 325.

327. Russian Civilization and Culture
Spring. 3(3-0) RUS 203.
Continuation of RUS 326.

341. Alexander Solzhenitsyn and the Russian Literary Tradition in English Translation
Fall. 3(3-0) Knowledge of Russian is not required.
Reading of the principal works of Alexander Solzhenitsyn with inquiry into their literary and philosophical antecedents, especially Dostoevsky and Tolstoy.

401. Russian Literature Before 1917
Fall of odd-numbered years. 3(3-0) RUS 303 or RUS 327.
Major literary movements, authors, and works from the Kievan time to 1917.

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426. Contemporary Russian Literary Language
Winter: 3(3-0) RUS 425 or approval of department.
Continuation of RUS 425.

427. Contemporary Russian Literary Language
Spring: 3(3-0) RUS 426 or approval of department.
Continuation of RUS 426.

499. Special Projects
Fall, Winter, Spring. 1 to 5 credits.
May reenroll for a maximum of 15 credits.
Approval of department.
Work in areas outside regular course offerings.

800. Teaching Methods of Russian in College
Fall, Winter, Spring. 6 credits.
Graduate teaching assistant
Supervised teaching of college classes in Russian.

801. Slavic Bibliography and Research Methods
Fall of odd-numbered years. 3(3-0)
Bibliographies of Slavic literature and languages.
The library and the utilization of its resources.
Principles of bibliographic compilation and research techniques in Russian literature and linguistics.

815. Russian Literature Before 1800
Fall of even-numbered years. 3(3-0)
Origin and development of Russian literature up to 1800. Emphasis on major works and authors of the period.

817. Nineteenth Century Russian Prose I
Fall of odd-numbered years. 3(3-0)
Pushkin and Chekhov’s search for a modern literary expression.

Lyman Briggs — Descriptions of Courses

111. College Algebra
Fall, 5(5-0) Placement Test or approval of school. Not open to students with credit in MTH 108, MTH 109, or MTH 111.
Rational and real numbers, functions, inverse functions, polynomials, rational functions, exponential and logarithmic functions, trigonometric functions and their inverses.

112. Calculus I
Fall, Winter, Spring. 5(5-0) LBS 111 or MTH 109, MTH 124 concurrently. Not open to students with credit in MTH 112.
Theory and applications of derivatives to polynomials, rational functions, trigonometric functions and their inverses, logarithmic and exponential functions. Definition and properties of the definite integral. Numerical approximations of definite integrals.

113. Calculus II
Fall, Winter, Spring. 5(5-0) LBS 112 and LBS 124. Not open to students with credit in MTH 113.
Further applications of the derivative to related rates, approximations including Newton’s method and graphing. The mean value theorem. Integration techniques, applications, and improper integrals. The cones and polar coordinates.

124. APL-Computer Programming for Scientists
Fall, Winter, Spring. 3(3-0) LBS 112 or concurrently. Interdepartmental with the Department of Computer Science.
APL programming; interactive programming techniques; arithmetic, logical, and extended APL operators; functions; applications to current topics in mathematics; principles of operation of time-shared computers.

131. Science and Technology Studies: Writing I
Fall, Winter, Spring. 4(4-0)
Instruction and practice in expository writing. Paper and report topics on science, technology and human values in Western civilization.

LBS 140 or LBS 141, or MTH 109.

College of Natural Science
Lyman Briggs School has a six term sequence in Chemistry and Physics that may be completed to fulfill the School’s requirements in Chemistry and Physics. This sequence involves Lyman Briggs School 161 through 163, and Lyman Briggs School 261 through 263. It is a coordinated sequence that is comparable to certain courses in the Department of Chemistry and the Department of Physics. Any student who plans to complete only part of the sequence must contact the faculty coordinator of either the Chemistry or the Physics portion.

LBS 140, 141, 242 may be used in place of Biological Science 210, 211, 212.

140. Biology I
Winter, Spring. 4(3-3) Not open to students with credit in B S 212.
The organisms and their environment. Organis­
tional level of organization. Evolution and adap­
tation as forces for biological variance.

141. Biology II
Fall, Spring. 3(3-0) LBS 140; not open to students with credit in B S 210.
Cellular structure and function. Maintenance and manipulation of materials, energy, space and information at the cellular and tissue level of organization.

142. Biology IA
Winter, Spring. 1 to 2 credits. May reenroll for a maximum of 4 credits. LBS 140 or concurrently.
Selected problems such as analysis of biological data, interspecific and intraspecific competition, microorganisms inhabiting leaf litter, spring flora, diversity, stability and evolution of natural communities.

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