

666. Equine Herd Health Clerkship
Winter, Spring, Summer. 3 credits.
Completion of 9 terms of professional program, 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. 3 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.

672. Advanced Food Animal Clerkship (LSM 672.) Fall, Winter, Spring, Summer. 3 credits. Completion of 9 terms of professional program, LCS 660, approval of department.

Advanced, supervised food animal surgery and medicine.

674. Preceptorial Clerkship
Fall, Winter, Spring, Summer. 6 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 practices tutored by practitioners with adjunct faculty appointments.

676. Veterinary Nutrition for Livestock
Fall, Winter, Spring, Summer. 3 credits. Completion of 9 terms of professional program, approval of department, LCS 660.

Evaluating the nutritional status and rations of livestock.

809. Problems in Large Animal Surgery
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
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
Fall, Winter, Spring, Summer. 1 credit.

825. Fundamental Biomedical Experimental Techniques
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.

827. Comparative Theriogenology
Winter. 3(3-0) V M 580 or approval of department.

Comparative pathophysiology of the reproductive system of domestic animals with emphasis on clinical theriogenology.

828. Tropical Animal Health and Production
Spring of even-numbered years. 3(2-2) ANS 488 or completion of 7 terms of the professional program.

Impact of animal health on livestock production, livestock production systems, human welfare, and socioeconomic development of developing countries, especially in Africa. Epidemiology and control of major diseases such as rinderpest, trypanosomiasis, and other viral epidemics.

899. Master's Thesis Research
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.

901. Investigating the Lung
Fall of even-numbered years. 3(3-0) Approval of department. Interdepartmental with the departments of Pathology and Physiology.
Classic and current concepts of respiratory structure and function in health and disease and mechanisms of lung injury.

921. Pathology of Nutritional and Metabolic Diseases
Spring of odd-numbered years. 4(3-2) ANT 420, ANS 525, BCH 452, HNF 462 recommended. Interdepartmental with Human Nutrition and Foods.
Development, physiopathology and morphologic pathology of nutritional and metabolic diseases including carbohydrate, protein, fatty acid, vitamin and mineral deficiencies, their experimental induction and their medical or economic significance.

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

LATIN

See Romance and Classical Languages.

LINGUISTICS AND GERMANIC, SLAVIC, ASIAN 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 LOA

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(3-0) 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(3-0) 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(3-0) 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.

434. Aesthetic Theory and Modernism
Fall. 4(4-0) Juniors. Interdepartmental with History of Art, Romance Languages, the departments of English, and Philosophy, and the School of Music. Administered by the Department of Philosophy.
Problems, assumptions, and arguments of modern aesthetic theory examined in the context of debates over modernity and modernist artistic practice.

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 AFR

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

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.

201. African Languages—Intermediate
Fall. 4(5-0) May reenroll for AFR 201-202-203 sequence in more than one African language. AFR 103 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.

Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages

of

Courses

202. African Languages—Intermediate
 Winter. 4(5-0) May reenroll for AFR 201-202-203 sequence in more than one African Language. AFR 201.
 Continuation of AFR 201.

203. African Languages—Intermediate
 Spring. 4(5-0) May reenroll for AFR 201-202-203 sequence in more than one African language. AFR 202.
 Continuation of AFR 202.

418. Critical Issues in Contemporary Africa (MTC)
 Fall, Spring. 3(3-0) May reenroll for a maximum of 9 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 18 credits. Approval of department.
 Advanced training or specialized research in particular African languages.

839. African Research
 (IDC 838.) 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 ARB

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) ARB 101.
 Continuation of ARB 101.

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

201. Intermediate Arabic
 Fall. 4(4-1) ARB 103.
 Reading and discussion of a broad range of cultural materials including expository and literary texts from the Arabic-speaking world. Further development of language skills.

202. Intermediate Arabic
 Winter. 4(4-1) ARB 201.
 Reading and discussion of a broad range of cultural materials including expository and literary texts from the Arabic-speaking world. Further development of language skills.

203. Intermediate Arabic
 Spring. 4(4-1) ARB 202.
 Reading and discussion of a broad range of cultural materials including expository and literary texts from the Arabic-speaking world. Further development of language skills.

Chinese CHS

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

102. Elementary Chinese
 Winter. 4(4-1) CHS 101.
 Continued practice in conversation and aural comprehension; introduction to the reading and writing of Chinese characters.

103. Elementary Chinese
 Spring. 4(4-1) CHS 102.
 Continuation of CHS 102 and grammatical analysis of basic Chinese sentence structure.

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

201. Second-Year Chinese
 Fall. 3(3-0) CHS 103.
 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.

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.
 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.

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

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

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

250. Chinese Calligraphy
 Spring. 2(2-0) One year in Chinese language or approval of department.
 The essential characteristics of and fundamental skills involved in writing Chinese characters, from the point of view of practical use.

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

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

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

321. Conversation and Composition
 Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 credits. CHS 203.
 Directed topical conversation and practice in composition.

400H. Honors Work
 Fall, Winter, Spring. 1 to 10 credits. May reenroll for a maximum of 18 credits. Approval of department.

401. Survey of Chinese Literature
 Fall, Winter, Spring. 3(3-0) May reenroll for a maximum of 9 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 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(3-0) Reading knowledge of Chinese.
 Rise and development of Chinese poetry with particular attention to poetry of the T'ang Dynasty.

German and Russian Courses GR

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.

498. Topics in Comparative Literature
 Fall, Winter, Spring. 3(3-0) or 4(4-0) May reenroll for a maximum of 12 credits if different topics are offered. Interdepartmental with Romance Languages and the Department of English. Administered by Romance Languages.
 Varying topics on relationships among writers, themes, genres, movements and periods in different national literatures, and between literature and other arts.

German**GRM**

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 German

Fall, Winter, Spring, Summer. 4(4-1)

German language, civilization, and culture. Development of language skills in contemporary German. Independent practice in the language laboratory.

102. Elementary German

Fall, Winter, Spring, Summer. 4(4-1)

GRM 101.

Continuation of GRM 101.

103. Elementary German

Fall, Winter, Spring, Summer. 4(4-1)

GRM 102.

Continuation of GRM 102.

200. German Grammar Review

Fall. 4(4-1) Placement test. Not open to students with credit in GRM 101, GRM 102 or GRM 103.

A review and strengthening of grammar skills and vocabulary needed by incoming freshmen and transfer students for further work at the second-year level.

201. Intermediate German

Fall, Winter, Spring, Summer. 4(4-0)

GRM 103. Not open to students with credit in GRM 200.

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.

202. Intermediate German

Fall, Winter, Spring, Summer. 4(4-0)

GRM 200 or 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.

203. 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.

241. German Literature in English Translation (A)

Fall. 3(3-0) Knowledge of German not required. Not applicable to major requirements. Selections from narrative prose, drama, and lyric poetry chosen to encourage and develop an appreciation of German literature.

242. German Literature in English Translation (A)

Winter. 3(3-0) Knowledge of German not required. Not applicable to major requirements.

Continuation of GRM 241.

243. German Literature in English Translation (A)

Spring. 3(3-0) Knowledge of German not required. Not applicable to major requirements.

Continuation of GRM 242.

299. Special Projects

Fall, Winter, Spring, Summer. 1 to 12 credits. May reenroll for a maximum of 12 credits. Approval of department.

Work in areas outside regular course offerings.

321. 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.

322. German Composition and Conversation

Winter. 3(3-0) GRM 321.

Continuation of GRM 321.

323. German Composition and Conversation

Spring. 3(3-0) GRM 322

Continuation of GRM 322.

331. German in International Business Communication I

Fall. 3(3-0) GRM 203.

Thorough grammar review based upon business vocabulary. German business communication formats and procedures: letter, memoranda, minutes, telephone, telex, resume, job description and application.

332. German in International Business Communication II

Winter. 3(3-0) GRM 331 or approval of department.

Continuation of German 331 - the world of German economics and business. Lecture and discussion in German covering business types, unions, import-export, banking system, foreign workers, multinational organizations, etc.

333. German in International Business Communication III

Spring. 3(3-0) GRM 332 or approval of department

Continuation of German 332 - the world of German economics and business. Lecture and discussion in German, covering German international policy, German/American corporate investment, corporations, communication problems, German business press.

336. Introduction to German Civilization and Culture

Winter. 3(3-0) GRM 203 or approval of department.

The cultural heritage of the German peoples. Readings and discussions in German based on selected nonliterary texts from 1750 to the present.

337. Contemporary German Civilization and Culture

Spring. 3(3-0) GRM 203 or approval of department.

The cultural heritage of the German peoples. Readings and discussions in German based upon selected nonliterary texts since World War II.

340. German Film

Spring. 3(2-2) One of the following: GRM 203, A L 210 or TC 280 or approval of department. Interdepartmental with the College of Arts and Letters.

Artistic, historical, and cultural analysis of German film. Weekly film viewings.

351. Introduction to German Literature

Fall. 3(3-0) GRM 203 or approval of department.

Major and representative dramas, novellas, lyric poems and ballads of German literature selected from the works of great authors. Methods of literary analysis, terminology, periodization.

352. Introduction to German Literature

Winter. 3(3-0) GRM 203 or approval of department. Not open to students with credit in GRM 301, GRM 302.

Reading and interpretation of representative works of eighteenth and nineteenth century authors. Methods and language of literary criticism. Study of form and expression in major literary works.

353. Introduction to German Literature

Spring. 3(3-0) GRM 203 or approval of department.

Reading and interpretation of representative works of twentieth century authors. Methods and language of literary criticism. Study of form and expression in major literary works.

410. German Reading Skills

Winter, Summer. 5(5-0) 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

Spring, Summer. 5(5-0) GRM 103 or GRM 410 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 333.

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. Contrastive Structures of English and German

Fall of odd-numbered years. 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.

Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages

**of
Courses**

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

Fall of odd-numbered years. 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

Winter 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, 1795-1880. 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, Muller, Hacks, 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 and approval of department.

The life and literary contributions of a selected German author such as Goethe, Schiller, Mann, Kafka, Frisch, Wolff.

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 proseminar on the terminology and methods of literary criticism, and the bibliographical aids for literary and pedagogical research.

810. Topics in the Theory and Practice of Teaching German

Fall, Winter, Spring. 3(2-2) May reenroll for a maximum of 9 credits. German graduate students and senior majors/minors.

Theory and practice of teaching university-level German language, literature and culture, including teaching methods, developments in second language acquisition, contrastive and error analysis, descriptive German grammar and materials development.

851. Studies in Germanic Linguistics and Philology

Spring. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken.

Linguistic analysis of the older Germanic dialects; reading and analysis of selected texts. Topic selected from Old High German and Old Saxon, Gothic and Comparative Germanic Grammar, Old Norse.

852. Studies in German Literature to 1700

Winter. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken.

Selected topics such as mysticism, genres such as medieval epic or minnesang, authors, and periods such as the Reformation or Baroque.

853. Studies in 18th Century and Classical German Literature

Spring. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken.

Topics, genres, authors such as Lessing, Schiller, and Goethe, and periods, such as early eighteenth century, Sturm und Drang, and Classical literature.

854. Studies in 19th Century German Literature

Winter. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken.

Topics, genres such as the novelle, authors such as Schlegel, Hoffman, Tieck, Heine, Stifter, Keller, Storm, and Fontane, and periods such as Romanticism and Realism.

855. Studies in 20th Century German Literature

Fall. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken.

Topics such as East German literature and Brechtian Theatre, genres, authors and periods such as Naturalism, Expressionism, Existentialism, Postwar literature.

856. Studies in German Culture and Civilization

Fall. 3(3-0) May reenroll for a maximum of 9 credits if different topics are taken.

Selected periods, movements, and regions, focusing on the dissemination of knowledge, the development of ideologies and the determination of values in German society.

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.

899. Master's Thesis Research

Fall, Winter, Spring, Summer. Variable credit. Approval of department.

981. 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. Approval of department.

Hebrew

HEB

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 of odd-numbered years. 4(4-1) HEB 103. 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.

202. Intermediate Hebrew

Winter of even-numbered years. 4(4-1) HEB 201. Interdepartmental with the Department of Religious Studies.

Continuation of HEB 201.

203. Intermediate Hebrew

Spring of even-numbered years. 4(4-1) HEB 202. Interdepartmental with the Department of Religious Studies.

Continuation of HEB 202. Primarily unpointed Hebrew texts and newspapers.

Japanese

JPN

101. Elementary Japanese

(JAP 101.) Fall. 4(4-1)

Spoken and written Japanese; emphasis on conversation and easy reading.

102. Elementary Japanese

(JAP 102.) Winter. 4(4-1) JPN 101.

Continuation of JPN 101.

103. Elementary Japanese

(JAP 103.) Spring. 4(4-1) JPN 102.

Continuation of JPN 102.

201. Intermediate Japanese

(JAP 201.) Fall. 5(5-0) JPN 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.

**Linguistics and Germanic, Slavic, Asian and African Languages — Descriptions
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Courses**

202. Intermediate Japanese

(JAP 202.) Winter. 5(5-0) JPN 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. Intermediate Japanese

(JAP 203.) Spring. 5(5-0) JPN 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

(JAP 221.) Fall. 2(2-0) JPN 103.

Review grammar and composition to supplement JPN 201.

Approved through Fall 1989.

222. Second-Year Composition

(JAP 222.) Winter. 2(2-0) JPN 221.

Continuation of JPN 221.

Approved through Fall 1989.

223. Second-Year Composition

(JAP 223.) Spring. 2(2-0) JPN 222.

Continuation of JPN 222.

Approved through Fall 1989.

400H. Honors Work

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

Linguistics

LIN

200. Language and Linguistics

Fall, Winter, Spring. 3(3-0) Not open to students with credit in LIN 401.

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.

280. Introduction to Sociolinguistics (A)

Winter. 4(4-0) Not open to students with credit in LIN 415.

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, Spring. 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 280.

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(3-0) 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.

435. Introduction to Semantics and Pragmatics

Winter. 3(3-0) LIN 200 or LIN 401.

Theories of word meaning. Sense and reference. Sentence meaning. Topics in pragmatics, e.g., presuppositions, conversational implicatures, speech acts.

450. Introduction to Cognitive Science

Winter. 4(4-0) PHL 447 or PSY 300 or LIN 401 or CPS 441 or approval of department. Interdepartmental with the departments of Philosophy and Psychology. Administered by the Department of Philosophy.

The cognitive processing of information by animals, humans, and computers. Relevant issues in philosophy, psychology, linguistics, neurophysiology, and artificial intelligence.

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, Spring. 3(3-0)

Individual projects demonstrating ability to do independent research.

808. 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 1950's 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, Spring. 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, Spring. 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 435 or approval of department.

Selected topics on the study of meaning in human languages. History, issues, and theories of semantics.

860. Special Projects

Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 16 credits. Approval of instructor.

Supervised study, reading, and research in specialized areas of linguistics.

861. Second Language Acquisition

Spring. 3(3-0) LIN 401.

Research and general theories; universals; personal, social, neurolinguistic, and other factors influencing second and foreign language acquisition/learning; comparisons with first language acquisition; methods of research.

**Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages
of
Courses**

865. Contrastive Analysis
Spring. 3(3-0) LIN 403.

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
reenroll 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, Summer. Variable
credit. Approval of instructor.

999. Doctoral Dissertation Research
Fall, Winter, Spring, Summer. 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, Summer. 4(4-1)

Fundamentals of grammar, syntax, and pronunciation with graded readings.

102. Elementary Russian
Fall, Winter, Spring, Summer. 4(4-1)
RUS 101.

Continuation of RUS 101.

103. Elementary Russian
Fall, Winter, Spring, Summer. 4(4-1)
RUS 102.

Continuation of RUS 102.

201. Intermediate Russian
Fall, Winter, Spring. 4(4-0) RUS 103.

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 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.

203. 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.

241. Masterpieces of Russian Literature in English Translation
Fall. 3(3-0) Knowledge of Russian not
required.

Issues confronting the individual within a society. Selections are from the finest prose masterpieces of mid-nineteenth century, including Pushkin, Gogol, Turgenyev, early Dostoevsky.

242. Masterpieces of Russian Literature in English Translation
Winter. 3(3-0) Knowledge of Russian
not required.

Issues confronting people and their perception of God. Selections are from the finest prose masterpieces of late nineteenth century, including Dostoevsky, Tolstoy, Chekhov.

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 are 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 reenroll 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 302.

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 322.

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. 3(3-0) RUS 303 or RUS 323 or
RUS 327 or approval of department.

Major literary movements, authors, and works from the Kievan time to 1917.

402. Russian Literature Before 1917
Winter. 3(3-0) RUS 401 or approval of
department.

Continuation of RUS 401.

403. Russian Literature Before 1917
Spring. 3(3-0) RUS 402 or approval of
department.

Continuation of RUS 402.

410. Russian Reading Skills
Fall, Winter, Spring, Summer. 5(5-0)
RUS 101 or graduate students or approval of
department.

Designed for those in scientific or other fields who wish to be able to read scholarly material. An intensive presentation of Russian grammar with emphasis on those features and techniques necessary for reading and translation.

411. Russian Reading Skills
Fall, Winter, Spring, Summer. 5(5-0)
RUS 103 or RUS 410 and approval of depart-
ment.

Reading and translation of works in the student's field of interest. Completion of RUS 410 and RUS 411 with a 3.0 or better will satisfy the Ph.D. reading requirement in most departments.

425. Contemporary Russian Literary Language
Fall. 3(3-0) RUS 323.

Description and analysis of contemporary Russian literary language, its phonology, morphology and syntax. Designed especially for future teachers of Russian.

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, Summer. 1 to 8
credits. May reenroll for a maximum of 18 credits.
Approval of department.

Work in areas outside regular course offerings.

817. 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.

817. Nineteenth Century Russian Prose I

Fall of odd-numbered years. 3(3-0)

Pushkin and Chekhov's search for a modern literary expression.

828. Introduction to Old Church Slavic

Fall of even-numbered years. 3(3-0)

Basic knowledge of Russian or another Slavic language.

Grammatical structure of the first written Slavic language accompanied by readings from the canonical Old Church Slavic texts.

832. Russian Drama Before 1859

Winter of odd-numbered years. 3(3-0)

Origin and development of Russian drama. Analysis of major plays by Fonvizin, Griboyedov, Pushkin, Lermontov and Gogol.

836. Nineteenth Century Russian Poetry

Winter of even-numbered years. 3(3-0)

Approval of department.

Trends and styles in 19th century Russian poetry up to 1890. Emphasis on major poetry by Zhukovsky, Batyushkov, Pushkin, Baratynsky, Yazykov, Tyutchev, Lermontov, Tolstoy, Fet, Nekrasov, and Solovyev.

856. Twentieth Century Russian Prose I

Winter of even-numbered years. 3(3-0)

Modernistic trends in Russian prose before 1917.

860. Graduate Reading Course

Fall, Winter, Spring. 1 to 5 credits.

May reenroll for a maximum of 15 credits. Approval of department.

Supervised reading course for investigation of special fields in Russian literature.

899. Master's Thesis Research

Fall, Winter, Spring. Variable credit.

Approval of department.

981. Seminar in Slavic Studies

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.

Approval of department.

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; LBS 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 conics 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 concurrent 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.

For prerequisite purposes the introductory biology sequence LBS 140, 141, 242 may be used in place of Biological Science 210, 211, 212.

140. Biology I

Fall, Winter. 4(3-3) Not open to students with credit in B S 212.

Organismal biology. Basic principles of genetics, evolution, systematics, populations and ecology.

141. Biology II

Winter, Spring. 4(3-3) 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

Spring. 1 to 2 credits. May reenroll for a maximum of 4 credits. LBS 140.

Selected problems such as analysis of biological data, interspecific and intraspecific competition, microarthropods inhabiting leaf litter, spring flora, diversity, stability and evolution of natural communities.

160. Physics—Elementary Concepts

Winter. 1(2-0) LBS 162 concurrently.

Elementary concepts of mechanics, electricity, magnetism and optics.

161. Introduction to Chemistry and Physics I

Fall. 3(4-0) MTH 108 or MTH 109 or MTH 111 or LBS 111 concurrently; LBS 161L or concurrently or approval of instructor.

Gases and gas laws, kinetic theory, heat and thermodynamics. Equilibria, solutions, acids and bases, ionization and electrolysis.

161L. Introductory Chemistry Laboratory

Fall. 1(0-3) LBS 161 or concurrently or approval of instructor.

Techniques and instruments in the chemistry laboratory. Includes qualitative, quantitative and synthetic work.

162. Introduction to Chemistry and Physics II

Winter. 3(4-0) LBS 161; LBS 162L or concurrently or approval of instructor.

Basic concepts of atomic and nuclear structure, wave particle duality, the quantum theory and the special theory of relativity. Radioactivity, nuclear reactions and elementary particle physics.

162L. Introductory Physics Laboratory

Winter. 1(0-3) LBS 162 or concurrently or approval of instructor.

Introduction to techniques and instruments in the physics laboratory. Selected experiments in classical and modern physics.

163. Introduction to Chemistry and Physics III

Spring. 3(4-0) LBS 162; LBS 163L or concurrently or approval of instructor.

Periodic properties and chemical families, stoichiometry, modern theory of chemical bonding, molecular orbitals. Chemical dynamics and equilibria, some organic chemistry nomenclature and reaction kinetics.

163L. Introductory Chemistry Laboratory

Spring. 1(0-3) LBS 163 or concurrently or approval of instructor.

Continuation of LBS 161.

216. Calculus III

Fall, Spring. 5(5-0) LBS 113.

Series, sequences, power series including Taylor series, and indeterminate forms. Graphing and vector geometry in 3-spaces. Differential calculus of functions of several variables through Taylor series and extreme points.

217. Calculus IV

Fall, Winter. 5(5-0) LBS 216. Credit may not be earned in both LBS 217 and MTH 310.

Double and triple integrals and their applications. Line integrals. Ordinary differential equations of first order and linear second order equations, including series solutions. Numerical methods for single and simultaneous equations.

232. Science and Technology Studies: Writing II

Fall, Winter, Spring. 4(4-0) LBS 131; sophomores.

A writing course emphasizing investigative expository papers. Paper and report topics drawn from readings in the history and philosophy of science and technology, and other areas of science technology studies.

LYMAN BRIGGS SCHOOL

LBS

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 163L and Lyman Briggs School 261 through 263L. 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.