753. 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 human treatment of animals, anesthesia, aseptic techniques, instrumentation, suture materials and patterns, tissue handling and wound healing for experimental animal research.

809. 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, BCH 452, HNF 462 recommended. Interdepartmental with Human Nutrition and Foods.

Development, phytopathology 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.

LATIN

See Romance and Classical Languages.

LINGUISTICS AND GERMANIC, SLAVIC, ASIAN AND AFRICAN LANGUAGES

(Name changed September 1, 1981. Formerly the Department of Linguistics and Oriental and African Languages and the Department of German and Russian.)

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. 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
(315.) 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
(316.) 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
(317.) 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 Quot, 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

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.

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.

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(4-0) May reenroll for AFR 201-202-203 sequence in more than one African language.

AFR 102 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
Winter. 4(4-5) May reenroll for AFR 201-202-203 sequence in more than one African language.

Continuation of AFR 201.

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

Continuation of AFR 202.

400H. Honors Work
Fall, Winter, Spring. 1 to 6 credits. May reenroll for a maximum of 16 credits. Approval of department.

415. Critical Issues in Contemporary Africa
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.

201. Intermediate Arabic
Fall. 4(4-1) ARB 102.

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.

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

### Chinese

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.

200. **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 203.  
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 101.  
Conversation and composition at the intermediate level to supplement CHS 301.

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 course in Chinese language or approval of department.

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.

400. **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 recorded to contemporary literature. 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.

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

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

German and Russian Courses

**German**

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)  
Continuation of GRM 101.

103. **Elementary German**  
Fall, Winter, Spring, Summer, 4(4-1)  
Continuation of GRM 102.

105. **Intensive Elementary German**  
Winter, Spring, 8(8-2) GRM 101 with 3.0 or better or approval of department. May not receive credit for both GRM 105 and GRM 102, GRM 103.

106. **Intensive Elementary German**  
Fall, Winter, Spring, Summer, 4(4-1)  
Continuation of GRM 106.

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.

204. **Intensive Second Year German**  
Spring, 10(10-0) GRM 103  
Intensive second year, combining in one term the work of GRM 201, GRM 202, GRM 203.

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 enroll for a maximum of 12 credits. Approval of department.  
Work in areas outside regular course offerings.

321. German Composition and Conversation  
Fall and Spring. 3(3-0) GRM 263.  
Thorough grammar review based upon business vocabulary. German business communication formats and procedures; letter, memorandum, minutes, telephone, telegrams, resume, job description and application.

322. German Composition and Conversation  
Winter. 3(3-0) GRM 262.  
Continuation of GRM 261.

323. German Composition and Conversation  
Spring. 3(3-0) GRM 262.  
Continuation of GRM 262.

331. German in International Business Communication I  
Fall. 3(3-0) GRM 263.  
Thorough grammar review based upon business vocabulary. German business communication formats and procedures; letter, memorandum, minutes, telephone, telegrams, resume, job description and application.

332. German in International Business Communication II  
Winter. 3(3-0) GRM 331 or approval of department.  
Continuation of GRM 261. The world of German economies 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 GRM 262. The world of German economics and business. Lecture and discussion in German covering German international policy, German/American corporate investment, corporations, communications problems, German business press.

336. Introduction to German Civilization and Culture  
Winter. 3(3-0) GRM 200 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  
(327.) Spring. 3(3-0) GRM 200 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.

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 204 or approval of department.  
Continuation of GRM 203. 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  
(303.) Spring. 3(3-0) GRM 204 or approval of department.  
Continuation of GRM 204. Reading and interpretation of representative works of nineteenth and twentieth century authors. Methods and language of literary criticism. Study of form and expression in major literary works.

410. German Reading Skills  
Fall, Winter, Spring, Summer. 5(5-0)  
GRM 101 or graduate students or approval of department. Not open to undergraduates with credit in GRM 101 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. 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 322 or GRM 333.  
Continuation of GRM 262. 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. 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 454 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  
(427.) 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 357 or GRM 353 or approval of department.  
Genre, theme, problem, or critical topic.

451. Studies in German Literature Before 1700  
(451.) 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, 1795-1830. 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, Wolf.
Descriptions — Linguistics and Germanic, Slavic, Asian and African Languages

Courses

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 proponent 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 assistants.
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 1030 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 815 or approval of department.
German language from the beginnings to about 1050; reading and analysis of sections from Tatián, Isidor, Notker, Hildebrand, and other documents.

818. Middle High German Literature
Winter of odd-numbered years. 3(3-0)
Readings in Middle High German from the Court poets to Werner 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.

827. Goethe's Intellectual Development
Spring of even-numbered years. 3(3-0)
An examination of Goethe's thought in relation to his major works.

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.

837. Contemporary Literature
Spring of even-numbered years. 3(3-0)
Selections from German literature since 1945.

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. 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 translation practice, reading and writing, and basic grammatical analysis of biblical and modern Hebrew.

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

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

201. Intermediate Hebrew
Fall, 4(4-1) HEB 201. 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, 4(4-1) HEB 202. Interdepartmental with the Department of Religious Studies.
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 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.

202. Second-Year Japanese
Winter, 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.

211. Second-Year Composition
Fall, 2(2-0) JAP 211.
Continuation of JAP 211.

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

400H. 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, 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.

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 context compared; development of human language compared with development of communication in animals.

250. Introduction to Sociolinguistics (A)
(320.) 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. 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, dialectal phonotactics, and phonology in contemporary linguistic theory.
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 theories, 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 380.
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(2-3) 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, 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 1800 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 one of the following: sociolinguistic; accent, mother tongue, minority, and code mixing.

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 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.

860. Special Projects
Fall, Winter, Spring, Summer. 1 to 6 credits. May reenroll for a maximum of 18 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, and cultural factors; influencing second and foreign language acquisition/learning; comparisons with first language acquisition; methods of research.

865. Contrastive Analysis
Spring, 3(3-0) LIN 403.
The essentials of contrastive analysis, with emphasis on methods of making such analyses. The usefulness of and controversy 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. 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, Summer, 4(4-1) May not receive credit for both RUS 101 and 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, Summer, 4(4-1) RUS 101. May not receive credit for both RUS 102 and RUS 112. Continuation of RUS 101, RUS 113 plus RUS 114 are the equivalent of RUS 102.

103. Elementary Russian
Fall, Winter, Spring, Summer, 4(4-1) RUS 102. May not receive credit for both RUS 103 and RUS 115. Continuation of RUS 102, 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 111 and RUS 101. Continuation of RUS 111. RUS 111 plus RUS 112 are the equivalent of RUS 101.

113. Elementary Russian
Spring, 3(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 113. 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.
Continuation of

303.

A-126

Selections from representative

Continuation

302.

30

century. Selections are from the finest prose

Russian literary terminology.

teenth century. Familiarization with essential

its. Approval of department.

24.

3. Masterpieces of mid-nineteenth century, including

eminent Russian authors.

242. Masterpieces of mid-nineteenth century, including

blockbuster authors.

241. Masterpieces of early nineteenth century, including

major figures.

240. Masterpieces of early nineteenth century, including

key figures.

239. Masterpieces of early nineteenth century, including

critical figures.

238. Masterpieces of early nineteenth century, including

prominent figures.

237. Masterpieces of early nineteenth century, including

famous figures.

236. Masterpieces of early nineteenth century, including

noteworthy figures.

235. Masterpieces of early nineteenth century, including

significant figures.

234. Masterpieces of early nineteenth century, including

prominent figures.

233. Masterpieces of early nineteenth century, including

noteworthy figures.

232. Masterpieces of early nineteenth century, including

significant figures.

231. Masterpieces of early nineteenth century, including

prominent figures.

230. Masterpieces of early nineteenth century, including

noteworthy figures.

229. Masterpieces of early nineteenth century, including

significant figures.

228. Masterpieces of early nineteenth century, including

prominent figures.

227. Masterpieces of early nineteenth century, including

noteworthy figures.

226. Masterpieces of early nineteenth century, including

significant figures.

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212. Masterpieces of early nineteenth century, including

noteworthy figures.

211. Masterpieces of early nineteenth century, including

significant figures.

210. Masterpieces of early nineteenth century, including

prominent figures.
LYMAN BRIGGS SCHOOL

College of Natural Science

Lyan 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 161 through 163L, and Lyman Briggs 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.

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 108. 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.

RUS 836.

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

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 credits. May reenroll for a maximum of 36 credits.

140. Biology I
Winter, Spring. 4(3-3) Not open to students with credit in 110. The organisms and their environment. Organismal level of organization. Evolution and adaptation as forces for biological variance.

141. Biology II
Fall, Spring. 4(3-3) LBS 140; not open to students with credit in 851. 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 3 credits. May reenroll for a maximum of 4 credits. LBS 140 or concurrently. Selected problems such as analysis of biological data, interspecífic 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 or concurrently. Elementary concepts of mechanics, electricity, magnetism and optics.

161. Introduction to Chemistry and Physics I
Fall, Winter, Spring. 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 161L 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
Fall. 1(0-3) LBS 162L 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 163; 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. 3(0-3) LBS 163L or concurrently or approval of instructor. Continuation of LBS 161.

216. Calculus III
Fall, Winter, 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.

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