201. Latin Prose Fall. 4(4-1)

P: LTN 102 or designated score on Latin placement test.

Intermediate-level Latin prose based on readings of such authors as Sallust, Livy, and Cicero. QP: LTN 103 QA: LTN 201, LTN 202

202. Latin Poetry

Spring. 4(4-1)

P: LTN 201.

Intermediate-level Latin poetry of the Republic and Augustan periods. QP: LTN 201 QA: LTN 202, LTN 203

Independent Study

Fall, Spring. I to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.

R: Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings. QA: LTN 299

Republican Prose and Poetry 301. Fall of even-numbered years. 3(3-0)

P: LTN 202.

Cicero, Caesar, Sallust, Plautus, Terence, Catullus, and Lucretius

QP: LTN 203 QA: LTN 300

302. Augustan Poetry

Spring of even-numbered years. 3(3-0) P: LTN 202.

Poetry of Virgil, Horace, Propertius, Tibullus, and

QP: LTN 203 QA: LTN 300

Augustan and Early Imperial Prose Fall of odd-numbered years. 3(3-0) P: LTN 301 or LTN 302.

Augustan and Early Imperial prose writers. Livy, Augustus, Tacitus, Petronius, Suetonius, and others. QP: LTN 300 QA: LTN 490

402. Imperial Poetry

Spring of odd-numbered years, 3(3-0)

P: LTN 301 or LTN 302.

Poets of the Empire: Lucan, Seneca, Persius, Juvenal, Silius Italicus, Statius, and others.

QP: LTN 300 QA: LTN 490

Independent Study

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.

R: Not open to freshmen and sophomores. Approval

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings. QA: LTN 499

Senior Thesis

Fall, Spring. 3 credits.
P: LTN 402. R: Approval of department.
Senior thesis under the direction of a faculty member. QP: LTN 490

LINGUISTICS

LIN

Department of Linguistics and Germanic, Slavic, Asian and African Languages College of Arts and Letters

Introduction to Language 200

Fall, Spring. 3(3-0)

Not open to students with credit in LIN 401. Human and societal aspects of the nature, use, acquisition, and history of languages. QA: LIN 200

Language in Society

Fall, Spring. 3(3-0)

Not open to students with credit in LIN 471. Sociolinguistic values of languages and their varieties. Origin, status and function of language varieties in social settings. Factors influencing language change and maintenance in individuals and social groups. QA: LIN 280

Introduction to Linguistics

Fall, Spring. 4(4-0)
R: Not open to students with credit in LIN 200.
Basic goals, concepts, methods, and research results of modern theoretical and applied linguistics. Examples from a variety of languages. QA: LIN 401

History of Linguistics Fall. 3(3-0) 411.

P: LIN 200 or LIN 401.

Origin and development of linguistic studies from ancient Greece to the present. Foundation for the understanding of contemporary issues in linguistics

QP: LIN 200 or LIN 401 QA: LIN 408

424. Phonology

Fall, Spring. 3(3-0)
P: LIN 200 or LIN 401.

Sounds and sound systems: articulatory phonetics, phonetic features and components, classical phonemics, and phonology in contemporary linguistic theo-

QP: LIN 200 or LIN 401 QA: LIN 402

Morphological and Syntactic Phenomena

Spring. 4(4-0)

P: LIN 424 or concurrently.

Structure of words, phrases, clauses, and sentences. Relations among words. Examples from languages of the world, and formal methods for their description. QP: LIN 200, LIN 401, LIN 402 QA: LIN 403, LIN 404

434. Syntax

Fall. 3(3-0) P: LIN 200 or LIN 401.

Structure of sentences and structural relations among sentences. Methods of syntactic analysis and argumentation. QP: LIN 200 or LIN 401 QA: LIN 431

437. Semantics and Pragmatics

Spring. 3(3-0)
P: LIN 200 or LIN 401 or approval of department.
Semantic properties and relations. Entailment, ambiguity, theories of word and sentence meaning, and logical form. Topics in pragmatics, such as presupposition, conversational implicature, speech acts. QP: LIN 200 or LIN 401 QA: LIN 435

Historical Linguistics

Spring. 3(3-0)
P: LIN 431 or concurrently.

Types of linguistic change and the methods used by linguists to study the historical development of languages and language families. QP: LIN 403 QA: LIN 471

450. Child Language Acquisition Spring. 3(3-0) P. LIN 200 or LIN 401.

Linguistic issues, perspectives and research on the acquisition of language by children. Phonology, lexicon, morphology, syntax, semantics. Universal principles, variation, contexts. Implications for related disciplines. QP: LIN 200 or LIN 401 QA: LIN 410

471. Sociolinguistics

Fall. 3(3-0) P: LIN 200 or LIN 401.

Linguistic and social psychological bases for language choice. Accounts of language variation and related larger constructs such as speech community, communicative competence, dialect, and language change. QP: LIN 200 or LIN 401 QA: LIN 415

Independent Study

Fall, Spring. I to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Approval of department.

Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

Special Topics

Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis.

Senior Thesis Research

Fall, Spring. 2 credits. R: Approval of department.

An individual research project supervised by a faculty member that demonstrates the student's ability to do independent research and submit or present a major paper. QA: LIN 490

Foundations of American Structuralism

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

P: LIN 431.

Critical reading of basic texts in linguistics from 1900 to the 1960s with primary emphasis on American structuralism and its major derivatives. QP: LIN 403, LIN 404 QA: LIN 808

815. Stratificational Linguistics

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

Theory of language developed by Sydney M. Lamb and its application to grammatical, semological, and phonological phenomena. The relation of stratificational theory to other views of language. QP: LIN 403, LIN 404 QA: LIN 821, LIN 831

824. Issues in Phonology

Fall. 3(3-0)

P: LIN 424

Theories, current issues, and research in the study of the sound systems of language. Methods of phonological analysis and argumentation. QP: LIN 402 QA: LIN 821

Issues in Syntax

Fall. 3(3-0)

P: LIN 434

Theories, current issues, and research in the study of the structure of sentences and structural relations among sentences. Methods of syntactic analysis and argumentation. QP: LIN 431 QA: LIN 831

837. Advanced Studies in Semantics and Pragmatics

Fall of even-numbered years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

P: LIN 437

Selected topics in semantics and/or pragmatics, such as noun phrase interpretation, tense and aspect, conversational implicature, and negation. Advanced level analytical techniques QP: LIN 435 QA: LIN 835

Advanced Studies in Child Language 850. Acquisition

Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P: LIN 450.

Children's native language acquisition: research methods, crosslinguistic data, and explanations from linguistic theory. Topics such as learnability, parameters, innateness, narratives, individual variation, and bilingualism.

QP: LIN 410 QA: LIN 810

Advanced Studies in Second

Language Acquisition
Spring, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with English.
P: ENG 461 or approval of department.

Current issues and theories of second and foreign language acquisition. Role of language structure, personality, and general cognition. Methods of re-

search. QP: LIN 401 QA: LIN 861

Courses

871. Advanced Studies in Sociolinguistics

Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. P. LIN 401.

Linguistic and societal bases for language choice. Topics exemplifying modern sociolinguistics including concerns of power, politeness, gender, quantitative microsociolinguistics, and ethnomethodology. QP: LIN 415 QA: LIN 815

Independent Study

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Approval of department.
Special projects, directed reading, and research arranged by an individual graduate student and a faculty member in areas supplementing regular course offerings. QA: LIN 860

891. Special Topics
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

R: Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis for graduate students.

892. Seminar in Linguistics

Spring 3(3-6) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to graduate students in Linguistics. Approval of department.

Directed original research on current topic in linguis-

QA: LIN 880

Master's Research 898.

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. R: Approval of department.

Directed research in support of Plan B master's degree requirements.

899. Master's Thesis Research

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Approval of department.

Directed research leading to a master's thesis, used in partial fulfillment of Plan A master's degree reautrements. QA: LIN 899

Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Approval of department. QA: LIN 999

LINGUISTICS AND LANGUAGES

Department of Linguistics and Germanic, Slavic, Asian and African Languages College of Arts and Letters

Independent Study 290.

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
R: Approval of department.
Special projects in Linguistics and Languages arran-

ged by an individual student and a faculty member in areas supplementing regular course offerings. QA: LOA 299

380. Methods of Teaching Foreign

Languages
Spring of even-numbered years. 3(3-0)
P: GRM 202 or RUS 202 or CHS 202 or JPN 202 or approval of department.

Methods of teaching Germanic, Slavic, Asian, and African languages for teacher education candidates. Theories of second language acquisition and practical application of teaching strategies.

QP: GRM 203 QA: T E 340

490. Independent Study

Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.
R: Approval of department.
Special projects in linguistics and languages arranged

by an individual student and a faculty member in areas supplementing regular course offerings. QA: LOA 499

Special Topics in Linguistic and Languages

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R. Approval of department.

Special topics supplementing regular course offerings proposed by faculty on a group study basis.

LYMAN BRIGGS SCHOOL LBS

Lyman Briggs School College of Natural Science

117. College Algebra and Trigonometry Fall. 3(3-0)

R: Open only to Lyman Briggs School majors. Designated score on mathematics placement test. Not open to students with credit in MTH 103 or MTH 110 or MTH 116 or MTH 120.

Rational and real numbers. Functions and inverses. Equations, simultaneous equations. Inequalities. Graphing. Trigonometry. QA: LBS 111, MTH 111, MTH 108, MTH 109

Calculus I

Fall, Spring. 5(5-0) P: LBS 117 or MTH 110 or MTH 116 or designated P: LBS 117 or MTH 110 or MTH 116 or designated score on mathematics place R: Open only to Lyman Briggs School majors. Not open to students with credit in MTH 120 or MTH 124 or MTH 132 or MTH 152H. Limits, continuity, differentiation, integration, and elementary applications.

QP: LBS 111, MTH 109, MTH 111 QA: LBS 112, MTH 112, LBS 113, MTH 113

Calculus II 119.

LL

Fall, Spring. 4(4-0)

P. LBS 118. R. Open only to Lyman Briggs School or MTH 153H or MTH 235.
Continuation of LBS 118. Further applications of one variable calculus. Infinite series. Ordinary differential

equations. QP: LBS 113, MTH 113 QA: LBS 113, MTH 113, LBS 217, MTH 215

Introduction to C Language with

Applications
Spring, 3(3-0)
P: LBS 118. R: Open only to Lyman Briggs School majors. Not open to students with credit in CPS 130 or CPS 131 or CPS 230.

Computer programming using the C language and the UNIX operating system. Emphasis on scientific and mathematical applications.

QP: MTH 112 or LBS 112

Personal Computers and Networks 126.

Fall, Spring. 3(3-0)
R: Open only to Lyman Briggs School majors. Not open to students with credit in CPS 100. Selecting, installing and using personal computer software and hardware. Computer networks.

Introduction to FORTRAN Language 127. with Applications Fall, 3(3-0)

P: LBS 118 or concurrently. R: Open only to Lyman Briggs School majors. Not open to students with credit in CPS 131.

Computer programming using the FORTRAN language and the UNIX operating system with emphasis on scientific and mathematical applications.

133. Introduction to Science and Technology Studies

Fall, Spring. 4(4-0)

P: Designated score on English placement test. R: Open only to Lyman Briggs School majors. Not open to students with credit in MC 111, MC 112, ATL 110, ATL 120, ATL 125, ATL 130, ATL 140, ATL 145, ATL 150. ATL 195H.

Instruction and practice in expository writing. Paper and report topics drawn from readings in the history, philosophy, and other areas of science and technology. QA: LBS 131, LBS 232

144. Biology I: Organismal Biology Fall, Spring, 4(3-3) R: Open only to Lyman Briggs School majors. Not

open to students with credit in BS 110.

Modern biology at the organismal level of integration.

Principles of genetics, evolution, ecology, and organismal diversity as interactive units.

QA: LBS 140, BS 212

Biology II: Cellular and Molecular
Biology
Fall, Spring. 4(3-3)
P: LBS 144; CEM 141 or CEM 151 or CEM 181H or
LBS 165 or concurrently. R: Open only to Lyman
Briggs School majors. Not open to students with credit
in BS 111.

Modern biology mainly at the cellular level of integra-tion. Principles of cell structure and function are used to explain processes of bioenergetics, protein synthesis, and development.

QP: LBS 140 QA: LBS 141, LBS 242, BS 210, BS

164. Introduction to Physics and Chemistry I Fall. 3(4-0)

P:LBS 117 or concurrently or MTH 116. R: Open only to Lyman Briggs School majors. Not open to students with credit in PHY 181B or PHY 183 or PHY 183B or PHY 231 or PHY 231B or PHY 193H.

Basic physics principles, problem solution techniques. Basic physics principles, problem solution examinques. Mechanical systems, elementary thermodynamics, vibrations and waves. Atoms and nuclei. QP: MTH 109, MTH 111, LBS 111 QA: LBS 162, LBS 261, PHY 237, PHY 281

164L. Introductory Physics Laboratory I Fall. 1(0-3)

P: LBS 164 or concurrently. R: Open only to Lyman

P: LBS 164 or concurrently. R: Open only to Lyman Briggs School majors. Not open to students with credit in PHY 192 or PHY 251.

Techniques and instruments in the physics laboratory. Selected experiments in classical and modern physics. QA: LBS 162L, LBS 261L, PHY 257, PHY 259, PHY 297, PHY 299

Introduction to Chemistry and 165. Physics I

Spring. 4(4-0)
P: LBS 164. R: Open only to Lyman Briggs School majors. Not open to students with credit in CEM 141 or CEM 152 or CEM 182H.

Chemical principles: structure and bonding, periodic properties. Stoichiometry, states of matter. Solutions, acids and bases, equilibria. Thermodynamics, kinetics. QA: LBS 161, LBS 163, CEM 141, CEM 151, CEM 152

165L. Introductory Chemistry Laboratory I

Spring. 1(0.3)
P: LBS 165 or concurrently. R: Open only to Lyman Briggs School majors. Not open to students with credit in CEM 161 or CEM 185H.

Determination of density and molecular weight. Stoi-chiometry. Acid-base titration, redox titration. Reac-tion kinetics, thermochemistry, Beer's law, freezing point depression, and equilibrium constants. QA: LBS 161L, LBS 163L, CEM 161

220. Calculus III

Fall, Spring. 5(5-0)
P: LBS 119. R: Open only to Lyman Briggs School
majors. Not open to students with credit in MTH 234
or MTH 235 or MTH 254H or MTH 255H.

Continuation of LBS 119. Three-dimensional vector geometry, differential calculus of functions of two or three variables. Double and triple integrals, line

integrals. QP: LBS 113, MTH 113 QA: LBS 216, LBS 217, MTH 214, MTH 215