

LATIN

201*. **Latin Prose**
 Fall. 4(4-1)
 P: LTN 102 or designated score on Latin placement test. R: LTN 102 or placement
 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. R: LTN 201 or placement
 Intermediate-level Latin poetry of the Republic and Augustan periods.
 QP: LTN 201 QA: LTN 203 LTN 203L

290*. **Independent Study**
 Fall, Spring, Summer. 1 to 4 credits.
 May reenroll for a maximum of 4 credits.
 R: Approval of the Department
 Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.
 QA: LTN 299

301*. **Republican Prose and Poetry**
 Fall of even-numbered years. 3(3-0)
 P: LTN 202. R: LTN 202 or placement
 Cicero, Caesar, Sallust, Plautus, Terence, Catullus, and Lucretius.
 QP: LTN 203 QA: LTN 300

302*. **Augustan Poetry**
 Spring of odd-numbered years. 3(3-0)
 P: LTN 202
 Poetry of Augustan Rome. Virgil, Horace, Propertius, Tibullus, and Ovid.
 QP: LTN 203 QA: LTN 300

401*. **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 even-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

490*. **Independent Study**
 Fall, Spring, Summer. 1 to 4 credits.
 May reenroll for a maximum of 4 credits.
 R: Approval of the Department
 Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.
 QA: LTN 499

499*. **Senior Thesis**
 Fall, Spring. 3(-)
 P: LTN 402. R: Approval of department.
 Senior thesis under the direction of a faculty member.
 QP: LTN 490

LINGUISTICS LIN

200*. **Language and Linguistics**
 Fall, Spring. 3(3-0)
 R: Not open to students with credit in LIN 401
 Introductory survey especially for students in areas other than linguistics; emphasizes linguistic concepts related to students' experiences; applications of linguistics to various disciplines.
 QA: LIN 200

271*. **Language in Society**
 Fall, Spring. 3(3-0)
 R: 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

401*. **Introduction to Linguistics**
 Fall, Spring. 4(4-0)

The scientific study of human languages. Basic goals, concepts, methods, and research results of modern theoretical and applied linguistics with examples from a variety of languages.
 QA: LIN 401

411*. **History of Linguistics**
 Fall. 3(3-0)
 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 and in society.
 QP: LIN 200 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 theories.
 QP: LIN 200 ORLIN 401 QA: LIN 402

431*. **Morphological and Syntactic Phenomena**
 Spring. 4(4-0)
 P: LIN 424 or concurrently

Essential phenomena of morphology and syntax in the languages of the world, including formal methods for their description. Structure of words in terms of morphemes; structure of phrases, clauses, and sentences; and relations between words
 QP: LIN 200 LIN 401 LIN 402 QA: LIN 403 LIN 404

434*. **Syntax**
 Fall. 3(3-0)
 P: LIN 401.

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

437*. **Semantics and Pragmatics**
 Spring. 3(3-0)
 P: LIN 200 or LIN 401 or approval of department

Important semantic properties and relations. Entailment, ambiguity, theories of word meaning, sentence meaning and logical form. Topics in pragmatics, such as presupposition, conversational implicature, speech acts.
 QP: LIN 200 LIN 401 QA: LIN 435

441*. **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 LIN 404

450*. **Child Language Acquisition**
 Spring. 3(3-0)
 P: LIN 200 or LIN 401. R: Not open to students with credit in LIN 404.

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 ORLIN 401 QA: LIN 404

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 LIN 401 QA: LIN 415

490*. **Independent Study**
 Fall, Spring, Summer. 1 to 4 credits.
 May reenroll for a maximum of 8 credits.
 R: Approval of the Department
 Special projects arranged by an individual student and a faculty member in areas supplementing regular course offerings.

491*. **Special Topics**
 Fall, Spring, Summer. 1 to 4 credits.
 May reenroll for a maximum of 8 credits.
 R: Approval of the Department
 Special topics supplementing regular course offerings proposed by faculty on a group study basis.

499*. **Senior Thesis Research(W)**
 Fall, Spring, Summer. 2(-)
 R: Approval of the 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

813*. **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 offshoots.
 QP: LIN 403 LIN 404 QA: LIN 808

815*. **Stratificational Linguistics**
 Fall of odd-numbered years. 3(3-0)
 P: LIN 431
 The 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 403 404 QA: LIN 821 LIN 831

824*. **Issues in Phonology**
 Fall. 3(3-0)
 P: LIN 424
 Findings, 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

834*. **Issues in Syntax**
 Fall. 3(3-0)
 P: LIN 434
 Findings, 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)
 May reenroll for a maximum of 6 credits.
 P: LIN 437 R: For reenrollment, approval of department.

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

LINGUISTICS

- 850*** **Advanced Studies in Child Language Acquisition**
Spring of even-numbered years. 3(3-0)
May reenroll for a maximum of 6 credits.

P: LIN 450 R: For reenrollment-approval of department

Selected topics on children's native language acquisition. Research methods, crosslinguistic data, explanations from linguistic theory. Representative topics: learnability, parameters, innateness, narratives, individual variation, bilingualism
QP: LIN 410 QA: LIN 810

- 861*** **Advanced Studies in Second Language Acquisition**
Spring. 3(3-0) May reenroll for a maximum of 6 credits.

Interdepartmental with the Department(s) of English.
P: ENG/LIN 461 or permission of department

Research, current issues and theories of second and foreign language acquisition. Role of aspects of language structure personality and general cognition. Methods of research.
QP: LIN 401 QA: LIN 861

- 871*** **Advanced Studies in Sociolinguistics**
Spring. 3(3-0) May reenroll for a maximum of 6 credits.

P: LIN 401
Linguistic and social-psychological bases for language choice. Topics and approaches exemplifying modern general sociolinguistic including concerns of power, politeness and gender, quantitative microsociolinguistics and ethnomethodology.
QP: LIN 415 QA: LIN 815

- 890*** **Independent Study**
Fall, Spring, Summer. 1 to 4 credits.
May reenroll for a maximum of 8 credits.

R: Approval of the 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.
May reenroll for a maximum of 8 credits.

R: Approval of the Department
Special topics supplementing regular course offerings proposed by faculty on a group study basis for graduate students.

- 892*** **Seminar in Linguistics**
Spring. 3(3-0) May reenroll for a maximum of 12 credits.

R: linguistics approval of department
Presentation and discussion of original research by the instructor, students and others.
QA: LIN 880

- 898*** **Master's Research--Plan B**
Fall, Spring, Summer. 1 to 3 credits.
May reenroll for a maximum of 3 credits.

R: Approval of the Department
Directed research in support of plan B master's degree requirements.

- 899*** **Master's Thesis Research--Plan A**
Fall, Spring, Summer. 1 to 6 credits.
May reenroll for a maximum of 6 credits.

R: Approval of the Department
Directed research leading to a master's thesis, used in partial fulfillment of plan A master's degree requirements.
QA: LIN 899

- 999*** **Doctoral Dissertation Research**
Fall, Spring, Summer. 1 to 6 credits.
May reenroll for a maximum of 36 credits.

R: Approval of the Department

QA: LIN 999

LYMAN BRIGGS SCHOOL LBS

- 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 110 or MTH 116 or MTH 120.

Rational and real numbers. Functions and inverses. Equations, simultaneous equations. Inequalities. Graphing. Trigonometry.

QP: NONE QA: LBS 111 MTH 111

- 118*** **Calculus I**

Fall, Spring. 5(5-0)
P: LBS 117 or MTH 110 or MTH 116 or designated score on mathematics place <F

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

- 119*** **Calculus II**

Fall, Spring. 4(4-0)
P: LBS 118. R: Open only to Lyman Briggs School majors. Not open to students with credit in MTH 133 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

- 125*** **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 ORLBS 112

- 126*** **Personal Computers and Networks**
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.

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

P: LBS 118. 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)
R: Open only to Lyman Briggs School majors.

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

- 145*** **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. 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 integration. 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 211

- 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.

Basic physics principles, problem solution techniques. Mechanical systems, elementary thermodynamics, vibrations and waves. Atoms and nuclei.

QP: MTH 109 MTH 111LBS 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 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

- 165*** **Introduction to Chemistry and Physics I**
Spring. 3(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. Stoichiometry. Acid-base titration, redox titration. Reaction 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 MTH215