LINGUISTICS

Courses offered by the Department of Linguistics are listed under the subject code LINGUIST on the Stanford Bulletin's ExploreCourses web site.

Linguistics concerns itself with the fundamental questions of what language is and how it is related to the other human faculties. In answering these questions, linguists consider language as a cultural, social, and psychological phenomenon and seek to determine what is unique in languages, what is universal, how language is acquired, and how it changes. Linguistics is, therefore, one of the cognitive sciences; it provides a link between the humanities and the social and natural sciences, as well as education, and hearing and speech sciences.

The department offers courses at the undergraduate and graduate levels in the areas central to linguistic theory and analysis. Many of them deal with the analysis of structural patterns in the different components that make up language, including sounds (phonetics and phonology), meanings (semantics and pragmatics), words (morphology), sentences (syntax), and the ways they vary and change over time. Other courses integrate the analysis of linguistic structure with phenomena that directly concern other disciplines. These include courses in computational linguistics, language acquisition, the philosophy of language, psycholinguistics, and sociolinguistics.

A variety of open forums provide for the discussion of linguistic issues, including colloquia and regularly scheduled workshops in child language, computational linguistics, phonetics and phonology, psycholinguistics, semantics and pragmatics, sociolinguistics, and syntax.

Mission of the Undergraduate Program in Linguistics

The mission of the undergraduate program in Linguistics is to provide students with basic knowledge in the principal areas of linguistics (phonetics, phonology, morphology, syntax, semantics, pragmatics, historical linguistics, and sociolinguistics) and the skills to do more advanced work in these subfields. Courses in the major also involve interdisciplinary work with connections to other departments including computer science, psychology, cognitive science, communication, anthropology, and foreign language. The program provides students with excellent preparation for further study in graduate or professional schools as well as careers in business, social services, government agencies, and teaching.

Learning Outcomes (Undergraduate)

The department expects undergraduate majors in the program to be able to demonstrate the following learning outcomes. These learning outcomes are used in evaluating students and the department's undergraduate program. By the end of the program, students are expected to be able to:

1. formulate theoretically interesting and tractable research questions;
2. find and collect information relevant to answering their research questions;
3. bring linguistic theory to bear in analyzing and evaluating information;
4. articulate the questions and outcomes of the process described in 1-3; and
5. engage with peers in an intellectual community around linguistic issues.

Graduate Programs in Linguistics

The department offers an M.A., Ph.D., and Ph.D. minor in Linguistics.

Learning Outcomes (Graduate)

The purpose of the master's program is to develop students' knowledge and skills in Linguistics and to prepare them for a professional career or doctoral studies. This is achieved through completion of courses, including course work in an area of specialization within the field, and experience with independent research.

The Ph.D. is conferred upon candidates who have demonstrated the ability to conduct substantive, independent research in Linguistics. Through completion of advanced coursework and rigorous methodological and analytical training, the doctoral program prepares students to make original contributions to knowledge in linguistics, to articulate the results of their work, and to demonstrate its significance to linguistics and related fields.

Cognitive Science

Linguistics is participating with the departments of Philosophy and Psychology in an interdisciplinary program in Cognitive Science for doctoral students. The program is intended to provide an interdisciplinary education as well as a deeper concentration in linguistics. Students who complete the Linguistics and Cognitive Science requirements receive a special designation in Cognitive Science along with the Ph.D. in Linguistics.

To receive this designation, students must complete 30 units of approved course work. The 30 units cannot include courses counted elsewhere towards the Ph.D. Courses may be drawn from the participating departments, as well as from other departments, as long as their content is appropriate to the designation. At least 18 of the 30 units must be from outside the student's major department and must include course work in at least two other departments. Special topic seminars are excluded from the approved list in favor of more foundational courses.

Linguistics Course Catalog Numbering System

Courses numbered under 100 are designed primarily for pre-majors. Courses with 100-level numbers are designed for majors, minors, and M.A. and Ph.D. minor candidates in Linguistics. Those with numbers 200 and above are primarily for graduate students, but with consent of the instructor some of them may be taken for credit by qualified undergraduates. At all levels, the course numberings indicate a special area, as follows:

Number	Special Area
00-04	General
05-09	Phonetics
10-14	Phonology
15-19	Morphology
20-29	Syntax
30-39	Semantics, Pragmatics, Discourse
40-49	Language Acquisition, Psycholinguistics
50-62	Sociolinguistics, Language Variation, Change
63-73	Language and Culture, Structure of a Language
74-79	Methods, Mathematical Linguistics, Statistics
80-89	Computational Linguistics

90-99	Directed Work, Theses, Dissertations

Bachelor of Arts in Linguistics

The undergraduate major stresses the study of language both as a fundamental human faculty and as a changing social institution. At the core of the program is a set of departmental courses on the nature of human language; the major also draws on courses offered by other departments and programs.

The Linguistics major cuts across the humanities and the social and physical sciences. It provides a solid general education as a background for advanced studies in such disciplines as anthropology, cognitive science, communication, computer science, education (language, literacy, and culture), hearing and speech sciences, languages, law, linguistics, philosophy, and psychology.

Degree Requirements

Requirements for the B.A. include at least 50 units of course work; at least 28 of these units must be in Linguistics. The remaining units may be in Linguistics or in related fields, with approval from the Undergraduate Adviser. Of the 50 units required for the major, no more than 12 may be below the 100 level. All required courses must be taken for a letter grade of C- or better. No more than two other courses used towards the 50 units of course work may be taken on a credit/no credit basis (CR/NC).

Required Courses:

Units

Specified Courses

LINGUIST 105	Phonetics
or LINGUIST 11	Introduction to Phonology
LINGUIST 196	Introduction to Research for Undergraduates (to be taken Autumn Quarter, junior year)
LINGUIST 197A	Undergraduate Research Seminar (to be taken Winter Quarter, senior year)

Two 200-level courses in Linguistics (see explorecourses for current options)

Breadth Courses

Take one course each from three of the areas below, or one course each from two of the areas below plus LINGUIST 1.

Courses that fulfill the breadth requirement include the following (specific courses that count to be revisited annually)

LINGUIST 1	Introduction to Linguistics (may be counted toward the major only if taken before senior year)

LANGUAGE CHANGE AND TYPOLOGY

LINGUIST 160	Introduction to Language Change
LINGUIST 162	History Through Language
LINGUIST 167	Languages of the World

MORPHOLOGY AND SYNTAX

LINGUIST 116	Morphology
LINGUIST 120	Introduction to Syntax
LINGUIST 121A	The Syntax of English
LINGUIST 121B	Crosslinguistic Syntax
LINGUIST 184	Syntactic Theory and Implementation
LINGUIST 222A	Foundations of Syntactic Theory I
LINGUIST 222B	Foundations of Syntactic Theory II

SEMANTICS AND PRAGMATICS

LINGUIST 130A	Introduction to Semantics and Pragmatics
LINGUIST 130B	Introduction to Lexical Semantics
LINGUIST 230A	Introduction to Semantics and Pragmatics
LINGUIST 230B	Semantics and Pragmatics I
LINGUIST 232A	Lexical Semantics

SOCIOLINGUISTICS

LINGUIST 150	Language in Society
LINGUIST 250	Sociolinguistic Theory and Analysis

PSYCHOLINGUISTICS

LINGUIST 140	Language Acquisition I
LINGUIST 240	Language Acquisition I
LINGUIST 141	Language and Gesture
LINGUIST 144	Minds and Machines
PSYCH 131	Language and Thought

COMPUTATIONAL LINGUISTICS

LINGUIST 180	From Languages to Information
LINGUIST 280	From Languages to Information
LINGUIST 183	Programming and Algorithms for Natural Language Processing
LINGUIST 188	Natural Language Understanding
LINGUIST 278	Programming for Linguists

Other Requirements

Other course work— additional courses counting toward the 50 unit requirement should form a coherent program of study. Majors should discuss this course work with faculty and the mentor in the major, and get specific approval for courses outside the department from the Undergraduate Adviser.

Language— majors must have competence in at least one language other than English as part of their understanding of the field of linguistics and its study. This is usually demonstrated by the completion of six quarters of language study at Stanford or equivalent; level of proficiency is determined by the Language Center or the relevant language department. Majors may petition to be exempted from the language requirement if they have grown up speaking a language other than English and can use it for everyday purposes and for linguistic analysis.

Honors Program

Students who wish to undertake a more intensive program of study, including independent research, should pursue departmental honors. Students should apply for honors by the end of Spring Quarter of their junior year. As part of the application, the student must write a research proposal describing the honors project, which must be approved by the faculty adviser. Approval is given only to students who have maintained a grade point average (GPA) of 3.3 (B+) or better in the courses required for the major.

Honors students complete a total of 60 units including the 50 units for the major, plus 10 additional units of Independent Study and Honors Research. In addition, they must complete an honors thesis based on research conducted with a principal adviser who must be a member of the Linguistics faculty, and a secondary faculty adviser who may, with the approval of the Undergraduate Studies Committee, be a member of another department. In the Autumn Quarter of the senior year, honors students enroll in LINGUIST 199 Independent Study, to work closely with one of their advisers on the research project. In Winter and Spring quarters, honors students enroll in LINGUIST 198 Honors Research, with the student's principal adviser for close supervision of the honors thesis. The thesis must be submitted in final, acceptable, form by May 15. The thesis topic is presented orally at a department Honors Colloquium late in Spring Quarter.

Joint Major Program in Linguistics and Computer Science

The joint major program (JMP), authorized by the Academic Senate for a pilot period of six years beginning in 2014-15, permits students to major in both Computer Science and one of ten Humanities majors. See the "Joint Major Program (http://exploredegrees.stanford.edu/undergraduatedegreesandprograms/#jointmajortext)" section of this bulletin for a description of University requirements for the JMP. See also the Undergraduate Advising and Research JMP web site and its associated FAQs.

Students completing the JMP receive a B.A.S. (Bachelor of Arts and Science).

Because the JMP is new and experimental, changes to procedures may occur; students are advised to check the relevant section of the bulletin periodically.

Linguistics Major Requirements in the Joint Major Program

See the "Computer Science Joint Major Program (http://exploredegrees.stanford.edu/schoolofengineering/computerscience/#jointmajorprogramtext)" section of this bulletin for details on Computer Science requirements.

All majors must take at least 50 units of course work in linguistics and related fields, with no more than 12 units below the 100 level and at least 8 units above the 200 level. No more than two courses (and none from the breadth list above) can be taken on a credit/no credit basis (CR/NC).

Students in the joint major must take LINGUIST 180 From Languages to Information as one of these breadth courses. Students may count LINGUIST 180/CS 124 towards both major requirements as long as the units are not double-counted. If LINGUIST 180/CS 124 is required for both Linguistics and a student's specific CS track, Linguistics works with the student to identify another course (possibly directed reading/independent study for 3-4 units) that would benefit the academic plan. (In this scenario, LINGUIST 180/CS 124 fulfills major requirements in both Linguistics and CS, but the units are only counted towards CS; additional units of work would be identified in Linguistics to meet the unit requirements.)

All majors must take LINGUIST 196 Introduction to Research for Undergraduates, usually in the junior year, and all majors must take LINGUIST 197A Undergraduate Research Seminar, usually in the senior year.

Within the 50 unit total, students in the joint major are encouraged to sign up for Directed Research units as part of completing the integrative capstone project. The expectation is that this project is supervised by a Linguistics faculty member. The specific number of units varies and is decided by the student and faculty adviser.

Different from Linguistics majors, CS + Linguistics joint majors are not required to display competence in a language other than English and therefore are not required to complete the equivalent of six quarters of language study.

For breadth within Linguistics, each joint major must take at least one course each from five of the following eight areas. Courses offered that fulfill the breadth requirement include the following (specific courses that count to be revisited annually):

		Units
General Linguistics		
LINGUIST 1	Introduction to Linguistics (may be counted toward the major only if taken before senior year)	4
Phonetics and Phonology		
LINGUIST 105	Phonetics	3-4
LINGUIST 110	Introduction to Phonology	4
LINGUIST 205A	Phonetics	3-4
LINGUIST 210A	Phonology	3-4
Language Change and Typology		
LINGUIST 160	Introduction to Language Change	4
LINGUIST 162	History Through Language	3-4
LINGUIST 167	Languages of the World	3-4
Morphology and Syntax		
LINGUIST 120	Introduction to Syntax	4
LINGUIST 121A	The Syntax of English	4
LINGUIST 121B	Crosslinguistic Syntax	4
LINGUIST 184	Syntactic Theory and Implementation	4
LINGUIST 222A	Foundations of Syntactic Theory I	3-4
Semantics and Pragmatics		
LINGUIST 130A or LINGUIST 230A	Introduction to Semantics and Pragmatics Introduction to Semantics and Pragmatics	4
LINGUIST 130B	Introduction to Lexical Semantics	3-4
Sociolinguistics		
LINGUIST 65	African American Vernacular English	3-5
LINGUIST 150	Language in Society	2-4
LINGUIST 156	Language and Gender	4
LINGUIST 157	Sociophonetics	1-4
LINGUIST 250	Sociolinguistic Theory and Analysis	3-4
Psycholinguistics		
LINGUIST 140	Language Acquisition I	4
LINGUIST 141	Language and Gesture	3
LINGUIST 144	Minds and Machines	4
PSYCH 131	Language and Thought	4
Computational Linguistics		
LINGUIST 180	From Languages to Information	3-4
LINGUIST 188	Natural Language Understanding	3-4

Declaring a Joint Major Program

To declare the joint major, students must first declare each major through Axess, and then submit the Declaration or Change of Undergraduate Major, Minor, Honors, or Degree Program. (https://stanford.box.com/change-UG-program) The Major-Minor and Multiple Major Course Approval Form (http://studentaffairs.stanford.edu/sites/default/files/registrar/files/MajMin_MultMaj.pdf) is required for graduation for students with a joint major.

Dropping a Joint Major Program

To drop the joint major, students must submit the Declaration or Change of Undergraduate Major, Minor, Honors, or Degree Program. (https://stanford.box.com/change-UG-program) . Students may also consult the Student Services Center (http://studentservicescenter.stanford.edu) with questions concerning dropping the joint major.

Transcript and Diploma

Students completing a joint major graduate with a B.A.S. degree. The two majors are identified on one diploma separated by a hyphen. There will be a notation indicating that the student has completed a "Joint Major". The two majors are identified on the transcript with a notation indicating that the student has completed a "Joint Major".

Minor in Linguistics

Requirements for the minor include at least 28 units of course work (typically seven courses) in Linguistics and related fields, approved in

advance by the Linguistics undergraduate studies adviser. No more than two courses, neither of which is among the required courses, may be taken on a credit/no credit basis. The courses counting towards the minor must be units beyond those needed to satisfy the student's major course of study.

1.

Required courses for the minor:	
LINGUIST 1 Introduction to Linguistics	
Take one course each from two of the three areas below:	8
PHONETICS AND PHONOLOGY	
LINGUIST 105 Phonetics	
LINGUIST 110 Introduction to Phonology	
SYNTAX	
LINGUIST 120 Introduction to Syntax	
LINGUIST 121A The Syntax of English	
LINGUIST 121I Crosslinguistic Syntax	
SEMANTICS AND PRAGMATICS	
LINGUIST 130A Introduction to Semantics and Pragmatics	
LINGUIST 130B Introduction to Lexical Semantics	
Select one of the following:	4
LINGUIST 150 Language in Society	
LINGUIST 160 Introduction to Language Change	

   or, in advance consultation with the Linguistics undergraduate studies adviser, a course in historical linguistics or the history of a language.

2. At least four other courses determined in advance consultation with the Linguistics undergraduate studies adviser. Students are encouraged to take at least one 200-level Linguistics course. Students may also choose to do independent work with a faculty member of their choice.

Master of Arts in Linguistics

The University's basic requirements for the master's degree are discussed in the "Graduate Degrees (http://exploredegrees.stanford.edu/ graduatedegrees)" section of this bulletin. The following are additional departmental requirements. Candidates should review the department's Guidelines for the M.A. Degree in Linguistics for further particulars concerning these requirements.

1. *Courses*—Individual programs should be worked out in advance with an adviser in Linguistics keeping the following requirements and guidelines in mind. The M.A. degree requires the completion of 45 units; at least 36 of these must be in Linguistics. The course work must include one introductory graduate-level course in each of the areas of syntax, semantics, and sound structure, as well as four courses in the student's area of specialization. If the student can make a compelling case, the department may allow up to 9 of the 45 units to be in a department other than Linguistics. Courses from outside the department must have clear linguistic content or contribute methodological knowledge that facilitates the thesis project; furthermore, if the student is simultaneously enrolled in a degree program in another department, not all of these 9 units can be earned in that department. No more than two courses should be at the 100 level. The majority of the courses taken towards the 45 units of degree program course work must be taken for a letter grade; these should include the three required introductory courses and the four courses constituting the specialization, which should all be completed with at least a 'B'. The overall course work grade point average (GPA) must be at least 3.0 (B).

2. *Language*—Students must complete a language requirement. There are two options for fulfilling the requirement:

Units

   a. the student may demonstrate reading knowledge of a non-native language in which a substantial linguistic literature is written, with sufficient facility to understand and interpret linguistic research published in that language, or

   b. the student must complete an original paper demonstrating the ability to carry out in-depth research on the structure of a non-native language.

3. *Thesis or Thesis Project*—A research paper supervised by a committee of three faculty (normally fulfilled by up to 6 units of LINGUIST 398 Directed Research).

Coterminal Master's Degree Program in Linguistics

The Department of Linguistics admits a limited number of undergraduates to the coterminal degree program. Students are required to submit to the department a complete application, which includes a statement of purpose identifying a thesis topic, a Stanford transcript, three letters of recommendation (at least one of which must be from a faculty member in Linguistics), and a proposed course of study (worked out in advance with a Linguistics adviser). Applicants for the coterminal degree may apply as early as their eighth quarter and no later than early in the eleventh quarter of undergraduate study. Decisions on admission to the coterminal degree program rest with the Graduate Admissions Committee of the Department of Linguistics.

University Coterminal Requirements

Coterminal master's degree candidates are expected to complete all master's degree requirements as described in this bulletin. University requirements for the coterminal master's degree are described in the "Coterminal Master's Program (http://exploredegrees.stanford.edu/ cotermdegrees)" section. University requirements for the master's degree are described in the "Graduate Degrees (http:// exploredegrees.stanford.edu/graduatedegrees/#masterstext)" section of this bulletin.

After accepting admission to this coterminal master's degree program, students may request transfer of courses from the undergraduate to the graduate career to satisfy requirements for the master's degree. Transfer of courses to the graduate career requires review and approval of both the undergraduate and graduate programs on a case by case basis.

In this master's program, courses taken three quarters prior to the first graduate quarter, or later, are eligible for consideration for transfer to the graduate career. No courses taken prior to the first quarter of the sophomore year may be used to meet master's degree requirements.

Course transfers are not possible after the bachelor's degree has been conferred.

The University requires that the graduate adviser be assigned in the student's first graduate quarter even though the undergraduate career may still be open. The University also requires that the Master's Degree Program Proposal be completed by the student and approved by the department by the end of the student's first graduate quarter.

Doctor of Philosophy in Linguistics

The following requirements are in addition to the basic University requirements for the degree sought; see the "Graduate Degrees (http:// exploredegrees.stanford.edu/graduatedegrees)" section of this bulletin. Candidates should review the department's Guidelines for the Degree of Ph.D. in Linguistics (https://linguistics.stanford.edu/department-resources) for further particulars concerning these requirements.

1. *Language*—candidates must demonstrate the ability to read at least one foreign language in which a substantial linguistic literature is written, with sufficient facility to understand and to interpret

linguistic research published in that language. (Particular areas of specialization may require additional research languages.)
In addition, each candidate must demonstrate an explicit in-depth knowledge of the structure of at least one language (normally neither the candidate's native language nor the language used for the reading exam).

2. *Courses*—a minimum of 135 units of graduate work beyond the bachelor's degree, or 90 units beyond the master's degree. The course requirements detailed in the Department of Linguistics Ph.D. Handbook guarantee that each candidate covers a sufficient set of subareas within the field.
Candidates must maintain a satisfactory record in the number and distribution of units completed. The overall course work GPA must be at least 3.0 (B), and all of the basic courses should be completed with at least a 'B'.

3. *Research*—the prospective Ph.D. candidate is expected to complete two substantial qualifying papers. The deadline for completion of the first qualifying paper is the end of Autumn Quarter of the second year; the deadline for completion of the second qualifying paper is the end of Autumn Quarter of the third year. The subject matter of the two papers, although it may be related (for example, same language), must be clearly distinct. The requirement is fulfilled by one quarter of LINGUIST 395 Research Workshop (1-2 units), and by oral discussion with a committee of at least three faculty members selected by the student and the faculty.

4. *Candidacy*—students must complete a prescribed portion of the basic course requirement (see item 2 above), one language requirement (see item 1 above), and one qualifying paper (see item 3 above) by the end of their sixth academic quarter, normally the Spring Quarter of the second year. The department faculty reviews each sixth quarter student and votes on whether to admit the student to candidacy. A student is only admitted to candidacy if, in addition to the student's fulfilling the specified department prerequisites, the faculty makes the judgment that the student has the ability to complete the remaining stages of the Ph.D. program at a level of superior quality. Students who are not admitted to candidacy will be terminated from the program; at the department's discretion, they may be allowed to complete any requirements that remain for the M.A. degree and receive this degree.

5. *Teaching*—at least three quarters serving as a teaching assistant in Linguistics courses.

6. *Dissertation*—
   a. appointment of a dissertation committee.
   b. an approved written dissertation proposal is required by the end of Autumn Quarter of the fourth year.
   c. oral discussion of the dissertation proposal with an augmented dissertation committee by Spring Quarter of the fourth year.
   d. passing a University oral examination on the dissertation and related areas which includes a public presentation of the dissertation research.
   e. dissertation (up to 15 units of LINGUIST 399 Dissertation Research).

Ph.D. Minor in Linguistics

1. *Courses*—the candidate must complete 30 units of course work in linguistics. The University requires that at least 20 of these units be at the 200 level or above; the remaining 10 units must be at the 100 level or above. The coursework for the minor must include one introductory course in each of sound structure, syntax, and semantics/pragmatics; this requirement is typically fulfilled by LINGUIST 105 Phonetics or LINGUIST 110 Introduction to Phonology, LINGUIST 121A The Syntax of English or LINGUIST 121B Crosslinguistic Syntax, LINGUIST 130A Introduction to Semantics and Pragmatics or LINGUIST 130B Introduction to Lexical Semantics

or by 200-level introductory courses in the same areas. Courses submitted for the minor must be incremental units beyond those used to satisfy the major. Individual programs should be worked out in advance with the student's Ph.D. minor adviser in Linguistics. The majority of the courses taken towards the 30 units of coursework must be taken for a letter grade; these should include the three required introductory courses, which should all be completed with at least a 'B'. The overall coursework grade point average (GPA) must be at least 3.0 (B).

2. *Research Project (optional)*—the candidate may elect to present a paper which integrates the subject matter of linguistics into the field of specialization of the candidate.

3. The Linguistics minor adviser or designee serves on the candidate's University oral examination committee and may request that up to one-third of the examination be devoted to the minor subject.

Faculty

Emeriti: (Professors) Joan Bresnan, Clara N. Bush, Shirley Brice Heath, William R. Leben, Stanley Peters, Elizabeth C. Traugott, Thomas A. Wasow

Chair: Daniel Jurafsky

Professors: Eve V. Clark (on leave Spring), Penelope Eckert, Daniel Jurafsky, Martin Kay, Paul Kiparsky, Beth Levin (on leave Spring), Christopher Manning, John R. Rickford

Associate Professors: Arto Anttila, Christopher Potts, Meghan Sumner

Assistant Professors: Vera Gribanova (on leave Spring), Boris Harizanov, Daniel Lassiter, Robert Podesva (on leave AY 15-16)

Professor (Research): Cleo Condoravdi

Courtesy Professors: Herbert H. Clark, Kenji Hakuta, Yoshiko Matsumoto, James McClelland, Orrin W. Robinson III, Chao Fen Sun

Courtesy Associate Professors: H. Samy Alim, James A. Fox, Miyako Inoue, Michael C. Frank

Courtesy Assistant Professors: Noah Goodman

Senior Lecturer: Philip L. Hubbard, Language Center

Lecturers: Bill MacCartney, Sarah Ogilvie

Consulting Professors: Jared Bernstein, Ronald Kaplan, Lauri Karttunen, Paul Kay, Livia Polanyi, Annie Zaenen, Arnold Zwicky