

Linguistics

Courses offered by the Department of Linguistics are listed under the subject code LINGUIST on the (<http://explorecourses.stanford.edu/CourseSearch/search?view=catalog&catalog=&page=0&q=LINGUIST&filter-catalognumber-LINGUIST=on>) Stanford Bulletin's (<http://explorecourses.stanford.edu/CourseSearch/search?view=catalog&catalog=&page=0&q=LINGUIST&filter-catalognumber-LINGUIST=on>) ExploreCourses web site (<http://explorecourses.stanford.edu/CourseSearch/search?view=catalog&catalog=&page=0&q=LINGUIST&filter-catalognumber-LINGUIST=on>).

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:

Specified Courses

LINGUIST 105	Phonetics
or LINGUIST 110	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)
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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://exploreddegrees.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://exploreddegrees.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 Introduction to Semantics and Pragmatics	4
or LINGUIST 230A Introduction to Semantics and Pragmatics	
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. (http://studentaffairs.stanford.edu/sites/default/files/registrar/files/change_UG_program.pdf) 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. (http://studentaffairs.stanford.edu/sites/default/files/registrar/files/change_UG_program.pdf). Students may also consult the Student Services Center (<http://studentaffairs.stanford.edu/studentervicescenter>) 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.

	Units
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 121B 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.

- 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://exploreddegrees.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.

- 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).
- Language**—Students must complete a language requirement. There are two options for fulfilling the requirement:
 - 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
 - the student must complete an original paper demonstrating the ability to carry out in-depth research on the structure of a non-native language.
- 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://exploreddegrees.stanford.edu/cotermdegrees>)" section. University requirements for the master's degree are described in the "Graduate Degrees (<http://exploreddegrees.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://exploreddegrees.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 Gribova (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

Courses

LINGUIST 1. Introduction to Linguistics. 4 Units.

This course introduces students to the cognitive organization of linguistic structure and the social nature of language use. We will investigate language as it is used in our everyday lives, highlighting both the variability and systematic nature of all levels of linguistic structure. In doing so, we will discover how to approach language from a scientific perspective, learn the fundamentals of linguistic analysis, and understand the foundational concepts of the field of Linguistics. Sample topics to be explored across a variety of languages include language and advertising, language change, dialect variation, and language and technology. *** Sections are mandatory. Please sign up for one of the sections at enrollment.

LINGUIST 3. Glamour of Grammar. 3-4 Units.

In this course, we will dispel many a mystery of English grammar, often presented as a dull and dreary subject in schools: we will see that the words *quest*; *glamorous*; *quest*; and *quest*; *grammatical*; *quest*; come from the same root meaning *quest*; *mysterious* or *occult*; *quest*; and we will ask: Why is there *quest*; *stupidity*; *quest*; but not *quest*; *smart*; *quest*;? Why can we *quest*; *blacken*; *quest*; fish or *quest*; *whiten*; *quest*; teeth, but not *quest*; *pink*; *quest*; or *quest*; *green*; *quest*; anything? Who makes up new words anyway? How do we put words together into meaningful sentences? And how do we understand the nuances of English without much direct instruction? While the focus of this course is on English grammar, we will also see that other languages possess grammars that are based on the same principles and constraints.

LINGUIST 5N. What's Your Accent? Investigations in Acoustic Phonetics. 3 Units.

Preference to freshmen. Phonetic variation across accents of English; experimental design; practical experience examining accents of seminar participants; acoustic analysis of speech using Praat.

LINGUIST 10N. Experimental Phonetics. 4 Units.

Everyday, we face variation in language. As readers, we see words printed in different fonts, sizes, and typefaces, typically static on a page. As listeners, we hear a speech signal riddled with variation. We are exposed to words, but a single word is produced differently each time it is uttered. These words stream by listeners at a rate of about 5 syllables per second, further complicating the listeners' task. How listeners map a speech signal into meaning despite massive variation is an issue central to linguistic theory. The field of experimental phonetics investigates how listeners take words that often vary drastically and understand them as quickly and adeptly as they do. This class introduces students to acoustic and auditory phonetics. As a class, we will carry out a project in experimental phonetics aimed at understanding how different realizations of words are able to be understood by listeners. Throughout the course, students will read background literature, become familiar with the Stanford Linguistics Lab, and learn to use software integral to the design, data collection, and data analysis of experiments. Each week, we will have two meetings, one in a seminar setting and one in the lab.

LINGUIST 36. The Arabic Language and Culture. 3 Units.

(Formerly AMELANG 36). Arabic language from historical, social, strategic, and linguistic perspectives. History of the Arabic language and the stability of classical Arabic over the last 15 centuries. Why the functionality of classical Arabic has not changed as Latin, Old English, and Middle English have. Social aspects of the Arabic language, Ferguson's notion of diglossia. The main varieties of Arabic, differences among them, and when and where they are spoken. Role of Arabic and culture in current world politics, culture, and economy. Linguistic properties of Arabic such as root-based morphology, lexical ambiguity, and syntactic structure relating it to current linguistic theories.

Same as: LINGUIST 270

LINGUIST 44N. Living with Two Languages. 3 Units.

Preference to freshmen. The nature of bi- and multilingualism with emphasis on the social and educational effects in the U.S. and worldwide, in individual versus society, and in child and adult. The social, cognitive, psycholinguistic, and neurological consequences of bilingualism. Participation in planning and carrying out a research project in language use and bilingualism.

LINGUIST 47N. Languages, Dialects, Speakers. 3 Units.

Preference to freshmen. Variation and change in languages from around the world; language and thought; variation in sound patterns and grammatical structures; linguistic and social structures of variation; how languages differ from one another and how issues in linguistics connect to other social and cultural issues; the systematic study of language.

LINGUIST 52N. Spoken Sexuality: Language and the Social Construction of Sexuality. 3 Units.

The many ways language is used in the construction of sexuality and sexual identity. How language is used as a resource for performing and perceiving sexual identity. Drawing on linguistic analyses of pronunciation, word choice, and grammar, questions such as: Is there a gay accent? Why isn't there a lesbian accent? How do transgendered people modify their linguistic behavior when transitioning? How are unmarked (heterosexual) identities linguistically constructed? Sexuality as an issue of identity, as well as of desire. Iconic relations between elements of language such as breathy voice quality and high pitch, and aspects of desire such as arousal and excitement. How language encodes ideologies about sexuality; how language is used to talk about sexuality in public discourses about gay marriage and bullying, as well as in personal narratives of coming out. How language encodes dominant ideologies about sexuality, evident in labels for sexual minorities as well as terminology for sex acts. Discussions of readings, explorations of how sexuality is portrayed in popular media, and analyses of primary data. Final research paper on a topic of student choice.

Same as: FEMGEN 52N

LINGUIST 53N. Language and Adolescence. 3 Units.

Adolescents are arguably the most creative age group in our society. They are the leaders in linguistic change, introducing innovations that eventually spread to the entire population. Not only do adolescents create new speech styles such as "valley girl" and "cholo", and new forms such as the quotative "I'm like", they also accelerate the phonetic changes that differentiate regional and ethnic dialects. This seminar will explore the diversity and creativity of adolescent language, and the role of adolescents in linguistic and social change.

LINGUIST 63N. The Language of Comics. 3 Units.

This seminar will explore language as represented in cartoons and comics such as Bizarro, Dilbert and Zits, how we interpret it, and why we find comics funny. We will explore and analyze language play, genderspeak and teenspeak; peeing about usage; new and spreading usages.

LINGUIST 65. African American Vernacular English. 3-5 Units.

The English vernacular spoken by African Americans in big city settings, and its relation to Creole English dialects spoken on the S. Carolina Sea Islands (Gullah), in the Caribbean, and in W. Africa. The history of expressive uses of African American English (in soundin' and rappin'), and its educational implications. Service Learning Course (certified by Haas Center).

Same as: AFRICAAM 21

LINGUIST 66. Vernacular English and Reading. 4-5 Units.

Discusses some of the literature on the relation between use of vernacular English varieties (e.g. African American Vernacular English, Chicano English) and the development of literacy (especially in Standard English). But our primary focus is on improving the reading skills of African American and Latino students in local schools through the Reading Road program developed at the University of Pennsylvania. Students must commit to tutoring one or more elementary students weekly, using the program. L65 AAVE recommended, but not required.

Same as: LINGUIST 266

LINGUIST 83N. Translation. 3 Units.

Preference to Freshman. What is a translation? The increased need for translations in the modern world due to factors such as tourism and terrorism, localization and globalization, diplomacy and treaties, law and religion, and literature and science. How to meet this need; different kinds of translation for different purposes; what makes one translation better than another; why some texts are more difficult to translate than others. Can some of this work be done by machines? Are there things that cannot be said in some languages?.

LINGUIST 90. Teaching Spoken English. 3-4 Units.

Practical approach to teaching English to non-native speakers. Teaching principles and the features of English which present difficulties. Preparation of lessons, practice teaching in class, and tutoring of non-native speaker.

LINGUIST 105. Phonetics. 4 Units.

Phonetics is the systematic study of speech. In this class, we will learn about the physical gestures and timing involved in the articulation of spoken language and about the resulting acoustic signal that is decoded into linguistic units by the human auditory system. The class is structured into two parts: A practical lab component, and a class component. This course highlights both the complexity of the physical nature of producing spoken language, and the highly variable acoustic signal that is interpreted by listeners as language. By the end of this course, you should: (1) Understand the process of preparing an utterance to articulating it; (2) Understand the basic acoustic properties of speech; (3) Provide detailed phonetic transcriptions of speech; (4) Produce and understand the gestures involved in nearly all of the world's speech sounds, and (5) Understand the ways this knowledge can be used to advance our understanding of spoken language understanding by humans and machines.

Same as: LINGUIST 205A

LINGUIST 106. Introduction to Speech Perception. 4 Units.

Basics of acoustic phonetics and audition. What do listeners perceive when they perceive speech. Examine current research including: the categorical perception of speech, cross-language speech perception, infant speech perception. Theoretical questions of interest to speech perception researchers and experimental methods used in the field.

LINGUIST 110. Introduction to Phonology. 4 Units.

Introduction to the sound systems of the world's languages, their similarities and differences. Theories that account for the tacit generalizations that govern the sound patterns of languages.

LINGUIST 112. Seminar in Phonology. 2-4 Units.

Topics vary each year. Previous topics include variation in the phonology of words according to their contexts within larger expressions and the place of these phenomena in a theory of grammar. May be repeated for credit.

Same as: LINGUIST 212A

LINGUIST 116. Morphology. 4 Units.

A survey of words including their structures, pronunciations, meanings, and syntactic possibilities in a wide sampling of languages to provide a laboratory for investigating the nature of morphology.

LINGUIST 120. Introduction to Syntax. 4 Units.

Grammatical constructions, primarily English, and their consequences for a general theory of language. Practical experience in forming and testing linguistic hypotheses, reading, and constructing rules.

LINGUIST 121A. The Syntax of English. 4 Units.

Course description: A data-driven introduction to the study of generative syntax through an in-depth investigation of the sentence structure of English. Emphasis is on central aspects of English syntax, but the principles of theory and analysis extend to the study of the syntax of other languages. The course focuses on building up syntactic argumentation skills via the collective development of a partial formal theory of sentence structure, which attempts to model native speaker knowledge. Satisfies the WIM requirement for Linguistics and the WAY-FR requirement. Prerequisites: none (can be taken before or after Linguistics 121B). The discussion section is mandatory.

LINGUIST 121B. Crosslinguistic Syntax. 4 Units.

Course description: A data-driven introduction to the study of syntax through the investigation of a diverse array of the world's languages, including but not limited to English. Emphasis is on understanding how languages are systematically alike and different in their basic sentence structure. The course focuses on building up syntactic argumentation skills via the collective development of a partial formal theory of sentence structure, which attempts to model native speaker knowledge. Satisfies the WIM requirement for Linguistics and the WAY-FR requirement. Prerequisites: none (can be taken before or after Linguistics 121A). The discussion section is mandatory.

LINGUIST 124. Introduction to Lexical Function Grammar. 2-4 Units.

Presentation of a formal model of grammar designed to allow precise, computationally tractable descriptions of cross-linguistic variation in syntactic structure. Concentration on the formal properties of the model, its flexibility in teasing out language specific and possibly universal characteristics of natural languages and the place of syntax as a component within a larger linguistic architecture. Prerequisite: 120 or consent of instructor.

Same as: LINGUIST 224

LINGUIST 130A. Introduction to Semantics and Pragmatics. 4 Units.

Linguistic meaning and its role in communication. Topics include ambiguity, vagueness, presupposition, intonational meaning, and Grice's theory of conversational implicature. Applications to issues in politics, the law, philosophy, advertising, and natural language processing. Those who have not taken logic, such as PHIL 150 or 151, should also enroll in 130C. Pre- or corequisite: 120, 121, consent of instructor, or graduate standing in Linguistics.

Same as: LINGUIST 230A

LINGUIST 130B. Introduction to Lexical Semantics. 3-4 Units.

Introduction to basic concepts and issues in the linguistic study of word meaning. The course focuses on the core semantic properties and internal organization of the four major word classes in natural languages: nouns, adjectives, prepositions, verbs. This course draws on material from English and other languages to illustrate the range of word meanings found across languages and to investigate possible word meanings. Prerequisites: Linguist 1 or equivalent or permission of the instructor. Linguist 130A is not a prerequisite for this course.

LINGUIST 130C. Logic Laboratory. 1 Unit.

Typically taken in conjunction with 130A/230A.
Same as: LINGUIST 230E

LINGUIST 131. Language and Thought. 4 Units.

The psychology of language including: production and understanding in utterances; from speech sounds to speaker's meaning; children's acquisition of the first language; and the psychological basis for language systems. Language functions in natural contexts and their relation to the processes by which language is produced, understood, and acquired. Prerequisite: 1 or LINGUIST 1.

Same as: PSYCH 131, PSYCH 262

LINGUIST 134. Seminar on Language and Deception. 3 Units.

Deceptive, exploitative, and other noncooperative uses of language. How is language used to deceive or exploit? Where are these techniques practiced and why? What are the personal, ethical, and social consequences of these practices? Prerequisite: 131, LINGUIST 1, or PHIL 181.

Same as: PSYCH 134

LINGUIST 134A. The Structure of Discourse: Theory and Applications. 2-4 Units.

In this course we will address the structure of language above the sentence concentrating initially on: nn(1) defining the minimal units of discourse structure n(2) recursive rules of combination of minimal units (i.e. discourse iquest;syntaxiquest;n(3) representations of discourse level phenomenon(4) the nature and structure of spoken and written formal and informal discourse genres and Speech events in English and other languages including stories, explanations, literary works etc. on the one hand, and socially constructed occasions of speaking such as classes, doctor patient interactions, and informal conversation on the other.

Same as: LINGUIST 234

LINGUIST 140. Language Acquisition I. 4 Units.

Processes of language acquisition in early childhood; stages in development; theoretical issues and research questions. Practical experience in data collection. Satisfies the WIM requirement for Linguistics if requested.

Same as: LINGUIST 240

LINGUIST 141. Language and Gesture. 4 Units.

History of work on gesture, gestural systems associated with particular languages/cultures, and with specific activities - music, sports, traffic management, stock exchanges, etc. Examination of how gesture is represented in painting and animation, and the role it plays in early adult-child interaction.

LINGUIST 142. Heritage Languages. 3-4 Units.

The linguistic and cultural properties of Heritage languages, which are partially acquired and supplanted by a dominant language in childhood. Topics: Syntactic, phonological and morphological properties of heritage languages, implications from experimental HL research for language universals, cultural vs. linguistic knowledge, the role of schooling in HL competence, influence of the dominant language on the HL, and pedagogical issues for HL learners in the classroom.

Same as: LINGUIST 242

LINGUIST 143. Sign Languages. 4 Units.

The linguistic structure of sign languages. How sign languages from around the world differ, and what properties they share. Accents and dialects in sign languages. How sign languages are similar to and different from spoken languages. How and why sign languages have emerged.

LINGUIST 144. Minds and Machines. 4 Units.

An overview of the interdisciplinary study of cognition, information, communication, and language, with an emphasis on foundational issues: What are minds? What is computation? What are rationality and intelligence? Can we predict human behavior? Can computers be truly intelligent? How do people and technology interact, and how might they do so in the future? Lectures focus on how the methods of philosophy, mathematics, empirical research, and computational modeling are used to study minds and machines. Undergraduates considering a major in symbolic systems should take this course as early as possible in their program of study.

Same as: PHIL 99, PSYCH 35, SYMSYS 100

LINGUIST 150. Language in Society. 2-4 Units.

How language and society affect each other. Class, age, ethnic, and gender differences in speech. Prestige and stigma associated with different ways of speaking and the politics of language. The strategic use of language. Stylistic practice; how speakers use language to construct styles and adapt their language to different audiences and social contexts.

LINGUIST 152. Sociolinguistics and Pidgin Creole Studies. 2-4 Units.

Introduction to pidgins and creoles, organized around the main stages in the pidgin-creole life cycle: pidginization, creolization, and decreolization. Focus is on transformations in the English language as it was transported from Britain to Africa, Asia, the Caribbean, and the Pacific. Resultant pidginized and creolized varieties such as Nigerian Pidgin English, Chinese Pidgin English, New Guinea Tok Pisin, Suriname Sranan, and the creole continua of Guyana, Jamaica, and Hawaii. Also French, Dutch, Portuguese, Chinook, Motu, and Sango.

Same as: LINGUIST 252

LINGUIST 153. Language, Power & Politics. 3-4 Units.

The integral role language plays in politics; how power operates in linguistic practices and political interaction. Critical examination of how language is used to articulate, maintain and subvert relations of power in society, emphasizing language in the media, the political rhetoric associated with war, and the construction of 'truthquest; in politics. The role of ethnographic analysis in aiding sociolinguistic understandings of how social actors use and (re)interpret political language.

LINGUIST 154. Sociolinguistics of Language Contact. 2-4 Units.

The role of contact between speakers of different languages in processes of language borrowing, convergence, and shift. Attending both to linguistic aspects and social contexts, examine: second-language acquisition, bilingualism, code-switching, lexical and grammatical borrowing, first language attrition, language death, and the creation of new contact varieties such as jargons, mixed languages, pidgins, and creoles. Prerequisite: background in linguistics, at least one course in linguistics.

Same as: LINGUIST 254

LINGUIST 155. Hip Hop, Youth Identities, and the Politics of Language. 3-4 Units.

Focus is on issues of language, identity, and globalization, with a focus on Hip Hop cultures and the verbal virtuosity within the Hip Hop nation. Beginning with the U.S., a broad, comparative perspective in exploring youth identities and the politics of language in what is now a global Hip Hop movement. Readings draw from the interdisciplinary literature on Hip Hop cultures with a focus on sociolinguistics and youth culture.

Same as: AFRICAAM 121X, AMSTUD 121X, ANTHRO 121A, CSRE 121X, EDUC 121

LINGUIST 155F. Seminar in Sociolinguistics: Classics in Sociolinguistics. 1-4 Unit.

TBD.

Same as: LINGUIST 255F

LINGUIST 156. Language and Gender. 4 Units.

The role of language in the construction of gender, the maintenance of the gender order, and social change. Field projects explore hypotheses about the interaction of language and gender. No knowledge of linguistics required. Same as: FEMGEN 156X

LINGUIST 157. Sociophonetics. 1-4 Unit.

The study of phonetic aspects of sociolinguistic variation and the social significance of phonetic variation. Acoustic analysis of vowels, consonants, prosody, and voice quality. Hands-on work on collaborative research project. Prerequisite: 110 or equivalent, or consent of instructor.

Same as: LINGUIST 257

LINGUIST 159. American Dialects. 2-4 Units.

What is a dialect, and who speaks one? This course will focus on the fundamentals of linguistic study and dialectology through examinations of regional, social and ethnic dialects in the United States. The course will examine dialect variation on many linguistic levels, from variation in individual words (pop v. soda) to variation in how vowels are pronounced. Historical development of U.S. dialects, linguistic change, perceptual dialectology, and prestige and stigma of dialects will be discussed. Students will participate in real variation research to gain experience with quantitative data in examining the influence of social factors on dialect variation.

LINGUIST 160. Introduction to Language Change. 4 Units.

Principles of historical linguistics: the nature of language change. Kinds and causes of change, variation and diffusion of changes through populations, differentiation of dialects and languages, determination and classification of historical relationships among languages, the reconstruction of ancestral languages and intermediate changes, parallels with cultural and genetic evolutionary theory, and implications of variation and change for the description and explanation of language in general. Prerequisite: introductory course in linguistics.

LINGUIST 162. History Through Language. 3-4 Units.

What we can learn about the human past through human language, especially where proper historical records are absent. Studying population migrations through language spread. Different types of change in different social environments: grammatical "simplification" of imperial languages vs. complexity of tribal languages. Effects of contact on languages. Methods for reconstructing linguistic past: comparative method, linguistic paleontology, computational phylogenetic methods.

LINGUIST 163A. Endangered Languages and Language Revitalization. 3-4 Units.

Languages around the world are dying at such a rapid rate that the next century could see half of the world's 6800 languages and cultures become extinct unless action is taken now. This course looks at how and why languages die, and what is lost from a culture when that occurs. We will investigate how this trend can be reversed by methods of language documentation and description, the use of innovative technologies, multimodal fieldwork, writing dictionaries and grammars for different audiences, language planning, and data creation, annotation, preservation, and dissemination. We will focus on a number of current programs around the world to revitalize languages. Finally, the course will examine ethical modes of fieldwork within endangered language communities, and the possibilities of successful collaborations and capacity building, focusing especially on Northern California Indian peoples and their languages. Same as: ANTHRO 163A, ANTHRO 263A, LINGUIST 263, NATIVEAM 163

LINGUIST 167. Languages of the World. 3-4 Units.

The diversity of human languages, their sound systems, vocabularies, and grammars. Tracing historical relationships between languages and language families. Parallels with genetic evolutionary theory. Language policy, endangered languages and heritage languages. Classification of sign languages.

LINGUIST 171. Iberian Languages: Structure, Variation & Context. 3 Units.

The course will center on Iberian languages with a special focus on Catalan. We will consider the relation between language structure and other factors, such as language variation in space and time, and sociological and political factors. Topics will include a contrastive analysis of selected features of Iberian languages, a survey of dialectal variation in some of the languages of the area and of their external linguistic history.

LINGUIST 173. The Structure of Russian. 2-4 Units.

A synchronic overview of contemporary standard Russian, including its sound system, word formation and grammatical structure. Emphasis is on problems presented by Russian for current linguistic theory. The acquisition of Russian as a first language.

Same as: LINGUIST 273

LINGUIST 180. From Languages to Information. 3-4 Units.

Extracting meaning, information, and structure from human language text, speech, web pages, genome sequences, social networks. Methods include: string algorithms, edit distance, language modeling, the noisy channel, naive Bayes, inverted indices, collaborative filtering, PageRank. Applications such as question answering, sentiment analysis, information retrieval, text classification, social network models, machine translation, genomic sequence alignment, spell checking, speech processing, recommender systems. Prerequisite: CS103, CS107, CS109.

Same as: CS 124, LINGUIST 280

LINGUIST 182. Computational Theories of Syntax. 3-4 Units.

Salient features of modern syntactic theories, including HPSG, LFG, and TAG, motivated by computational concerns. Impact of work within these frameworks on the design of algorithms in computational linguistics, and its influence in both linguistics and computer science. Topics include: notions of unification; unification algorithms and their relation to linguistic theory; agenda-driven chart processing for analysis and synthesis; the interface with morphology, the lexicon, and semantics; and applications, notably machine translation.

Same as: LINGUIST 282

LINGUIST 183. Programming and Algorithms for Natural Language Processing. 3-4 Units.

Construction of computer programs for linguistic processes such as string search, morphological, syntactic, and semantic analysis and generation, and simple machine translation. Emphasis is on the algorithms that have proved most useful for solving such problems.

Same as: LINGUIST 283

LINGUIST 184. Syntactic Theory and Implementation. 4 Units.

Analysis and implementation of grammatical phenomena of English. Introduction to a theory of formal grammar, and its computational realization. Practical experience in forming linguistic hypotheses and testing them via implementation using state-of-the-art language technology.

Same as: SYMSYS 184

LINGUIST 185. Writing Systems in a Digital Age. 2-3 Units.

Introduction to the variety of writing systems and their behaviors. Classification of all existing scripts as alphabetic, syllabic, ideographic; unifying and differentiating features within each group. How writing captures human language in various ways. The development of the alphabet, from ancient Semitic scripts to modern times. How writing systems are extended to additional languages. Chinese writing, its characteristics and sphere of influence. Japanese writing as a hybrid system that includes Chinese. Korean writing as an ideally designed script. The Indian system of writing as the foundation of numerous Asian syllabic scripts. Unicode as global standard for encoding text in all languages. Font technology: the emulation of human writing in the digital realm. nBasic knowledge of phonetics recommended. Knowledge of foreign languages helpful.

Same as: LINGUIST 284A

LINGUIST 188. Natural Language Understanding. 3-4 Units.

Project-oriented class focused on developing systems and algorithms for robust machine understanding of human language. Draws on theoretical concepts from linguistics, natural language processing, and machine learning. Topics include lexical semantics, distributed representations of meaning, relation extraction, semantic parsing, sentiment analysis, and dialogue agents, with special lectures on developing projects, presenting research results, and making connections with industry. Prerequisites: one of LINGUIST 180, CS 124, CS 224N, CS224S, or CS221; and logical/ semantics such as LINGUIST 130A or B, CS 157, or PHIL 150. Same as: CS 224U, LINGUIST 288

LINGUIST 191. Linguistics and the Teaching of English as a Second/ Foreign Language. 4-5 Units.

Methodology and techniques for teaching languages, using concepts from linguistics and second language acquisition theory and research. Focus is on teaching English, but most principles and techniques applicable to any language. Optional 1-unit seminar in computer-assisted language learning. Same as: LINGUIST 291

LINGUIST 195A. Undergraduate Research Workshop. 1 Unit.

Designed for undergraduates beginning or working on research projects in linguistics. Participants present and receive feedback on their projects and receive tips on the research and writing process.

LINGUIST 196. Introduction to Research for Undergraduates. 1 Unit.

Introduction to linguistic research via presentations by Stanford linguistics faculty and graduate students. Open to undergraduate students interested in linguistics. Required for linguistics majors.

LINGUIST 197A. Undergraduate Research Seminar. 2-3 Units.

May be repeat for credit.

LINGUIST 198. Honors Research. 1-15 Unit.

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LINGUIST 199. Independent Study. 1-15 Unit.

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LINGUIST 200. Foundations of Linguistic Theory. 4 Units.

Theories that have shaped contemporary linguistics; recurrent themes and descriptive practice. Strong background in Linguistics or permission of instructor.

LINGUIST 204. Philosophy of Linguistics. 4 Units.

Philosophical issues raised by contemporary work in linguistics. Topics include: the subject matter of linguistics (especially internalism vs. externalism), methodology and data (especially the role of quantitative methods and the reliance on intuitions), the relationship between language and thought (varieties of Whorfianism and anti-Whorfianism), nativist arguments about language acquisition, and language evolution. Same as: PHIL 369, SYMSYS 204

LINGUIST 205A. Phonetics. 4 Units.

Phonetics is the systematic study of speech. In this class, we will learn about the physical gestures and timing involved in the articulation of spoken language and about the resulting acoustic signal that is decoded into linguistic units by the human auditory system. The class is structured into two parts: A practical lab component, and a class component. This course highlights both the complexity of the physical nature of producing spoken language, and the highly variable acoustic signal that is interpreted by listeners as language. By the end of this course, you should: (1) Understand the process of preparing an utterance to articulating it; (2) Understand the basic acoustic properties of speech; (3) Provide detailed phonetic transcriptions of speech; (4) Produce and understand the gestures involved in nearly all of the world's speech sounds, and (5) Understand the ways this knowledge can be used to advance our understanding of spoken language understanding by humans and machines. Same as: LINGUIST 105

LINGUIST 205B. Advanced Phonetics. 2-4 Units.

In this course, we will read and discuss literature relating broadly to issues of attention in speech perception. This course will illuminate the complexity of speech perception, identify where we are as a field in understanding human behavior with respect to speech perception, pinpoint specific areas of research that might be informed by considering attention, and to understand the impact an attentional component in current models would have on the structure and organization of language and on our current understanding of linguistic experience.

LINGUIST 207. Seminar in Phonetics: The perception and recognition of clear and casual speech.. 2-4 Units.

Through readings and discussion, we will focus on two questions in this seminar: (1) Is the balance of top-down versus bottom-up information different when processing careful vs. casual speech? (2) What provides more information to a listener - Half of a clearly-articulated word, or an entire reduced word? This is not a project-based seminar, but the seminar is linked to an ongoing research project, and we will use that project to ground how a researcher might go about addressing the above questions. We will refer to our in-progress project to provide concrete examples of (a) testable, theoretically-grounded hypotheses, (b) appropriately matched methods/design, (c) benefits/costs of different types of statistical methods, and (d) supported vs. speculative accounts. The seminar is heavily based on reading and discussion, but will be supplemented by the practical issues associated with a related project. At the end of the seminar, students will have a basic understanding of the literature related to the topic, what gaps/inconsistencies exist in that work, and how to pursue those gaps, if interested. A research proposal is required at the end of the quarter.

LINGUIST 210A. Phonology. 3-4 Units.

Introduction to phonological theory and analysis based on cross-linguistic evidence. Topics: phonological representations including features, syllables, metrical structure; phonological processes; and phonological typology and universals; Optimality Theory. The phonology/morphology interface.

LINGUIST 210B. Advanced Phonology. 2-4 Units.

New developments in phonological theory, in particular Optimality Theory, primarily on the empirical basis of stress, syllable structure, prosodic organization, and phonological variation.

LINGUIST 211. Metrics. 1-4 Unit.

Principles of versification from a linguistic point of view. Traditional and optimality-theoretic approaches. The canonical system of English metrics, and its varieties and offshoots. The typology of metrical systems and its linguistic basis. Meter and performance.

LINGUIST 212A. Seminar in Phonology. 2-4 Units.

Topics vary each year. Previous topics include variation in the phonology of words according to their contexts within larger expressions and the place of these phenomena in a theory of grammar. May be repeated for credit. Same as: LINGUIST 112

LINGUIST 212B. Seminar in Phonology. 1-4 Unit.

May be repeated for credit.

LINGUIST 213. Corpus Phonology. 2-4 Units.

An introduction to constructing and using phonologically annotated corpora to test phonological hypotheses. Hands-on experience in corpus manipulation and phonological modeling.

LINGUIST 214. Phonology Workshop. 1-2 Unit.

May be repeated for credit.

LINGUIST 217. Morphosyntax. 2-4 Units.

The role of morphology in grammar: how word structure serves syntax in the expression of meaning. Lexical semantics, Theta-roles, argument structure, and grammatical relations. Licensing: case, agreement, word order, and their interaction.

LINGUIST 218. Seminar on Morphological Theories. 2-4 Units.

Word formation and the lexicon: empirical generalizations and theoretical approaches. Lexicalist and Distributed Morphology. How words are built and interpreted: constituency and headedness, morpheme order and scope, the mirror principle, bracketing paradoxes, the hierarchy of functional categories. Paradigms, blocking, gaps, periphrasis, syncretism. Locality, head movement vs. selection, constraints on allomorphy, incorporation, polysynthesis, cliticization and prosodic re-ordering phenomena.

LINGUIST 219. Frequency and the Grammar of Alternations. 1-4 Unit.

Variationist, and psycholinguistic studies of how syntactic alternations (for example, the English dative, genitive, and passive) develop in time and space.

LINGUIST 221A. Foundations of English Grammar. 1-4 Unit.

A systematic introduction to the formal analysis of English grammar using the framework of head-driven phrase structure grammar (HPSG). Topics: feature structure modeling, lexical and phrasal organization in terms of type hierarchies and constraint inheritance, clausal types, patterns of complementation, the auxiliary system, extraction dependencies, wh-constructions, and the syntax-semantics interface.

LINGUIST 221B. Studies in Universal Grammar. 1-4 Unit.

Focus is on grammatical analysis of individual languages. Builds directly on the theoretical foundations presented in 221A. Topics vary each year.

LINGUIST 222A. Foundations of Syntactic Theory I. 3-4 Units.

The roles of the verb and the lexicon in the determination of sentence syntax and their treatment in modern grammatical theories. Empirical underpinnings of core phenomena, including the argument/adjunct distinction, argument structure and argument realization, control and raising, operations on argument structure and grammatical function changing rules. Motivations for a lexicalist approach rooted in principles of lexical expression and subcategorization satisfaction. Prerequisite: 120 or permission of instructor.

LINGUIST 222B. Foundations of Syntactic Theory II. 3-4 Units.

The nature of unbounded dependency constructions such as constituent questions, topicalization, relative clauses, and clefts, among others. Topics include A-bar movement, constraints on extraction, successive cyclicity, as well as variation in the way unbounded dependencies are established crosslinguistically. Prerequisite: 222A.

LINGUIST 223. Introduction to Minimalist Syntax. 3-4 Units.

Introduces the basics of Minimalist architecture and structure-building operations, with attention to the communication of syntax with the phonological and semantic interfaces. Topics include phrase structure, locality and phases, phrasal and head movement, functional categories, and features. A previous graduate-level syntax course, or permission of the instructor required.

LINGUIST 224. Introduction to Lexical Function Grammar. 2-4 Units.

Presentation of a formal model of grammar designed to allow precise, computationally tractable descriptions of cross-linguistic variation in syntactic structure. Concentration on the formal properties of the model, its flexibility in teasing out language specific and possibly universal characteristics of natural languages and the place of syntax as a component within a larger linguistic architecture. Prerequisite: 120 or consent of instructor.

Same as: LINGUIST 124

LINGUIST 224A. From Text to Natural Reasoning. 1-4 Unit.

To reason about textual information we rely extensively on extra-linguistic information but the syntactic structure and lexical items used also play a role in guiding us to conclusions. In by now traditional semantic practice the contributions of those are treated in model theoretic terms. But formulas of first or higher order logic do not come with effective procedures for the reasoning that is required to draw inferences or answer questions given some natural language input. Natural Reasoning is a cover term we use for a family of proof-theoretic formal approaches that are currently used by computational linguists. The course will give an overview of proof-theoretic logic as applied to natural language, discuss some of the computational systems that incorporate this view (Stanford's NatLog, Bar Ilan's Biutee, Parc's Bridge) and conclude with a critical view of the linguistic generalizations that underlie these approaches and means to improve them or mitigate their shortcomings. The examples of natural reasoning will mainly be in the domain of monotonicity reasoning and reasoning about the factuality of events.

LINGUIST 224B. Advanced Topics in Lexical Functional Grammar. 1-4 Unit.

May be repeated for credit.

LINGUIST 225. Seminar in Syntax: Head Movement. 2-4 Units.

Seminar on advanced topics in syntax. Topics may vary from year to year. May be repeated for credit. May be repeated for credit.

LINGUIST 225A. Seminar in Syntax: Ellipsis. 1-4 Unit.

Diverse kinds of elliptical utterances. The fundamental problems in grammatical analysis of ellipsis (primary focus: English). The clarification of key data relating to current theoretical controversies. May be repeated for credit.

LINGUIST 225B. Seminar in Syntax: Syntax/Phonology Interface. 2-4 Units.

The nature of the syntax-phonology interface. To what extent does syntax influence phonology and in what ways does phonology influence syntax? Topics may include: word order and linearization, second-position effects, prosodic structure and the prosodic hierarchy, sentential stress, ellipsis, focus, allomorphy, among others. May be repeated for credit. Prerequisites: Linguistics 222A (Foundations of Syntactic Theory I) and Linguistics 210A (Phonology), or permission of the instructor.

LINGUIST 227C. Projects in Syntax. 2-4 Units.

Group research projects using quantitative syntactic data from texts, recordings, experiments, or historical records. Skills in extracting, graphically exploring, and analyzing naturalistic syntactic data, and in presenting results. May be repeated for credit. Prerequisite: 229A, B, or D, or equivalent.

LINGUIST 229A. Laboratory Syntax I. 1-4 Unit.

Critiques of the empirical foundations of syntax. The roles of introspective, usage-based, experimental, and typological evidence. Modern methods of data collection and analysis used in syntax. Hands-on, practical work with data sets. May be repeated for credit.

LINGUIST 229B. Laboratory Syntax II. 1-4 Unit.

Hands-on use of methods for handling syntactic data, including corpus work on ecologically natural data and controlled experimental paradigms. Explanatory models of syntactic processing and their relation to theories of grammar. May be repeated for credit.

LINGUIST 229C. Laboratory Syntax III. 1-4 Unit.

Hands-on use of methods for handling syntactic data, including corpus work on ecologically natural data and controlled experimental paradigms. Explanatory models of syntactic processing and their relation to theories of grammar. May be repeated for credit.

LINGUIST 229D. Empirical Syntax Research Seminar. 1-2 Unit.

Recent work in syntax that employs data-rich methods like corpora and laboratory studies, emphasizing research by seminar participants. May be repeated for credit.

LINGUIST 230A. Introduction to Semantics and Pragmatics. 4 Units.
Linguistic meaning and its role in communication. Topics include ambiguity, vagueness, presupposition, intonational meaning, and Grice's theory of conversational implicature. Applications to issues in politics, the law, philosophy, advertising, and natural language processing. Those who have not taken logic, such as PHIL 150 or 151, should also enroll in 130C. Pre- or corequisite: 120, 121, consent of instructor, or graduate standing in Linguistics.

Same as: LINGUIST 130A

LINGUIST 230B. Semantics and Pragmatics I. 2-4 Units.

Expands on 130A/230A. Detailed study of selected topics in formal semantics and pragmatics. Prerequisites: LINGUIST 130A/230A or permission from instructor.

LINGUIST 230C. Semantics and Pragmatics II. 1-4 Unit.

We focus on a topic in the meaning and use of linguistic expressions to explore a number of central issues in semantics and pragmatics. These include quantification, binding, referentiality, presupposition, pragmatic inferences, context-dependency, indexicality, and systems of dynamic interpretation. Prerequisites: Ling 230B or permission of the instructor.

LINGUIST 230D. Semantics Research Seminar. 1 Unit.

Maybe repeated for credit.

LINGUIST 230E. Logic Laboratory. 1 Unit.

Typically taken in conjunction with 130A/230A.

Same as: LINGUIST 130C

LINGUIST 232A. Lexical Semantics. 2-4 Units.

Introduction to issues in word meaning, focused primarily around verbs. Overview of the core semantic properties of verbs and the organization of the verb lexicon. Approaches to lexical semantic representation, including semantic role lists, proto-roles, and causal and aspectual theories of event conceptualization.

LINGUIST 232B. Seminar in Lexical Semantics: Agents, External Arguments, and Clause Structure. 1-4 Unit.

An investigation into the semantic foundations of clause structure through the lens of agentivity. Review of recent research on the nature of agentivity, with a focus on investigations of non-canonical instances (e.g., non-volitional agents, emitters, natural forces, projectiles). Implications for current syntactic assumptions about the nature of the clause (e.g., severing the external argument, voice P, little v). May be repeated for credit with different content.

LINGUIST 234. The Structure of Discourse: Theory and Applications. 2-4 Units.

In this course we will address the structure of language above the sentence concentrating initially on: (1) defining the minimal units of discourse structure (2) recursive rules of combination of minimal units (i.e. discourse structure) (3) representations of discourse level phenomena (4) the nature and structure of spoken and written formal and informal discourse genres and Speech events in English and other languages including stories, explanations, literary works etc. on the one hand, and socially constructed occasions of speaking such as classes, doctor patient interactions, and informal conversation on the other.

Same as: LINGUIST 134A

LINGUIST 235. Semantic Fieldwork. 2-4 Units.

Techniques for evidence from less well-studied languages within formal semantic theory. Semantic phenomena, and techniques for investigating them, including scope, quantifiers, pronouns, focus, tense, aspect, mood, evidentiality, and information structure. Practical work on a language.

LINGUIST 236. Seminar in Semantics: Modality and Conditionals. 4 Units.

Discussion of theories of the semantics and pragmatics of modals and conditionals.

Same as: PSYCH 236C

LINGUIST 237. Seminar in Semantics: Gradation & Modality. 1-4 Unit.

Discussion of major semantic theories of modality and gradation, with special attention to empirical and logical issues that arise from the study of gradable modals.

LINGUIST 239. Semantics and Pragmatics Research Seminar. 1-2 Unit.

Presentation of ongoing research in semantics. May be repeated for credit.

LINGUIST 240. Language Acquisition I. 4 Units.

Processes of language acquisition in early childhood; stages in development; theoretical issues and research questions. Practical experience in data collection. Satisfies the WIM requirement for Linguistics if requested.

Same as: LINGUIST 140

LINGUIST 241. Language Acquisition II. 4 Units.

Pragmatics and acquisition. May be repeated for credit.

LINGUIST 242. Heritage Languages. 3-4 Units.

The linguistic and cultural properties of Heritage languages, which are partially acquired and supplanted by a dominant language in childhood. Topics: Syntactic, phonological and morphological properties of heritage languages, implications from experimental HL research for language universals, cultural vs. linguistic knowledge, the role of schooling in HL competence, influence of the dominant language on the HL, and pedagogical issues for HL learners in the classroom.

Same as: LINGUIST 142

LINGUIST 245. Experimental Design for Linguistics. 4 Units.

Hypothesis formation, confound avoidance, power, general methods, and analysis of results. Students complete a pilot experiment; write-up; peer review; presentation.

LINGUIST 246. Foundations of Psycholinguistics. 4 Units.

Basic readings in language processing and language use, with a historical dimension; discussion each week in class of the relevant papers.

LINGUIST 248. Seminar in Developmental Psycholinguistics. 4 Units.

Children's acquisition of word meaning, with particular emphasis on socio-pragmatic approaches vs. a priori constraints. Consideration of differences in acquisition by syntactic category (nouns versus verbs), by semantic domain, and by conversational frame, in considering how children build up a lexical repertoire.

LINGUIST 249. Language Processing. 2-4 Units.

Understanding spoken or written language requires the rapid, incremental processing of novel compositional structures, as well as the integration of the incoming language stream with multiple sources of information, such as the prior discourse, physical context, social information, etc. How are humans able to efficiently accomplish this task? To address this question, this course will consider principles of sentence and discourse processing that guide language understanding and features of sentence & discourse structure that facilitate comprehension. Specific topics are likely to include reference processing, memory & forgetting, individual differences in comprehension ability, the role of context, and computational models of language comprehension.

LINGUIST 249L. Workshop on Language and Social Reasoning. 1 Unit.

To what extent can language use be treated as a special case of social cognition? The class will be based around visiting lectures by major researchers in this area, along with meetings to prepare for their visits by discussing key readings. May be repeated for credit.

Same as: PSYCH 249L

LINGUIST 250. Sociolinguistic Theory and Analysis. 3-4 Units.

Methods of modeling the patterned variation of language in society. Emphasis is on variation, its relation to social structure and practice, and its role in linguistic change. Intersection between quantitative and qualitative analysis, combining insights of sociology and linguistic anthropology with quantitative linguistic data. Prerequisite: graduate standing in Linguistics or consent of instructor.

LINGUIST 251. Sociolinguistic Field Methods. 3-5 Units.

Strengths and weaknesses of the principal methods of data collection in sociolinguistics.

LINGUIST 252. Sociolinguistics and Pidgin Creole Studies. 2-4 Units.

Introduction to pidgins and creoles, organized around the main stages in the pidgin-creole life cycle: pidginization, creolization, and decreolization. Focus is on transformations in the English language as it was transported from Britain to Africa, Asia, the Caribbean, and the Pacific. Resultant pidginized and creolized varieties such as Nigerian Pidgin English, Chinese Pidgin English, New Guinea Tok Pisin, Suriname Sranan, and the creole continua of Guyana, Jamaica, and Hawaii. Also French, Dutch, Portuguese, Chinook, Motu, and Sango. Same as: LINGUIST 152

LINGUIST 253. Race, Ethnicity, and Language. 3-4 Units.

This seminar explores the linguistic construction of race and ethnicity across a wide variety of contexts and communities. Throughout the course, we will take a comparative perspective and highlight how different racial/ethnic formations participate in similar, yet different, ways of "doing race" through language, interaction and culture. Readings draw heavily from perspectives in (linguistic) anthropology and sociolinguistics. Prerequisite: consent of instructor.

Same as: ANTHRO 320A, EDUC 389

LINGUIST 254. Sociolinguistics of Language Contact. 2-4 Units.

The role of contact between speakers of different languages in processes of language borrowing, convergence, and shift. Attending both to linguistic aspects and social contexts, examine: second-language acquisition, bilingualism, code-switching, lexical and grammatical borrowing, first language attrition, language death, and the creation of new contact varieties such as jargons, mixed languages, pidgins, and creoles. Prerequisite: background in linguistics, at least one course in linguistics.

Same as: LINGUIST 154

LINGUIST 255A. Seminar in Sociolinguistics: California Dialectology. 1-5 Unit.

This seminar organizes and analyzes data gathered by the Voices of California project. This year, we will be working with the data from Sacramento. May be repeated for credit.

LINGUIST 255B. Sociolinguistics Classics and Community Studies. 3-5 Units.

This course discusses some of the major community studies in sociolinguistics (e.g. Labov in NYC, Wolfram in Detroit, Trudgill in Norwich, Milroy in Belfast, and a selection of others up to the present) and the work of other classic sociolinguistic figures (e.g. Romaine, Hymes) who contributed in other ways. Our goal is to reach a deep understanding and critique of their methods, findings and ideas, to improve our own research and our responses to new developments in the field.

LINGUIST 255C. Seminar in Sociolinguistics: Sociogrammar. 2-4 Units.

Seminar style course exploring the literature on sociolinguistic variation in morphology and syntax from the 1960s to the present, and its implication for (socio)linguistic theory, especially in relation to (and in contrast with) socio-phonetics.

LINGUIST 255D. Seminar in Sociolinguistics: Character Types in Sociolinguistics. 1-4 Unit.

Figures of personhood, personas, character types, and stereotypes in the study of linguistic variation. What are the significant differences among these types? Are these social types merely the vehicles through which social meanings travel or do they constitute the meanings themselves?.

LINGUIST 255E. Seminar in Sociolinguistics: Stylistic Landscapes. 2-5 Units.

The study of the role of language in the stylistic construction of personae has progressed significantly over the past decade. We know that patterns of association of these personae ramp up to construct the major macro-social categories such as gender, age, class, ethnicity, hence patterns across their linguistic styles correlate with these categories. We have yet, though, to theorize how that patterning takes place on the ground. This seminar will explore ways to theorize the stylistic landscape. Prerequisites: 105/205 and 250, or consent of instructor.

LINGUIST 255F. Seminar in Sociolinguistics: Classics in Sociolinguistics. 1-4 Unit.

TBD.

Same as: LINGUIST 155F

LINGUIST 256. Language, Gender and Sexuality. 1-4 Unit.

The role of language in constructing gender and sexuality. Historical overview of major theoretical perspectives and debates (difference vs. dominance, identity vs. desire) and discussion of new directions (affect, embodiment, figures of personhood, experimental approaches). Previous coursework in sociolinguistics recommended. Prerequisites: LING 250 and 110 or the equivalent.

LINGUIST 257. Sociophonetics. 1-4 Unit.

The study of phonetic aspects of sociolinguistic variation and the social significance of phonetic variation. Acoustic analysis of vowels, consonants, prosody, and voice quality. Hands-on work on collaborative research project. Prerequisite: 110 or equivalent, or consent of instructor. Same as: LINGUIST 157

LINGUIST 258. Analysis of Variation. 1-4 Unit.

The quantitative study of linguistic variability in time, space, and society emphasizing social constraints in variation. Hands-on work with variable data. Prerequisites: 105/205 and 250, or consent of instructor.

LINGUIST 259. Topics in Sociolinguistics. 2-4 Units.

Topics vary by quarter. Current topic is Sociophonetics. Repeatable for credit. This seminar explores new methods of collecting and analyzing sociophonetic data in an experimental setting, including electroglottography, aerodynamic measures, speech resynthesis, and perception study tasks. Requirements include both collaborative and individual research projects.

LINGUIST 260A. Historical Morphology and Phonology. 4 Units.

Sound change and analogical change in the perspective of linguistic theory. Internal and comparative reconstruction. Establishing genetic relationships.

LINGUIST 260B. Historical Morphosyntax. 2-4 Units.

Morphological and syntactic variation and change. Reanalysis, grammaticalization. The use of corpora and quantitative evidence.

LINGUIST 263. Endangered Languages and Language Revitalization. 3-4 Units.

Languages around the world are dying at such a rapid rate that the next century could see half of the world's 6800 languages and cultures become extinct unless action is taken now. This course looks at how and why languages die, and what is lost from a culture when that occurs. We will investigate how this trend can be reversed by methods of language documentation and description, the use of innovative technologies, multimodal fieldwork, writing dictionaries and grammars for different audiences, language planning, and data creation, annotation, preservation, and dissemination. We will focus on a number of current programs around the world to revitalize languages. Finally, the course will examine ethical modes of fieldwork within endangered language communities, and the possibilities of successful collaborations and capacity building, focusing especially on Northern California Indian peoples and their languages. Same as: ANTHRO 163A, ANTHRO 263A, LINGUIST 163A, NATIVEAM 163

LINGUIST 264. English Transplanted, English Transformed: Pidgins and Creoles. 2-4 Units.

English varieties around the world, including white vernacular dialects and creole, pidgin, and indiginized Englishes. Emphasis is on the historical circumstances of origin, linguistic characteristics, and social setting in colonial and postcolonial societies. Theoretical issues pertaining to language contact, language shift, and pidgin and creole formation.

LINGUIST 265. African American Vernacular English. 2-5 Units.

Linguistics 265 is a new, advanced course on African American Vernacular English, intended for graduate students in Linguistics, Education and other fields, and for undergraduate majors in Linguistics. Students who have taken Linguistics 65 or its equivalent, or who have had an undergraduate introduction to linguistics, are also eligible to take this course. The course will discuss in detail some of the descriptive, historical and sociolinguistic literature on AAVE, beginning with the classic book length works on AAVE written by William Labov, Walt Wolfram and Ralph Fasold, but including some of the most recent research-based articles on the subject in current and recent journals. Research interests of students in the course will help to determine the specific foci within these broad parameters.

LINGUIST 266. Vernacular English and Reading. 4-5 Units.

Discusses some of the literature on the relation between use of vernacular English varieties (e.g. African American Vernacular English, Chicano English) and the development of literacy (especially in Standard English). But our primary focus is on improving the reading skills of African American and Latino students in local schools through the Reading Road program developed at the University of Pennsylvania. Students must commit to tutoring one or more elementary students weekly, using the program. L65 AAVE recommended, but not required. Same as: LINGUIST 66

LINGUIST 270. The Arabic Language and Culture. 3 Units.

(Formerly AMELANG 36). Arabic language from historical, social, strategic, and linguistic perspectives. History of the Arabic language and the stability of classical Arabic over the last 15 centuries. Why the functionality of classical Arabic has not changed as Latin, Old English, and Middle English have. Social aspects of the Arabic language, Ferguson's question; notion of diglossia. The main varieties of Arabic, differences among them, and when and where they are spoken. Role of Arabic and culture in current world politics, culture, and economy. Linguistic properties of Arabic such as root-based morphology, lexical ambiguity, and syntactic structure relating it to current linguistic theories.

Same as: LINGUIST 36

LINGUIST 271. Structure of Basque. 2-4 Units.

Introduction to key topics in Basque morphology, syntax, semantics and how they bear on current theoretical debates. Topics covered may include basic clause structure and word order, case-marking and ergativity, the expression of motion and location.

LINGUIST 272. Structure of Finnish. 2-4 Units.

Central topics in Finnish morphology, syntax, and semantics and how they bear on current theoretical debates. Topics: clause structure; case; aspect; word order.

LINGUIST 272A. Structure of Slavic. 2-4 Units.

Central topics in the syntax, morphology, and phonology of Slavic languages and how they bear on current theoretical debates. Prerequisites: Linguistics 222A (Foundations of Syntactic Theory I) and Linguistics 210A (Phonology).

LINGUIST 273. The Structure of Russian. 2-4 Units.

A synchronic overview of contemporary standard Russian, including its sound system, word formation and grammatical structure. Emphasis is on problems presented by Russian for current linguistic theory. The acquisition of Russian as a first language.

Same as: LINGUIST 173

LINGUIST 274A. Linguistic Field Methods. 3-4 Units.

Practical training in the collection and analysis of linguistic data from native speakers of a language largely unknown to the investigator. Documentation of endangered languages. Research goals, field trip preparation, ethics (including human subjects, cooperation with local investigators, and governmental permits), working in the community, technical equipment, and analytical strategies. Emphasis is on the use of recording devices and computers in collection and analysis. Students are strongly encouraged to make a commitment to both 274A and 274B in the same year. Prerequisites: One course in phonetics or phonology and syntax, or permission of the instructor. Open to undergraduates with permission of instructor only. Same as: ANTHRO 30

LINGUIST 274B. Field Methods II. 2-3 Units.

Continuation of 274A, with a focus on student projects in a targeted language. Prerequisite: 274A or consent of instructor. Graduate students are strongly encouraged to make a commitment to both 274A and 274B in the same year. For full credit, students are expected to work privately with the consultant outside of class time.

LINGUIST 274C. Linguistic Field Methods: Syntax. 3-4 Units.

Prerequisites include one quarter of phonology and one quarter of syntax or permission of instructor. Graduate students are heavily encouraged to make a commitment to both 274B and 274C in the same year.

LINGUIST 275. Probability and Statistics for linguists. 2-4 Units.

Introduction to probability and statistical inference, with a focus on conceptual and practical issues relevant to theoretical, experimental, and corpus linguistics. Data analysis and modeling using R. Course project will involve reproducing a published modeling result or statistical analysis in full detail.

LINGUIST 276. Quantitative Methods in Linguistics. 2-4 Units.

Introduction to methods for collecting and analyzing quantitative linguistic data, with a primary focus on the use of corpora in exploring theoretical questions in various areas of linguistics. Topics include the access and retrieval of corpus data (including web-based corpora), data annotation, and statistical modeling. Practical experience with R, Python scripting, and setting up online experiments through Amazon Mechanical Turk.

LINGUIST 277. Laboratory Methods in Psycholinguistics. 2-4 Units.

Issues that commonly arise in the design and implementation of linguistic experiments and in the statistical analysis of empirical results. Topics in experimental design include selection of stimuli, blocking, and power analysis and sample size calculation. How to fit and interpret statistical models using the multilevel regression and Bayesian inference, as implemented in software packages R and Bugs. Topics include interpretation of model coefficients for fixed and random effects, collinearity, model criticism, as well as comparison and reporting of models. Theoretical issues worked out at lab sessions using examples from experiments and corpus studies, including those provided by students.

LINGUIST 278. Programming for Linguists. 1-4 Unit.

Computer programming techniques for collecting and analyzing data in linguistic research. Introduction to the UNIX, regular expressions, and Python scripting. Hands-on experience gathering, formatting, and manipulating corpus, field, and experimental data, combining data from multiple sources, and working with existing tools. Knowledge of computer programming not required.

LINGUIST 280. From Languages to Information. 3-4 Units.

Extracting meaning, information, and structure from human language text, speech, web pages, genome sequences, social networks. Methods include: string algorithms, edit distance, language modeling, the noisy channel, naive Bayes, inverted indices, collaborative filtering, PageRank. Applications such as question answering, sentiment analysis, information retrieval, text classification, social network models, machine translation, genomic sequence alignment, spell checking, speech processing, recommender systems. Prerequisite: CS103, CS107, CS109.

Same as: CS 124, LINGUIST 180

LINGUIST 281. Computational Models of Linguistic Formalism. 1-4 Unit.

This seminar will explore the computational properties of a small set of formalisms from phonology, morphology, syntax, and semantics, the choice depending on the interests of the participants. Possible topics include, but are not limited to, finite-state techniques, Optimality Theory, Unification-based grammar, Montague Grammar, Sound change, Corpus-based exploration, and Translation.

LINGUIST 282. Computational Theories of Syntax. 3-4 Units.

Salient features of modern syntactic theories, including HPSG, LFG, and TAG, motivated by computational concerns. Impact of work within these frameworks on the design of algorithms in computational linguistics, and its influence in both linguistics and computer science. Topics include: notions of unification; unification algorithms and their relation to linguistic theory; agenda-driven chart processing for analysis and synthesis; the interface with morphology, the lexicon, and semantics; and applications, notably machine translation.

Same as: LINGUIST 182

LINGUIST 283. Basic Algorithms for Computational Linguistics. 2-4 Units.

Foundational algorithms of non-statistical computational linguistics, including string searching, suffix trees and suffix arrays, finite-state technology for phonology, morphology and dictionary access, classical back-tracking programs for sentence analysis, the use of charts in parsing, generation and translation. Students complete a programming project in one of these areas.

LINGUIST 284. Natural Language Processing. 3-4 Units.

Methods for processing human language information and the underlying computational properties of natural languages. Syntactic and semantic processing from linguistic and algorithmic perspectives. Focus is on modern quantitative techniques in NLP: using large corpora, statistical models for acquisition, translation, and interpretation; and representative systems.

Prerequisites: CS124 or CS121/221.

Same as: CS 224N

LINGUIST 284A. Writing Systems in a Digital Age. 2-3 Units.

Introduction to the variety of writing systems and their behaviors. Classification of all existing scripts as alphabetic, syllabic, ideographic; unifying and differentiating features within each group. How writing captures human language in various ways. The development of the alphabet, from ancient Semitic scripts to modern times. How writing systems are extended to additional languages. Chinese writing, its characteristics and sphere of influence. Japanese writing as a hybrid system that includes Chinese. Korean writing as an ideally designed script. The Indian system of writing as the foundation of numerous Asian syllabic scripts. Unicode as global standard for encoding text in all languages. Font technology: the emulation of human writing in the digital realm. Basic knowledge of phonetics recommended. Knowledge of foreign languages helpful.

Same as: LINGUIST 185

LINGUIST 286. Information Retrieval and Web Search. 3 Units.

Text information retrieval systems; efficient text indexing; Boolean, vector space, and probabilistic retrieval models; ranking and rank aggregation; evaluating IR systems. Text clustering and classification: classification algorithms, latent semantic indexing, taxonomy induction; Web search engines including crawling and indexing, link-based algorithms, and web metadata. Prerequisites: CS 107, CS 109, CS 161.

Same as: CS 276

LINGUIST 287. Extracting Social Meaning and Sentiment. 3 Units.

Methods for extracting social meaning (speaker perspectives, emotions and attitudes) from text and speech. Topics include sentiment analysis and summarization, detection of deception, sarcasm, emotion, and personality. Analysis of meaning-bearing characteristics of the speaker and topic, including text, discourse, prosodic and other cues. Prerequisite: CS 124 or 221 or 229 or permission of instructors.

LINGUIST 288. Natural Language Understanding. 3-4 Units.

Project-oriented class focused on developing systems and algorithms for robust machine understanding of human language. Draws on theoretical concepts from linguistics, natural language processing, and machine learning. Topics include lexical semantics, distributed representations of meaning, relation extraction, semantic parsing, sentiment analysis, and dialogue agents, with special lectures on developing projects, presenting research results, and making connections with industry. Prerequisites: one of LINGUIST 180, CS 124, CS 224N, CS224S, or CS221; and logical/semantics such as LINGUIST 130A or B, CS 157, or PHIL150.

Same as: CS 224U, LINGUIST 188

LINGUIST 289. Topics in Computational Linguistics: History of Computational Linguistics. 3-4 Units.

Intellectual history of computational linguistics and natural language processing, together with related aspects of dialogue and speech processing, using primary sources. Reading of seminal early papers, interviews with historical figures, with the goal of understanding the origins and intellectual development of the field. Prerequisites: at least one of LING 180, 281, 283, 284, 286, or 288.

LINGUIST 291. Linguistics and the Teaching of English as a Second/Foreign Language. 4-5 Units.

Methodology and techniques for teaching languages, using concepts from linguistics and second language acquisition theory and research. Focus is on teaching English, but most principles and techniques applicable to any language. Optional 1-unit seminar in computer-assisted language learning. Same as: LINGUIST 191

LINGUIST 294. Linguistic Research Discussion Group. 1 Unit.

Restricted to first-year Linguistics Ph.D. students.

LINGUIST 390. M.A. Project. 1-6 Unit.

LINGUIST 391A. Curricular Practical Training. 1 Unit.

Educational opportunities in research and development labs in industry. Qualified linguistics students engage in internship work and integrate that work into their academic program. Students register during the quarter they are employed and complete a research report outlining their work activity, problems investigated, results, and follow-on projects they expect to perform. 391 A may be taken only once.

LINGUIST 393. Summer Research Activity. 1-8 Unit.

Restricted to Linguistics Ph.D. students. May be repeated for credit.

LINGUIST 393A. Research Activity in Sociolinguistics. 1-2 Unit.

Restricted to Linguistics Ph.D. students. May be repeated for credit.

LINGUIST 394. TA Training Workshop. 1 Unit.

For second-year graduate students in Linguistics.

LINGUIST 395. Research Workshop. 1-2 Unit.

Restricted to students in the doctoral program. Student presentations of research toward qualifying papers. May be repeated for credit.

LINGUIST 395C. Summer Research Workshop. 1-2 Unit.

Restricted to Linguistics Ph.D. students. May be repeated for credit. Student presentations of ongoing research plus professional development sessions.

LINGUIST 395D. Linguistics Writing Group. 1 Unit.

Restricted to Linguistics Ph.D. students. May be repeated for credit. Meets weekly to support student writing projects.

LINGUIST 396. Research Projects in Linguistics. 2-3 Units.

Mentored research project for first-year graduate students in linguistics.

LINGUIST 397. Directed Reading. 1-15 Unit.

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LINGUIST 398. Directed Research. 1-15 Unit.

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LINGUIST 399. Dissertation Research. 1-15 Unit.

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