

# 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 is the study of language as a fundamental human activity. Linguists consider language as a cultural, social, and psychological phenomenon and seek to determine what is universal to all languages and what is specific to individual languages, how language varies across individuals and communities, how it is acquired, how it changes, and how it is processed by humans and machines. Linguistics is an inherently interdisciplinary field that links the humanities, the social sciences, and the other cognitive sciences, as well as computer science, education, and hearing and speech sciences.

The department offers courses at the undergraduate and graduate levels. Some focus on analyzing structural patterns of sounds (phonetics and phonology), meanings (semantics and pragmatics), words (morphology), sentences (syntax). Others examine how these structures vary over time (historical linguistics), or over individuals and social groups (sociolinguistics), or how language is processed and learned by humans (psycholinguistics and language acquisition) or by computers (computational linguistics).

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

## 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, sociolinguistics, psycholinguistics, and computational linguistics) and the skills to do more advanced work in these subfields. Courses in the major also involve interdisciplinary work with connections to other programs including anthropology, communication, computer science, education, foreign languages, psychology, and symbolic systems. The program provides students with excellent preparation for further study in graduate or professional schools as well as careers in business, government agencies, social services, 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. For admissions information, please see the Department of Linguistics admissions page (<https://linguistics.stanford.edu/degree-programs/graduate-admissions/>). The GRE is not required.

## 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. The majority of the courses taken towards the 30 units of coursework must be taken for a letter grade and should be completed with at least a 'B'. Special topic seminars are excluded 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 undergraduate majors and minors; a limited number of 100-level units may apply to a master's or Ph.D. minor. 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 final two digits of the course number 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 Department of Linguistics offers a Bachelor of Arts in Linguistics. Eligible students may also pursue a Bachelor of Arts with Honors (p. 2). The department also offers a minor in Linguistics (p. 4).

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 55 units of course work; at least 28 of these units must be in Linguistics. Of the 55 units required for the major, no more than 12 units may be below the 100-level and a maximum of 3 courses, totaling no more than 8 units, may be taken on a credit/no credit basis (CR/NC). All required courses must be taken for a letter grade of 'C-' or better.

## Course Requirements

	Units
<b>Gateway Course</b>	<b>1</b>
LINGUIST 196 Introduction to Research for Undergraduates (to be taken Winter Quarter, junior year)	1
<b>Capstone Course</b>	<b>2-3</b>
LINGUIST 197A Undergraduate Research Seminar	2-3
<b>Core Courses</b>	<b>6-8</b>
Select at least one course each from two of the following three areas:	
<b>Phonetics and Phonology</b>	
LINGUIST 105 Phonetics or LINGUIST 205 Phonetics	
LINGUIST 110 Introduction to Phonology	
<b>Morphology and Syntax</b>	
LINGUIST 116A Introduction to Word-Formation	
LINGUIST 121A The Syntax of English	
LINGUIST 121B Crosslinguistic Syntax (WIM)	
<b>Semantics and Pragmatics</b>	
LINGUIST 130A Introduction to Semantics and Pragmatics (WIM) or LINGUIST 230A Introduction to Semantics and Pragmatics	
LINGUIST 130B Introduction to Lexical Semantics	
LINGUIST 230B Advanced Semantics	
LINGUIST 232A Lexical Semantics	
<b>Breadth Courses</b>	<b>2-8</b>

Select at least one course each from two of the following four areas:

**Historical Linguistics and Language Change**

LINGUIST 160	Introduction to Language Change
LINGUIST 260A	Historical Morphology and Phonology
LINGUIST 260B	Historical Morphosyntax

**Sociolinguistics**

LINGUIST 150	Language and Society
LINGUIST 156	Language, Gender, & Sexuality
LINGUIST 157 or LINGUIST 257	Sociophonetics

LINGUIST 250 Sociolinguistic Theory and Analysis

**Psycholinguistics**

LINGUIST 35	Minds and Machines
LINGUIST 140	Learning to Speak: An Introduction to Child Language Acquisition
LINGUIST 145	Introduction to Psycholinguistics

**Computational Linguistics**

LINGUIST 180 or LINGUIST 280	From Languages to Information
LINGUIST 188 or LINGUIST 288	Natural Language Understanding
LINGUIST 278	Programming for Linguists
LINGUIST 284	Natural Language Processing with Deep Learning

**Depth Courses** **6-8**

Select at least two 200-level Linguistics courses, taken for 3-4 units each. See ExploreCourses for current options.

**Other Course Requirements** **27-36**

The remaining units may be in Linguistics or in related fields, and should form a coherent program of study. Majors should discuss this course work with faculty and get specific approval from the Linguistics Director of Undergraduate Studies for courses outside the department.

**Total Units** **55**

## Language Requirement

Linguistics 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 requirement is fulfilled by completion of six quarters of language coursework at Stanford or by certification of equivalent proficiency through the Language Center (<https://web.stanford.edu/dept/lc/language/>) or the relevant department (see University requirements). Language courses do not count toward the total of 55 required units for the major. 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 project advisor. Approval for honors depends on the number of courses in the major that students have taken for a letter grade by the start of the third quarter of the junior year. For students who have completed at least 28 units for a letter grade in fulfillment of major requirements, only those maintaining a grade point average of 3.3 (B+) or better in these courses are eligible for honors. Students who have taken fewer than 28 units in the major for a letter grade must receive an endorsement

from both a faculty member in the Department of Linguistics who will supervise or co-supervise the honors project and a second Department of Linguistics faculty member who can attest to the student's qualifications for carrying out honors research.

Honors students complete a total of 65 units including the 55 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 project advisor, who must be a member of the Linguistics faculty, and a secondary faculty reader, who may, with the approval of the Linguistics Director of Undergraduate Studies, 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 advisors on the research project. In Winter and Spring quarters, honors students enroll in LINGUIST 198 Honors Research, with the student's project advisor 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.

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## Joint Major Program in Linguistics and Computer Science

The joint major program (JMP) was discontinued at the end of the academic year 2018-19. Students may no longer declare this program. All students with declared joint majors are permitted to complete their degree; faculty and departments are committed to providing the necessary advising support.

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 (<https://majors.stanford.edu/more-ways-explore/joint-majors-csx/>) web site and its associated FAQs.

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

## 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 may be taken on a credit/no credit basis (CR/NC). All required courses must be taken for a letter grade of C- or better.

Students in the joint major must take LINGUIST 180/CS 124 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 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.)

Within the 50-unit total, students in the joint major are encouraged to sign up for independent study 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.

## Required Courses for the Joint Major:

### Gateway Course

		Units
LINGUIST 196	Introduction to Research for Undergraduates (to be taken Autumn Quarter, junior year)	1

### Capstone Course

		Units
LINGUIST 197A	Undergraduate Research Seminar (to be taken Winter Quarter, senior year)	2-3

### Core Courses

		Units
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Select at least one course each from two of the following three areas:

#### Phonetics and Phonology

LINGUIST 105	Phonetics	4
	or LINGUIST 205A Phonetics	
LINGUIST 110	Introduction to Phonology	4

#### Morphology and Syntax

LINGUIST 120	Introduction to Syntax	4
LINGUIST 121A	The Syntax of English	4
LINGUIST 121B	Crosslinguistic Syntax	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
LINGUIST 230B	Advanced Semantics	2-4
LINGUIST 232A	Lexical Semantics	2-4

### Breadth Courses

Select LINGUIST 180/280 plus at least one additional breadth course:

LINGUIST 180	From Languages to Information	3-4
	or LINGUIST 280 From Languages to Information	

### Historical Linguistics and Language Change

LINGUIST 160	Introduction to Language Change	2-4
LINGUIST 260A	Historical Morphology and Phonology	2-4
LINGUIST 260B	Historical Morphosyntax	2-4

### Sociolinguistics

LINGUIST 150	Language and Society	3-4
LINGUIST 156	Language, Gender, & Sexuality	4
LINGUIST 157	Sociophonetics	1-4
	or LINGUIST 257 Sociophonetics	
LINGUIST 250	Sociolinguistic Theory and Analysis	3-4

### Psycholinguistics

LINGUIST 35	Minds and Machines	4
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LINGUIST 140	Learning to Speak: An Introduction to Child Language Acquisition	4
LINGUIST 145	Introduction to Psycholinguistics	4

### Depth Courses

Select at least two 200-level Linguistics courses, taken for 4 units each (for a total of at least 8 units). See ExploreCourses for current options.

### Dropping a Joint Major Program

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

### Transcript and Diploma

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

### Minor in Linguistics

Requirements for the minor include at least 28 units of course work in Linguistics and related fields, approved in advance by the Linguistics Director of Undergraduate Studies. All courses must be taken for at least 3 units. No more than two courses may be taken on a credit/no credit basis (CR/NC). All required courses must be taken for letter grade of 'C-' or better. The courses counting towards the minor must be units beyond those needed to satisfy the student's major course of study.

### Degree Requirements

Required Course	Units
LINGUIST 1 Introduction to Linguistics	4
<b>Core Courses</b>	<b>11-12</b>
Select one course each from two of the three areas below:	
Phonetics and Phonology	
LINGUIST 105 Phonetics or LINGUIST 205 Phonetics	
LINGUIST 110 Introduction to Phonology	
Morphology and Syntax	
LINGUIST 116A Introduction to Word-Formation	
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:	
LINGUIST 150 Language and Society	
or, in advance consultation with the Linguistics Director of Undergraduate Studies, a course in historical linguistics or the history of a language.	
<b>Electives</b>	<b>12-13</b>

Remaining courses are to be determined in advance consultation with the Linguistics Director of Undergraduate Studies. 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.

**Total Units** 28

### Master of Arts in Linguistics

The University's basic requirements for the M.A. degree are discussed in the "Graduate Degrees (<https://exploreddegrees.stanford.edu/graduatedegrees/>)" section of this bulletin.

The Department of Linguistics occasionally admits graduate students already enrolled at Stanford for the M.A. degree.

### Degree Requirements

- Courses**—Individual programs should be worked out in advance with an adviser in Linguistics keeping the following requirements and guidelines in mind. The master's 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 (LINGUIST 222A Foundations of Syntactic Theory I), semantics (LINGUIST 230A Introduction to Semantics and Pragmatics or LINGUIST 232A Lexical Semantics), and phonetics/phonology (LINGUIST 205A Phonetics or LINGUIST 210A Phonology), 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. The three required courses and the four courses constituting the specialization should all be completed with at least a 'B' and taken for 4 units. The overall course work grade point average (GPA) must be at least 3.0 (B).
- Thesis or Thesis Project**—A research paper supervised by a committee of two 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 Stanford undergraduates to the coterminal master's 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 master's 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 ([Stanford Bulletin 2020-21](http://</a></p>
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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 advisor 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. Students should review the department's Department of Linguistics Ph.D. Handbook (<https://linguistics.stanford.edu/department-resources/>) for further particulars concerning these requirements.

1. *Courses*—a minimum of 135 units of graduate work beyond the bachelor's degree, or 90 units beyond the master's degree. The core course requirements detailed in the Department of Linguistics Ph.D. Handbook guarantee that each student covers a sufficient set of subareas within the field. Students 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 core courses should be completed with at least a 'B'.
2. *Language*—each student must demonstrate an explicit in-depth knowledge of the structure of at least one language other than Standard English, by writing a research paper on that language.
3. *Research*—each student 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, about the same language), must be clearly distinct. The requirement is fulfilled by one quarter LINGUIST 395 Research Workshop (1-2 units), and by oral discussion of each paper with a committee of at least three faculty members selected by the faculty with input from the student.
4. *Candidacy*—each student must apply for candidacy for the Ph.D. by the end of the sixth academic year quarter, normally the Spring Quarter of the second year. Departmental prerequisites for candidacy include: (i) completion of a prescribed portion of the core course requirement (see item 1 above), (ii) completion of one qualifying paper (see item 3 above), and (iii) having an approved plan for completing the language requirement (see item 2 above). At the end of the academic year, the department faculty reviews each applicant and votes on whether to admit that student to candidacy. A student is only admitted to candidacy if, in addition to the student's fulfilling the 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 are terminated from the program; at the department's discretion, they may be allowed to

complete any requirements that remain for the master's 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 the end of 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. *Units*—the student must complete 30 units of course work in Linguistics. At least 20 units must be graduate courses at the 200 level or above; 10 units may be at the 100 level or above, but in no event may they be below the 100 level.
2. *Introductory Courses*—The coursework for the minor must include one introductory course in each of phonetics/phonology, syntax, and semantics/pragmatics; these requirements are typically fulfilled by:
  - Phonetics/Phonology: LINGUIST 105/205A Phonetics LINGUIST 210A Phonology or LINGUIST 110 Introduction to Phonology
  - Syntax: LINGUIST 121A The Syntax of English or LINGUIST 121B Crosslinguistic Syntax or LINGUIST 222A Foundations of Syntactic Theory
  - Semantics/Pragmatics: LINGUIST 130A/230A Introduction to Semantics and Pragmatics or LINGUIST 130B Introduction to Lexical Semantics or LINGUIST 232A Lexical Semantics.
3. *Courses submitted for the minor* may not be double-counted in satisfaction of degree requirements for the student's doctoral or any other program. Individual programs should be worked out in advance with the student's Ph.D. minor adviser in Linguistics. The majority of the courses taken toward 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' and taken for 4 units. The overall course work grade point average (GPA) must be at least 3.0 (B).
4. *Research Project (optional)*—the student may elect to present a paper which integrates the subject matter of linguistics into the student's field of specialization.
5. The Department of Linguistics does not require that the student's Linguistics adviser serve on the student's University oral examination committee

## COVID-19 Policies

On July 30, the Academic Senate adopted grading policies effective for all undergraduate and graduate programs, excepting the professional Graduate School of Business, School of Law, and the School of Medicine M.D. Program. For a complete list of those and other academic policies relating to the pandemic, see the "COVID-19 and Academic Continuity (<http://exploreddegrees.stanford.edu/covid-19-policy-changes/#tempdeptemplatetabtext>)" section of this bulletin.

The Senate decided that all undergraduate and graduate courses offered for a letter grade must also offer students the option of taking the course for a "credit" or "no credit" grade and recommended that deans, departments, and programs consider adopting local policies to count courses taken for a "credit" or "satisfactory" grade toward the fulfillment

of degree-program requirements and/or alter program requirements as appropriate.

## Undergraduate Degree Requirements

### Grading

The Department of Linguistics counts all courses taken in academic year 2020-21 with a grade of 'CR' (credit) or 'S' (satisfactory) towards satisfaction of undergraduate degree requirements that otherwise require a letter grade.

## Graduate Degree Requirements

### Grading

During academic year 2020-21, Ph.D. students may take up to three of the basic courses (those in Groups I-III and LINGUIST 200) for CR/NC, and have those count toward the program requirements if they receive a grade of 'CR'. Students may choose whether to take advantage of this option, and if so, which three courses they will use.

All other required courses should still be taken for a letter grade, and the department standard for basic courses and LINGUIST 200 applies to them: students should earn a grade of 'B' or above in order for those courses to count toward program requirements.

## Graduate Advising Expectations

The department is committed to providing academic advising in support of each graduate student's scholarly and professional development. The advising relationship should entail collaborative engagement by both the adviser and the advisee. Faculty advisers guide students in key areas such as selecting courses, designing and conducting research, navigating degree requirements, exploring academic and professional opportunities, and preparing for their post-Ph.D. careers. Graduate students are active contributors to the advising relationship, proactively seeking academic and professional guidance and taking responsibility for informing themselves of policies and degree requirements for the Ph.D. program. An important part of the advisee-adviser relationship is that students learn to advocate for themselves; this includes discussing expectations for the adviser/advisee relationship with the adviser and revisiting these expectations periodically to ensure mutual understanding.

### Advisers and Advising Meetings

A department faculty member serves as the Graduate Studies Adviser (GSA). Typically, the GSA keeps track of the general degree progress of all M.A. and Ph.D. students, offers advice on meeting department and University milestones, coordinates departmental advising and TA assignments, and approves special petitions.

### Ph.D. Students

Each student has an individual adviser (also referred to as a second adviser in the pre-candidacy stage), usually chosen based on shared research interests, who advises on coursework, training in research methodologies, research projects, and professional development. Entering students are assigned a second adviser for their first two quarters in the program. The second adviser helps first year students make the transition to graduate school and take the initial steps towards their long-term goals. Beginning with Spring Quarter of the first year, the student's current Qualifying Paper Committee Chair serves as the second adviser. On completion of these papers, the student chooses a faculty member as Chair of their dissertation Reading Committee; this faculty member becomes the main adviser. Throughout their graduate career,

students are also encouraged to consult with other faculty, including the members of their Qualifying Paper and Reading Committees.

In order to meet the department's advising expectations, twice a year each student and their adviser meet for a holistic, structured discussion of the student's recent progress, short-term plans, and longer-term academic and professional goals and to discuss the steps that the student should take to meet these objectives. The GSA usually joins the discussion with students in the earlier stages of the Ph.D. program. Students who receive department Summer funding are also expected to fill out a Summer Commitments Agreement that lays out their activities, priorities and goals for the summer, and to discuss these with their adviser.

Students are expected to meet regularly with their advisers and to keep them informed about their academic progress. Each student and their adviser should mutually agree on the frequency of these meetings when the advising relation begins and reassess their frequency at the start of every quarter.

### M.A. Students

At the start of graduate study, each student is assigned a faculty member as an M.A. program adviser, chosen based on shared research interests and the student's proposed M.A. thesis area. Usually this faculty member serves in this role for the duration of the M.A. program. Besides advising the student on the M.A. thesis, the adviser provides guidance on the student's overall path through the M.A. program. Students are expected to meet with their advisers at least once each quarter and to keep them informed about their academic progress. The precise meeting frequency should be mutually agreed upon and reassessed quarterly; it depends on the student's stage in the program.

### Additional resources

The Department of Linguistics Ph.D. Handbook provides additional information. Students are also encouraged to familiarize themselves with the Policies and Best Practices for Advising Relationships at Stanford. Additional resources on advising are offered by VPGE. For a statement of University policy on graduate advising, see the "Graduate Advising" section of the Bulletin.

## Faculty

*Emeriti:* (Professors) Joan Bresnan, Eve V. Clark, Kenji Hakuta, Shirley Brice Heath, Philip L. Hubbard (Senior Lecturer, Language Center), Martin Kay, William R. Leben, Stanley Peters, John R. Rickford, Elizabeth C. Traugott, Thomas A. Wasow

*Chair:* Christopher Potts

*Director of Graduate Studies/Graduate Studies Adviser:* Vera Gribanova

*Director of Undergraduate Studies:* Robert Podesva

*Professors:* Cleo Condoravdi, Penelope Eckert (emerita in Winter), Daniel Jurafsky (on leave in Autumn), Paul Kiparsky (on leave in AY 2020-21), Beth Levin, Christopher Manning, Christopher Potts

*Associate Professors:* Arto Anttila (on leave in Spring), Vera Gribanova, Robert Podesva, Meghan Sumner

*Assistant Professors:* Judith Degen, Boris Harizanov, Daniel Lassiter

*Courtesy Professors:* Yoshiko Matsumoto, James McClelland, Chao Fen Sun

*Courtesy Associate Professors:* Michael C. Frank, Noah Goodman, Miyako Inoue, Jonathan Rosa

Lecturers: Katherine Hillton

Adjunct Professors: Jared Bernstein, Ronald Kaplan, Lauri Karttunen, Paul Kay, Annie Zaenen, Arnold Zwicky

## Courses

### LINGUIST 1. Introduction to Linguistics. 4 Units.

This introductory-level course is targeted to students with no linguistics background. The course is designed to introduce and provide an overview of methods, findings, and problems in eight main areas of linguistics: Phonetics, Phonology, Morphology, Syntax, Semantics, Pragmatics, Psycholinguistics, and Sociolinguistics. Through lectures, in-class activities, and problem sets, you will come away with an overview of various linguistic phenomena, a sense of the diversity across languages, skills of linguistic analysis, an awareness of connections between these linguistics and applications of linguistics more broadly, and a basis for understanding the systematic, but complex nature of human language. While much of the course uses English to illuminate various points, you will be exposed to and learn to analyze languages other than English. By the end of the course, you should be able to explain similarities and differences of human languages, use basic linguistic terminology appropriately, apply the tools of linguistic analysis to problems and puzzles of linguistics, understand the questions that drive much research in linguistics, and explain how understanding linguistics is relevant for a variety of real-world phenomena.

### 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 21N. Linguistic Diversity and Universals: The Principles of Language Structure. 3 Units.

The human capacity for language is able to support a staggering diversity of languages. But is anything possible in a human language, and is there anything that is common to all languages? Looking past the vast surface differences, linguists have discovered deep commonalities among the languages of the world as well as strict limits on the observed variation and on what a possible human language is. In this seminar, we will seek to uncover the building blocks of language and the laws that govern their interactions. Our goal will be to reach an understanding of the ways in which languages are systematically alike and different, as well as of the nature of language in general. We will investigate a variety of topics, including crosslinguistic differences and similarities with respect to word order, the grammatical structure of questions, and how languages mark subjects and objects. We will explore the structure of both sentences and words, identifying and studying their fundamental properties. In this pursuit, we will rely on data from a range of languages, such as English, Navajo, Zulu, and many others. This seminar will teach you how to view language as an object of scientific study, introducing you to central concepts and methods of linguistics (with a particular emphasis on syntax) along the way. It will give you the tools to describe and analyze even unfamiliar languages, and will teach you to construct explicit hypotheses about how language works and to test them empirically. There are no prerequisites for this course and no experience with linguistics will be assumed; the course is Socratically taught and there will be no textbook.

### LINGUIST 30N. Linguistic Meaning and the Law. 3 Units.

We will investigate how inherent properties of language, such as ambiguity, vagueness and context-dependence, play into the meaning of a legal text, and how the meaning of a law can remain invariant while its range of application can change with the facts and with our discovery of what the facts are. Our focus will be on the perspective linguistic analysis brings to legal theory, addressing current controversies surrounding different conceptions of 'textualism' and drawing on well-known examples of legal reasoning about language in cases of identity fraud, obstruction of justice and genocide.

### LINGUIST 35. Minds and Machines. 4 Units.

(Formerly SYMSYS 100). 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. Students must take this course before being approved to declare Symbolic Systems as a major. All students interested in studying Symbolic Systems are urged to take this course early in their student careers. The course material and presentation will be at an introductory level, without prerequisites. If you have any questions about the course, please email [symsys1staff@gmail.com](mailto:symsys1staff@gmail.com). Same as: CS 24, PHIL 99, PSYCH 35, SYMSYS 1, SYMSYS 200

### LINGUIST 40S. Lab in Scientific and Critical Thinking: The Emergence of Language. 2-4 Units.

This course introduces students to the basic skills of critical thinking and provides a venue to apply these skills to a controversial topic: the emergence of human language. We discuss the following questions: what is language? Do animals have it? How did humans begin to talk? How do children learn to speak? In discussing these questions, we cover the basics of the scientific method and critical thinking. Students practice how to read scientific articles, find their main claims, differentiate between factual and theoretical claims, assess the evidence supporting the factual claims, and critically evaluate the arguments. Students practice small scale data collection, hypothesis formation, and hypothesis testing as part of their final project. We discuss the problems that researchers face in each of these phases of research.

**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 51S. Language, Society, and Media. 3 Units.**

How do people use language to construct identities and achieve interactional goals? How is that language use represented, circulated, and discussed in the media? This course will explore the way that language operates in society with a particular focus on popular and new media. The media, as both a platform for the display and dissemination of linguistic creativity as well as a site for explicit commentary about language, is ripe for analysis of both language use and language attitudes. To do this, we'll examine specific contexts: how public figures, actors, and corporations use language in movies, television, and advertising, and how individuals use language in new media (e.g. YouTube) and on social media (e.g. Twitter). We'll discuss the function of linguistic variation in the construction, recognition, and circulation of social types and conventionalized notions about 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 54N. Social Bias and Eyewitness Memory. 3 Units.**

As individuals, we would like to believe that we are free from biases and that we are somehow immune to acting on the social biases that we have been socialized to since birth. We would like to believe that we can report experiences accurately, recalling events as they truly happened. But, memory is faulty and stereotypes and social biases are pervasive. And, at a level beneath our own control, these biases slip in and influence our memory of events. Eyewitness memory, and the inaccuracy and unreliability of eyewitnesses, is a perfect example of this. But, what about the things we hear? Speech carries a great deal of information; packets of co-varying cues we have been raised to recognize categorically, informing us about a talker's race, accent, emotion, and gender. We have, through our ears, information about events that occur. And, we have in our minds, stereotyped expectations about how various groups of people behave and what various groups of people might say. In this course, we will explore how these two types of information (e.g., the percept of what is actually heard vs. our stereotypes about who is likely to have said what) clash together and influence earwitness memory. We will read and critique journal articles, blogs, and popular science articles, think about the reliability of memory for auditory events, and we will work together to develop three well-designed thought experiments that address questions at the heart of this issue. Along the way, we will learn a bit about the acoustics of speech, social variation in speech, speech perception and spoken word recognition, memory, and experimental design and analysis. Students in this course should be committed to reading the assignments, sharing their ideas about the readings (without concern for being right), and think creatively about ways we can explore the idea of earwitness memory together. While this is a one-quarter course, my goal is to pursue our thought experiments collaboratively, with any interested students in subsequent quarters.

**LINGUIST 55N. Language in the City. 3 Units.**

Language communicates a great deal more than the meaning of our words. Our regional accents, for example, offer clues about where we grew up. And even though accents are usually labeled in geographical terms, their symbolic meanings extend far beyond mere coordinates on a map. When we hear a New Yorker, we not only wonder whether they're from Brooklyn, but also conjecture about the kind of person they are: they might prefer to walk down the street quickly over strolling, they might enjoy lively conversations where people talk over one another, and they might tend to express their opinions bluntly. This seminar explores the linguistic practices and social meaning of accents spoken in San Francisco. nClass participants will collectively choose a neighborhood in San Francisco for in-depth examination. Through a series of field trips (once every two or three weeks), students will document the varieties of English spoken by lifelong residents of the neighborhood. Field assignments will consist primarily of observation and audio-recorded interviews. Interviews will serve as data for linguistic analysis (transcription, quantitative analysis of a linguistic feature of interest) throughout the term. Linguistic patterns will be analyzed in relation to salient social issues in the community, which will be identified in both interview content and historical records. nUpon completing the seminar, students will have (a) learned how to treat language as an object of scientific analysis, (b) developed an understanding of the social ramifications of linguistic practice, (c) gained fieldwork skills in general and interviewing skills in particular, and (d) come to appreciate the diversity of experiences in an urban community near Stanford.



**LINGUIST 55S. Language, Speech, and Social interaction. 3 Units.**

We use language to communicate every day, but we take its complex and dynamic nature for granted. This introduction to Linguistics will ask students to rethink their assumptions about language and communication as it approaches the field with a special focus on speech and social interactions. The course is grounded in the production and perception of speech sounds: its physiological basis, its acoustic signal form, and its cognitive process of perception. From this foundation, the course will move on to explore how the subtle variation and change of sounds is used to construct identity, foster relationships, and shape community. We will also investigate how exciting linguistic research sheds light on important contemporary social debates and on speech technology. Throughout the course, students will supplement readings, exercises, and discussion with lab sessions that will teach them how to manipulate and analyze speech sound recordings. Their accumulated theoretical and practical knowledge will find its expression in an intensive research project drawing on social media data. There is no prerequisite for this course.

**LINGUIST 61S. Language Evolution and Change. 2-3 Units.**

Every human culture has a sophisticated, systematic means of communication which we call "language". Why? What makes languages the way they are, and what makes them keep changing over time? In this course, we will explore proposed explanations for language evolution and their connections to language change. In doing so, we will address a major roadblock in scientific inquiry: how do you study something you can't directly observe? Language evolution left no fossils behind, so how can different proposed explanations for it be evaluated? We will examine the argumentation behind different proposed explanations and the various methodologies that have been used to support them. Students will put to practice the knowledge and critical thinking skills gained from this course by developing and workshopping their own research project proposals. Students taking the course for 3 units will be expected to complete a project proposal and peer review in addition to the regular assignments.

**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; peeving about usage; new and spreading usages.

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

Vocabulary, pronunciation and grammatical features of the systematic and vibrant vernacular English [AAVE] spoken by African Americans in the US, its historical relation to British dialects, and to English creoles spoken on the S. Carolina Sea Islands (Gullah), in the Caribbean, and in W. Africa. The course will also explore the role of AAVE in the Living Arts of African Americans, as exemplified by writers, preachers, comedians and actors, singers, toasters and rappers, and its connections with challenges that AAVE speakers face in the classroom and courtroom. Service Learning Course (certified by Haas Center). UNITS: 3-5 units. Most students should register for 4 units. Students willing and able to tutor an AAVE speaking child in East Palo Alto and write an additional paper about the experience may register for 5 units, but should consult the instructor first. Students who, for exceptional reasons, need a reduced course load, may request a reduction to 3 units, but more of their course grade will come from exams, and they will be excluded from group participation in the popular AAVE Happenin at the end of the course.

Same as: AFRICAAM 21, CSRE 21, LINGUIST 265

**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 67S. The Role of Language in Perception and Cognition. 3 Units.**

One of the driving questions in linguistics involves the relationship between language and cognition: what do the properties of language tell us about the nature of our thinking and reasoning? Whorf's theory of linguistic relativism, made famous in popular science, suggests that the structures and patterns of the language(s) we speak constrain the way we think. This hypothesis, and the data that motivated it, have been the subject of much debate in the linguistic literature over the past few decades. This course introduces methods and ideas in modern linguistics through the lens of this debate. We first discuss Whorf's original hypothesis, and then examine arguments and data for strong and weak interpretations of linguistic relativism. We look at data from languages that differ structurally and conceptually from English, including languages that divide the colour spectrum differently, languages that lack numerals beyond the low single digits, and languages that use geographical coordinate systems (north, south, etc) instead of speaker-oriented ones (left, right). We consider how to use these differences to investigate a potential connection between language and cognitive capacities, focusing on understanding and critiquing recent research and experimental work in these areas.

**LINGUIST 83Q. Translation. 3 Units.**

Preference to Sophomores. 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 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. We will be using the software program Praat (<https://www.fon.hum.uva.nl/praat/>) weekly, beginning on the first day of class. Please download the program and have it installed on your computer before class begins.

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. Prerequisite: Linguist 1.

**LINGUIST 112. Seminar in Phonology: Stress, Tone, and Accent. 4 Units.**

Stress, tone, and accent systems vary widely, sometimes even within closely related language groups. Adding to their linguistic allure are their interactions with morphology and syntax, and with one another. Stress, tone, and accent are often also closely linked to phonological quantity and syllable structure. This course will survey the different behaviors of stress, tone, and accent systems in the languages of the world. Decades of work on this topic has led to fundamental changes in how we represent phonological structure. While we will analyze a few systems deeply in order to get at the heart of the topic, an even bigger aim will be breadth of coverage. The result will be a better empirical grasp of the underpinnings of the typology of accentual systems.

**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 116A. Introduction to Word-Formation. 3-4 Units.**

This course provides an introduction to word formation in the world's languages. It investigates the notion of word, the internal structure of words, the relation between a word's structure and its meaning, and processes for forming new words. Data will be drawn from a range of languages with an emphasis on English. Prerequisites: One of Linguist 1, 110, 121A, 121B, 130A, or 130B, or permission of instructor.

**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.**

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.**

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 127. Linguistic Meaning and Legal Interpretation. 3-4 Units.**

This course applies analytical concepts from semantics and pragmatics to the interpretation of legal texts. It critically examines methods and theories of legal interpretation, such as 'textualism', 'intentionalism', 'originalism'. Prerequisites: LINGUIST 130A/230A, or PHIL 181/281, or permission of instructor. Same as: LINGUIST 227

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

Linguistic meaning and its role in communication. Topics include logical semantics, conversational implicature, presupposition, and speech acts. 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 attend section. Prerequisites: LINGUIST 1, SYMSYS 1 (LINGUIST 35), 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. We explore grammatical regularities in word meaning and the relation between word meaning and the conceptual realm. The questions we address include the following. How is the meaning of a word determined from its internal structure? How can simple words have complex meanings? What is a possible word? How does a word's meaning determine the word's syntactic distribution and what kind of reasoning does it support? What kind of information belongs to the lexical entry of a word? The course will show that the investigation of the linguistic and semantic structure of words draws on the full resources of linguistic theory and methodology. Prerequisites: Symsys 1, Linguist 35, 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 132. Lexical Semantic Typology. 3-4 Units.**

This course surveys how languages express members of the basic conceptual categories entity, event, property, and spatial relation. It examines strategies languages use to name members of these categories, and factors that might influence the choices languages make. Relatedly, it explores similarities and differences among languages in the sets of words they have to express notions within various conceptual domains. Restricted to undergraduates. Prerequisites: Linguist 121A, 121B, 130A, or 130B, or permission of the instructor.

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

This course examines the linguistic structure of discourse, with a particular emphasis on learning to identify the emergent structures of spontaneous conversations. Specific topics include: narrative structure; turn-taking; discourse markers; face and politeness; inference and implicature; discourse coherence; reference; intertextuality; stance-taking; and framing. Class-time is split between hands-on data analysis and the discussion of both recent and foundational research on conversation. Throughout the class discussions and data analysis projects, students will also explore how the structure of discourse is shaped by cognition, social identities, interpersonal relationships, and cultural contexts. Prerequisites: Prior coursework in linguistics or permission of the instructor. Same as: LINGUIST 234

**LINGUIST 140. Learning to Speak: An Introduction to Child Language Acquisition. 4 Units.**

None of us were born talking. We all had to learn it. How did we do that? We start the journey by looking at the perception of sounds before birth. We follow infants as they discover the sounds of their native languages. We talk about how the infant mind breaks the speech stream into words, phrases, and sentences; how it makes sense of language and uses it to convey thoughts and feelings. We finish by discussing how the majority of children in the world learn two or more languages at once. The course content will introduce you to major topics in child language acquisition. Assignments will help you develop skills in collecting, analyzing, and reporting empirical data. The class project involves collecting data from children at the Bing Nursery school on campus as well as the analysis of a large dataset of children's speech online. Class discussion and projects focus on giving you a hands-on experience with critical and scientific thinking.

**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 145. Introduction to Psycholinguistics. 4 Units.**

How do people do things with language? How do we go from perceiving the acoustic waves that reach our ears to understanding that someone just announced the winner of the presidential election? How do we go from a thought to spelling that thought out in a sentence? How do babies learn language from scratch? This course is a practical introduction to psycholinguistics – the study of how humans learn, represent, comprehend, and produce language. The course aims to provide students with a solid understanding of both the research methodologies used in psycholinguistic research and many of the well-established findings in the field. Topics covered will include visual and auditory recognition of words, sentence comprehension, reading, discourse and inference, sentence production, language acquisition, language in the brain, and language disorders. Students will conduct a small but original research project and gain experience with reporting and critiquing psycholinguistic research.

Same as: LINGUIST 245A, PSYCH 140

**LINGUIST 148. Language of Advertising. 4 Units.**

A good ad takes the language we all share and manipulates it in creative, sometimes unique ways to influence our thoughts and our behavior. This course explores the range of techniques that advertisers use to express propositions that we consumers will notice, enjoy, and accept. Because advertising is quick to pick up on new trends, tracing the changes over the past century will allow us to re-experience the huge shifts in culture and media that have happened since then. The most effective advertisers understand us really well. Their choice of words, structure, image, and sometimes sound together form a careful composition. By taking apart some great past ads, we'll indirectly be looking at ourselves, as seen by the advertiser. Many of the techniques in ads are adapted from our own normal linguistic behavior. For example, think of how you adjust your vocabulary and tone to the person you're talking to, whether a friend, a professor, or a parent. This lecture course will include weekly input from students, who will present examples to form the basis for discussion and discovery.

**LINGUIST 150. Language and Society. 3-4 Units.**

This course explores the social life of spoken language. Students learn to address the following big questions about language and society: Why do languages vary across different time periods, locations, and social groups? What do our opinions about the way other people speak tell us about society? How do our social identities and goals influence the way we speak? And how do we use language to alter our social relationships? In addition to weekly reading responses, students complete two projects during the quarter: a transcription of spoken interaction and a quantitative analysis of linguistic variation. Students taking the course for four units write a literature review and project proposal for their final papers. Students taking the course for three units complete a shorter final paper that aims to improve public awareness about sociolinguistics.

**LINGUIST 150E. Who Speaks Good English. 4 Units.**

Many people have strong beliefs that there are right and wrong ways of speaking, good and bad versions of their language. These norms are reinforced explicitly in the education system, and implicitly in the ways that people talk about language or see it portrayed in media. Students will learn about the history, development, and linguistic structure of three language varieties that are sometimes characterized by non-linguists as "bad English": Singaporean English, Jamaican Creole, and African American Vernacular English. By critically examining public discourses about these language varieties and learning to identify their systematic patterns of grammatical structure, students will discover that popular ideas about "good" and "bad" English are rooted in the narratives that surround language, not linguistic fact.

**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 'truth' in politics. The role of ethnographic analysis in aiding sociolinguistic understandings of how social actors use and (re)interpret political language.

**LINGUIST 155K. Seminar in Sociolinguistics: Applied Sociolinguistics -- Tryna Make a Difference. 3-4 Units.**

In this new course, we will explore how sociolinguistic research and principles can be used to make a positive difference in society, especially for speakers of vernacular varieties, who are often stymied in schools, courtrooms, job searches, doctor's visits, apartment searches and so on. We will focus especially on language and the law, and language in education, drawing on some brand new texts, but also on recent and ongoing research and experimentation at Stanford and elsewhere. (Our schedule will include some visiting lecturers from other universities.) Same as: LINGUIST 255K

**LINGUIST 156. Language, Gender, & Sexuality. 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: 105, 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. 2-4 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 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 168. Introduction to Linguistic Typology. 3-4 Units.**

This course covers the foundations of the linguistic subfield concerned with comparing and classifying world languages. The course provides an overview of the analytic tools which may be used to identify and classify a language based on its phonological, morphological, and syntactic properties, and explores the major ways in which languages may be similar or different in these domains. Students will acquire a useful toolkit for studying novel, unusual, and typologically diverse linguistic data, and for conducting fieldwork on understudied languages. Prerequisites: Linguist 110, 121A, 121B, 130A, 130B, or permission of the instructor.

**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, social networks. Introducing methods (regex, edit distance, naive Bayes, logistic regression, neural embeddings, inverted indices, collaborative filtering, PageRank), applications (chatbots, sentiment analysis, information retrieval, question answering, text classification, social networks, recommender systems), and ethical issues in both. Prerequisites: CS106B.

Same as: CS 124, LINGUIST 280

**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 180/280, CS 124, CS 224N, or CS 224S.

Same as: CS 224U, LINGUIST 288, SYMSYS 195U

**LINGUIST 192. Language Testing. 3 Units.**

Performance with language (speaking, reading, writing, listening, translating or interpreting) is used to measure a person's proficiency or achievement level in the language. Language performance is also used to measure other human characteristics, including psycho-social states and traits. The course will review basic methods in language measurement and cover their use as applied in education, psychology, and commerce. Topics include both traditional and automatic methods for assessing speaking, reading, writing, affect, and language disorders. Students will develop, apply, and evaluate a language test.

Same as: LINGUIST 292A

**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.**

Senior capstone seminar. Joint readings in an annually varying topic, exploring the implications and importance of linguistic research for other domains of knowledge or practice.

**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.**

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

**LINGUIST 200C. Foundations of Linguistic Theory: Categories and Concepts. 3-4 Units.**

This course investigates foundational issues and recurrent themes in linguistics related to the notions of category and concept. It will review traditional approaches to these notions and consider how they have shaped more recent developments in our understanding. Possible topics include: the world-to-word mapping, the relation between cognitive and grammatical categories, arbitrariness vs. regularity in the grammatical properties of words, and the nature of lexical categories. The discussion will be grounded in lexical semantics, but students will have an opportunity to examine how categorization figures in other areas of linguistics. Restricted to Linguistics Ph.D. students. Prerequisites: Graduate-level background in Linguistics or permission of instructor.

**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. We will be using the software program Praat (<https://www.fon.hum.uva.nl/praat/>) weekly, beginning on the first day of class. Please download the program and have it installed on your computer before class begins.

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 207A. Advanced Phonetics. 3 Units.**

In this seminar, we will work collaboratively on a research project in spoken word recognition and/or memory, that is sensitive to current issues dealing with phonetic variation. We will choose one of four clearly delineated questions and work as a team throughout the quarter to complete the project. With this structure, everyone will gain hand-on experience in experimental design, stimulus development, experimental setup, data collection, and data analysis.

**LINGUIST 207L. Phonetics Research Lab. 1 Unit.**

Regular meetings of the members of the Phonetics Lab.

**LINGUIST 208. Memory for Spoken Words. 3 Units.**

Research on memory for spoken words altered the course of much research in phonetics and psycholinguistics since the 1990s. In 2019, though, we are facing three main issues: (1) Much work was unmoved by this seminal work, carrying assumptions that need to be clearly thought through and addressed, (2) We still have no clear grasp of all the intricacies and predictions of this earlier work, and (3) Redundancy in research exists, where parts of our field appear to be caught in a loop. This seminar will be reading and discussion based, focusing on work related to each of these three points. Students will be expected to read two papers a week (one course paper, and one paper cited within that work) to bring us to a clear picture of past work. In addition, the final project involves close collaboration between each student and me, to arrive at a novel and feasible study proposal that addresses one of these three issues, with the expectation that the study will be conducted in the Spring and/or Summer quarters.

**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; phonological rules and constraints; phonological typology and universals; the phonology/morphology interface; Optimality Theory and Harmonic Grammar.

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

May be repeated for credit.

**LINGUIST 213. Corpus Phonology. 3-4 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 215. Corpus Phonology: Sentence Prosody. 2-4 Units.**

Prosodic prominence at the sentence level from phonological, syntactic, and discourse perspectives. The course combines lectures with hands-on corpus work, with the opportunity to develop joint projects.

**LINGUIST 216. Morphology. 2-4 Units.**

Major contemporary approaches to morphology. Word-based vs. morpheme-based morphology. Realizational vs. generative morphology. Affix ordering and morphological constituency. The mirror principle. The morphology/syntax boundary and the lexicalist hypothesis. Compound-ing: synthetic and phrasal compounds, incorporation. Prosodic morphology. The semantics of inflection and derivation. Feature decomposition of inflectional categories: markedness, blocking, underspecification. Gaps and periphrasis. Inheritance hierarchies. Valence-changing operations. This is a 4-unit course. May be taken for fewer units with prior approval of the instructor.

**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 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: Linguist 121A, Linguist 121B, 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 222C. Foundations of Syntactic Theory III - Topics. 3-4 Units.**

This course introduces contemporary approaches to syntactic theory. Focus is on a few central topics of current interest such as ellipsis, binding, locality, movement, case and agreement, among others. Prerequisites: Linguist 222B or permission of the instructor.

**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 225. Seminar in Syntax. 2-4 Units.**

Seminar on advanced topics in syntax. Topics may vary from year to year. 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 225D. Seminar in Syntax: Advanced Topics. 2-4 Units.**

Seminar on advanced topics in syntax. Topics may vary from year to year. Prerequisites: LINGUIST 222A and 222B, or permission of instructor. May be repeated for credit.

**LINGUIST 225S. Syntax and Morphology Research Seminar. 1 Unit.**

Presentation of ongoing research in syntax and morphology. May be repeated for credit.

**LINGUIST 227. Linguistic Meaning and Legal Interpretation. 3-4 Units.**

This course applies analytical concepts from semantics and pragmatics to the interpretation of legal texts. It critically examines methods and theories of legal interpretation, such as 'textualism', 'intentionalism', 'originalism'. Prerequisites: LINGUIST 130A/230A, or PHIL 181/281, or permission of instructor. Same as: LINGUIST 127

**LINGUIST 230A. Introduction to Semantics and Pragmatics. 4 Units.**

Linguistic meaning and its role in communication. Topics include logical semantics, conversational implicature, presupposition, and speech acts. 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 attend section. Prerequisites: LINGUIST 1, SYMSYS 1 (LINGUIST 35), consent of instructor, or graduate standing in Linguistics. Same as: LINGUIST 130A

**LINGUIST 230B. Advanced Semantics. 2-4 Units.**

The primary goal of this course is to cover advanced topics in semantics and pragmatics that are central to research in those fields. The course is aimed at advanced graduate students who plan to do research in semantics, pragmatics, or philosophy of language. Prerequisites: LINGUIST 130A/230A or permission from instructor.

**LINGUIST 230C. Advanced Topics in Semantics & Pragmatics. 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: LINGUIST 230B or permission of the instructor.

**LINGUIST 230E. Logic Laboratory. 1 Unit.**

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

**LINGUIST 230P. Advanced Pragmatics. 2-4 Units.**

The primary goal of this course is to cover advanced topics in pragmatics that are central to research in those fields. The course is aimed at advanced graduate students who plan to do research in semantics, pragmatics, or philosophy of language. Prerequisites: LINGUIST 130A/230A or permission of instructor.

**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. Prerequisite: Linguist 130A, Linguist 130B, or permission of instructor.

**LINGUIST 232B. Seminar in Lexical Semantics: Unaccusativity. 1-4 Unit.**

A general introduction to the phenomenon of unaccusativity, followed by in-depth exploration of several facets of this phenomenon, chosen according to participant's interests. Potential topics include: an assessment of proposed semantic determinants of unaccusativity, the linguistic representation of unaccusativity, its crosslinguistic manifestations, and case studies of unaccusative phenomena (e.g. auxiliary selection, resultatives, the causative alternation, psych-verbs, weather verbs). These topics may be approached from theoretical, typological, psycholinguistic, and acquisition perspectives. May be repeated for credit with different content. Prerequisite: Linguist 232A or permission of the instructor.

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

This course examines the linguistic structure of discourse, with a particular emphasis on learning to identify the emergent structures of spontaneous conversations. Specific topics include: narrative structure; turn-taking; discourse markers; face and politeness; inference and implicature; discourse coherence; reference; intertextuality; stance-taking; and framing. Class-time is split between hands-on data analysis and the discussion of both recent and foundational research on conversation. Throughout the class discussions and data analysis projects, students will also explore how the structure of discourse is shaped by cognition, social identities, interpersonal relationships, and cultural contexts. Prerequisites: Prior coursework in linguistics or permission of the instructor.

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: Conditionals. 1-4 Unit.**

Discussion of the semantics and pragmatics of conditionals with a focus on recent developments in linguistics, analytic philosophy, and cognitive psychology.

**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 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 245A. Introduction to Psycholinguistics. 4 Units.**

How do people do things with language? How do we go from perceiving the acoustic waves that reach our ears to understanding that someone just announced the winner of the presidential election? How do we go from a thought to spelling that thought out in a sentence? How do babies learn language from scratch? This course is a practical introduction to psycholinguistics – the study of how humans learn, represent, comprehend, and produce language. The course aims to provide students with a solid understanding of both the research methodologies used in psycholinguistic research and many of the well-established findings in the field. Topics covered will include visual and auditory recognition of words, sentence comprehension, reading, discourse and inference, sentence production, language acquisition, language in the brain, and language disorders. Students will conduct a small but original research project and gain experience with reporting and critiquing psycholinguistic research.

Same as: LINGUIST 145, PSYCH 140

**LINGUIST 245B. Methods in Psycholinguistics. 4 Units.**

Over the past ten years, linguists have become increasingly interested in testing theories with a wider range of empirical data than the traditionally accepted introspective judgments of hand-selected linguistic examples. Consequently, linguistics has seen a surge of interest in psycholinguistic methods across all subfields. This course will provide an overview of various standard psycholinguistic techniques and measures, including offline judgments (e.g., binary categorization tasks like truth-value judgments, Likert scale ratings, continuous slider ratings), response times, reading times, eye-tracking, ERPs, and corpus methods. Students will present and discuss research articles. Students will also run an experiment (either a replication or an original design, if conducive to the student's research) to gain hands-on experience with experimental design and implementation in html/javascript and Mechanical Turk; data management, analysis, and visualization in R; and open science tools like git/github.

Same as: SYMSYS 195L

**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 247. Seminar in Psycholinguistics: Advanced Topics. 2-4 Units.**

Adaptation to speaker variability in language use has received increasing attention in recent years from linguists and psychologists alike, who have recognized that, though long ignored, it poses a problem for static theories of language. The course will present a broad survey of recent work in this area across levels of linguistic representation, including phonetic, lexical, syntactic, prosodic, and semanto-pragmatic adaptation. We will discuss the cognitive underpinnings of adaptation and its relation to priming and learning, compare adaptation in varying domains, and consider the implications for theories of language and communication. The course will be organized primarily around discussion of assigned readings. Students will develop a research proposal relevant to issues in adaptation. May be repeated for credit. Prerequisite: LINGUIST 145 or background in any subfield of linguistics. Same as: PSYCH 227

**LINGUIST 247L. Alps Research Lab. 1 Unit.**

Regular meetings of members of the Alps Lab.

**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 Incremental Language Processing. 1 Unit.**

Language is processed incrementally over time. This has consequences for language comprehension, production, acquisition, and change, all of which occur at different timescales. What is the role of time in language? 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: Racial, Ethnic, and Linguistic Formations. 3-5 Units.**

Language, as a cultural resource for shaping our identities, is central to the concepts of race and ethnicity. This seminar explores the linguistic construction of race and ethnicity across a wide variety of contexts and communities. We begin with an examination of the concepts of race and ethnicity and what it means to be "doing race," both as scholarship and as part of our everyday lives. Throughout the course, we will take a comparative perspective and highlight how different racial/ethnic formations (Asian, Black, Latino, Native American, White, etc.) participate in similar, yet different, ways of drawing racial and ethnic distinctions. The seminar will draw heavily on scholarship in (linguistic) anthropology, sociolinguistics and education. We will explore how we talk and don't talk about race, how we both position ourselves and are positioned by others, how the way we talk can have real consequences on the trajectory of our lives, and how, despite this, we all participate in maintaining racial and ethnic hierarchies and inequality more generally, particularly in schools. Same as: ANTHRO 320A, CSRE 389A, EDUC 389A

**LINGUIST 254. Race, Ethnicity, and Language: Writing Race, Ethnicity, and Language in Ethnography. 3-4 Units.**

This methods seminar focuses on developing ethnographic strategies for representing race, ethnicity, and language in writing without reproducing the stereotypes surrounding these categories and practices. In addition to reading various ethnographies, students conduct their own ethnographic research to test out the authors' contrasting approaches to data collection, analysis, and representation. The goal is for students to develop a rich ethnographic toolkit that will allow them to effectively represent the (re)production and (trans)formation of racial, ethnic, and linguistic phenomena.

Same as: ANTHRO 398B, EDUC 389B

**LINGUIST 255A. Seminar in Sociolinguistics: California Dialectology. 2-4 Units.**

This seminar organizes and analyzes data gathered by the Voices of California project. This year, we will be working with the data from Amador County. 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.**

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 255G. Seminar in Sociolinguistics: Language & Embodiment. 1-4 Unit.**

Topics vary by quarter. This course examines the role of the body (beyond speech articulators) in language use. Topics will include gesture, facial expression, physical stance, and hexis. Readings will be drawn from a variety of fields outside of linguistics. May be repeated for credit.

**LINGUIST 255H. Seminar in Sociolinguistics: Iconicity. 3-5 Units.**

The nature of iconicity in language, with a focus on the role of sound symbolism in sociolinguistic variation.

**LINGUIST 255I. Seminar in Sociolinguistics: Class Stratification of the California Vowel Shift in Sacramento. 2-4 Units.**

Models of the role of socioeconomic class in the spread of sound change are based on studies in cities that have had a stable English-speaking population for several centuries. The question underlying this seminar is whether this model applies to California, whose dialect is in the early stages of development and whose cities have, for example, no major industrial history. We will use data from the Voices of California fieldsite in Sacramento to examine the role of class in the California Vowel Shift.

**LINGUIST 255J. Seminar in Sociolinguistics: Style. 3-4 Units.****LINGUIST 255K. Seminar in Sociolinguistics: Applied Sociolinguistics -- Tryna Make a Difference. 3-4 Units.**

In this new course, we will explore how sociolinguistic research and principles can be used to make a positive difference in society, especially for speakers of vernacular varieties, who are often stymied in schools, courtrooms, job searches, doctor's visits, apartment searches and so on. We will focus especially on language and the law, and language in education, drawing on some brand new texts, but also on recent and ongoing research and experimentation at Stanford and elsewhere. (Our schedule will include some visiting lecturers from other universities.). Same as: LINGUIST 155K

**LINGUIST 255L. Seminar in Sociolinguistics: Multiracial Identity in Variation Studies. 1-4 Unit.**

This course confronts the challenge of investigating linguistic variation among multiracial speakers. Hands-on individual and collaborative projects using the voices of California corpus. Prerequisite: Linguistics 258 or equivalent, no exceptions.



**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: 105, 110 or equivalent, or consent of instructor.

Same as: LINGUIST 157

**LINGUIST 257L. Interactional Phonetics Research Lab. 1 Unit.**

Sociophonetic, discourse-analytic, and computational approaches to social interaction. Meetings consist of presentations of research, discussions of readings, and collaborative research project work.

Prerequisites: Linguist 250, Linguist 258, or Linguist 258A.

**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 258A. Variation and Social Meaning. 2-4 Units.**

The social meaning of linguistic variation. Approaches to investigating social meaning, encoding meaning across different levels of language, the structure of meaning and theories of indexicality, the role of meaning in language change.

**LINGUIST 260A. Historical Morphology and Phonology. 2-4 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. This is a 4-unit course. May be taken for fewer units with prior approval of the instructor.

**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. 3-5 Units.**

Vocabulary, pronunciation and grammatical features of the systematic and vibrant vernacular English [AAVE] spoken by African Americans in the US, its historical relation to British dialects, and to English creoles spoken on the S. Carolina Sea Islands (Gullah), in the Caribbean, and in W. Africa. The course will also explore the role of AAVE in the Living Arts of African Americans, as exemplified by writers, preachers, comedians and actors, singers, toasters and rappers, and its connections with challenges that AAVE speakers face in the classroom and courtroom. Service Learning Course (certified by Haas Center). UNITS: 3-5 units. Most students should register for 4 units. Students willing and able to tutor an AAVE speaking child in East Palo Alto and write an additional paper about the experience may register for 5 units, but should consult the instructor first. Students who, for exceptional reasons, need a reduced course load, may request a reduction to 3 units, but more of their course grade will come from exams, and they will be excluded from group participation in the popular AAVE Happenin at the end of the course.

Same as: AFRICAAM 21, CSRE 21, LINGUIST 65

**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 267. Panini. 2-4 Units.**

Panini's "Astadhyayi", the most complete generative grammar of any language yet written, is the source of many of the principles and formal techniques of modern linguistic theory. Remarkably, in Pa 'n.ini's work these emerge just from jointly maximizing empirical coverage and minimizing description length. We review the overall organization of his grammar and its motivation, the levels of representation, the types of rules and constraints, and the principles that govern their application and interaction. Among the specific aspects of the analysis that we will examine are the thematic role-based syntax, the lexicalist analysis of word-formation and inflection, and the stratally organized phonology. Course is 4 units. May be taken for fewer units with prior approval from instructor.

**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 I. 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.

**LINGUIST 274B. Linguistic Field Methods II. 3-4 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 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 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, social networks. Introducing methods (regex, edit distance, naive Bayes, logistic regression, neural embeddings, inverted indices, collaborative filtering, PageRank), applications (chatbots, sentiment analysis, information retrieval, question answering, text classification, social networks, recommender systems), and ethical issues in both. Prerequisites: CS106B.  
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 284. Natural Language Processing with Deep Learning. 3-4 Units.**

Methods for processing human language information and the underlying computational properties of natural languages. Focus on deep learning approaches: understanding, implementing, training, debugging, visualizing, and extending neural network models for a variety of language understanding tasks. Exploration of natural language tasks ranging from simple word level and syntactic processing to coreference, question answering, and machine translation. Examination of representative papers and systems and completion of a final project applying a complex neural network model to a large-scale NLP problem. Prerequisites: calculus and linear algebra; CS124, CS221, or CS229.  
Same as: CS 224N, SYMSYS 195N

**LINGUIST 285. Spoken Language Processing. 2-4 Units.**

Introduction to spoken language technology with an emphasis on dialogue and conversational systems. Deep learning and other methods for automatic speech recognition, speech synthesis, affect detection, dialogue management, and applications to digital assistants and spoken language understanding systems. Prerequisites: CS124, CS221, CS224N, or CS229.  
Same as: CS 224S

**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; Web search engines including crawling and indexing, link-based algorithms, web metadata, and question answering; distributed word representations. 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 180/280, CS 124, CS 224N, or CS 224S.  
Same as: CS 224U, LINGUIST 188, SYMSYS 195U

**LINGUIST 289. Topics in Computational Linguistics: Computational Models of Language Change. 3-4 Units.**

Topics in computational models of language change. Vector semantic models of change in word meaning, word sentiment, and word innovation, computational models of syntactic change and sound change, and models of language evolution like the iterated learning paradigm. Prerequisites: LINGUIST 288, LINGUIST 230A, LINGUIST 250, and either LINGUIST 205A or 210A. Or consent of instructor.

**LINGUIST 289L. Computational Linguistics Research Lab. 1 Unit.**

Regular meetings of the members of the Computational Research Lab.

**LINGUIST 292A. Language Testing. 3 Units.**

Performance with language (speaking, reading, writing, listening, translating or interpreting) is used to measure a person's proficiency or achievement level in the language. Language performance is also used to measure other human characteristics, including psycho-social states and traits. The course will review basic methods in language measurement and cover their use as applied in education, psychology, and commerce. Topics include both traditional and automatic methods for assessing speaking, reading, writing, affect, and language disorders. Students will develop, apply, and evaluate a language test.  
Same as: LINGUIST 192

**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. Course may be repeated for credit.

**LINGUIST 393. Summer Research Activity. 1-8 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 Linguistics Ph.D. students. 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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**LINGUIST 802. TGR Dissertation. 0 Units.**

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