

SCHOOL OF HUMANITIES AND SCIENCES

LINGUISTICS

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

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

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

A variety of open forums provide for the discussion of linguistic issues, including colloquia and regularly scheduled workshops in child language, computational linguistics, phonology, psycholinguistics, semantics, sociolinguistics, and syntax. Faculty and visiting scholars in the department and the Center for the Study of Language and Information (CSLI), whose members are computer

scientists, linguists, philosophers, and psychologists, participate extensively in the activities of the department.

LINGUISTICS COURSE CATALOG NUMBERING SYSTEM

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

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
50-61	Sociolinguistics, Language Variation, Change
62-73	Language and Culture, Structure of a Language
74-79	Methods, Mathematical Linguistics, Statistics
80-89	Computational Linguistics
90-93	Applied Linguistics
94-99	Directed Work, Theses, Dissertations

BACHELOR OF ARTS IN LINGUISTICS

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

The Linguistics major cuts across the humanities and the social and physical sciences. It provides a solid general education as a background for advanced studies in such disciplines as Anthropology, Cognitive Science, Communication, Computer Science, Education (Language, Literacy, and Culture), hearing and speech sciences, languages, Law, Linguistics, Philosophy, and Psychology.

REQUIREMENTS

Requirements for the B.A. include at least 50 units of course work in Linguistics and approved courses in related fields. Of the 50 units required for the major, no more than 12 may be below the 100 level. No more than two courses, neither of which can be a core course, may be taken on a credit/no credit basis. Students must receive a 'C-' or better in courses used towards the requirements.

Core Courses—The core courses are:

LINGUIST 1. Introduction to Linguistics

LINGUIST 110. Introduction to Phonetics and Phonology

LINGUIST 120. Introduction to Syntax

LINGUIST 130A. Introduction to Linguistic Meaning

or LINGUIST 130B. Introduction to Lexical Semantics

LINGUIST 150. Language in Society, which fulfills the Writing in the Major requirement (WIM)

LINGUIST 160. Introduction to Language Change, or, in advance consultation with the Linguistics undergraduate studies adviser, a course in historical linguistics or the history of a language

All majors must complete at least five core courses, including LINGUIST 150, Language and Society.

Other Courses—Other courses counting toward the unit requirement should form a coherent program with emphases from among the areas of concentration listed below. Students should consult with the Linguistics undergraduate studies adviser when declaring the major, and maintain regular contact during the remainder of their Stanford career. Each student's major program must be approved by the Linguistics undergraduate studies adviser, or approved department adviser.

Students in the major must also take:

1. At least two 200-level Linguistics courses, typically in their area of concentration.
2. LINGUIST 197, Undergraduate Research Seminar, in the junior year. Special arrangements can be made for transfer students and others who start the major late.

Other Requirements—

3. *Foreign language:* majors must have competence in at least one language other than English as part of their understanding of the field of linguistics and its study. This is usually demonstrated by the completion of six quarters of language study at Stanford or equivalent; level of proficiency is determined by the Language Center or the relevant language department. Students 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.
4. *Junior research paper:* this requirement is typically fulfilled by providing an additional stage of revision on a research paper previously submitted in a Linguistics course. It must be approved by both the instructor of the course and the Linguistics undergraduate studies adviser by the end of the junior year.

AREAS OF CONCENTRATION

Students select one of the following areas of concentration or develop one themselves in advance consultation with the Linguistics undergraduate studies adviser. These areas of concentration are not declared on Axess, and they do not appear on the transcript or diploma.

*General Linguistics—*This concentration provides a broad education in Linguistics and is advisable for students interested in advanced degrees in Linguistics. All six core courses are required.

*Language and Society—*This concentration focuses on the social dimensions of language.

*Language Structures—*This concentration focuses on the cognitive aspects of language.

*Language Specialization—*This concentration focuses on linguistics as it pertains to a particular language. To date, Chinese, Japanese, and Spanish language specializations have been pre-approved. Other language specializations can be arranged on an ad hoc basis if appropriate courses are available in the relevant departments.

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 Winter Quarter of their junior year. As part of the application, the student must write a research proposal describing the honors project which must be approved by the faculty adviser. Approval is given only to students who have maintained a grade point average (GPA) of 3.3 (B+) or better in the courses required for the major.

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

MINOR IN LINGUISTICS

Requirements for the minor include at least 28 units of course work (typically seven courses) in Linguistics and related fields, approved in advance by the Linguistics undergraduate studies adviser. No more than two courses, neither of which can be a core course, may be taken on a credit/no credit basis. The courses counting towards the minor must be incremental units beyond those needed to satisfy the student's major course of study. The minor consists of:

5. LINGUIST 1. Introduction to Linguistics
6. Two out of the following Linguistics core courses:
LINGUIST 110. Introduction to Phonetics and Phonology
LINGUIST 120. Introduction to Syntax
LINGUIST 130A. Introduction to Linguistic Meaning
or LINGUIST 160. Introduction to Language Change
or, in advance consultation with the Linguistics undergraduate studies adviser, a course in historical linguistics or the history of a language.
7. At least four other courses determined in advance consultation with the Linguistics undergraduate studies adviser. Students are encouraged to take at least one 200-level Linguistics course. Students may also choose to do independent work with a faculty member of their choice.

GRADUATE PROGRAMS IN LINGUISTICS COGNITIVE SCIENCE

Linguistics is participating with the departments of Computer Science, 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 field designation, students must complete 30 units of approved courses, to be determined in consultation with the graduate studies adviser.

COTERMINAL BACHELOR'S AND MASTER'S DEGREE PROGRAM IN LINGUISTICS

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

For University coterminal degree program rules and University application forms, see <http://registrar.stanford.edu/shared/publications.htm#Coterm>.

MASTER OF ARTS IN LINGUISTICS

The University's basic requirements for the master's degree are discussed in the "Graduate Degrees" section of this bulletin. The following are additional departmental requirements. Candidates should review the department's *Guidelines for the M.A. Degree in Linguistics* for further particulars concerning these requirements.

8. *Courses:* candidates must complete 45 units of graduate work in Linguistics, including at least four courses in the student's area of specialization. No more than two courses should be at the 100 level.

Individual programs should be worked out in advance with an adviser to ascertain that the necessary courses in the area of specialization are offered over the course of the year of anticipated enrollment. The overall grade point average (GPA) must be at least 3.0 (B) for all degree program coursework.

9. *Language*: reading knowledge of a non-native language in which a substantial linguistic literature is written, with sufficient facility to understand and interpret linguistic research published in that language, or in-depth research on the structure of a non-native language.
10. *Thesis or Thesis Project*: a research paper supervised by a committee of three faculty (normally fulfilled by up to 6 units of LINGUIST 398, Directed Research).

DOCTOR OF PHILOSOPHY IN LINGUISTICS

The following requirements are in addition to the basic University requirements for the degree sought; see the "Graduate Degrees" section of this bulletin. Candidates should review the department's *Guidelines for the Degree of Ph.D. in Linguistics*, downloadable at <http://www-linguistics.stanford.edu/graduate/phd-guidelines.pdf>, for further particulars concerning these requirements.

11. *Language*—candidates must demonstrate the ability to read at least one foreign language in which a substantial linguistic literature is written, with sufficient facility to understand and to interpret linguistic research published in that language. (Particular areas of specialization may require additional research languages.)
In addition, each candidate must demonstrate an explicit in-depth knowledge of the structure of at least one language (normally neither the candidate's native language nor the language used for the reading exam). This requirement is fulfilled by writing an original research paper on a language.
12. *Courses*—a minimum of 135 units of graduate work beyond the bachelor's degree, or 90 units beyond the master's degree. The course requirements detailed in the *Guidelines for the Degree of Ph.D. in Linguistics* guarantee that each student covers a sufficient set of subareas within the field.
Candidates must maintain a satisfactory record in the number and distribution of units completed. The overall course work GPA must be at least 3.0 (B), and all of the basic courses should be completed with at least a 'B.'
13. *Research*—the prospective Ph.D. candidate is expected to complete two substantial qualifying papers. The deadline for completion of the first qualifying paper is the end of Autumn Quarter of the second year; the deadline for completion of the second qualifying paper is the end of Autumn Quarter of the third year. The subject matter of the two papers, although it may be related (for example, same language), must be clearly distinct. The requirement is fulfilled by two quarters of LINGUIST 395, Research Workshop (1-2 units each), and by oral discussion with a committee of at least three faculty members selected by the student and the faculty.
14. *Candidacy*—students must complete a prescribed portion of the basic course requirement (see item 2 above), one foreign language requirement (see item 1 above), and one qualifying paper (see item 3 above) by the end of their second year.
15. *Teaching*—at least three quarters serving as a teaching assistant in Linguistics courses.
16. *Colloquia*—two oral presentations exclusive of the oral presentation of the dissertation proposal (see item 7b below). This requirement is satisfied by class presentations, conference papers, or colloquium talks. Normally, both should be given during the first four years of study.
17. *Dissertation*—
 - a. a written dissertation proposal is required by the end of the third year.
 - b. oral presentation of the dissertation proposal, preferably as a colloquium.

- c. approval of the dissertation topic and appointment of a dissertation committee.
- d. passing a University oral examination on the dissertation and related areas.
- e. dissertation (up to 15 units of LINGUIST 399).

PH.D. MINOR IN LINGUISTICS

18. *Courses*: the candidate must complete 30 units of course work in linguistics. The University requires that at least 20 of these units be at the 200 level or above; the remaining 10 units must be at the 100 level or above. The course work for the minor must include LINGUIST 110, 120, and either 130A or 130B or 200-level introductory courses in the same areas and at least three courses related to the area of specialization. Courses submitted for the minor must be incremental units beyond those used to satisfy the major. Individual programs should be worked out in advance with the student's Ph.D. minor adviser in Linguistics.
19. *Research Project* (optional): the candidate may elect to present a paper which integrates the subject matter of linguistics into the field of specialization of the candidate.
20. The Linguistics minor adviser or designee serves on the candidate's University oral examination committee and may request that up to one-third of the examination be devoted to the minor subject.

OVERSEAS STUDIES COURSES IN LINGUISTICS

For course descriptions and additional offerings, see the listings in the *Stanford Bulletin's* ExploreCourses web site (<http://explorecourses.stanford.edu>) or the Bing Overseas Studies web site (<http://bosp.stanford.edu>). Students should consult their department or program's student services office for applicability of Overseas Studies courses to a major or minor program.

WINTER QUARTER

PARIS

- OSPAPARIS 37. Gesture. 3 units, Eve Clark, GER:DB:SocSci
OSPAPARIS 38. First Language Acquisition, with Emphasis on French. 4 units, Eve Clark

LINGUISTICS (LINGUIST)

UNDERGRADUATE COURSES IN LINGUISTICS

LINGUIST 1. Introduction to Linguistics

The cognitive organization of linguistic structure and the social nature of language use. Why language learning is difficult. Why computers have trouble understanding human languages. How languages differ from one another. How and why speakers of the same language speak differently. How language is used strategically. GER:DB-SocSci

4 units, Aut (Potts, K), Spr (Fong, V)

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

(F,Sem) Stanford Introductory Seminar. Preference to freshmen. Phonetic variation across accents of English; experimental design; practical experience examining accents of seminar participants; acoustic analysis of speech using Praat. GER:DB-SocSci

3 units, Aut (Sumner, M)

LINGUIST 65. African American Vernacular English

(Same as LINGUIST 265) The English vernacular spoken by African Americans in big city settings, and its relation to Creole English dialects spoken on the S. Carolina Sea Islands (Gullah), in the Caribbean, and in W. Africa. The history of expressive uses of African American English (in soundin' and rappin'), and its educational implications. GER:DB-SocSci, EC-AmerCul

3-5 units, Win (Staff)

LINGUIST 66. Vernacular English and Reading

(Same as LINGUIST 266) 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.

4-5 units, Spr (Rickford, J)

LINGUIST 83N. Translation

(F,Sem) Stanford Introductory Seminar. Preference to freshmen. 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? GER:DB-SocSci

3 units, Aut (Kay, M)

LINGUIST 90. Teaching Spoken English

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

3-4 units, Spr (Romeo, K)

LINGUIST 105. Phonetics

(Same as LINGUIST 205A) The study of speech sounds: how to produce them, how to perceive them, and their acoustic properties. The influence of production and perception systems on sound change and phonological patterns. Acoustic analysis and experimental techniques. Lab exercises. Prerequisite: 110 or equivalent, or consent of instructor. GER:DB-SocSci

4 units, Win (Sumner, M)

LINGUIST 110. Introduction to Phonetics and Phonology

Differences in the sounds of the world's languages and how these sounds are made by the human vocal tract. Theories that account for cross-linguistic similarities in the face of differences. GER:DB-SocSci

4 units, Win (Sumner, M)

LINGUIST 112. Seminar in Phonology

(Same as LINGUIST 212A) Topics vary each year. Previous topics include variation in the phonology of words according to their contexts within larger expressions and the place of these phenomena in a theory of grammar. May be repeated for credit.

2-4 units, not given this year

LINGUIST 116. Morphology

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.

4 units, Spr (Staff)

LINGUIST 119. Choosing a Variant

(Same as LINGUIST 219) Assortment of cases (lexical and morphosyntactic) where two or more English expressions serve as alternatives, apparently differing only in stylistic value or sociolinguistic status; explores the semantic, discourse function, syntactic, prosodic, and processing factors that favor the choice of one variant over the other; and evaluates claims about the stylistic values and sociolinguistic status of the variants

2-4 units, Win (Zwicky, A)

LINGUIST 120. Introduction to Syntax

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. GER:DB-SocSci

4 units, Aut (Wasow, T)

LINGUIST 124A. Introduction to Formal Universal Grammar

(Same as LINGUIST 224A) A formal model of universal grammar designed to explain crosslinguistic variation in syntactic structure: nonconfigurationality in Australian aboriginal languages, incorporation in native American languages and the Bantu languages of Africa, scrambling and head movement in European languages. Issues such as universal grammar design, and analytic problems from a variety of natural languages. Prerequisites: introduction to syntax and familiarity with logic or other symbolic systems, or consent of instructor. GER:DB-SocSci

4 units, not given this year

LINGUIST 130A. Introduction to Linguistic Meaning

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

4 units, Spr (Potts, C)

LINGUIST 130B. Introduction to Lexical Semantics

Issues in the study of word meaning. Focus is on the core semantic properties and internal organization of the four major word categories in natural languages: nouns, verbs, adjectives, and prepositions. GER:DB-SocSci

4 units, not given this year

LINGUIST 130C. Logic Laboratory

Typically taken in conjunction with 130A/230A.

1 unit, Spr (Staff)

LINGUIST 133. Introduction to Formal Pragmatics

(Same as LINGUIST 233) (Graduate students register for 233.) Mechanism underlying language use and felicity intuitions. Formal models of discourse that incorporate many aspects of pragmatics such as presuppositions, speech acts, implicatures, relevance, optimality, and utility. Discussion of common ground, illocutionary acts, Gricean maxims and Neo-Gricean analysis, game and decision theory.

3-4 units, not given this year

LINGUIST 140. Language Acquisition I

(Same as LINGUIST 240) Processes of language acquisition in early childhood; stages in development; theoretical issues and research questions. Practical experience in data collection. GER:DB-SocSci

4 units, Aut (Clark, E)

LINGUIST 142. Bilingualism, Language Attrition, and Heritage Languages

Linguistic and sociolinguistic aspects of first language loss among emigrants; consequences for language teaching. GER:DB-SocSci

3-4 units, not given this year

LINGUIST 144. Introduction to Cognitive and Information Sciences

(Same as PHIL 190, PSYCH 132, SYMSYS 100) The history, foundations, and accomplishments of the cognitive sciences, including presentations by leading Stanford researchers in artificial intelligence, linguistics, philosophy, and psychology. Overview of the issues addressed in the Symbolic Systems major. GER:DB-SocSci

4 units, Spr (Wasow, T; McClelland, J)

LINGUIST 150. Language in Society

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

4 units, Win (Staff)

LINGUIST 152. Sociolinguistics and Pidgin Creole Studies

(Same as LINGUIST 252) 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.

2-4 units, not given this year

LINGUIST 153. Language, Power & Politics

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.

3-4 units, Aut (Staff)

LINGUIST 154. Sociolinguistics of Language Contact

(Same as LINGUIST 254) The role of contact between speakers of different languages in processes of language borrowing, convergence, and shift. Attending both to linguistic aspects and social contexts, examine: second-language acquisition, bilingualism, code-switching, lexical and grammatical borrowing, first language attrition, language death, and the creation of new contact varieties such as jargons, mixed languages, pidgins, and creoles. Prerequisite: background in linguistics.

2-4 units, Spr (Rickford, J; Roberts, S)

LINGUIST 156. Language and Gender

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. GER:DB-SocSci, EC-Gender

4 units, Win (Roberts, S)

LINGUIST 160. Introduction to Language Change

(Same as ANTHRO 120) 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, rates of change, 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 or evolutionary theory. GER:DB-SocSci

4-5 units, Spr (Staff)

LINGUIST 167. Languages of the World

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. GER:DB-SocSci

3-4 units, Win (Pereltsvaig, A)

LINGUIST 170. The Arabic Language and Culture

(Same as AMELANG 36, LINGUIST 270) Arabic language from historical, social, strategic, and linguistic perspectives. History of the Arabic language and the stability of classical Arabic over the last 15 centuries. Why the functionality of classical Arabic has not changed as Latin, Old English, and Middle English have. Social aspects of the Arabic language, Ferguson's notion of diglossia. The main varieties of Arabic, differences among them, and when and where they are spoken. Role of Arabic and culture in current world politics, culture, and economy. Linguistic properties of Arabic such as root-based morphology, lexical ambiguity, and syntactic structure relating it to current linguistic theories.

3 units, not given this year

LINGUIST 173. The Structure of Russian

(Same as LINGUIST 273) 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.

2-4 units, not given this year

LINGUIST 174. Linguistic Field Methods

(Same as ANTHRO 30, LINGUIST 274A) 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. Prerequisite: introductory course in linguistics.

3-5 units, not given this year

LINGUIST 180. From Languages to Information

(Same as CS 124) Automated processing of less structured information: human language text and speech, web pages, social networks, genome sequences, with goal of automatically extracting meaning and structure. Methods include: string algorithms, automata and transducers, hidden Markov models, graph algorithms, XML processing. Applications such as information retrieval, text classification, social network models, machine translation, genomic sequence alignment, word meaning extraction, and speech recognition. Prerequisite: CS103, CS107, CS109.

3-4 units, Win (Jurafsky, D)

LINGUIST 181. Grammar Engineering

(Same as LINGUIST 281) Hands-on techniques for implementation of linguistic grammars, drawing on grammatical theory and engineering skills. The implementation of constraints in morphology, syntax, and semantics, working within a unification-based lexicalist framework. Focus is on developing small grammars for English and at least one other language. Prerequisite: basic syntactic theory or 120. No programming skills required.

1-4 units, Aut (Flickinger, D)

LINGUIST 182. Computational Theories of Syntax

(Same as LINGUIST 282) Salient features of modern syntactic theories, including HPSG, LFG, and TAG, motivated by computational concerns. Impact of work within these frameworks on the design of algorithms in computational linguistics, and its influence in both linguistics and computer science. Topics include: notions of unification; unification algorithms and their relation to linguistic theory; agenda-driven chart processing for analysis and synthesis; the interface with morphology, the lexicon, and semantics; and applications, notably machine translation.

3-4 units, Win (Kay, M)

LINGUIST 185. Writing Systems in a Digital World

(Same as LINGUIST 284A) Writing systems and their behaviors. Classification of scripts as alphabetic, syllabic, and ideographic; what features typically belong to each group. What can be considered an ideal script. Topics include: why Japanese writing is considered a complex system; the influence of Indian writing on other syllabic scripts; how writing systems extend their reach to new languages; linguistic insights by studying this process; the Unicode standard; and font technology. Recommended: basic phonetics.

2-3 units, not given this year

LINGUIST 188. Natural Language Understanding

(Same as CS 224U, LINGUIST 288) Machine understanding of human language. Computational semantics (determination of word sense and synonymy, event structure and thematic roles, time, aspect, causation, compositional semantics, scopal operators), and computational pragmatics and discourse (coherence, coreference resolution, information packaging, dialogue structure). Theoretical issues, online resources, and relevance to applications including question answering and summarization. Prerequisites: one of LINGUIST 180 / CS 124 / CS 224N,S; and logic such as LINGUIST 130A or B, CS 157, or PHIL150).

3-4 units, Win (Jurafsky, D; MacCartney, W)

LINGUIST 191. Linguistics and the Teaching of English as a Second/Foreign Language

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

4-5 units, Win (Hubbard, P; Rylance, C)

LINGUIST 197. Undergraduate Research Seminar

Research goals and methods in linguistics and related disciplines. Students work on a small project to define a focus for their linguistic studies and prepare for honors research. Presentations; final paper.

2 units, Win (Staff)

LINGUIST 198. Honors Research

1-15 units, Win (Staff), Spr (Staff)

LINGUIST 199. Independent Study

1-15 units, Aut (Staff), Win (Staff), Spr (Staff), Sum (Staff)

GRADUATE COURSES IN LINGUISTICS**LINGUIST 200. Foundations of Linguistic Theory**

Theories that have shaped contemporary linguistics; recurrent themes and descriptive practice.

4 units, not given this year

LINGUIST 201. Advanced Introduction to Linguistics

Primarily for graduate students. The leading ideas of linguistic description and argumentation. Fundamental representational notions in phonology, syntax, and semantics, and the place of these notions in wider linguistic analysis.

4 units, not given this year

LINGUIST 205A. Phonetics

(Same as LINGUIST 105) The study of speech sounds: how to produce them, how to perceive them, and their acoustic properties. The influence of production and perception systems on sound change and phonological patterns. Acoustic analysis and experimental techniques. Lab exercises. Prerequisite: 110 or equivalent, or consent of instructor.

4 units, Win (Sumner, M)

LINGUIST 205B. Advanced Phonetics

Prerequisite: LINGUIST 205A.

2-4 units, Aut (Sumner, M)

LINGUIST 207. Seminar in Phonetics

Topics vary. Previous topics include how variation is accommodated in current models of speech perception, and how perceptual models need to be altered to accommodate phonetic variation encountered by listeners. May be repeated for credit.

2-4 units, not given this year

LINGUIST 210A. Phonology

Introduction to phonological theory and analysis based on cross-linguistic evidence. Topics: phonological representations including features, syllables, metrical structure; phonological processes including assimilation and dissimilation; and phonological typology and universals; optimality theory.

4 units, Aut (Anttila, A)

LINGUIST 210B. Advanced Phonology

The phonological organization of the lexicon. Topics include lexical phonology, phonological subregularities, gradient phonotactics, and lexical frequency effects.

4 units, Win (Anttila, A)

LINGUIST 211. Metrics

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. The ideology of normative prosodic discourse in relation to changing poetic practice.

1-4 units, Aut (Kiparsky, P)

LINGUIST 212A. Seminar in Phonology

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

2-4 units, not given this year

LINGUIST 212B. Seminar in Phonology

May be repeated for credit.

1-4 units, not given this year

LINGUIST 214. Phonology Workshop

May be repeated for credit.

1-2 units, not given this year

LINGUIST 215. Empirical Approaches to Morphosyntax

Introduction into quantitative and statistical methodology of morphological and syntactic research. Overview of analytical techniques developed for language research in the statistical software package R. Theoretical discussions will be supplemented by examples from corpus-based and experimental studies in morphosyntax as well as by hands-on practical sessions

2-4 units, Win (Kuperman, V)

LINGUIST 216. Morphology

How morphology fits into the lexicon and how the lexicon fits into grammar. Inflection and word-formation: blocking, productivity, analogy. Morphological categories. The interaction of morphology with phonology within the lexicon: level-ordering, prosodic morphology. Review of English morphology and analysis of representative material from languages with richer morphologies.

2-4 units, Spr (Anttila, A)

LINGUIST 217. Morphosyntax

The role of morphology in grammar: how word structure serves syntax in the expression of meaning. Universal properties and typology of morphological categories; proposals towards their principled explanation in a restrictive theory of language.

2-4 units, not given this year

LINGUIST 218. Seminar in Morphosyntax

May be repeated for credit.

2-4 units, not given this year

LINGUIST 219. Choosing a Variant

(Same as LINGUIST 119) Assortment of cases (lexical and morphosyntactic) where two or more English expressions serve as alternatives, apparently differing only in stylistic value or sociolinguistic status; explores the semantic, discourse function, syntactic, prosodic, and processing factors that favor the choice of one variant over the other; and evaluates claims about the stylistic values and sociolinguistic status of the variants

2-4 units, Win (Zwicky, A)

LINGUIST 221A. Foundations of English Grammar

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

1-4 units, not given this year

LINGUIST 221B. Studies in Universal Grammar

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

1-4 units, not given this year

LINGUIST 222A. Foundations of Syntactic Theory I

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

2-4 units, Aut (Levin, B)

LINGUIST 222B. Foundations of Syntactic Theory II

The nature of unbounded dependency constructions and their treatment in modern grammatical theories. Filler-gap dependencies, island constraints, and the relation between grammar and processing. Prerequisite: 222A.

2-4 units, Win (Wasow, T)

LINGUIST 223. Introduction to Minimalist Syntax

Focus is on phrase structure, movement, functional categories, features, the nature of economy conditions, and parametric differences. More general issues of the architecture of the grammar and the nature of crosslinguistic variation.

2-4 units, not given this year

LINGUIST 224A. Introduction to Formal Universal Grammar

(Same as LINGUIST 124A) A formal model of universal grammar designed to explain crosslinguistic variation in syntactic structure: nonconfigurationality in Australian aboriginal languages, incorporation in native American languages and the Bantu languages of Africa, scrambling and head movement in European languages. Issues such as universal grammar design, and analytic problems from a variety of natural languages. Prerequisites: introduction to syntax and familiarity with logic or other symbolic systems, or consent of instructor.

4 units, not given this year

LINGUIST 224B. Advanced Topics in Lexical Functional Grammar

May be repeated for credit.

1-4 units, not given this year

LINGUIST 225A. Seminar in Syntax

1-2 units, Spr (Sag, I)

LINGUIST 227C. Projects in Syntax

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

2-4 units, not given this year

LINGUIST 229A. Laboratory Syntax I

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

1-4 units, not given this year

LINGUIST 229B. Laboratory Syntax II

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

1-4 units, not given this year

LINGUIST 229C. Laboratory Syntax III

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

1-4 units, not given this year

LINGUIST 229D. Empirical Syntax Research Seminar

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

1-2 units, not given this year

LINGUIST 230A. Introduction to Semantics and Pragmatics

Conventional meaning and pragmatic enrichment, with special emphasis on the foundations of semantics and pragmatics, the central problems of the theory, the role of logic and model theory in semantic analysis, and interconnections with other aspects of language and communication.

2-4 units, Win (Potts, C)

LINGUIST 230B. Semantics and Pragmatics

Expands on 230A. Standard approaches to formal semantics (Montague grammar, DRT, and basic dynamic semantics). Analyses of semantic phenomena in these frameworks. Prerequisites: 230A; or combination of 130A and PHIL 150 and 160.

2-4 units, not given this year

LINGUIST 232A. Lexical Semantics

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.

2-4 units, Spr (Levin, B)

LINGUIST 232B. Seminar in Lexical Semantics: The Lexical Semantics of Nouns

Exploration of those facets of meaning which affect the naming of entities and the grammatical properties of nouns. Topics covered include artifacts vs. natural kinds, the mass/count noun distinction, individuals vs. collectives, and Roschian categorization. Readings will provide theoretical, typological, psycholinguistic, and anthropological perspectives. May be repeated for credit with different content.

1-4 units, Win (Levin, B)

LINGUIST 233. Introduction to Formal Pragmatics

(Same as LINGUIST 133) (Graduate students register for 233.) Mechanism underlying language use and felicity intuitions. Formal models of discourse that incorporate many aspects of pragmatics such as presuppositions, speech acts, implicatures, relevance, optimality, and utility. Discussion of common ground, illocutionary acts, Gricean maxims and Neo-Gricean analysis, game and decision theory.

3-4 units, not given this year

LINGUIST 234. Discourse Analysis

The organization of language above the sentence level, and the manifestation of language in context. Practical experience in working with discourse data.

4 units, not given this year

LINGUIST 235. Semantic Fieldwork

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.

2-4 units, not given this year

LINGUIST 236. Seminar in Semantics: Lexical and Constructional Pragmatics

Case studies in how reliable pragmatic meanings arise from the interactions between conventionalized content, speaker intentions, hearer expectations, and general pragmatic pressures. Emphasis on corpus and psycholinguistic methods. Potential topics: exclamatives, affective demonstratives, discourse particles, appositives, scalar terms, negation; progression of topics to be decided largely by the participants. May be repeated for credit.

1-4 units, Aut (Staff)

LINGUIST 237. Seminar in Semantics: Semantics of Questions and Commands

Semantics of interrogatives and imperatives; propositional semantics of declaratives. Research emphasizing the meaning of questions. May be repeated for credit.

1-4 units, not given this year

LINGUIST 239. Semantics Research Seminar

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

1-2 units, Aut (Levin, B), Win (Levin, B), Spr (Staff)

LINGUIST 240. Language Acquisition I

(Same as LINGUIST 140) Processes of language acquisition in early childhood; stages in development; theoretical issues and research questions. Practical experience in data collection.

4 units, Aut (Clark, E)

LINGUIST 241. Language Acquisition II

Constructions and the lexicon. May be repeated for credit.

1-4 units, Spr (Clark, E)

LINGUIST 242. Methods for Research in Language Acquisition

Research methods in developmental psycholinguistics

4 units, not given this year

LINGUIST 245. Experimental Design for Linguistics

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

4 units, not given this year

LINGUIST 247. Seminar in Psycholinguistics: Information-Theoretic Models of Language and Cognition

(Same as PSYCH 227) Information theory and its relation to learning and to reference, meaning, and information encoding. Information-theoretic models of linguistic structure at the phonological, morphological, and syntactic levels, and the links between information theory and information structure/clause packaging. The role of uncertainty and uniform information density in sentence processing. May be repeated for credit.

3-4 units, Aut (Ramscar, M; Jurafsky, D)

LINGUIST 250. Sociolinguistic Theory and Analysis

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.

4 units, Aut (Rickford, J)

LINGUIST 251. Sociolinguistic Field Methods

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

4 units, not given this year

LINGUIST 252. Sociolinguistics and Pidgin Creole Studies

(Same as LINGUIST 152) 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.

2-4 units, not given this year

LINGUIST 254. Sociolinguistics of Language Contact

(Same as LINGUIST 154) The role of contact between speakers of different languages in processes of language borrowing, convergence, and shift. Attending both to linguistic aspects and social contexts, examine: second-language acquisition, bilingualism, code-switching, lexical and grammatical borrowing, first language attrition, language death, and the creation of new contact varieties such as jargons, mixed languages, pidgins, and creoles. Prerequisite: background in linguistics.

2-4 units, Spr (Rickford, J; Roberts, S)

LINGUIST 255. Seminar in Sociolinguistics: Contact Linguistics

Classical and recent works in contact linguistics including Weinreich, Tudgill, Winford. May be repeated for credit.

3-5 units, Win (Rickford, J)

LINGUIST 257. Seminar in Sociolinguistics: Community Studies of Variation

May be repeated for credit.

1-4 units, not given this year

LINGUIST 258. Analysis of Variation

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.

1-4 units, Spr (Eckert, P)

LINGUIST 260A. Historical Morphology and Phonology

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

4 units, not given this year

LINGUIST 260B. Historical Morphosyntax

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

2-4 units, Win (Kiparsky, P)

LINGUIST 265. African American Vernacular English

(Same as LINGUIST 65) The English vernacular spoken by African Americans in big city settings, and its relation to Creole English dialects spoken on the S. Carolina Sea Islands (Gullah), in the Caribbean, and in W. Africa. The history of expressive uses of African American English (in soundin' and rappin'), and its educational implications.

3-5 units, Win (Staff)

LINGUIST 266. Vernacular English and Reading

(Same as LINGUIST 66) 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.

4-5 units, Spr (Rickford, J)

LINGUIST 270. The Arabic Language and Culture

(Same as AMELANG 36, LINGUIST 170) Arabic language from historical, social, strategic, and linguistic perspectives. History of the Arabic language and the stability of classical Arabic over the last 15 centuries. Why the functionality of classical Arabic has not changed as Latin, Old English, and Middle English have. Social aspects of the Arabic language, Ferguson's notion of diglossia. The main varieties of Arabic, differences among them, and when and where they are spoken. Role of Arabic and culture in current world politics, culture, and economy. Linguistic properties of Arabic such as root-based morphology, lexical ambiguity, and syntactic structure relating it to current linguistic theories.

3 units, not given this year

LINGUIST 272. Structure of Finnish

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

2-4 units, Win (Anttila, A; Kiparsky, P; Karttunen, L)

LINGUIST 273. The Structure of Russian

(Same as LINGUIST 173) 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.

2-4 units, not given this year

LINGUIST 274A. Linguistic Field Methods

(Same as ANTHRO 30, LINGUIST 174) 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. Prerequisite: introductory course in linguistics.

3-5 units, not given this year

LINGUIST 274B. Field Methods II

Continuation of 274A, with a focus on phonetic topics in a targeted language. Prerequisite: 274A or consent of instructor.

2-4 units, not given this year

LINGUIST 277. Laboratory Methods in Psycholinguistics

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

at lab sessions using examples from experiments and corpus studies, including those provided by students.

2-4 units, not given this year

LINGUIST 278. Programming for Linguists

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.

1-4 units, Aut (Potts, C)

LINGUIST 280. Natural Language Processing

(Same as CS 224N) Methods for processing human language information and the underlying computational properties of natural languages. Syntactic and semantic processing from linguistic and algorithmic perspectives. Focus is on modern quantitative techniques in NLP: using large corpora, statistical models for acquisition, translation, and interpretation; and representative systems. Prerequisites: CS124 or CS121/221.

3-4 units, Spr (Manning, C)

LINGUIST 281. Grammar Engineering

(Same as LINGUIST 181) Hands-on techniques for implementation of linguistic grammars, drawing on grammatical theory and engineering skills. The implementation of constraints in morphology, syntax, and semantics, working within a unification-based lexicalist framework. Focus is on developing small grammars for English and at least one other language. Prerequisite: basic syntactic theory or 120. No programming skills required.

1-4 units, Aut (Flickinger, D)

LINGUIST 282. Computational Theories of Syntax

(Same as LINGUIST 182) Salient features of modern syntactic theories, including HPSG, LFG, and TAG, motivated by computational concerns. Impact of work within these frameworks on the design of algorithms in computational linguistics, and its influence in both linguistics and computer science. Topics include: notions of unification; unification algorithms and their relation to linguistic theory; agenda-driven chart processing for analysis and synthesis; the interface with morphology, the lexicon, and semantics; and applications, notably machine translation.

3-4 units, Win (Kay, M)

LINGUIST 284A. Writing Systems in a Digital World

(Same as LINGUIST 185) Writing systems and their behaviors. Classification of scripts as alphabetic, syllabic, and ideographic; what features typically belong to each group. What can be considered an ideal script. Topics include: why Japanese writing is considered a complex system; the influence of Indian writing on other syllabic scripts; how writing systems extend their reach to new languages; linguistic insights by studying this process; the Unicode standard; and font technology. Recommended: basic phonetics.

2-3 units, not given this year

LINGUIST 285. Speech Recognition and Synthesis

(Same as CS 224S) Automatic speech recognition, speech synthesis, and dialogue systems. Focus is on key algorithms including noisy channel model, hidden Markov models (HMMs), Viterbi decoding, N-gram language modeling, unit selection synthesis, and roles of linguistic knowledge. Prerequisite: programming experience. Recommended: CS 221 or 229.

2-4 units, not given this year

LINGUIST 286. Information Retrieval and Web Search

(Same as CS 276) Text information retrieval systems; efficient text indexing; Boolean, vector space, and probabilistic retrieval models; ranking and rank aggregation; evaluating IR systems. Text clustering and classification: classification algorithms, latent semantic indexing, taxonomy induction; Web search engines including crawling and indexing, link-based algorithms, and web metadata. Prerequisites: CS 107, CS 109, CS 161.

3 units, Aut (Manning, C; Raghavan, P)

LINGUIST 288. Natural Language Understanding

(Same as CS 224U, LINGUIST 188) Machine understanding of human language. Computational semantics (determination of word sense and synonymy, event structure and thematic roles, time, aspect, causation, compositional semantics, scopal operators), and computational pragmatics and discourse (coherence, coreference resolution, information packaging, dialogue structure). Theoretical

issues, online resources, and relevance to applications including question answering and summarization. Prerequisites: one of LINGUIST 180 / CS 124 / CS 224N,S; and logic such as LINGUIST 130A or B, CS 157, or PHIL150).

3-4 units, Win (Jurafsky, D; MacCartney, W)

LINGUIST 289. Quantitative, Probabilistic, and Optimization-Based Explanation in Linguistics

Capturing the soft constraints inherent in linguistic systems, based on quantitative evidence obtained from linguistic corpora. Computer tools for collecting and modeling data. Emphasis is on syntax.

3-4 units, not given this year

LINGUIST 291. Linguistics and the Teaching of English as a Second/Foreign Language

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

4-5 units, Win (Hubbard, P; Rylance, C)

LINGUIST 293. Research Seminar in Applied Linguistics

(Same as EDUC 435X) For graduate students in the schools of Education and Humanities and Sciences who are engaged in research pertaining to applied linguistic topics in original research. Topics: language policies and planning, language and gender, writing and critical thinking, foreign language education, and social applications of linguistic science. (SSPEP)

1-4 units, not given this year

LINGUIST 294. Linguistic Research Discussion Group

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

1 unit, Aut (Wasow, T)

LINGUIST 390. M.A. Project

1-3 units, Aut (Staff), Win (Staff), Spr (Staff), Sum (Staff)

LINGUIST 394. TA Training Workshop

For second-year graduate students in Linguistics

1 unit, Aut (Levin, B)

LINGUIST 395. Research Workshop

Restricted to students in the doctoral program. Student presentations of research toward qualifying papers.

1-2 units, Spr (Wasow, T)

LINGUIST 395C. Research Workshop III

Restricted to students in the doctoral program. Student presentations of research toward qualifying papers.

1-2 units, Sum (Staff)

LINGUIST 396. Research Projects in Linguistics

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

2-3 units, Win (Staff)

LINGUIST 397. Directed Reading

1-15 units, Aut (Staff), Win (Staff), Spr (Staff), Sum (Staff)

LINGUIST 398. Directed Research

1-15 units, Aut (Staff), Win (Staff), Spr (Staff), Sum (Staff)

LINGUIST 399. Dissertation Research

1-15 units, Aut (Staff), Win (Staff), Spr (Staff), Sum (Staff)

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