

## LINGUISTICS Fall 2021

### Language

**LING-UA 1-001**

**Professor Anna Szabolcsi**

**T/R 2:00PM - 3:15PM**

**Satisfies Introductory course requirement and the Societies and Social Science component of the College Core Curriculum**

This course is an introductory survey of linguistics—the scientific study of language. Language is a social phenomenon, but all human languages share many specific structural properties. Analyzing data from English and many other languages, we examine some fundamental properties of the structure and interpretation of words and sentences, and the sound system. Building on these foundations, we discuss the brain representation, processing and acquisition of language, language change, dialects and sociolects, and Signed Languages. The course will provide you with the necessary background to continue your studies in linguistics at a more advanced level if you choose to. It satisfies the Introductory Course requirement for Linguistics major, its combined majors, and the Language and Mind major, and is a prerequisite for some of our other courses. Language is a CORE exemptor for CAS students; it satisfies the Societies and Social Sciences course requirement.

### Language & Mind

**LING-UA 3-001/PSYCH-UA 27-001**

**Professors Ailís Cournane & Brian McElree**

**M/W 12:30PM - 1:45PM**

**Satisfies Introductory course requirement**

This course deals with what our knowledge of language can tell us about the nature of the mind, and vice versa. It is offered jointly by Psychology and Linguistics, presenting methodology and results from both fields. It is well known that language is a social phenomenon; this course will focus on some aspects of language that make its study more like a natural science. We discuss the structure of sentences (syntax), words (morphology), and sound shape (phonetics, phonology), and ask how these are acquired, mentally represented, and processed by humans.

### Introduction to Semantics

**LING-UA 4-001**

**Professor Chris Barker**

**T/R 9:30AM – 10:45AM**

**PREREQUISITE: LING-UA 1 OR LING-UA 3 OR LING-UA 13**

**Satisfies Semantics requirement**

This course is an introduction to the study of meaning, more specifically, the meaning of expressions and sentences in natural languages like English. What sort of things could meanings be? How do the meanings of words differ from the meanings of larger phrases? What is the role of context in enriching the meaning conveyed by a sentence? What is the difference between what is explicitly said versus what is merely implied? What is the difference between literal meaning and metaphorical meaning? The approach will be formal and scientific, using the methods of theoretical linguistics. Our main goal will be to propose explicit and precise hypotheses about how the meanings of phrases are determined by the meanings of the words that they contain, and to test these hypotheses by comparing the predictions that they make with what various phrases actually mean.

### **Patterns in Language (Online Asynchronous)**

**LING-UA 6-001**

**Professor Lucas Champollion**

**Satisfies the Quantitative Reasoning component of the College Core Curriculum**

If a computer can beat humans at Jeopardy!, does it follow that machines can think? Is it possible to predict the spread of the flu based on patterns in Google searches? Did Shakespeare really write that sonnet? Scientists use patterns in language to answer these questions, using the same concepts that underlie such everyday applications as search engines, automatic translators, speech recognition, spell-checkers, and auto-correction tools. We examine these applications, focusing on the technological and linguistic ideas behind them and gaining practical hands-on experience and insight into how they work. No programming experience is required; students only need curiosity about language and some everyday experience with computers.

For more information and a syllabus, please see <https://champollion.com/patterns/>.

### **Sound and Language (Online Asynchronous)**

**LING-UA 11-001**

**Professors Maria Gouskova & Juliet Stanton**

**Satisfies Phonetics requirement**

This course offers an introduction to the sounds of the world's languages, how they are produced and how they are organized as basic units of linguistic representation. Topics include basic phonetic and phonological theory, the description and analysis of speech sounds, the anatomy, physiology, and acoustical properties of speech sounds, elements of speech perception, and the properties of connected speech. Students develop skills to distinguish and produce the sounds of human languages and to transcribe them using the International Phonetic Alphabet.

### **Grammatical Analysis**

**LING-UA 13-001**

**Professor Stephanie Harves**

**M/W 11:00AM – 12:15PM**

**PREREQUISITE: LING-UA 1 OR LING-UA 3 OR Permission of the Instructor**

**Satisfies Syntax requirement**

What determines the sequencing of words in a given language? How can we explain word order variation within and across languages? Are there universal syntactic properties common to the grammar of all languages? This course presents the motivation for the modern generative approach to the scientific study of language and systematically develops a model that will account for the most basic syntactic constructions of natural language. Skills in scientific argumentation and reasoning are developed primarily through an analysis of English, but occasionally of other languages as well.

### **Language Change**

**LING-UA 14-001**

**Professor Gregory Guy**

**T/R 3:30PM – 4:45PM**

**Elective**

All languages change across time. With the passage of centuries, the accumulated changes may be so great that we give different names to the new varieties: thus the contemporary Romance languages – French, Spanish, etc.- are all greatly changed direct descendants of Latin. This course examines the phenomenon of language change from several perspectives. What elements of a language change – sound systems, morphology, syntax, etc. – and what patterns and properties of replacement are evident in each area? How can we ‘undo’ change, reconstructing earlier stages of a language, and tracing genealogical relationships among families of related languages? What is the time course of a change like? Why does language change? Who does the changing? Can we observe change going on around us in the present day? Students will learn methods for doing historical reconstruction, analyzing change processes, and collecting and interpreting evidence for change in process.

### **Bilingualism**

**LING-UA 18-001**

**Professor Zvezdana Vrzic**

**M/W 4:55PM - 6:10PM**

Most people in the world today grow up speaking multiple languages. In this class, students will be introduced to a variety of linguistic and social issues that are raised by the phenomenon of multilingualism. Among other topics, we will read about and discuss different multilingual communities to discover the ways in which people use multiple languages in their daily lives; policies that exist in societies with multilingual populations; differences in growing up learning one and two or more native languages; changes that happen in a language as it comes under the influence of another language; reasons why people in traditionally bilingual communities can shift away from using one of their languages. We will also investigate what the study of these and other phenomena tied to multilingualism can tell us more generally about language and about community and identity.

### **Grammatical Diversity**

**LING-UA 27-001**

**Professors Richard Kayne & Gary Thoms**

**M/W 12:30PM – 1:45PM**

**PREREQUISITE: LING-UA 13 OR Permission of the Instructor**

Introduces the syntax of languages quite different from English, from various parts of the world. Considers what they may have in common with English and with each other, and how to characterize the ways in which they differ from English and from each other.

### **Neural Bases of Language**

**LING-UA 43-001/PSYCH-UA 300-004**

**Professor Liina Pylkkänen**

**T/R 11:00AM – 12:15PM**

**PREREQUISITE: PSYCH-UA 25, PSYCH-UA 29, LING-UA 1, LING-UA 3 OR Permission of the Instructor**

What are the brain bases of our ability to speak and understand language? Are some parts of the brain dedicated to language? What is it like to lose language? This course provides a state-of-the-art survey of the cognitive neuroscience of language, a rapidly developing multidisciplinary field in the intersection of Linguistics, Psycholinguistics and Neuroscience. Lectures cover all aspects of language processing in the healthy brain from early sensory perception to higher level semantic interpretation as well as a range of neurological and development language disorders, including aphasias, dyslexia and genetic language impairment. Functional neuroimaging techniques will be introduced.

### **Field Methods**

**LING-UA 44-001/LING-GA 44-001**

**Professor Chris Collins**

**M/W 9:30AM - 10:45AM**

**PREREQUISITE: LING-UA 11 AND LING-UA 13 OR Permission of the Instructor**

Field Methods is a hands-on approach to learning linguistics. Every year, a different language is chosen to investigate. Students interview a native speaker of an unfamiliar language, usually a nonlinguist, to study all aspects of the language's grammar: phonetics, phonology, morphology, syntax, and semantics. They learn to evaluate and organize real, non-idealized linguistic data and to formulate generalizations, which then serve as the basis for a research paper. This course is a unique opportunity to obtain a rich set of data on a new topic of theoretical interest in any field of linguistics.

### **Linguistics as Cognitive Science**

**LING-UA 48-001/PSYCH-UA 48-001/LING-GA 48-001**    **Professor Alec Marantz**    **M/W, 9:30AM – 10:45AM**

This course examines the place of Linguistics within Cognitive Science from multiple perspectives. Foundational questions for a science of linguistics will be addressed both from within linguistics and from philosophy and psychology. Issues include the nature of the evidence for constructing grammars, the interpretation of grammatical rules as cognitive or neural operations, the significance of neo-behaviorist approaches to language and computational modeling for a cognitive theory of language, the connection between linguistic theory and genetics, and the importance of socio-cultural and historical variation for understanding the nature of language. Students will be expected to engage in debate over these issues bringing to the table their own background in one of the relevant disciplines as well what they learn from the assigned readings. The primary instructor will be joined for several of the lectures by guest speakers with complementary expertise.

### **Seminar: Computational Psycholinguistics**

**LING-UA 102-003**

**Professor Tal Linzen**

**W, 3:30PM - 6:10PM**

**Permission of the Instructor is required**

**Prerequisites: LING-UA 1, CSCI-UA 2, or CSCI-UA 3**

How do we understand and produce sentences in a language we speak? How do we acquire the knowledge that underlies this ability? Computational psycholinguistics seeks to address these questions using a combination of two approaches: computational models, which aim to replicate the processes that take place in the human mind; and human experiments, which are designed to test those models. The perspective we will take in this class is that models and experimental paradigms from psycholinguistics do not only advance our understanding of human cognitive science, but can also help us advance artificial intelligence and language technologies. While research in computational psycholinguistics spans all levels of linguistic structure, from speech to discourse, the focus of this class will be at the level of the sentence (syntax and semantics).