Linguistics (Tri-Co)

Department Website: https://www.haverford.edu/linguistics

There are 7,000 languages in the world, and we’re interested in studying all of them. Linguistics is the scientific study of language—we develop techniques to explore patterns that all human languages have in common and investigate the ways in which each is unique. Our explorations yield insights not only about languages, but also about the nature of the human mind.

Linguistics is also relevant to other disciplines, such as psychology, philosophy, mathematics, computer science, sociology and anthropology, and some of our students choose to double major with one of them.

Learning Goals

• Examine the structural components of sound, form, and meaning, and the precise interplay between them.
• Interact with the field of linguistics through a series of foundation courses in linguistics theory and methodology.
• Hone analytical and argumentation skills, and prepare for future pursuits in any field to which such skills are essential, including psychology, neuroscience, philosophy, mathematics, computer science, computational linguistics, sociology, and anthropology.
• Apply theoretical and methodological tools to the analysis of linguistic data, particularly in forming and testing hypotheses, and arrive at conclusions that the data and arguments support.
• Understand how language influences the way we interact with each other and with the larger world around us.
• Investigate how people acquire their knowledge about language, how this knowledge interacts with other cognitive processes and how it varies across speakers and geographic regions.

Haverford’s Institutional Learning Goals are available on the President’s website, at http://hav.to/learninggoals.

Major Requirements

The Tri-Co Linguistics Department offers two major tracks: (i) Linguistics and (ii) Linguistics & Language (often called Ling/Lang). Students complete either of these majors with a total of eight credits.

Mandatory Foundation Courses (three credits)

Students in both major tracks must complete one course from each of the following categories:

• Forms: LING H113 or LING S050 (Introduction to Syntax)
• Meanings: LING H114 or LING S040 (Introduction to Semantics)
• Sounds: LING H115 or LING S045 (Phonetics and Phonology)

Structure of a Non-Indo-European Language Courses (one credit)

Students in both major tracks much complete one course from the Structure of a Non-Indo-European Language series, which include the following classes, among others:

• LING H215 (Structure of Colonial Valley Zapotec)
• LING H282 (Structure of Chinese)
• LING S060 (Structure of Navajo)
• LING S062 (Structure of American Sign Language)
• LING S064 (Structure of Tuvan)

Elective Courses (LING majors only, three credits)

Three elective courses in linguistics or related fields are required for Linguistics majors. (Ling/Lang majors are not required to take elective courses, but have an additional language requirement, see below.) Electives include the following courses, among others:

• LING B101 or LING H101 (Introduction to Linguistics)
• LING H204 (Topics in Introductory Programming: Language and Computation)
• CMSC/LING H208 (Speech Synthesis and Recognition)
• LING/ENGL H213 (Inventing [the] English)
• LING/PSYC H238 (The Psychology of Language)
• PHIL H253 (Analytic Philosophy of Language)
• PHIL H260 (Historical Introduction to Logic)
• ANTH B281 (Language in the Social Context)
• LING/CMSC H325 (Computational Linguistics)
• LING/SPAN H365 (The Politics of Language in the Spanish-Speaking World)

Language Courses (LING/LANG majors only, six credits)

This requirement applied only to Linguistics and Language majors, not Linguistics majors.

• Ling/Lang majors must study two different languages with three credits from each, with at least one credit at the third-year level for each of the two languages.
Thesis (one credit)
A one-credit senior thesis in the fall semester of the senior year is required for majors in both tracks. The thesis constitutes the comprehensive requirement for the major.

Note: Majors in the Tri-Co Linguistics Department can receive up to two elective credits for pre-approved courses taken outside the Tri-Co. Interested students should seek consultation with, and approval from, the Bi-Co chair of the department prior to enrolling in the courses, and be ready to provide course descriptions during consultation and transcripts afterwards for proper credit counting towards the major.

Senior Project
Majors in our department are recommended to take the Junior Seminar LING S090 (Advanced Research Methods in Linguistics), in the spring term of their junior year. This course is designed to expose students to the classic literature on the major subfields in linguistics, familiarizing them with theoretical frameworks, methodologies, and bibliographies, culminating in the selection of a potential thesis topic, working and reworking on a thesis abstract with references. Students are also encouraged to take an upper level seminar course in the subfield where they will most likely choose a thesis topic.

Linguistics majors write their thesis in the fall semester of their senior year. All Bi-Co linguistics majors should pre-register for LING H399 in the spring of their junior year. They will be assigned an appropriate faculty advisor once they choose a thesis topic and the topic is approved. In the topic proposal, students need to list at least two relevant courses related to the topic. (LING S090 could be listed as one of the two.) If their assigned faculty advisor is from Swarthmore, majors will then switch to the appropriate senior seminar section of LING S100, which can be done in the beginning of the fall semester of their senior year.

Senior Project Learning Goals
As the capstone experience of the Linguistics major, the senior project represents the most rigorous academic undertaking by a senior, and reflects the achievement of the learning goals of the major.

Senior Project Assessment
Faculty members are assigned as first and second readers to each thesis after the senior major has decided on a topic in the beginning of the fall semester.

The senior thesis is evaluated on the following criteria:

Fundamentals:
- Does the student demonstrate a comprehensive understanding of elementary concepts in linguistics, such as the underlying goals of linguistic inquiry, basic units of linguistic analysis (phonemes, morphemes, constituency, entailment, etc.), and distinctions important to linguistics (prescriptive/descriptive, competence/performance, phoneme/allophone, form/function, etc.)? Does the student demonstrate familiarity with essential literature?

Tools and Methods:
- Does the student select and correctly implement methods and formal theories appropriate for their work? Does the student correctly use standard, professional linguistics formatting and notation for transcriptions, glosses, OT tableaux, syntactic structures, semantic interpretations, citations and references, etc.? Does the student correctly use standardly accepted technical jargon (“allomorph,” “adjunct,” “implicature,” etc.) rather than vague descriptions or nonstandard terminology? Does the student correctly use appropriate linguistics technology (Praat, ELAN, etc.)? At the level of technical details, does the student’s work look like it was written by a linguist (rather than, say, by a historian or chemist)?

Ethics:
- Does the student demonstrate a full understanding of best practices for responsible and ethical collection, storage, and use of data in ways that respect the relevant speakers and their communities and cultures? Does the student demonstrate a commitment to appropriate collaboration with speakers and communities? (N.B. This learning outcome may not be relevant to work that does not use primary data, in which case, this should normally be assessed as “N/A”.)

General Scientific Methodology:
- **Data Collection and Presentation**
  Does the student demonstrate an understanding of proper scientific methodology for collecting data (survey design, selection of participants, establishing controls, eliciting useful contrasts and paradigms, etc.)? Does the student organize data in meaningful ways that clearly demonstrate important patterns (minimal pairs, morphological paradigm tables, logical blocks of related utterances, etc.)?
- **Analysis**
  Does the student construct useful, appropriate hypotheses to explain the observed patterns in the data? Are these hypotheses rigorously and clearly formulated? Does the student sufficiently
explore logically plausible alternative hypotheses? Does the student convincingly argue for why their hypotheses are superior to the logical alternatives?

Critical Thinking Skills:
• Advanced Literature
  Does the student draw upon relevant advanced literature in meaningful ways? Does the student demonstrate an understanding of crucial data, analyses, results, models, predictions, etc. from this advanced literature?
• Innovation
  Is the student’s work innovative in some way that makes it stand out as more than just superficial description and/or straightforward application of tried-and-true analytical tools? Does the student articulate novel and insightful claims about a specific language, language itself, or linguistics more broadly? Is the student’s work noteworthy, at least in part, because of the student’s particular insights?

Quality of Prose:
• Coherence, Structure, Fluidity, etc.
  Is the student’s prose professional and polished, in line with general standards of academic writing? Is the student’s prose clear and logically structured? Are individual sentences coherent and grammatical? Do sentences and paragraphs flow fluidly from one to the next? Does the student’s prose strike an appropriate balance between being concise and being sufficient? Would the student’s prose pass muster for publication in a journal?

Requirements for Honors
Honors will be granted, at the discretion of the faculty members, to those senior majors who have consistently distinguished themselves in major-related course work (typically with a GPA of 3.7 or higher), active and constructive participation in the intellectual life of the department, and an outstanding senior thesis. A senior major may receive high honors if deemed exceptional in all three areas.

Minor Requirements
Students may minor in linguistics through Haverford by completing six credits in the following three areas:

Mandatory Foundation Courses (three credits)
• Forms: LING H113 or LING S050 (Introduction to Syntax)
• Meanings: LING H114 or LING S040 (Introduction to Semantics)
• Sounds: LING H115 or LING S045 (Phonetics and Phonology)

Structure of a Non-Indo-European Language Courses (one credit)
• LING H215 (Structure of Colonial Valley Zapotec)
• LING H282 (Structure of Chinese)
• LING S060 (Structure of Navajo)
• LING S062 (Structure of American Sign Language)
• LING S064 (Structure of Tuvan)

Elective Courses (choose two from the following sample of relevant courses among many others):
• LING B101 or LING H101 (Introduction to Linguistics)
• LING H204 (Topics in Introductory Programming: Language and Computation)
• CMSC/LING H208 (Speech Synthesis and Recognition)
• LING/ENGL H213 (Inventing [the] English)
• LING/PSYC H238 (The Psychology of Language)
• PHIL H253 (Analytic Philosophy of Language)
• PHIL H260 (Historical Introduction to Logic)
• LING/ANTH B281 (Language in the Social Context)
• LING/CMSC H325 (Computational Linguistics)
• LING/SPAN H365 (The Politics of Language in the Spanish-Speaking World)

The Tri-Co Linguistics Department accepts all linguistics courses offered at Swarthmore, Bryn Mawr, and Haverford for credit in their appropriate category.

Note: Minors in the Tri-Co Linguistics Department can receive up to two elective credits for pre-approved courses taken outside the Tri-Co. Interested students should seek consultation with, and approval from, the Bi-Co chair of the department prior to enrolling in the courses, and be ready to provide course descriptions during consultation and transcripts afterwards for proper credit counting towards the minor.

Study Away & Study Abroad
Majors in the Tri-Co Linguistics Department can receive up to two elective credits for pre-approved courses taken at departments on the College’s list of study away or study abroad programs. Interested students should seek consultation with, and approval from, the Bi-Co chair of the department prior to studying abroad, and be ready to provide course descriptions during consultation and transcripts afterwards for proper credit counting towards the major.
Prizes
The Tri-Co Department of Linguistics may, at its discretion, award the following prizes.

The "Best Theoretical Linguistics Thesis Prize" is awarded to the senior whose thesis exemplifies outstanding work in area of theoretical linguistics.

The "Best Descriptive Linguistics Thesis Prize" is awarded to the senior whose thesis exemplifies outstanding work in area of descriptive linguistics.

The "Best Applied Linguistics Thesis Prize" is awarded to the senior whose thesis exemplifies outstanding work in area of applied linguistics.

Faculty
Jane Chandlee
Assistant Professor of Linguistics

Shizhe Huang
The C.V. Starr Professor of Asian Studies; Associate Professor of Chinese and Linguistics

Brook Lillehaugen
Associate Professor and Haverford Chair of Linguistics (TriCo)

Amanda Payne
Visiting Assistant Professor of Linguistics

Affiliated Faculty
Suzanne Lindell
Computer Science Lab Assistant

Ana López-Sánchez
Associate Professor and Chair of Spanish

Faculty at Bryn Mawr
Deepak Kumar
Professor of Computer Science

Katherine Riesterberg
Post-Doctoral Fellow

Amanda Weidman
Associate Professor of Anthropology

Faculty at Swarthmore
Jeremy Fahringer
Laboratory Instructor

Theodore Fernald
Professor of Linguistics

Emily Gasser
Visiting Assistant Professor of Linguistics

K. David Harrison
Professor of Linguistics and Associate Provost

Patricia Irwin
Visiting Assistant Professor of Linguistics

Peter Klecha
Visiting Assistant Professor of Linguistics

Jamie Thomas
Assistant Professor of Linguistics

Jonathan North Washington
Assistant Professor of Linguistics

Courses at Haverford
LING H101 INTRODUCTION TO LINGUISTICS (1.0 Credit)
Amanda Payne

Division: Humanities
Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World
An introductory survey of linguistics as a field. This course examines the core areas of linguistic structure (morphology, phonology, syntax, semantics), pragmatics, and language variation in relation to language change. The course provides rudimentary training in the analysis of language data, and focuses on the variety of human language structures and on the question of universal properties of language.

(Offered: Fall 2019, Spring 2020)

LING H113 INTRODUCTION TO SYNTAX (1.0 Credit)
Amanda Payne

Division: Humanities; Symbolic Reasoning
Domain(s): B: Analysis of the Social World
This course is a hands-on investigation of sentence structures in human language. This is a participation intensive course. Collectively, the class will develop an increasingly complex syntactic theory starting with basic assumptions and seeing where they lead. In the process, students will develop skills in observing syntactic patterns and analyzing these patterns in order to come to some generalizations on their own.

(Offered: Fall 2019)

LING H114 INTRODUCTION TO SEMANTICS (1.0 Credit)
Amanda Payne

Division: Humanities; Symbolic Reasoning
Domain(s): B: Analysis of the Social World
This course focuses on the study of meaning in human language. We will explore semantic issues that arise from the lexicon, the sentences, and the discourse. Along the way, we will investigate not only the semantic structure of natural language but also pragmatic factors that affect language use. This
is a participation-intensive course. In the process, students will not only learn the basic semantic theory but will also develop skills in observing semantic patterns and analyzing these patterns in order to come to some generalizations on their own.

(Offered: Spring 2020)

**LING H115  PHONETICS AND PHONOLOGY (1.0 Credit)**

*Jane Chandlee*

**Division:** Humanities; Symbolic Reasoning  
**Domain(s):** B: Analysis of the Social World

This course investigates the sound patterns found in human languages. Phonetics is the study of these patterns from a physical and perceptual perspective while phonology is the study of sound patterns from a cognitive perspective. Activities in the class will expose students to the methodologies used by both perspectives (articulatory description and acoustic analysis for phonetics and formal theoretical models for phonology) and show the necessity and utility of both approaches in understanding the nature of sound patterns in human language.

(Offered: Spring 2020)

**LING H204  TOPICS IN INTRODUCTORY PROGRAMMING: LANGUAGE AND COMPUTATION (1.0 Credit)**

*Jane Chandlee, Suzanne Lindell*

**Division:** Natural Science; Quantitative; Symbolic Reasoning  
**Domain(s):** C: Physical and Natural Processes

A general introduction to computer programming, in the context of its application to a specific discipline such as Data Analysis or Bioinformatics. Prerequisite for CMSC 107, along with discipline-specific analysis. Not for students who have completed CMSC 105 and/or 107. This course is equivalent to CMSC 104.

Prerequisite(s): LING H101, H113, or H115  

(Offered: Spring 2020)

**LING H208  SPEECH SYNTHESIS AND RECOGNITION (1.0 Credit)**

*Jane Chandlee*

**Division:** Natural Science; Symbolic Reasoning  
**Domain(s):** C: Physical and Natural Processes

An introduction to the methodologies used in the automated recognition and synthesis of human speech, focusing on Hidden Markov Models in recognition and unit selection in synthesis. Students will get hands-on experience with implementing the various components of these systems to better understand the techniques, challenges, and open areas of research. Crosslisted: Computer Science, Linguistics

Prerequisite(s): LING 204, CS105 and 106 OR CS107 OR BMC 110 and 206 OR instructor consent  

(Offered: Fall 2019)

**LING H214  SPANISH IN THE US: LANGUAGE, IDENTITY AND POLITICS (1.0 Credit)**

*Ana López-Sánchez*

**Division:** Humanities  
**Domain(s):** A: Meaning, Interpretation (Texts); B: Analysis of the Social World

An examination of the social histories, geopolitical forces and linguistic ideologies that have shaped Spanish and its study in the U.S. This course will be taught in Spanish. Prerequisite(s): Course at the 200-level in Spanish or Linguistics  

(Offered: Spring 2020)
LING H215 THE STRUCTURE OF COLONIAL VALLEY ZAPOTEC (1.0 Credit)
Brook Lillehaugen
Division: Humanities
A detailed examination of the grammar of Colonial Valley Zapotec, an indigenous language of Oaxaca, Mexico. Focus on hands-on research, morphological analysis, and translation of archival documents. Prerequisite(s): LING 113; and one of the following: LING 101, 114, 115, or instructor consent

LING H250 SEMINAR IN PHONETICS AND PHONOLOGY (1.0 Credit)
Jane Chandlee
Division: Humanities; Symbolic Reasoning
Domain(s): B: Analysis of the Social World
This course provides theoretical and empirical breadth in advanced topics in phonetics and/or phonology. It also serves to introduce students to new ideas and recent developments in the field. Topics vary from semester to semester. Prerequisite(s): LING 115
(Offered: Fall 2019)

LING H282 STRUCTURE OF CHINESE (1.0 Credit)
Shizhe Huang
Division: Social Science
Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World
This course is designed to acquaint students with both the syntactic and semantic structures of Mandarin Chinese and the theoretical implications they pose to the study of natural language. Students will have an opportunity to further their understanding of linguistic theories and to develop skills in analyzing a non-Indo-European language systematically.
(Offered: Spring 2020)

LING H365 THE POLITICS OF LANGUAGE IN THE SPANISH-SPEAKING WORLD (1.0 Credit)
Ana López-Sánchez
Division: Humanities
Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World
The course will explore the relationship between (national) identity and language, and the specific outcomes of (language) policies and educational practices in societies where Spanish is spoken, generally alongside other mother tongues, often as the dominant language, but also in a minority situation. This course is conducted in Spanish. Crosslisted: Spanish, Linguistics

LING H399 SENIOR THESIS SEMINAR (1.0 Credit)
Amanda Payne, Shizhe Huang
Division: Humanities
Domain(s): A: Meaning, Interpretation (Texts); B: Analysis of the Social World
This seminar exposes students to linguistic research methods and guides them through the conceptualization of a topic, the research, and the writing of a senior thesis. All linguistics majors must write their senior thesis in this seminar or Ling S100 or S195. Enrollment limited to 15 students, Senior linguistics majors only.
(Offered: Fall 2019)

Courses at Bryn Mawr
LING B101 INTRODUCTION TO LINGUISTICS (1.0 Credit)
Katherine Riestenberg
Division: Humanities
Domain(s): A: Meaning, Interpretation (Texts)
An introductory survey of linguistics as a field. This course examines the core areas of linguistic structure (morphology, phonology, syntax, semantics), pragmatics, and language variation in relation to language change. The course provides rudimentary training in the analysis of language data, and focuses on the variety of human language structures and on the question of universal properties of language.
(Offered: Fall 2019)

LING B140 LANGUAGE AND EMPIRE IN MESOAMERICA (1.0 Credit)
Brook Lillehaugen
In this course we look at language and empire in Mesoamerica from a linguistic perspective. Students learn about the languages and linguistic features of the Mesoamerican area. The course features three “imperial” languages: Nahuatl, Spanish, and English. We consider the roles that language can have in building and maintaining empire and explore the linguistic landscape of Mesoamerica in its entirety. For example, we examine the role of Nahuatl in place names throughout Mesoamerica, the use of Spanish bilingual texts in the spread of Catholicism, and why in modern Mexico, speaking Spanish with an English accent might be viewed as “cool” but speaking Spanish with a Zapotec accent can be viewed as “uneducated”. The course ends with a unit on ways that speakers of indigenous Mesoamerican languages push back against linguistic colonialism, including opportunities to hear firsthand from language activists about their experiences and efforts. This course is reading, writing, and discussion heavy. This course is designated as satisfying the following approaches at BMC: CI and CC. This course
should also count towards the Latin American, Iberian, and Latino Studies concentration.

**LING B200 MULTILINGUALISM AND SECOND LANGUAGE ACQUISITION (1.0 Credit)**
*Katherine Riestenberg*
It is estimated that at least 60% of the world population speaks more than one language, while this is true of only around 15-20% of Americans. Misconceptions about multilingualism, multidialectalism, and language learning are common in American society, and these can often lead to bias and discrimination. This course examines these topics from a variety of sociocognitive angles, including language learning, language processing, dialectal variation, language contact, language and identity, and language policy. The following types of questions will be considered: What do multilingual speakers' linguistic resources mean to them? What are the linguistic ‘rules’ of code-switching? How is learning languages as a child different from learning languages as an adult? Can you ‘forget’ a language you once knew? How can public policies discourage or support multilingualism? This is a seminar-style course that will use a mix of discussion, lecture, and interactive activities to give students a strong foundation in both classical and recent research on these topics while also inviting students to explore personal curiosities and multilingualism in their own lives. It is also a writing intensive course that will guide students to analyze the style and structure of academic works, offer low-stakes opportunities to improve writing skills, and provide feedback on how to polish written work into a strong final version. Prerequisites: At least one previous Linguistics course (any course)
*(Offered: Spring 2020)*

**LING B399 SENIOR THESIS SEMINAR (1.0 Credit)**
This seminar exposes students to linguistic research methods and guides them through the conceptualization of a topic, the research, and the writing of a senior thesis. All linguistics majors must write their senior thesis in this seminar or Ling S100 or S195.
*(Offered: Fall 2019)*

**Courses at Swarthmore**
Visit the Tri-College Course Guide to view the list of courses at Swarthmore this year: https://trico.haverford.edu