LING410 Grammar and Meaning (3 Credits)
The basic notions of semantic theory: reference, quantification, scope relations, compositionality, thematic relations, tense and time, etc. The role these notions play in grammars of natural languages. Properties of logical form and relationship with syntax.
Prerequisite: Permission of instructor; or LING311.

LING411 Comparative Syntax (3 Credits)
Comparison of data from a variety of languages with respect to syntactic theory in order to investigate how parameters of universal grammar are fixed differently in different languages. Attempts to work out fragments of grammars for some languages.
Prerequisite: LING321; or permission of instructor.

LING419 Topics in Syntax (3 Credits)
Topics vary.
Prerequisite: LING311.
Repeatable to: 12 credits if content differs.

LING420 Word Formation (3 Credits)
Examination of shape and meaning of possible words, both across languages and within particular languages. Interaction between principles of word formation and other components of a grammar: syntax, logical form and phonology.
Prerequisite: LING321 and LING311.

LING429 Topics in Phonology (3 Credits)
Advanced seminar in phonology. Topics vary.
Prerequisite: LING322.
Repeatable to: 6 credits if content differs.

LING439 Topics in Diachronic Linguistics (3 Credits)
LING440 Grammars and Cognition (3 Credits)
Relationship between the structure, development and functioning of grammars and the structure, development and functioning of other mental systems. Interpretations of experimental and observational work on children's language, aphasia, speech production and comprehension.
Prerequisite: LING321 and LING311.

LING444 Child Language Acquisition (3 Credits)
Examines language acquisition in infancy and early childhood: the nature of children's linguistic representations and how these develop naturally. Role of (possible) innate linguistic structure and interaction of such structure with experience. Evaluation of methods and results of current and classic research leading to contemporary models of language development.
Prerequisite: LING311.

LING448 Advanced Laboratory Research in Linguistics (2-3 Credits)
Individualized, collaborative research course aimed at developing skills for laboratory research in language acquisition, sentence processing or neurolinguistics. Conducting a research project in laboratory linguistics as part of a team creating original research relevant to current issues in linguistics.
Prerequisite: LING248; and (LING200 or LING240).
Restriction: Permission of instructor.
Repeatable to: 6 credits if content differs.
Additional Information: This course is part of a two-semester sequence. Ling248 is a prerequisite. Ling248 and Ling448 must be completed in the same laboratory.

LING449 Topics in Psycholinguistics (3 Credits)
Prerequisite: LING321 and LING311; or permission of ARHU-Linguistics department.
Repeatable to: 6 credits if content differs.

LING451 Grammars and Variation (3 Credits)
Grammars and the use of language in a variety of styles: formal, casual, literary, etc. Consequences for concepts of grammars. Variation theory. Literary styles.
Prerequisite: LING311.

LING453 Mathematical Approaches to Language (3 Credits)
The aspects of mathematics used in linguistic discussions: recursion theory, Chomsky's hierarchy of grammars, set theory, Boolean algebra, finite state grammars, context-free grammars, etc. Applications to theories of grammars. Formalizations of grammatical theories.
Prerequisite: LING312.

LING455 Second Language Acquisition (3 Credits)
Examines second language acquisition from the perspective of Chomsky's 'Universal Grammar'. Relationship between theories of grammars, first language acquisition by children and the learning of second languages by adults.
Prerequisite: LING311.

LING460 Diversity and Unity in Human Languages (3 Credits)
Fundamentals of grammatical typology as they relate to issues in social attitudes towards language. Linguistic structure of standard and non-standard languages and dialects. Relationship of different writing systems to linguistic structure. Issues in bilingualism and multilingualism.
Prerequisite: LING240 or LING200.

LING487 Computer Science for Cognitive Studies (3 Credits)
List processing and discrete mathematics. Preparation for the study of artificial intelligence and other mathematically oriented branches of cognitive studies. Intended for students of linguistics, philosophy, and psychology. LISP computer language, graphs and trees, the concept of computational complexity, search algorithms.
Credit Only Granted for: LING487 or PHIL487.

LING499 Directed Studies in Linguistics (1-3 Credits)
Independent study or research on language under the supervision of a faculty member.
Prerequisite: Permission of ARHU-Linguistics department.
Repeatable to: 6 credits if content differs.

LING610 Syntactic Theory (3 Credits)
Intensive introduction to transformational syntax.
Prerequisite: LING312.

LING611 Issues in Syntax (3 Credits)
Topics of current theoretical interest examined through data from a variety of languages.
Prerequisite: LING610.

LING620 Phonological Theory (3 Credits)
Topics in current phonological theory, as they relate to data from various languages. Segmental and prosodic analysis. Autosegmental theory, metrical theory, etc.
Prerequisite: LING322.
LING621 Issues in Phonology (3 Credits)
Topics of current interest in phonological theory examined through data from several languages.
Prerequisite: LING620.

LING625 Morphology and the Lexicon (3 Credits)
The structure of words and investigation of how word formation processes interact with other components of grammar.

LING640 Psycholinguistics (3 Credits)
Core graduate course in psycholinguistics, covering leading theoretical approaches and experimental methods in language acquisition, language processing, and neurolinguistics.
Restriction: Permission of instructor.

LING641 Issues in Psycholinguistics (3 Credits)
Topics of current interest in psycholinguistics, including both theoretical approaches and experimental and analytical issues in language acquisition, language processing, and neurolinguistics.
Prerequisite: LING640.

LING644 Language Acquisition (3 Credits)
Interpretations of observational and experimental work on children’s language development, and relationship between developmental stages and theories of human language faculties.
Prerequisite: LING640.

LING646 Cognitive Neuroscience of Language (3 Credits)
Overview of classical and recent work on the neural basis of speech and language, with a goal of introducing contemporary methods and results to prepare the student to read the neurolinguistics and cognitive neuroscience literature. An emphasis will be placed on current techniques.

LING658 History of a Language (3 Credits)
Detailed examination of the history of a single language or language family.
Repeatable to: 6 credits if content differs.

LING659 Structure of a Language (3 Credits)
Detailed examination of a particular language or language family.
Repeatable to: 6 credits if content differs.

LING660 Introduction to Semantics (3 Credits)
Basic concepts and methods of contemporary semantic theory including basic set theory, elementary propositional and predicate calculus, the structure of predicates and propositions, quantification binding. Prepares students for study of more advanced topics in semantics.
Restriction: Permission of instructor.

LING661 Issues in Semantics (3 Credits)
A second course in semantic theory. Application of basic concepts and methods to topics of current theoretical interest.
Prerequisite: LING660; or permission of ARHU-Linguistics department.

LING663 Pragmatics (3 Credits)
An intensive introduction to formal linguistic pragmatics: the study of systematic dependencies of meaning on context of use. Topics will include implicature, presupposition, reference, topic, focus, and the linguistic means of expressing these.
Prerequisite: LING660 or PHIL660; or permission of instructor.
Recommended: LING661.

LING678 Linguistic Field Methods (3 Credits)
A hands-on introduction to conducting linguistic analysis on an unfamiliar language. Students work with a native speaker of a language that they are not familiar with, devising elicitations and developing analyses. Investigations will include phonological, morphological, syntactic, and semantic properties of the language.
Prerequisite: Minimum grade of B- in LING311 and LING321.
Restriction: Permission of instructor.
Repeatable to: 6 credits if content differs.

LING689 Independent Study (1-3 Credits)
Independent studies in grammatical theory.
Restriction: Permission of instructor; and must be in a major within ARHU-Linguistics department.
Repeatable to: 6 credits if content differs.

LING698 Directed Study (1-3 Credits)

LING723 Computational Linguistics I (3 Credits)
Fundamental methods in natural language processing. Topics include: finite-state methods, context-free and extended context-free models of syntax; parsing and semantic interpretation; n-gram and Hidden Markov models, part-of-speech tagging; natural language applications such as machine translation, automatic summarization, and question answering.
Prerequisite: CMSC421; or students who have taken courses with comparable content may contact the department; or permission of instructor. Also offered as: CMSC723, INST735.
Credit Only Granted for: CMSC723, LING723, or INST735.
Formerly: LING645.

LING773 Computational Linguistics II (3 Credits)
Natural language processing with a focus on corpus-based statistical techniques. Topics include: stochastic language modeling, smoothing, noisy channel models, probabilistic grammars and parsing; lexical acquisition, similarity-based methods, word sense disambiguation, statistical methods in NLP applications; system evaluation.
Prerequisite: LING723 or CMSC723; or permission of instructor. Also offered as: CMSC773.
Formerly: LING647.

LING798 Research Papers in Linguistics (1-6 Credits)

LING799 Master's Thesis Research (1-6 Credits)

LING819 Seminar in Syntactic Theory (3 Credits)
Current topics in research on syntactic theory.
Prerequisite: LING611.
Repeatable to: 6 credits if content differs.

LING829 Seminar in Phonological Theory (3 Credits)
Current topics in research on phonology and morphology.
Prerequisite: LING621.
Repeatable to: 6 credits if content differs.

LING839 Seminar in Language Change (3 Credits)
Topics in research on historical change in language.
Prerequisite: LING630.
Repeatable to: 6 credits if content differs.

LING848 Seminar in Computational Linguistics (3 Credits)
Current topics in research in computational linguistics.
Prerequisite: LING645; or permission of instructor.

LING849 Seminar in Psycholinguistics (3 Credits)
Current topics in research on psycholinguistics.
Prerequisite: LING640 or LING641; or permission of instructor.
Repeatable to: 6 credits if content differs.
LING859 Seminar in Language Acquisition (3 Credits)
Current topics in research on language acquisition.
Prerequisite: LING640 or LING641; or permission of ARHU-Linguistics department.
Repeatable to: 6 credits if content differs.
Credit Only Granted for: LING859 or LING889A.
Formerly: LING889A.

LING869 Seminar in Neurolinguistics (3 Credits)
Current topics in research on neurolinguistics.
Prerequisite: LING640 or LING641; or permission of ARHU-Linguistics department.
Repeatable to: 6 credits if content differs.
Credit Only Granted for: LING869 or LING889A.
Formerly: LING889A.

LING879 Seminar in Semantics (3 Credits)
Current topics in research in semantics.
Prerequisite: LING660 or LING661.
Repeatable to: 9 credits if content differs.
Formerly: LING889.

LING888 Doctoral Research Paper (1-6 Credits)
Students will strengthen their abilities to formulate coherent research questions, conduct research and create a publishable piece of work. In addition, the course is part of a set of requirements to advance to doctoral candidacy.
Repeatable to: 6 credits.
Credit Only Granted for: LING888 or LING895.
Formerly: LING895.

LING889 Directed Research (1-8 Credits)

LING896 Research Paper in Minor Area (3 Credits)
This course is designed to strengthen the students' ability to do research in a minor area of expertise, and to help them create a publishable piece. In addition, the course constitutes part of a set of requirements to advance to doctoral candidacy.
Prerequisite: LING888.

LING898 Pre-Candidacy Research (1-8 Credits)

LING899 Doctoral Dissertation Research (1-8 Credits)