MA Evolutionary Linguistics

Master Thesis (06SM272-MA)

Objective
The master's thesis demonstrates the ability to independently process and adequately present a scientific task at the level of the chosen curriculum within a given deadline.

General description
The master's thesis is written as an independent paper. Mentoring takes place during consultation hours with the advisor, who must minimally hold a Ph.D. The student workload of the master's thesis includes both their own work and the meetings with the advisor.

Introduction to Evolutionary Linguistics (06SM272-502)

Objective
Familiarity with the key questions and findings of interdisciplinary research on the evolution of language

General description
This course introduces students to the key research questions in the interdisciplinary study of the evolution of language. The course places particular emphasis on empirical studies addressing the origin and transmission of language.

Requirements
Basic knowledge of linguistic analysis and terminology

Methods in Evolutionary Linguistics (06SM272-503)

Objective
Knowledge and application of advanced quantitative methods in evolutionary linguistics

General Description
This course introduces students to the theory and application of quantitative methods in evolutionary linguistics. It builds on basic skills, extends these through both field-specific and more general approaches, and includes practical applications and implementations.

Requirements
Basic knowledge of statistics and probability theory
Mechanisms in Child Language Development (06SM272-507)

Objective
Knowledge of the biological, psychological and cultural-social foundations of child language development. In-depth understanding of the basic prerequisites and cognitive mechanisms that underlie language development in ontogenesis. Knowledge of the factors (e.g., quantity and quality of input) that can influence these mechanisms.

General description
The course addresses various theories of language development research with a special focus on the underlying learning mechanisms (e.g., statistical learning, generalization mechanisms) that are postulated in specific theories of language learning. A special focus is placed on the cognitive prerequisites in early ontogenesis.

Prerequisites
Basic knowledge of analytical concepts in linguistics; knowledge of the key aspects of language development in children and the most important research methods (as taught in to the BA module "language development")

Written Work in Linguistic Ontogeny (06SM272-508)

Objective
Ability to conduct research on a given topic and to summarize and critically discuss the findings

General description
In consultation with the instructor, students will engage with a current research topic in linguistic ontogenesis. The topic will be developed through critical reading of the literature, and then presented, discussed, and evaluated in a written paper.

Prerequisites
Basic knowledge of analytical concepts in linguistics; knowledge of the key aspects of language development in children and the most important research methods (as taught in to the BA module "language development")

Variation in Child Language Development (06SM272-509)

Objective
Understanding of the role of individual and cross-linguistic variation in early linguistic development, the environmental factors that may cause individual variation, and the relevance of language development research for our understanding of the evolution of language.

General description
This course introduces students to selected topics of language development research, especially with regard to the causes of variation. These include both the causes of speaker-specific variation and the role of cross-linguistic variation in children’s language development.

Prerequisites
Basic knowledge of analytical concepts in linguistics; knowledge of the key aspects of language development in children and the most important research methods (as taught in to the BA module "language development")
Linguistic Theory in Evolutionary Perspective (06SM272-510)

Objective
Understanding the components that distinguish language from other communication systems; analysis of key linguistic theories in an evolutionary framework

General Description
This course introduces the central components of human language and discusses what exactly makes human language unique. The course explores key theories on the evolution of language and extends this discussion by analyzing what these theories imply about the evolution of language.

Requirements
Basic knowledge of linguistic analysis and terminology

Written Work in Language Origin (06SM272-511)

Objective
Ability to summarize and critically discuss research on a selected topic.

General description
In consultation with the instructor, students will engage with a current research topic in language origin. The topic will be developed through critical reading of the literature, and then presented, discussed, and evaluated in a written paper.

Comparative Research on Language Origin (06SM272-512)

Objective
Understand the similarities and differences in the cognitive and communicative abilities of humans and animals; knowledge of the impact of these skills for the language faculty and for the reconstruction of its emergence; thorough understanding of the key methods (analysis, experiments) and current issues (conceptual and methodological) in comparative research.

General description
This course investigates the extent to which cognitive and communicative components of human language exist in nonhuman animals. The course summarizes comparative research on wild and captive animals, from both closely and distantly related species, and puts this research into a broad framework to examine the phylogenetic age of specific components in human language and to determine the socio-ecological conditions under which these components emerged.

Prerequisites
Basic understanding of the comparative approach and its role in reconstructing the evolution of language; knowledge of the different levels of animal behavior research (Tinbergen’s questions); the importance of observational and experimental research
Conditions of Language Dynamics (06SM272-504)

Objective
Knowledge of the most important biological, psychological and socio-cultural conditions that affect language change; knowledge of the methods used to undertake research into these conditions; ability to formulate questions for this research.

General description
The course introduces students to state-of-the-art research on selected biological-psychological and socio-cultural conditions that drive or shape language change. A particular focus is placed on the theoretical foundation of current research and the choice of methods.

Written Work in Language Diachrony (06SM272-505)

Objective
Ability to summarize the state-of-the-art in research on a selected topic and to critically discuss such findings.

General description
In consultation with the instructor, students will engage with a current topic in the modeling of language history through space and time. The topic will be developed through critical reading of the literature, and then presented, discussed, and evaluated in a written paper. Depending on the topic, written work may also include actual modeling.

Prerequisites
Basic knowledge of linguistic analysis concepts; knowledge of the concepts of language and language change.

Statistical Modeling of Language Dynamics (06SM272-506)

Objective
Knowledge of the main statistical methods for modeling language dynamics in space and time; ability to apply these methods to appropriate data and to critically evaluate the results.

General description
The course covers the most important statistical methods for modeling language dynamics in space and time. These include the theoretical foundations and assumptions of the methods, their application to appropriate data and the critical evaluation of the results.

Prerequisites
Basic knowledge of statistics and probability theory; basic knowledge of linguistic concepts and analysis; knowledge of the concepts of language change.
Colloquium on Master’s Thesis Work (06SM272-501)

Objective
Preparation of the master's thesis for presentation in the research colloquium of the IVS.

General description
Presentation of the master’s thesis in the research colloquium of the Department of Comparative Linguistics.

IMPORTED MODULES IN EVOLING:

Primate Behavior - Empirical Research (BIO 211)
General description
In this course, students will learn how to empirically approach ideas on the evolution of social, cultural and cognitive evolution, by observing primate behavior. Based on the theoretical background acquired in BIO 210 (or equivalent knowledge), participants will develop their own project, and design, execute, analyse and present their observational or experimental study, aimed at testing current ideas in primate behavior. The practical part will take place in Zoo Zurich and the Institute's Primate Station.

Notes
This course is the continuation of Bio 210. Bio 210 or Bio 216 are a pre-requisite for this course, or equivalent knowledge or the motivation to acquire it during the course. Please contact the module leader if you are not sure regarding the pre-requisites.

Primate Cognitive Evolution (BIO 216)
General description
This course aims at exploring the current state of the art of research in primate cognition. To do so, we will first provide an overview over the fastly growing field of comparative psychology, identifying cognitive capacities across primates in various social and non-social domains, with data from both the wild and captivity. Based on the comparative approach, we will then discuss various hypotheses of primate cognitive evolution that have been proposed to explain this pattern, and ultimately ask whether and how this approach can help us to understand the evolutionary pathways that have led to our own cognitive capacities.

Learning Outcome
By the end of this module each student is able to:
- describe the cognitive abilities of non-human primates in different social and non-social contexts
- explain findings from comparative cognition research and to critically evaluate their relevance for the cognitive evolution of humans
- apply findings about the cognitive abilities of non-human primates in the context of comparative cognition research
- critically evaluate experimental studies
- experimentally implement simple questions concerning cognitive abilities of non-verbal individuals
Sociobiology of Communication I (BIO 386)

General description
In this interactive lecture we identify commonalities and communication concepts expressing social behaviour across a diversity of taxa. Based on theoretical and empirical research we unveil both proximate and ultimate mechanisms shaping communication from intra-genomic conflict to bacterial cells, to insect, vertebrate and human societies.

Learning Outcome
By the end of this module each student is able to:
- describe proximate and ultimate mechanisms underlying communication among and within organisms
- recognize commonalities of communication across a wide range of systems
- show how empirical research and theoretical models fit the conceptual framework
- critically evaluate empirical evidence and interpretations
- improved their scientific writing

Notes
The first 7 weeks of the semester are taught as 2 hour interactive lectures. Students will be asked to read a paper and actively contribute to discussions within the lecture. In the second half of the semester, students will write a scientific essay within the topic of communication/cooperation, sociobiology, and give a short presentation in the 2nd last week of the semester. There will be no taught lectures anymore during this part, only two meetings to give feedback on the essays, and one meeting on presentations of their scientific essay. Knowledge of content BIO 122 (Grundvorlesung ‘Verhaltensbiologie) is compulsory to attend this module. This module is a pre-requisite for participation in the Blockkurs BIO 387 (can be taken in the same semester).

Sociobiology of Communication II (BIO 387)

General description
In this practical course, students either choose a small project in which they collect some empirical data on communication in social organisms, or write a review on a specific aspect of communication. Students bring in their own idea of a topic or follow our suggestions. They are expected to work independently and produce a final report in form of a research proposal or review.

Learning Outcome
By the end of this module each student is able to:
- apply their knowledge from BIO 386 to a practical project on 'Sociobiology of communication'
- identify and formulate a research question and to support it with empirical evidence or literature based arguments
- write a scientific proposal (in the style of a MSc thesis proposal) based on preliminary data and / or literature review
- perform extensive literature search on a specific topic