International school in
psycholinguistics, neurolinguistics and
clinical linguistics

2026 SCHOOL
COURSE DESCRIPTIONS

Introduction to linguistics: Srdjan Popov (Introductory, MONDAY, slot 1)

This introductory course to linguistics is intended for a wide audience, from linguists to students or professionals with no previous linguistic training. The course will cover a number of essential theoretical topics, mainly in the fields of morphology and syntax. The goal of the course is to prepare the students for the courses in psycholinguistics and neurolinguistics. The course is also of interest to (advanced) linguistics students, as it will focus in detail on a number of selected topics that will later be covered from an experimental perspective.

Neuroanatomy for linguists 1-2: Silvia Martínez-Ferreiro (Introductory, MONDAY & TUESDAY, slot 2)

The course provides an overview of the main anatomical landmarks involved in speech and language production and comprehension. The course departs from genetics and a broad characterization of the phono-articulatory and the nervous system and deepens into cortical and subcortical structures relevant for language.

Cross-Syndrome Comparisons and Markers of Grammatical Impairment: Alexandra Perovic (Advanced, MONDAY, slot 3)

This course examines language development across neurodevelopmental disorders, with the aim of identifying reliable clinical markers of grammatical impairment. Focusing on autism (with and without structural language impairment), Down syndrome, Williams syndrome, Developmental Language Disorder (DLD), and Fragile X, we address long-standing questions about the relationship between grammar and cognition, modularity of the language faculty, and whether atypical language development reflects delay or deviance relative to typical development. We focus on experimental data from cross-syndrome comparisons of two grammatical phenomena, tense/finiteness and binding.

Distributional semantic models of cognition: Dušica Filipović Đurđević (Advanced, MONDAY, slot 4)

This course will introduce the conceptual and historical background of distributional semantics and its application in cognitive psychology and psycholinguistics. We will start from the very roots of the idea that concepts can be represented as vectors in multidimensional semantic space and end by describing the Large Language Models as state-of-the-art. We will also provide a practical demonstration of how this approach can be used in testing psycholinguistic models of learning and processing word meanings.

Ethics and data management: Srdjan Popov (Introductory, TUESDAY, slot 1)

This course focuses on ethical (and legal) aspects of conducting research with human participants. We will talk about why it is necessary to have your research evaluated by an ethical committee and what to do in case there is no such body at your institution. Particular emphasis will be placed on the difference between research requiring medical ethical and non-medical/general ethical review. In addition, we will talk about general aspects of data and privacy protection, but we will also discuss (research) data handling in terms of the EU General Data Protection Regulation.

First language acquisition: Mirjana Mirić (Advanced, TUESDAY, slot 3)

This course will present various theoretical approaches to the phenomenon of typical language acquisition, such as generative, cognitive and socio-cultural. The focus will be on the issues of innateness, universal grammar, poverty of stimulus argument, and critical period for language acquisition. Additionally, the course will present the milestones in language acquisition across different levels of linguistic structure.

Bilingualism and its effect on executive functions: Sabina Halupka-Rešetar (Advanced, TUESDAY, slot 4)

In this talk we are going to focus first on defining bilingualism and executive functions. We will then introduce theoretical frameworks that link bilingualism and executive functions and will provide empirical evidence for the bilingual advantage but will also dwell on the controversies and counterarguments for the bilingual advantage. We will explore the potential reasons behind the inconsistencies observed in research into bilingualism. Finally, drawing on an exploration of the role of language similarity on memory and executive functions by comparing the performance of three groups of young adults (two bilingual groups and a monolingual group), we will attempt to determine the extent to which

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the combination of languages spoken by the bilinguals contributes to an advantage in executive functions.

Clinical linguistics 1-3: Silvia Martínez-Ferreiro, Ana Matić Škorić, Claudia Peñaloza (Introductory, WEDNESDAY - FRIDAY, slot 1)

The course includes an overview of the main communication disorders. There is a focus on the description, assessment and treatment of speech and language pathologies occurring throughout the lifespan. This includes genetic, developmental, acquired, and degenerative conditions.

Introduction to neuroimaging: Christina Manouilidou (Introductory, WEDNESDAY, slot 2)

The course will give an introduction to the field of neuroimaging. It will be divided into two parts. The first part will be a short theoretical introduction into neuroscience and neuroimaging, covering all relevant aspects of physiology, neuroanatomy and some of the most relevant functional networks. In the second part, the course will cover the latest developments on electrophysiological (EEG), electromagnetic (MEG) and hemodynamic techniques (fMRI & PET) used in the study of language.

Applied statistics for linguistics 1 & 2: Ksenija Mišić, Milica Popović Stijačić (Advanced, WEDNESDAY, slots 3 and 4)

This course offers a gentle and accessible introduction to using mixed-effects regression models for psycho- and neurolinguistic data, by providing step-by-step tutorials in R studio. We will be using pieces of sample data from a reaction times experiment for the mixed-effect regression model, and from an eye-tracking experiment for a generalized mixed-effect regression model. The course requires no prerequisites; however, we recommend participants to bring along a laptop computer with R and R-studio installed.

Experiment design in OpenSesame: Ksenija Mišić (Introductory, THURSDAY, slot 2)

OpenSesame is a freely available open-source software tool (created by Sebastiaan Mathôt) that allows you to program experiments in psychology and linguistics. This tutorial will provide you with the basic principles of designing a simple experiment using PsychoPy using its graphical interface. Additionally, we will give a general overview of its capabilities, such as combining pre-made

elements and code tailored for your experiment, as well as demonstrate how easily data collection can be transferred from in-lab to online. Following this tutorial, you will be able to build an experiment on your own laptop, ready for data collection. Participants who will attend this tutorial are kindly asked to install OpenSesame beforehand.

Eye-tracking in language research: Ana Matić Škorić (Advanced, THURSDAY, slot 3)

In this course, you will get the most important information about eye-tracking as a method used in language processing studies. Specifically, we will review 1) basic aspects of this technique, 2) the most commonly used eye-tracking measures, 3) different eye-tracking paradigms, e.g., the reading paradigm and the visual world paradigm, and 4) examples of studies with different populations. Newer trends in online experimental studies which combine multiple methods (e.g. eye-tracking and EEG) will also be mentioned.

Neuromodulation of language: Christina Manouilidou (Advanced, THURSDAY, slot 4)

The course will be an introduction to the neuromodulation of language. Students will get familiar with the use of Transcranial Magnetic Stimulation (TMS) and transcranial Direct-Current Stimulation (tDCS) in improving language performance in populations with brain damage. The techniques are being used for the treatment of chronic stroke-induced aphasia, but also for a number of neurodegenerative conditions, such as Primary Progressive Aphasia, Mild Cognitive Impairment and Alzheimer's disease.

Application of Machine Learning or AI for Automatic Language Impairment Detection: Frank Tsiwah (Introductory, FRIDAY, slot 2)

In this workshop, you will explore how Machine Learning (ML) and Natural Language Processing (NLP) can be applied to the automatic detection of language impairments. We will cover the fundamental concepts of ML and introduce techniques for extracting meaningful linguistic features from narrative or spontaneous speech. You will also learn how to design, run, and interpret basic ML experiments aimed at identifying language abnormalities. The methods introduced in this session can be applied to a wide range of clinical and linguistic contexts, including developmental language disorders, aphasia, schizophrenia, and dementia—using just a few minutes of recorded speech as input data. The workshop will use Python for demonstrations and exercises. While prior programming experience is not required, having a Python environment installed

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(or access to [Google Colab](#)) will allow you to actively participate in the hands-on part.

Verbal learning in aphasia: Current evidence and implications for clinical practice: Claudia Peñaloza (Advanced, FRIDAY, slot 3)

In this lecture, I will provide a theoretical framework for language learning in the neurotypical brain and I will highlight why studying new word learning ability in aphasia is essential to understand the interplay between the language processing and learning systems during language recovery. I will also provide an overview of key empirical evidence on novel word learning in aphasia, providing a general characterization of this ability in people with this language disorder. Finally, I will discuss how clinical practice may benefit from understanding individual profiles of preserved versus impaired verbal learning abilities in people with aphasia in terms of assessment, prognosis and treatment.

Information theory in psycholinguistics: Dušica Filipović Đurđević (Advanced, FRIDAY, slot 4)

This course will describe the conceptual background of information theory and its application in the study of various language phenomena. At the very start, the basic concepts of information theory will be introduced. Throughout the course, several information theory measures will be explained and illustrated through presentation of published research which demonstrated their effects in language processing at the levels of phonology, morphology, syntax and semantics.