





PhD program in Linguistics

Course Catalogue, Academic Year 2024/2025

Updated: 1. Dezember 2024

Overview

Date	Short title	Instructor (Proponent)	
18.12.2024	Neurolinguistics in a Nutshell: From Development to Bilingualism (unibz)	Soares (Alber, Zordan)	
20.12.2024	Syntax on the edge: a graph theoretic analysis of sentence structure (unibz)	Krivochen (Alber, Girolami)	
Winter Scho	Winter School in Linguistics UniVR, 20.0124.01.2025		
	20-22.1.: Inflectional Morphology Rabanus 22-24.1.: Linguistics and Large Language Models Delfitto, Padovan		
11.02.2025	Studying Heritage Languages: Conversational and Sociolinguistics Perspectives (Heritage Languages Study Day) (unibz) [syllabus arriving soon]	De Stefani, Osterman, Cerruti (Veronesi, Antonello)	
26.02.2025	Investigating linguistic variables using oral data: the AlpiLinK corpus (UniVR)	Rabanus	
17.04.2025	Mapping linguistic variation with the REDE SprachGIS (UniVR)	Frank (Rabanus)	
07.05.2025	Phraseology and CxG (UniVR)	Cantarini, Schafroth	
Summer School in Linguistics unibz, summer 2025 [exact date and contents to be defined]			
Generation and Analysis of Corpora Theory and Practice of Transcription Abel Spreafico			

Title	Neurolinguistics in a Nutshell: From Development to Bilingualism
Teacher	Dr. Sergio Miguel Pereira Soares (Max Planck Institute for Psycholinguistics)
Coordinator UniVR/UniBZ	Birgit Alber (Angelica Zordan)
Compulsory/free choice?	Free Choice
Teaching hours/ECTS credits	5,5h/1CP
When?	18 December 2024; 10:30-12:30; 14-17:30
Where?	Aula 2.02, UniBZ (Campus Bressanone-Brixen)
Language of instruction	English
Assessment	In class
Learning outcomes	Students will learn the basis of neurolinguistics: the methods implied & the state-of-the-art research on language development and bilingualism in the brain.
Course contents	The workshop focuses on the neural basis of (multiple) language acquisition and processing. The day will be divided into three main parts:
	(i) Neuroanatomy & Cognitive Neuroscience Methods (10:30-12:30) In-depth understanding and all-around coverage of the neuroimaging methods (MEG/EEG, (f)MRI, (f)NIRS) cognitive neuroscientists make use of to investigate neural processes.
	(ii) Language in the Developing Brain (14:00-15:30) Portrait of (first) language acquisition in the developing brain. For instance, we will revisit literature looking at auditory processing (e.g., through the mismatch response component), word segmentation and word learning, perception and comprehension, resting state EEG, and more.
	(iii) Neurocognition of Bilingualism (16:00-17:30) Dive into literature covering second (and more) language acquisition in the brain and overview of the neurocognition of bi- and multilingualism.
Reading	 Anderson, A. J., & Perone, S. (2018). Developmental change in the resting state electroencephalogram: Insights into cognition and the brain. <i>Brain and cognition</i>, 126, 40-52. Friederici, A. D., & Männel, C. (2013). Neural correlates of the development of speech perception and comprehension. In K. N. Ochsner, & S. M. Kosslyn (Eds.), The Oxford Handbook of Cognitive Neuroscience (pp. 171-192). New York, USA: Oxford University Press. Kuhl, P. K. (2004). Early language acquisition: Cracking the speech code. <i>Nature Reviews Neuroscience</i> 5. 832–843. Morgan-Short, K. (2014). Electrophysiological approaches to understanding second language acquisition: A field

reaching its potential. *Annual Review of Applied Linguistics*, 34, 15-36.

Rothman, J., Alemán Bañón, J., & González Alonso, J. (2015). Neurolinguistic measures of typological effects in multilingual transfer: Introducing an ERP methodology. *Frontiers in psychology*, 6, 1087.

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Title	Syntax on the edge: a graph theoretic analysis of sentence structure
Teacher	Diego Gabriel Krivochen (University of Oxford)
Coordinator UniVR/UniBZ	Birgit Alber (Veronica Girolami)
Compulsory/free choice?	Free choice
Teaching hours/ECTS credits	5h/1CP
When?	20 December; 10:30-12:30; 14:00-17:00
Where?	Aula 1.35, UniBZ (Campus Bressanone-Brixen)
Language of instruction	English
Assessment	In class
Learning outcomes	On successful completion of this seminar, PhD students will acquire a basic knowledge in graph-theoretic syntax and its implications for the analysis of sentence structure.
Course contents	Perhaps the most familiar way of representing hierarchical structure in theories of natural language is by means of <i>tree diagrams</i> . These trees illustrate the derivations of sentences obtained by either top-down rewriting rules (as in Phrase Structure Grammars, expanding a sentential symbol) or bottom-up recursive discrete combinatorics (as in Minimalist syntax, combining syntactic objects stepwise): in both cases we are dealing with formal systems born out of the Immediate Constituency approach to syntax that dominated American structuralism and early generative grammar. Trees represent relations of <i>containment</i> and <i>precedence</i> between syntactic building blocks (words and phrases): branching nodes in a tree dominate segments that are linearly contiguous and also correspond to aspects of semantic interpretation (such that, for example, the semantic interpretation of a branching node is a function of the interpretation of its daughters). Formally, trees belong to the larger class of mathematical objects known as <i>graphs</i> . In this seminar we will examine the consequences of adopting a strictly graph-theoretic approach to the analysis of sentence structure in natural languages which departs from traditional (transformational and non-transformational) theories of syntax in a number of ways. We will define the expressions and relations that make up the grammar of a language in graph-theoretic terms and examine some of the empirical consequences of our approach. Time permitting, we would cover the following topics: • Fundamentals of graph-theoretic syntax: Justification, formalisation • Declarative and Procedural variants • Basic expressions, addressing axiom • Grammatical Analysis - Simple clauses - Equi and raising - Wrap

Ditransitive constructions Open problems Case - hypergraphs, multigraphs, and Unification grammar Coordination – evidence in favour of a derivational approach? Reading Bondy, J. A. & U. S. R. Murty (2008) *Graph Theory*. New York: Springer. Frank, Robert (2013) Tree adjoining grammar. In Marcel den Dikken (ed.) The Cambridge Handbook of Generative Syntax. Cambridge: CUP. 226-261. Gould, Ronald (1988) Graph Theory. California: The Benjamins/Cummings Publishing Company. Gross, Jonathan & Jay Yellen (2014) Fundamentals of graph theory. In Jonathan Gross, Jay Yellen & Ping Zhang (eds.) Handbook of Graph Theory [2nd Edition]. London: Routledge. 2-20. Johnson, David & Paul Postal (1980) Arc Pair Grammar. Princeton: Princeton University Press Joshi, Aravind K. & Yves Schabes (1991) Tree-Adjoining Grammars and Lexicalized Grammars. Technical Reports (CIS). Paper 445. http://repository.upenn.edu/cis_reports/445 Krivochen, Diego Gabriel (2024) Raising to object: a graphtheoretic analysis. Evolutionary Linguistic Theory 5(2). 128-161. Krivochen, Diego Gabriel (2023) Towards a theory of syntactic workspaces: neighbourhoods and distances in a lexicalised grammar. The Linguistic Review 40(2). 311-360. https://doi.org/10.1515/tlr-2023-2004 Krivochen, Diego Gabriel (2023) The search for Minimal Search. Biolinguistics 17. https://doi.org/10.5964/bioling.9793 Krivochen, Diego Gabriel (2023) Syntax on the Edge: a graphtheoretic analysis of sentence structure. Leiden: Brill. McKinney-Bock, Katherine & Jean-Roger Vergnaud (2014) Grafts and beyond: Graph-theoretic syntax. In Katherine McKinney-Bock & María Luisa Zubizarreta (eds.) Primitive Elements of Grammatical Theory. London: Routledge. 207-236. Perlmutter, David (1980) Relational grammar. In E. Moravcsik & J. Wirth (eds.) Syntax and semantics 13. New York: Academic Press. 195-229. Zyman, Eric (2023) On the definition of Merge. Syntax. https://onlinelibrary.wiley.com/doi/abs/10.1111/synt.12287

Title	Inflectional Morphology: Agreement, Syncretism and Paradigm Structure
Teacher	Stefan Rabanus
Coordinator UniVR/UniBZ	Stefan Rabanus (stefan.rabanus@univr.it)
Compulsory/free choice?	Compulsory
Teaching hours/ECTS credits	10/2.5
When?	20 January 2025, 14.00-17.00 21 January 2025, 10.00-12.00, 14.00-17.00 22 January 2025, 10.00-12.00
Where?	UniVR - Aula Co-Working
Language of instruction	English
Assessment	PhD Students can choose aspects of the module as topic of their term paper.
Learning outcomes	On successful completion of this module, PhD students will be able to: - summarize categories and markers of inflectional morphology; - compare different languages with respect to morphological categories and marking; - relate empirical findings to morphological theory; - demonstrate a deeper understanding of the thematic fields of 'agreement' 'syncretism', 'paradigm structure'; - show proficiency in morphosyntactic analysis, especially in the use of the Leipzig Glossing Rules, by both writing and interpreting glosses.
Course contents	The course will provide basic knowledge in inflectional morphology. With 'agreement', 'syncretism' and 'paradigm structure' three central concepts will be discussed in more detail. The concepts will be exemplified mainly with data from Indo-European standard languages. For German and Italian also other contemporary und historical varieties will be considered, in accordance with the PhD programme's special focus on dialects and minority languages. A third-year PhD student will contribute a case study on historical dialectology of German.
Reading	 Baerman, Matthew/Brown, Dunstan/Corbett, Greville G. (2005): The Syntax-Morphology Interface. A Study of Syncretism. Cambridge: Cambridge University Press. Corbett, Greville G. (2006): Agreement. Cambridge University Press. Haspelmath, Martin (2002): Understanding Morphology. London: Arnold. Stump, Gregory T. (2016): Inflectional Paradigms: Content and Form at the Syntax-Morphology Interface. Cambridge University Press.

Title	Linguistics and Large Language Models
Teacher	Denis Delfitto, Andrea Padovan
Coordinator UniVR/UniBZ	Stefan Rabanus (stefan.rabanus@univr.it)
Compulsory/free choice?	Compulsory
Teaching hours/ECTS credits	10/2.5
When?	Wednesday 22 January, 14.00-17.00, Co-working Thursday 23 January, 10.00-12.00, T.10 Thursday 23 January, 14.00-17.00, T.10 Friday 24 January, 10.00-12.00, T.10
Where?	UniVR - Aula Co-Working, T.10
Language of instruction	English
Assessment	PhD Students can choose aspects of the module as topic of their term paper.
Learning outcomes	On successful completion of this module, PhD students will acquire a basic knowledge in the nature and use of Large Language Models (LLM) and recent developments in AI in text analysis and text production
Course contents	This 10-hour course will introduce students to the key features of Large Language Models (LLMs) and their relationship with natural language. The course will cover (i) a brief introduction to the basic mathematical notions that are necessary to understand the developments in Machine Learning (ML) that led to LLMs and (ii) a critical discussion of some influential papers that deal with the LLMs' impact on applied and theoretical linguistics. More particularly, there have been interesting debates about the models' ability to produce grammatical sentences and understand complex syntactic constructions. Some of the questions that arise are: (i) how can models display such a high level of proficiency in some linguistic domains? (ii) which are the differences (or the commonalities) with human linguistic competence? (iii) in which linguistic domains are models currently underperforming and what could be done to improve their performance? (iv) what are the consequences for theories on language acquisition? (v) how can models impact research methodology in applied and theoretical linguistics? Some case studies with both ChatGPT and Google Gemini will be presented to showcase the grammatical performance of LLMs. The course will also explore the concept of 'emergent skills' in LLMs and the associated scientific debate.
Reading	to be comunicated

Title	Investigating linguistic variables using oral data: the AlpiLinK corpus
Teacher	Stefan Rabanus
Coordinator UniVR/UniBZ	Stefan Rabanus (stefan.rabanus@univr.it)
Compulsory/free choice	Free choice
Teaching hours/ECTS credits	4/1
When	26 February 2025, 14.00-17.00
Where	UniVR - Aula Co-working
Language of instruction	English
Assessment	In class
Learning outcomes	On successful completion of this workshop, PhD students will be able to demonstrate to: - know how to create a linguistic questionnaire which is adequate for crosslinguistic analyses; - be familiar with the structure of language-data repositories; - be able to extract features from audio recordings and organize the data analysis in way which allows for geolinguistic interpretations (using Excel tables or similar tools).
Course contents	AlpiLinK (https://alpilink.it) provides a comprehensive and rapidly growing parallel corpus with crowdsourced audio data from all dialects and minority languages of the northern Italian regions: Piedmont, Aosta Valley, Lombardy, Veneto, Trentino-South Tyrol and Friuli-Venezia Giulia. By 17 June 2024 the repository featured 35.489 audio files produced by 1003 speakers (https://zenodo.org/records/11352290). In the theoretical part the questionnaire design will be illustrated and students will be introduced to the linguistic analysis of the data. In the practical part PhD students will be trained to conduct their own analyses of the data.
Reading	Reading: since there are no publications on the AlpiLinK corpus creation and analysis, yet, the articles deal with the VinKo project and corpus. However, AlpiLinK is the continuation of VinKo, hence, VinKo and AlpiLinK share basic features. Kruijt, Anne, Stefan Rabanus & Marta Tagliani (2023): The VinKo Corpus. Oral data from Romance and Germanic local varieties of Northern Italy. In: Marc Kupietz & Thomas Schmidt (eds.): Neue Entwicklungen in der Korpuslandschaft der Germanistik. Beiträge zur IDS-Methodenmesse 2022. Tübingen: Narr Francke Attempto, 203–212. https://dx.doi.org/10.24053/9783823396024 Kruijt, Anne, Patrizia Cordin & Stefan Rabanus (2023): On the validity of crowdsourced data. In: Elissa Pustka, Carmen Quijada Van den Berghe & Verena Weiland (eds.): Corpus Dialectology. Amsterdam/Philadelphia: Benjamins, 10–33. https://doi.org/10.1075/scl.110.01kru

Title	Mapping linguistic variation with the REDE SprachGIS
Teacher	Marina Frank (Universität Marburg)
Coordinator UniVR/UniBZ	Stefan Rabanus
Compulsory/free choice?	Free choice
Teaching hours/ECTS credits	6/1.5
When?	17 April 2025, 9:00–16:45
Where?	
Language of instruction	English
Assessment	In class
Learning outcomes	Upon successful completion of this module, PhD students will be able to demonstrate their ability to create linguistic maps and utilize the additional features of REDE's Geographic Information System.
Course contents	Regionalsprache.de (REDE) is an innovative, long-term research project based at the Forschungszentrum Deutscher Sprachatlas in Marburg, focused on exploring the contemporary regional languages of German. Funded by the Akademie der Wissenschaften und der Literatur Mainz, REDE offers an online platform designed for linguistic geography research. The platform, www.regionalsprache.de , gives researchers access to a wealth of resources, including digitized linguistic atlases, audio recordings, Wenkerbögen, and a database of dialectological literature. The REDE SprachGIS allows you to: 1. Access the above mentioned linguistic maps, audio files, Wenkerbögen, and bibliography, 2. Create your own customized maps by importing and visualizing spatial data, 3. Publish and export maps with ease for use in your academic work. The REDE platform can also be used for creating maps in other languages than German, which we will cover during the course as well.
Reading	Limper, Juliane / Pheiff, Jeffrey / Williams, Anneli (2019): The REDE SprachGIS: A Geographic Information System for Linguists. In: Brun, Stanley, D. / Kehrein, Roland (Hrsg.): Handbook of the Changing World Language Map. Dordrecht: Springer, 3743–3771.

Title	Phraseology and CxG
Teacher	Sibilla Cantarini (Introduction) and Prof. Dr. Elmar Schafroth
Coordinator UniVR/UniBZ	Sibilla Cantarini
Compulsory/free choice?	Free Choice
Teaching hours/ECTS credits	4/1
When?	7 May 2025, 10.00-16.30 (da prenotarsi 9.00-17.30)
Where?	UniVR - Aula Co-working
Language of instruction	German (slides in English)
Assessment	In class
Learning outcomes	On completion of this introductory course, students will have gained an understanding of the basic theoretical concepts used in the study of phraseology and constructional grammar.
Course contents	What new insights has phraseology gained through the approaches of construction grammar? What role does the lexical-syntactic continuum play? What is the significance of corpus linguistics? To what extent do contrastive phraseology and foreign language learning benefit from these approaches?
Reading	1) Schafroth, Elmar (2015): "Italian phrasemes as constructions: how to understand and use them", in: Journal of Social Sciences 11/3. Special issue: Phraseodidactics and Construction Grammar(s), 317-337.
	2) Schafroth, Elmar (2020): "Why equivalence of idioms in different languages is the exception. Arguments from a constructional perspective". In: Paola Cotta Ramusino/Fabio Mollica (Hgg.), Contrastive Phraseology. Cambridge (Cambridge Scholars), 129-150.
	For further study
	3) Carmen Mellado Blanco/Fabio Mollica/Elmar Schafroth (Hgg.) (2022): Konstruktionen zwischen Lexikon und Grammatik. Phrasem-Konstruktionen monolingual, bilingual und multilingual. Berlin/Boston (de Gruyter) (Open-Access-Publikation).