



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Phonetics and Digital Speech Analysis: English and German / Fonetika ir skaitmeninė šnekos analizė: anglų ir vokiečių kalbos	DSTPDSA

Academic staff	Core academic unit(s)
Coordinating: Assoc. Prof. Dr. Diana Šileikaitė-Kaishauri Other: Assoc. Prof. Dr Giedrė Balčytytė, Assist. Prof. Dr Justina Mandravickaitė	Vilnius University Faculty of Philology, Universiteto g. 5, LT-01131, Vilnius, tel. +370 5 268 7207, e-mail studijos@flf.vu.lt

Study cycle	Type of the course unit
1 st (bachelor)	Compulsory

Mode of delivery	Semester or period when it is delivered	Language of instruction
Face-to-face	1 st semester	English and German

Requisites	
Prerequisites: ≥ B2 level of English	Co-requisites (if relevant): none

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	133	64	69

Purpose of the course unit		
Having completed this course, the students will be able to analyze and compare the phonetic systems of English and German, as well as improve speech production and perception using methods of phonetics and digital speech analysis tools. In addition, they will have improved their analytical, critical and reflective thinking.		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
After completing the course, students will be able to:		
DK.1.1 describe and explain the phonetic systems of English and German (segmental and suprasegmental features), read phonetic transcription (the IPA alphabet) and use it to transcribe utterances/texts, analyze speech phenomena from authentic audio sources phonetically using digital tools	engaging lectures and seminars, group discussions, practical assignments (open- and closed-ended tasks, listening to recordings, phonetic analysis of texts, transcription, working with Praat/ASR apps); independent preparation for seminars and tests; literature studies, mind mapping	written assignments: tests (open- and closed-ended tasks, phonetic analysis and transcription of texts)
DK.3.1 ability to understand speech from authentic audio sources and produce speech according to the pronunciation rules of British English and standard German	listening to audio recordings, practical assignments (pronunciation exercises using pronunciation and ASR apps), phonetic analysis of texts, self-recordings, self-analysis and correction of errors	phonetic analysis of texts, practical assignments: self-recordings
DK.3.2	engaging lectures and seminars, group	written assignments: tests

analyze and compare phonological, prosodic, and pronunciation patterns in English and German using appropriate methods of linguistics and digital speech analysis, and interpret their implications for multilingual communication	discussions, practical assignments (open- and closed-ended tasks, listening to recordings, phonetic analysis of texts, transcription, working with Praat/ASR apps); independent preparation for seminars and tests; literature studies, mind mapping	(open- and closed-ended tasks, phonetic analysis and transcription of texts)
BK.4.5 critically reflect on their own learning and pronunciation development in both languages, evaluate the effectiveness of digital speech analysis tools, and assess the broader impact of such technologies on language learning and society	listening to recordings, practical assignments (pronunciation exercises using pronunciation and ASR apps), phonetic analysis of texts, self-recording, self-analysis and correction of errors, self-reflection	phonetic analysis of texts, practical assignments: self-recordings, self-reflection;

Content	Contact hours							Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
Introduction to Phonetics and Digital Speech Analysis Phonetics as a discipline (articulatory, acoustic, auditory phonetics). Why phonetics matters for multilingual learners. Tools for digital speech analysis (Praat basics).	1		1				2	2	Reading of the assigned texts, microlecture videos, discussion of theoretical issues, working with IT and AI tools for speech analysis and pronunciation training, exercises, assignments, and tasks focusing on developing pronunciation skills in both languages, focusing on identifying similarities and differences
Letter-Sound Relationship: IPA as a Phonetic Alphabet IPA chart introduction. Transcription and transcription tools. Pronunciation of the German umlaut letters (ä/ö/ü), diphthongs	1		3				4	4	
Articulatory Phonetics: Speech Anatomy Overview of human speech production. Contrastive view: English vs. German articulatory base, consonant and vowel inventories.	1		3				4	4	
Pronunciation Training and Error Analysis. Applications of Speech Technology Common learner difficulties (English: fossilized errors, German: new contrasts). Digital tools for self-recording, playback, and comparison. Pronunciation apps and AI-based feedback (e.g., Duolingo, Elsa Speak). Speech synthesis (text-to-speech) in English and German. Ethical questions of voice technology.	0		4				4	8	
Phonetics vs. Phonology. Minimal pairs. Allophones. Complementary distribution and free variation.	1		1				2	2	
Phonotactics and Syllable Structure Syllable structure rules. Comparative corpus examples; digital segmentation practice.	2		2				4	4	
Vowels: English vs. German English vowel system (B2 learners: refinement, diphthongs).	2		8				10	10	

German vowel system (pre-A1 learners: short/lax vs. long/tense vowels, front vs. back vowels, high vs. low vowels, rounded vs. unrounded vowels, focus on front rounded vowels). Digital visualization: vowel formants in Praat.									
Mid-Term: Test 1	0		2				2	3	Preparation for the test, revision
Consonants: English vs. German English consonant system (focus on problematic areas: /θ/, /ð/, aspiration). German consonant system (focus on new sounds for beginners: Ich-Laut [ç] and Ach-Laut [x], affricates [pf], [ts], glottal stop [ʔ], contrasts in comparison with English: Auslautgesetz). Recording and analyzing spectrograms.	2		8				10	10	Reading of the assigned texts, microlecture videos, discussion of theoretical issues, working with IT and AI tools for speech analysis and pronunciation training, exercises, assignments, and tasks focusing on developing pronunciation skills in both languages, focusing on identifying similarities and differences
Multilingualism and Pronunciation. Connected Speech Phenomena Influence of English on early German learning. Cross-linguistic transfer and interference. English: assimilation, elision, linking /r/. German: assimilation, basic reductions, glottal stop, aspiration). Digital spectrograms to visualize assimilation.	2		4				6	6	
Suprasegmentals I: Stress and Rhythm English: stress-timed rhythm, weak forms, sentence stress. German: word stress (mostly initial), rhythmic patterns. Comparative digital analysis: waveform visualization of stress and rhythm.	2		2				4	4	
Suprasegmentals II: Intonation and Prosody English: intonation patterns for statements, questions, emphasis. German: falling vs. rising contours, early intonation practice for beginners. Using Praat to track pitch contours.	2		2				4	4	
Speech Corpora and Automatic Speech Recognition Introduction to English and German spoken corpora. Basics of automatic speech recognition (ASR) systems. Strengths/limits of digital tools in multilingual learning. Contrastive analysis of English and German speech samples. Using Praat/ASR to analyze data.	0		8				8	8	
Total	16		48				64	69	

Assessment strategy	Weight %	Deadline	Assessment criteria
Continuous assessment of semester performance: average grade	20%	During the semester	All specific details regarding the grading of quizzes and practical assignments will be provided to students by the instructors before the beginning of the course.
Midterm: Test 1	20%	In the middle of the semester	Single integrated multilingual test, based on the quizzes, assignments, and tasks completed in class throughout the semester. Ten-point assessment scale:
Written exam: Test 2	20%	During the exam period	

			10 (excellent). Excellent, exceptional knowledge and abilities. 95-100% of questions answered correctly. 9 (very good). Very good knowledge and abilities. 85-94 % of questions answered correctly. 8 (good). Knowledge and abilities are above average. 75-84 % of questions answered correctly. 7 (average). Average knowledge and abilities; there are a few non-essential mistakes. 65-74 % of questions answered correctly. 6 (satisfactory). Knowledge and abilities are below average; there are mistakes. 55-64 % of questions answered correctly. 5 (weak). Knowledge and abilities meet the minimum requirements. 51-54 % of questions answered correctly. 4, 3, 2, 1. Minimum requirements are not met to varying extents.
Practical assignment 1	20%	In the middle of the semester	Ability to pronounce correctly, employ phonetic aspects of connected speech (linking, assimilation, etc.) as well as suprasegmental aspects (stress, tempo, rhythm, etc.).
Practical assignment 2	20%	At the end of semester	

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
VU	2025	Interactive learning units on Moodle	online	https://emokymai.vu.lt/
Balčytytė-Kurtinienė, G.	2014	<i>A Course in English Phonetics for EFL University Students. Segmental Phonetics. Syllable. Stress.</i>		Vilnius: VU leidykla / link
Boersma, P. / Weenink, D.	1992–2025	<i>Praat: doing phonetics by computer</i>		link
Collins, B. & Mees, I. M.	2019	<i>Practical Phonetics and Phonology: A Resource Book for Students</i> , 4th ed.		London and New York: Routledge
Fröhlich, M.				
Goethe-Institut	2024	<i>Aussprachetrainer</i>		link
Handke, J.	2012–2022	<i>The Virtual Linguistics Campus. VLC105 – Phonetics, Phonology & Transcription</i>		link
Hirschfeld, U.	2007	<i>Phonothek intensiv</i>	Buch und CD	Langenscheidt
Roach, P.	2009	<i>English Phonetics and Phonology</i> . 4th ed.		Cambridge: CUP
Šileikaitė-Kaishauri, D.	2015	<i>Einführung in die Phonetik und Phonologie des Deutschen. Basiswissen, Aufgaben und Literaturhinweise.</i>		Vilnius: VU leidykla / link
Szynalski, T. P.	2014.	<i>TypeIt. Type IPA phonetic symbols for all languages</i>		link
Tench, P.	2011	<i>Transcribing the Sound of English</i>		Cambridge: CUP
Recommended reading				
Mangold, M. (Dudenredaktion)	2005	<i>Das Aussprachewörterbuch. (DUDEN-AWB)</i>	Band 6	Dudenverlag
Rug, W.	2012	<i>77 Klangbilder gesprochenes Hochdeutsch. Sprachniveau B1 bis C2.</i>	Buch und CD	Leipzig: Schubert-Verlag