

LEARNING MODULE DESCRIPTION (SYLLABUS)

I. General information

1. Module title: *Experimental phonetics*
2. Module code: 15-EP-EL-11
3. Module type – compulsory or optional: *compulsory*
4. Programme title: *English Linguistics: Theories, Interfaces, Technologies*
5. Cycle of studies (1st or 2nd cycle of studies or full master's programme): *1st cycle of studies*
6. Year of studies (where relevant): *1BA*
7. Terms in which taught (summer/winter term): *summer term*
8. Type of classes and the number of contact hours (e.g. lectures: 15 hours; practical classes: 30 hours); *practical course: 30 hours*
9. Number of ECTS credits: 3
10. Name, surname, academic degree/title of the module lecturer/other teaching staff

Prof. UAM dr hab. Geoffrey Schwartz

11. Language of classes: *English*

II. Detailed information

1. Module aim (aims)

The purpose of this course is to familiarize students with experimental methods in phonetics. We will start with a rigorous look at vocal tract anatomy and physiology, followed by a survey of methods for studying various aspects of speech production, including both phonation and articulation. The second half of the course will cover the relationship between articulation and acoustics, and include hands-on training with the Praat program. Students will learn how to interpret acoustic displays including waveforms, spectra and spectrograms, as well as make and extract a number of acoustic measurements. After successful completion of the course, students should have the background required to start engaging in phonetics research.

2. Pre-requisites in terms of knowledge, skills and social competences (where relevant)
3. Module learning outcomes in terms of knowledge, skills and social competences and their reference to programme learning outcomes

Learning outcomes symbol*	Upon completion of the course, the student will:	Reference to programme learning outcomes#
IPH_01	be familiar with the methodology of phonetic research	K_W01
IPH_02	know study areas and terminology of phonetics	K_W02
IPH_03	know about issues in English phonetics	K_W03
IPH_04	realize the complexity of factors influencing phonetic implementation	K_W06
IPH_05	be able to apply the methods of acoustic phonetics	K_U04
IPH_06	be able to analyze phonetic phenomena instrumentally	K_U07
IPH_07	be able to plan and conduct production experiments	K_U08
IPH_08	be prepared to verify preconceived notions with data	K_K04

IPH _09	be in a position to investigate the phonetics of various languages, boosting their recognition	K_K10
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4. Learning content

Module title		
Learning content symbol*	Learning content description	Reference to module learning outcomes #
TK_01	Introduction: What can we measure and why should we bother?	IPH_01, IPH_02
TK_02	Vocal Tract anatomy and physiology	IPH_02
TK_03	Speech Production: aerodynamics and phonation (airflow measures)	IPH_01, IPH_04, IPH_08
TK_04	Speech Production: position of articulators (EPG, EMA, Ultrasound)	IPH_01, IPH_04, IPH_08
TK_05	Acoustics: Phonation and pitch	IPH_03, IPH_04, IPH_06, IPH_08
TK_06	Acoustics: Manner of articulation	IPH_03, IPH_06
TK_07	Acoustics: Vowels	IPH_03, IPH_06
TK_08	Acoustics: Laryngeal Features	IPH_03, IPH_06
TK_09	Acoustics: Consonant Place of articulation	IPH_03, IPH_05, IPH_06
TK_10	Acoustics: Summary of measures	IPH_01, IPH_05, IPH_06, IPH_07, IPH_09
TK_11	Acoustics: Automated data extraction	IPH_01, IPH_05, IPH_06, IPH_07, IPH_09

5. Reading list

- Bickford, Anita C., and Rick Floyd. *Articulatory Phonetics: Tools for Analyzing the World's Languages*. SIL International, 2006.
- Johnson, Keith. *Acoustic and Auditory Phonetics*. 2nd ed. Blackwell, Oxford 2003
- Kreiman, Jody, and Diana Sidtis. *Foundations of voice studies: An interdisciplinary approach to voice production and perception*. John Wiley & Sons, 2011.
- Ladefoged, Peter, and Keith Johnson. *A course in phonetics*. Nelson Education, 2014.
- Ladefoged, Peter, and Sandra Ferrari Disner. *Vowels and consonants*. John Wiley & Sons, 2012.
- Ladefoged, Peter, and Ian Maddieson. "The sounds of the world's languages." *Language* 74.2 (1998): 374-376.
- Lieberman, Philip, and Sheila E. Blumstein. *Speech physiology, speech perception, and acoustic phonetics*. Cambridge University Press, 1988.
- Machač, Pavel, and Radek Skarnitzl. *Principles of phonetic segmentation*. Epocha, 2009.
- Stevens, Kenneth N. *Acoustic phonetics*. Vol. 30. MIT press, 2000.

6. Information on the use of blended-learning (if relevant)

7. Information on where to find course materials

Course materials will be made available on the Moodle learning platform.

III. Additional information

1. Reference of learning outcomes and learning content to teaching and learning methods and assessment methods

Module title			
Symbol of module learning outcome	Symbol of module learning content	Methods of teaching and learning	Assessment methods of LO achievement ^{&}
IPH_02	TK_02	Discussion of assigned reading	Quiz
IPH_01, IPH_08	TK_03, TK_04	Discussion of assigned reading	Test
IPH_01, IPH_03, IPH_04, IPH_05, IPH_06, IPH_07, IPH_08, IPH_09	TK_05 – TK_11	Guided acoustic analysis with Praat software	Test

& Please include both formative (F) and summative (S) assessment

It is advisable to include assessment tasks (questions).

2. Student workload (ECTS credits)

Module title:	
Activity types	Mean number of hours* spent on each activity type
Contact hours with the teacher as specified in the programme	30
Independent study 1: preparation for classes	10
Independent study 2: data analysis	20
Independent study 3: library-based work	20
Independent study 4: test preparation	10
Total hours	90
Total ECTS credits for the module	3

** Class hours – 1 hour means 45 minutes*

3. Assessment criteria

- showing understanding of discussed issues during tests
- showing engagement with phonetic issues during discussions of assigned reading
- care taken to ensure accuracy in phonetic measurements