POSTGRADUATE COURSE

Pedagogy and Technology of Voice and Singing



Academic year 2023/2024

https://formacionpermanente.uned.es/tp_actividad/actividad/pedagogia-y-tecnologia-para-la-voz-y-el-canto

Target students

Delivered in English, Portuguese and Spanish, this course targets four professional groups: health specialists (e.g., laryngologists, phoniatricians, speech and language pathologists); educators (teachers, music educators, voice educators, hearing and speech teachers; professional voice users (e.g. singers, actors, journalists); and voice scientists.

Special requisites

A minimum requisite to be accepted in this course is to have a higher education degree / diploma or equivalent in accordance to the student's national higher education system policies and rules.

The technical requisites required to have access to all contents of this course include: 1. One computer with a Windows operating system (for MAC users a virtual machine or Parallels are needed) and Microsoft Office; 2. One omnidirectional microphone; 3. One external sound card (e.g., Focusrite Scarlett Solo 3rd Gen Audio Interface); 4. Headphones; 5. Mozilla Firefox or Google Chrome, as the e-learning platform is more compatible with these browsers; 6. Quick Time Player (or equivalent), which will allow the visualization of multimedia contents; 7. Software for handling computer screen capture (e.g., Srecorder).

1. Goals

To promote continuing specialized education on techniques and evidence-based practical skills of evaluation, analysis, (re)habilitation and education of the voice for speech and singing.

Learning outcomes include:

- Knowledge on functional anatomy and physiopathology of the voice
- Understanding of the physiology and acoustics of speech and singing
- To objective and perceptually evaluate voices
- Tailoring vocal exercises to specific vocal needs
- Acoustical, physiological and aerodynamic analysis of the voice
- Technology in voice education
- Evidence-based(re)habilitation practices
- Distinguish the different research methodologies applied in voice research

2. Course syllabus

- 1. Introduction to the physiology and acoustics of the voice
 - Intrinsic and extrinsic anatomy
 - Physiology of breathing
 - Physiology of phonation
 - The vocal tract: articulation and resonance
 - Voice function and dysfunction
- 2. Objective and perceptual evaluation of the voice
 - Sound physics
 - Fundamental frequency, jitter and shimmer
 - Formants and harmonics
 - Specific characteristics of the singing voice
 - Recording techniques
 - Voice perception and listening tests

- 3. Acoustic, physiological and aerodynamic measures
 - Sound intensity and frequency
 - Spectra and spectrograms
 - Inverse filtering
 - Physiological measures
 - Aerodynamic measures
- 4. Voice habilitation
 - Neuromotor learning theories
 - Practical exercises of voice (re)habilitation
 - Technology in the voice studio

3. Teaching & learning methodologies

The working hours will be organized in such a way that student's autonomy and critical thinking can be promoted through:

- lecturing using audiovisual learning materials
- practical demonstrations
- discussion forums
- reading and interpretation of specific bibliography
- practical exercises and problem-solving
- tools for real-time visual feedback of the voice

There will be three principal teaching and learning methods:

1. Action research: students perform tasks, do exercises, solve problems, handle voice analysis software and use real-time visual feedback for assessing particular aspects of voice.

2. Lecturing: using audio-visual demonstrations and explanations of key concepts within the scientific areas of the course.

3. Peer-learning: encouraging student's participation in work groups and in forums specially designed for this purpose.

4. Learning materials

4.1 Learning materials in the eLearning platform

Learning materials will be constituted by video-lectures, practical demonstrations on voice recordings using specific hardware and on voice analysis using designated software, written instructions on how to perform signal processing, written informs on solutions for practical exercises and specific designated literature.

4.2 Additional recommended bibliography

Recommended bibliography will be listed in the online learning platform.

5. Additional information

For additional information please contact the course coordinators: Nuria Polo Cano (PhD) UNED | Facultad de Filología Dpto. Lengua Española y Lingüística General C/ P.º Senda del Rey, 7. 28040, Madrid - Spain Telf.: (00 34) 91 398 68 54 E-mail: nuriapolo@flog.uned.es

Filipa M.B. Lã (PhD) UNED | Facultad de Educación Dpto. Didáctica, Organización Escolar y Didácticas Especiales C/ Juan del Rosal, 14 28040, Madrid - Spain Telf: (00 34) 91 398 69 76 E-mail: filipa.la@edu.uned.es

More information in English: https://unedvoicelab.com/english-faq/

6. Evaluation

The Specialization Course in Pedagogy and Technology of Voice and Singing will be awarded to those students who pass resulting from the sum of the final marks obtained in the 4 modules that constitute the course.

The students will be evaluated through:

- Written exam (30 %)
 - Audiovisual recording of a(re)habilitation session using visual feedback of the voice (20 %)
 - Practical exercises (30 %)
 - Analysis and interpretation of different types of voice signals (20 %)

7. Duration and dedication

This course, delivered between the Faculties of Philology and Education at UNED provides 40 ECTS and a diploma in Pedagogy and Technology of Voice and Singing.

Its contents will be delivered from January to July, covering the following topics: Physiology and Acoustics of the Voice (8ECTS) | Objective and perceptual evaluation of voices (12 ECTS) | Voice Measures (12 ECTS) | Voice Education (8 ECTS).

8. Faculty

Coordinators

MARTINS BAPTISTA LA, FILIPA POLO CANO, NURIA

Collaborators UNED

BARRO FIUZA, MAURO MATEOS RAMIREZ, ANA

External collaborators

GILL, BRIAN P. GRANQVIST, SVANTE SUNDBERG, JOHAN TERNSTROM, STEN

9. Registration fee

Price: 1.120,00 €.

10. Discounts

You must make the registration request by checking the corresponding option, and then send the documentation to the email: <u>ventas@fundacion.uned.es</u>.

Members of the following associations who are up to date with payment of the fee will have a discount on tuition: European Voice Teachers Association (EVTA), British Voice Association (BVA), National Association of Teachers of Singing (NATS), Associação Portuguesa de Professores e Profissionais da Voz (APVoz), Instituto Español de la Voz (IEVOZ), College of Speech Therapists of Madrid, Spanish Association of Otorhinolaryngology (SEORL), Colegium Medicorum Theatri (COMET), Confederationof European Otorhinoralyngology - Head and Neck Surgery, Members of VoiceFoundation , Spanish Association of Speech Therapy, Phoniatrics and Audiology (AELFA). Discount applied: 10%.

11. Registration information

From September 7, 2023 to January 15, 2024.

Enroll at:

https://formacionpermanente.uned.es/tp_infomatricula/idactividad/13735

Registration information:

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