



INTENSIVE COURSE CLINICAL ASSESSMENT OF ACOUSTIC VOICE SIGNALS

MAY28—JUNE05—JUNE11—JUNE26, 2024

Phonanium's intensive course on the Clinical Assessment of Acoustic Voice Signals (**CAAVS**) already has an international history with well-reviewed live as well as **online**/remote trainings in the past years (see www.phonanium.com/courses/ for an overview).

[Goal]
To know about
clinical voice
acoustics ...

Basic information on sound recording quality and choice of microphone, sound level calibration, interesting aspects of the acoustic voice signal, and reliability and validity of acoustic voice measures, will be presented in the context of clinical voice assessment.

[Goal]
... and also to do
clinical voice
acoustics.

Theory will be replaced by practice: working with the basic function of the program Praat^A, interpretation of narrow-band spectrograms, installation of and training with Phonanium's Clinical Voice Lab^B, and demonstration of calibration of audio recording systems.

NEW
Vocal tremor
Vocal tension
Phonation onset
hardness

Acoustic methods offer objective solutions for (a) the documentation of most vocal phenomena both quantitatively and qualitatively, (b) the measurement of specific aspects of voice signals, and consequently (c) the tracking of voice across time and intervention. As such, acoustic voice analysis continues to form one of the corner stones in clinical as well as scientific voice assessment, regardless of the speech-language pathology or laryngology area. Furthermore, not only in those with a voice disorder, but also persons with hearing impairment, dysarthria, laryngectomy, head and neck cancer, etc. can encounter problems in both the production and the sound of the airborne voice signal. **Phonanium** has therefore developed several clinical software tools for acoustic analysis of voice to be at all voice and speech clinicians' disposal.

This intensive online course is designed to give participants **theoretical** insights in as well as **practical** mastery over acoustic voice assessment using Phonanium's tools in the program Praat. There will be presentation, live demonstration, exercises, interpretations by participants and discussion.

^A The program **Praat** from Paul Boersma and David Weenink (Institute of Phonetic Sciences, University of Amsterdam, The Netherlands) is free available and can be downloaded at www.praat.org.

^B **Phonanium's Clinical Voice Lab** incorporates a set of voice analysis tools that work as Praat plug-ins. It can be purchased at www.phonanium.com.

Pre-course assignments

A good start is half the battle!

1. Speed-dating with the program Praat: exercises with some of its basic functions.
2. Submersion in the literature of clinical voice acoustics.

Tuesday — May 28, 2024 — 16:00-20:00 (CET) — 09:00-13:00 (CST)

Amuse Acoustics ... unblocking paths to high-standard acoustic methods in clinical voice assessment!

16:00 16:15
09:00 09:15 Clinical voice assessment anno 2021: the role of acoustic methods.

16:15 18:15
09:15 11:15 Criteria for high-quality voice/speech recordings in the clinic. (Part 1)

18:15 18:30
11:15 11:30 *Break (time for a snack).*

18:30 20:00
11:30 13:00 Criteria for high-quality voice/speech recordings in the clinic. (Part 2)

Wednesday — June 05, 2024 — 16:00-20:00 (CET) — 09:00-13:00 (CST)

Numbers and graphs from acoustic voice signals ... what's the meaning of it all?

16:00 18:00
09:00 11:00 Clinically fascinating facets of the acoustic voice signal. (Part 1)

18:00 18:15
11:00 11:15 *Break (time for a snack).*

18:15 19:15
11:15 12:15 Clinically fascinating facets of the acoustic voice signal. (Part 2)

19:15 20:00
12:15 13:00 The 'Acoustic Voice Quality Index' story ... toward measuring dysphonia severity.

Tuesday — June 11, 2024 — 16:00-20:00 (CET) — 09:00-13:00 (CST)

Additional features for correct interpretation and clinical use of acoustic voice measures.

16:00 17:00
09:00 10:00 How loud is your voice? Toward a method for calibrating sound level measures in the voice clinic.

17:00 18:30
10:00 11:30 Hold on a minute ... what about reliability and validity related to acoustic voice measures?

18:30 18:45
11:30 11:45 *Break (time for a snack).*

18:45 20:00
11:45 13:00 Let's talk about specific features: tremor, onset, tension, etc.

Wednesday — June 26, 2024 — 16:00-20:00 (CET) — 09:00-13:00 (CST)

From theory to practice ... clinical voice acoustics with Phonanium!

16:00 17:00
09:00 10:00 What you see is what you hear ... spectrographic explorations in the peculiarities of voiced sounds!

17:00 18:00
10:00 11:00 DIY... interpretation of and discussion on real spectrography examples.

18:00 18:15
11:00 11:15 *Break (time for a snack).*

18:15 19:00
11:15 12:00 Demo ... how to use Phonanium's Clinical Voice Lab for acoustic voice signal assesment?

19:00 20:00
12:00 13:00 Future perspectives, Q&A, ... wrapping up!

CET: Central European Time. CST: US Central Standard Time.

PRACTICAL INFORMATION

Online registration

www.phonanium.com/courses/
... on a 'first come, first served' basis.
Deadline: May 19, 2024.

Course fee

Course fee (including registration for the four course moments, Phonanium's Clinical Voice Lab and slides in PDF):
EUR 795 or USD ~866€.

Number of participants

Maximum: 15.

CE

ASHA CE is requested.

Language

English.

Contact information

+32 478 377454 — youri@phonanium.com

Latest course information

www.phonanium.com/courses/
All **practical information** and pre-course assignment materials will be send by e-mail to the participants.

ORGANIZING COMMITTEE

Julie Barkmeier-Kraemer (PhD, CCC-SLP) from the University of Utah.

Youri Maryn (PhD, SLP) from Phonanium.

INSTRUCTOR

Youri Maryn (PhD) works as a clinical speech-language pathologist at the **European Institute for ORL-HNS** (Otorhinolaryngology & Head and Neck Surgery, Sint-Augustinus Hospital GZA, Wilrijk, Belgium — www.neus-keel-oor.be). He also teaches on acoustic phonetics at University of Ghent and on voice disorders at Université Catholique Louvain and Ghent University College. He is post-doctoral researcher at University of Antwerp. He serves as board member of the Flemish Association for Speech-Language Therapists. He publishes on voice disorder management and acoustics, and he speaks at (inter)national voice meetings. His specific topics of interest are clinical voice assessment, voice disorder management, voice/speech acoustics and oral versus nasal speech production. In 2017, he founded **Phonanium** (www.phonanium.com), a company dedicated to providing all voice and speech pathologists with information on and software tools for clinical acoustic analyses.

DISCLOSURES

Financial – Youri Maryn owns Phonanium (Lokeren, Belgium) and receives royalty payments from the sale of voice analysis products. He is employed by the Department of Otorhinolaryngology & Head and Neck Surgery, Sint-Augustinus Hospital (Wilrijk, Belgium); serves as professor at University College Ghent, University of Ghent and Université Catholique Louvain, for which he receives salaries. He is executive board member of Vlaamse Vereniging voor Logopedisten (Flemish Association of Speech-Language Therapists) for which he also receives a salary. **Nonfinancial** – He is post-doctoral researcher at University of Antwerp and received no compensation for this. **Course Content Disclosure** – This course focuses solely on Praat software and Phonanium's plugins for acoustic voice analyses of voice signals, and will not include information on other similar or related products that might be used for the same analyses.



PHONANIUM

State-of-the-art voice/speech clinics through sophisticated and high-quality yet accessible acoustic voice/speech analyses.

