



Information about the subject

Degree: Bachelor of Science Degree in Speech and Language Therapy

Faculty: Faculty of Psychology

Code: 1170204 **Name:** Assessment and diagnosis of voice disorders

Credits: 6,00 **ECTS Year:** 2 **Semester:** 2

Module: Assessment and diagnosis in speech and language therapy

Subject Matter: Assessment and diagnosis in Speech and Language Therapy **Type:** Compulsory

Field of knowledge: Speech and Language Therapy

Department: -

Type of learning: Classroom-based learning

Languages in which it is taught: Spanish

Lecturer/-s:

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Module organization

Assessment and diagnosis in speech and language therapy

Subject Matter	ECTS	Subject	ECTS	Year/semester
Assessment and diagnosis in Health Sciences	6,00	Assessment and diagnosis	6,00	2/1
Assessment and diagnosis in Speech and Language Therapy	12,00	Assessment and diagnosis of language and speech	6,00	2/1
		Assessment and diagnosis of voice disorders	6,00	2/2

Recommended knowledge

Previous knowledge associated with the subjects Functional Anatomy of the Organs of Speech and Hearing I and II is recommended.



Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 To know the instruments of speech-language evaluation, both in children and adults. To know how to select and apply them.
- R2 To communicate effectively and professionally, verbally and in writing, the results of the speech-language evaluation and diagnosis process.
- R3 To recognize the limits of the professional skills of the speech-language pathologist profession and to know how to bring them into multidisciplinary teams.
- R4 To know the anatomical, physiological and acoustic mechanisms of the normal and pathological voice.
- R5 To know the laryngeal disorders, especially those that are frequently related to or might relate to voice pathology, differentiating those that require speech therapy from those that must be treated from other disciplines.
- R6 To understand and be familiar with the voice and laryngeal medical evaluation and screening techniques that are applied to patients attending a speech and language service.
- R7 To analyze normal and pathological voice samples from a clinical, acoustic, psychoacoustic and aerodynamic point of view, and professionally capture their results.



Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

SPECIFIC	Weighting			
	1	2	3	4
CE6 To understand the fundamentals of the evaluation and diagnostic process.				X
CE7 To know and apply evaluation models, techniques and instruments				X
CE8 To evaluate language alterations in specific language developmental disorders: specific developmental language disorders, specific language disorders, language delays, phonetic and phonological disorders; communication and language disorders associated with auditory and visual deficits, attention deficit, mental impairment, pervasive developmental disorder, autism spectrum disorders, infantile cerebral palsy and multiple impairments; specific written language disorders; dyscalculias; alterations in language development due to social deprivation and those associated with multicultural and multilingual contexts; disorders of speech fluency; aphasia and associated disorders; dysarthria; dysphonia; dysglosia; alterations of language in ageing and degenerative disorders; alterations of language and communication in mental illnesses; mutism and language inhibitions; alterations of non-verbal oral functions: atypical swallowing, dysphagia and tubal alterations.				X
CE9 To write a logopedical evaluation report.				X
CE10 To carry out an evaluation after the intervention.			X	
CE11 Know the classification, terminology and description of communication disorders, language, speech, and voice, in addition to hearing and nonverbal oral functions			X	
CE21 Know how to design and write speech therapy reports			X	
CE22 Know how to design, develop and evaluate the performance of speech therapy			X	



CE25	Understand the organization of educational, health and social institutions	X		
CE26	To acquire practical knowledge for speech-language evaluation.			X
CE32	Using information technology and communication		X	
CE33	Final project involving transversally applicable material; to be carried out in association with different subjects	X		
CE36	To use the techniques and tools of exploration specific to the profession, and record, synthesize and interpret the data provided by integrating them into the set of information.			X
CE37	Master the terminology that allows one to interact effectively with other professionals		X	
CE41	Work in school environments, health care and part of a professional team. Advise on the development, implementation of care and education policies on issues related to speech therapy	X		
CE43	Knowing the limits of competencies and knowing when interdisciplinary treatment is necessary		X	
CE46	Being able to develop skills such as regulating one's own learning, solving problems, thinking critically and adapting to new situations		X	
CE47	Know and be able to integrate the biological (anatomical and physiological), psychological (and evolutionary development processes), linguistic and pedagogical foundations of speech therapy intervention in communication, language, speech, hearing, speech and non-verbal oral functions			X
CE48	Being familiar with communication disorders, language, speech, hearing, speech and nonverbal oral functions			X
CE49	Know and critically evaluate the techniques and tools for evaluation and diagnosis in speech therapy, as well as speech therapy intervention procedures			X
CE50	Understand and critically evaluate the terminology and specific methodologies used in speech therapy research		X	
CE51	Communicate orally and in writing one's observations and conclusions to the patient, their families and other professionals involved in treatment, adapting to the sociolinguistic characteristics of the environment		X	



CE52 Develop and prepare reports for examination, diagnosis, monitoring, termination and referral

X

TRANSVERSAL

Weighting

1 2 3 4

CT1 Use the techniques of verbal and nonverbal communication in order to optimize relevant communicative situations

X

CT3 Have the flexibility to work within teams integrated by other professionals belonging to the same field

X

CT5 Recognize, analyze and obtain solutions to ethical problems in professional practice situations

X

CT8 Know and use of technical advances in the exercise of their profession

X



Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R3, R4, R5, R6	50,00%	Written exam
R2, R7	40,00%	Practical work assignments assessment
R2, R3, R4, R5, R6, R7	10,00%	Attendance and participation of in-person formative activities

Observations

Each of the practical assignments or activities that account for 40% of the grade may have a different weighting, which will be detailed, as well as other relevant information for their delivery, format, etc., in the framework document of each of these. All the theoretical-practical assignments must be passed, that is, the student must obtain at least a 5 out of 10 in each of them.

The remaining 50% of the grade is obtained with a final test that may include theoretical and practical aspects worked on during the course. In order for the rest of the evaluation instruments to be included in the overall result, the student must obtain at least a 5 out of 10 in the grade of the written multiple-choice test.

The delivery dates of the practical tasks are understood as a term or maximum limit, being possible to make deliveries several days in advance of the deadline, so the student who, FOR ANY REASON has not delivered the tasks in the term and the STRICTLY established way (or obtains a result lower than 5) may perform, the same day of the exam, different practical exercises from which the pending percentage of the grade will be obtained. The delivery of these exercises will be done EXCLUSIVELY, and if not otherwise indicated, through the specific application of the virtual campus of the UCV. Any other way of delivery will be, therefore, automatically REJECTED. Many of these tasks REQUIRE, on the other hand, the attendance to the exposition of the same for the VIRTUAL DELIVERY, since they are based on contents only shown in the classroom; if you have not attended the exposition and execution of the same, the evaluation will be made by practical exam.

The marks of each evaluation instrument will be kept between exams of the same course, but never between different academic years.

Honors. Maximum grade from 9.5 with the limits established according to UCV regulations.



In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with Distinction) may be awarded.

Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 On-Campus Class
- M2 Practical Class
- M3 Seminar
- M4 Laboratory
- M5 Individual Work
- M6 Group Work
- M7 Work Exhibition
- M8 Clinical Case Analysis
- M9 Prácticas en clínicas y centros



IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
ON-CAMPUS CLASS. Teacher presentation of contents, analysis of competences, explanation and in-class display of skills, abilities and knowledge M1	R3, R4, R5, R6	18,00	0,72
PRACTICAL CLASSES. Group work sessions supervised by the professor. Case studies, diagnostic tests, problems, field work, computer room, visits, data search, libraries, on-line, Internet, etc. Meaningful construction of knowledge through interaction and student activity M2	R2, R7	18,00	0,72
GROUP WORK EXHIBITION. Application of multidisciplinary knowledge M5, M6	R2, R7	6,00	0,24
SEMINAR. Supervised monographic sessions with shared participation M3, M4	R2, R7	6,00	0,24
OFFICE ASSISTANCE. Personalized and small group attention. Period of instruction and/or orientation carried out by a tutor to review and discuss materials and topics presented in classes, seminars, papers, etc. M3	R7	9,00	0,36
ASSESSMENT. Set of oral and/or written tests used in initial, formative or additive assessment of the student M1	R2, R3, R4, R5, R6, R7	3,00	0,12
TOTAL		60,00	2,40



LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK. Group preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or small-group tutoring sessions. Work done on the university e-learning platform M6	R6, R7	36,00	1,44
INDEPENDENT WORK. Student study: Individual preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or submitted in theoretical lectures, practical and/or small-group tutoring sessions. Work done on the university e-learning platform M5	R6, R7	54,00	2,16
TOTAL		90,00	3,60



Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
1. INTRODUCTION	<p>TOPIC 1.- Anatomic-physiologic memory of the basis of phonation. Anatomy and physiology of the respiratory system. Respiratory mechanism. Anatomy and physiology of the phonatory system. Histological structure of the vocal fold. Mechanism of phonation: the vocal cycle. Resonance and articulation. Neurophysiology of the vocal mechanism. Laryngeal innervation.</p> <p>TOPIC 2.- Normal voice - pathological voice. Professional voice. Normal voice. Basic concepts. Pathological voice: concept of dysphonia. Professional voice. Vocal abuse and misuse. Spoken voice vs. sung voice. Classical singer and popular singer. Types and classification of voices. Classification systems. The voice in lyrical singing. The voice in the choir. The children's singing voice. The voice in modern singing.</p>



2. CLINICAL AND INSTRUMENTAL EXAMINATION OF PHONATION

TOPIC 3- Clinical otorhinolaryngological examination.

- Physical examination of the ear, nose and pharynx.

Hearing.

- Evaluation of the respiratory component. Spirometry.

Aerodynamic study of vocal function.

TOPIC 4.- Functional exploration by imaging.

- Fibro-video stroboscopy. Basic principles of its interpretation. Clinical applications.

- High speed digital laryngeal imaging.

Videochemography.

- Radiological imaging in voice pathology. Computerized tomography. Magnetic resonance imaging.

TOPIC 5.- Complementary techniques

- Electroglottography. Clinical applications.

- Laryngeal neurophysiological evaluation.

Electroneurography. Electromyography. Clinical applications.

3. FUNCTIONAL VOICE ASSESSMENT

TOPIC 6.- Clinical history and subjective assessment of the voice.

- Objectives of the functional evaluation. Anamnesis.

- Subjective acoustic assessment: GIRBAS, CAPE-V.

Subjective assessment of vocal disorders by the patient.

- Subjective assessment of vocal disorders by the patient.

Assessment of quality of life in relation to the voice: Voice Handicap Index, Singing Voice Handicap Index, other questionnaires.

TOPIC 7.- Assessment of vocal efficiency.

- Respiratory evaluation. Respiratory type. Evaluation of phono-respiratory coordination. Maximum phonation time.

Phonatory quotient. S/e index

- Evaluation of voice parameters: evaluation of intensity and frequency. Phonetogram. Extension, optimal pitch, habitual pitch.

- Evaluation of resonance, emission and articulation. Body evaluation.

TOPIC 8.- Acoustic analysis of the voice.

- Advantages and disadvantages. Methods of obtaining the vocal signal.

- Main parameters of acoustic analysis: frequency, intensity, noise and its disturbances.

- Clinical voice spectrography.



4. PHONIATRIC CLINIC

TOPIC 9.- Classification of dysphonia. Organic pathologies of the larynx

- Dysphonia classification criteria.
- Congenital organic pathologies.
- Acquired organic pathologies:
 - Traumatic
 - Inflammatory. Pharyngo-laryngeal reflux.
 - Neoplastic laryngeal pathologies.
 - Laryngeal papillomatosis
 - Chronic laryngitis. Intraepithelial neoplasms and initial glottic carcinoma.

TOPIC 10.- Neurological laryngeal pathologies.

- Central and peripheral laryngeal paralysis.
- Dysphonias of neurological origin: upper motor neuron involvement, movement disorders, cerebellar disorders, diffuse CNS lesions, upper and lower motor neuron involvement, neuromuscular dysphonias.

TOPIC 11.- Minimal associated lesions

- Exudative lesions of Reinke's space: nodules, vocal polyp, vocal pseudocyst, Reinke's edema.
- Subepithelial cyst: epidermal cyst, mucous retention cyst.
- Vocal vascular lesions: vocal varicose veins, ectasia, hemorrhagic polyp.
- Other lesions: arytenoid granulomas.

TOPIC 12.- Functional dysphonias

- Dysphonia due to muscular tension: isometric laryngeal contraction, medial contraction, anteroposterior contraction.
- Laryngeal hypofunction: closure defect, presbyphonia.
- Dysphonia due to inadequate pitch: mutational disorders, low variability.
- Psychogenic dysphonia: conversion dysphonia, paradoxical vocal movement.

TOPIC 13.-Endocrine laryngeal pathologies. Infantile dysphonia

- Hypothyroidism
- Premenstrual and grávida dysphonia.
- The voice in the change of gender.
- Vocal disorders in the pediatric population. Characteristic features.



Temporary organization of learning:

Block of content	Number of sessions	Hours
1. INTRODUCTION	4,00	8,00
2. CLINICAL AND INSTRUMENTAL EXAMINATION OF PHONATION	6,00	12,00
3. FUNCTIONAL VOICE ASSESSMENT	8,00	16,00
4. PHONIATRIC CLINIC	12,00	24,00



References

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