

### **COURSE DATA**

Data Subject		
Code	35293	
Name	Speech Therapy Intervention in Pathology of Voice	
Cycle	Grade	
ECTS Credits	6.0	
Academic year	2021 - 2022	

Study (s)						
Degree	Center	Acad. year	Period			
1203 - Degree in Speech Therapy	Faculty of Psychology and Speech	3	Second term			

Subject-matter					
Degree	Subject-matter	Character			
1203 - Degree in Speech Therapy	20 - Speech therapy intervention in voice pathology	Obligatory			

#### Coordination

NameDepartmentROSELL CLARI, VICENTE JOSE300 - Basic Psychology

## **SUMMARY**

The subject "Speech therapy intervention in voice pathology" is a subject within the Department of Basic Psychology, belonging to the Faculty of Psychology and Speech Therapy at the University of Valencia.

It is a compulsory subject, consisting of 6 semester credits (ECTS), equivalent to 150 hours of student work.

Taught in the second quarter of the third year in Speech Therapy Degree. The course consists of 4 distinct blocks.

The first, Block 1, its focused on speech therapy evaluation of voice disorders as a basis for rehabilitation, with special emphasis on both the subjective evaluation as objective assessment, as well as different resources to use (History, Qualitatives Scales, Software, etc..).



The second section focuses on the rehabilitation of voice disorders from a functional perspective, and aims to provide students with knowledge and skills required to perform adequately in speech therapy and hyperkinetic dysphonia most common hipoquinetics, knowing the criteria which is based in the voice rehabilitation, programs, techniques and rehabilitation exercises more appropriate depending on the patient's pathology.

The third section focuses on the rehabilitation of the voice disorders from congenital and trauma origen, and aims to provide students with the knowledge and skills necessary to perform an adequate speech therapy in dysphonia congenital and trauma, knowing the criteria, programs and rehabilitation techniques that are most suitable in each case, with special interest in rehabilitation of laryngectomized patients.

The fourth and final section focuses on the rehabilitation of voice disorders suffered by some groups of subjects according to their function and vocal use, and aims to provide students with the knowledge and skills necessary to perform an adequate speech therapy in each group: children dysphonia, professional voice, singing voice and voice disorders in the elderly are some of the specific dysphonia groups in which the student will meet the criteria matter, programs, techniques and rehabilitation exercises appropriate to each group based on their clinical characteristics.

The study of the subject shares assessment techniques, diagnosis and rehabilitation of voice used in otolaryngology and speech therapy. The knowledge that this discipline provides has important clinical applications (the rehabilitation of voice and breathing), educational applications (children dysphonia, dysphonia in teachers) and gerontology uses (the voice disorders in the elderly). Therefore a special way is linked with the subjects: "Anatomy of the organs of speech and hearing", "Physiology of the organs of speech and hearing", "Pathology of the Voice" and with such matters relating to the language pathology, speech and hearing and intervention in these diseases.

### **PREVIOUS KNOWLEDGE**

#### Relationship to other subjects of the same degree

1203 - Degree in Speech Therapy:

R4-OBLIGATION TO HAVE SUCCESSFULLY COMPLETED THE COURSE

35287 - Pathology of Voice

#### Other requirements

It is considered highly recommended having knowledge of the subjects of Anatomy and Physiology of the voice ("Anatomy of the organs of speech and hearing", "Physiology of the organs of speech and hearing") and Voice Pathology ("Voice Pathology"). The latter subject is required to have it passed.



### **OUTCOMES**

#### 1203 - Degree in Speech Therapy

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Design, implement and evaluate actions to prevent communication and language disorders.
- Explore, evaluate, diagnose and predict the evolution of communication and language disorders from a multidisciplinary perspective.
- Use the exploration techniques and instruments typical of the profession and record, synthesize and interpret the data provided by integrating them into the information set.
- Design and conduct speech therapy treatments, both individual and collective, by setting targets and stages, with the most effective and adequate methods, techniques and resources, and bearing in mind the different life developmental stages as well as gender perspective.
- Work in the school, healthcare and healthcare settings as part of the professional team. Advice on the development, implementation of care and education policies on topics related to speech therapy.
- Develop communication skills in the general population.
- Have an adequate speech production, language structure and voice quality.
- Design, implement and evaluate actions to prevent voice disorders.
- Apply speech therapy treatments with the most effective methods, techniques and resources suited to the vocal pathology shown by each patient.
- Adapt actions to the different human developmental stages in voice pathology.
- Know the techniques and tools of assessment and diagnosis of voice disorders.

### **LEARNING OUTCOMES**

Vocal design rehabilitation programs and apply the methods and techniques required in hyperkinetic dysphonia voice Designing rehabilitation programs and apply the methods and techniques required in hipoquinéticas dysphonia Adapt voice rehabilitation programs and apply the methods and techniques required in Nias disfo- children Adapt voice rehabilitation programs and apply the methods and techniques required in congenital and traumatic designing voice rehabilitation programs and apply the methods and techniques required in professional voice problems dysphonia and design preventive strategies designing rehabilitation programs voice and apply the methods and techniques needed to rehabilitate the voice in laryngectomy.



### **DESCRIPTION OF CONTENTS**

#### 1. Voice logopedic as a basis for the rehabilitation.

Especificación de contenidos de la unidad

In this first part will provide the student with relevant knowledge about the speech therapy evaluation of voice disorders as a basis for rehabilitation, providing the skills necessary to perform both subjective assessment and objective assessment of voice disorders through recourses as different rating scales, software, etc..

UNIT 1. INTRODUCTION TO THE REHABILITATION OF VOICE DISORDERS.

Concept of dysphonia ratings. Basic concepts in the examination, diagnosis and Rehabilitation of the voice, tone, Intensity, Ring. Fundamental frequency, harmonics or formants. Misuse and vocal abuse. Impost vocal. Vocal projection. Vocal range, Vocal Range and Dynamic Range.

UNIT 2. - EXPLORATION AND DIAGNOSIS OF VOICE DISORDERS. BASIS FOR REHABILITATION. Exploration of the voice speech therapy from a clinical point of view applied. Differences between diagnosis ENT, and Logopedic phoniatric. Anamnesis and clinical records. Subjective exploration: Scale GRBAS. Software applied to the exploration and diagnosis of voice disorders. Oscillograms. Spectrograms. Jitter, Shimer, HNR. Vital capacity (VC), phonatory quotient CV / TMF. Ratio TMF / TME.

#### 2. Speech therapy intervention in hyperkinetic and hypokinetic dysphonia.

In this second block will provide students the concepts, methods and techniques to make a speech therapy effective in dysphonia whose origin has a strong functional component with or without associated organic components.

#### UNIT 3. - SPEECH THERAPY IN HYPERKINETIC DYSPHONIA.

Hyperkinetic dysphonia. Concept. Common pathologies. Features. Program and partial voice rest. Vocal hygiene program in hyperkinetic dysphonia: developing listening activities. Abusive patterns identifying the patient. Voice therapy in dysphonia hyperkinetic.

#### UNIT 4. - VOCAL REHABILITATION IN HIPOQUINÉTICAS DYSPHONIA.

Hipoquinéticas dysphonia. Concept. Features. Common pathologies. Vocal hygiene program hipoquinéticas dysphonia. Voice therapy in dysphonia hipoquinéticas.

#### 3. Speech therapy intervention in voice disorders of congenital and traumatisms origin.

In this third section will provide students the concepts, methods and techniques to make a speech therapy effective in dysphonia which is congenital or traumatic origin, with special emphasis on the rehabilitation of laryngectomized patients.

UNIT 5. REHABILITATION OF THE VOICE IN CONGENITAL AND TRAUMATIC DYSPHONIA. Congenital dysphonia. Definition, characteristics. Voice therapy in congenital dysphonia. Voice therapy in laryngeal trauma.

UNIT 6. VOICE REHABILITATION IN LARINGUECTOMIES.

Techniques and methods for obtaining and developing the voice erigmofónica or esophagus.

#### 4. Speech therapy intervention in specific groups.

In this fourth and final block will provide students the concepts, skills, methods and techniques relevant to intervene in groups at risk of developing specific dysphonia such as: the child dysphonia, voice training, singing and voice disorders voice in the elderly.

#### UNIT 7. REHABILITATION OF CHILDREN DYSPHONIA.

The child dysphonia, concept and characteristics. Vocal hygiene program tailored to the child dysphonia. Program modification of vocal behavior. Specialized techniques and materials on rehabilitation of child dysphonia. Puberphonias. Specific vocal technique applied in bitonal voice.

#### UNIT 8. SPEECH THERAPY VOICE IN THE BUSINESS.

The professional voice. Vocal use in different professions. Development of strategies and techniques for vocal control in situations typical of professional use. Strategies and techniques for public speaking.

#### UNIT 9. REHABILITATION OF THE VOICE IN THE ELDERLY.

Vocal changes in elders. Presbiphonias. The voice rehabilitation in the elderly.

#### UNIT 10. SPEECH THERAPY VOICE IN THE SONG.

Fundamental concepts: characteristics of the singing voice and its different types. Classifications. Records. Phonetogram and tonal extension. Disodeas. Vocal technique applied to the singing voice.

### **WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Laboratory practices	15,00	100
Study and independent work	90,00	0
TOTAL	150,00	

### **TEACHING METHODOLOGY**

In order to provide the student with the fundamental objectives of the course as well as specific and transversal competences are proposed:

Theoretical lessons. It will draw mainly from the lectures to present course content. For this, each session will begin with an framework the contents to be addressed and will be completed by highlighting the most important aspects covered. At the same time, use case studies and will be a series of practical and applied activities that allow students to acquire specific skills and transverse of the subject, promoting participatory involvement of students in order to facilitate critical dialogue energize both the pace of the class.



Practical classes. The main purpose of these is twofold: first, to be part and acquire the knowledge and intervention strategies related to content presented in theoretical lessons, and, secondly, to demonstrate the ability to work in group and interpersonal communication skills.

At the same time, there will be individual sessions and group tutorials scheduled to be held in the supervision to students in order that they can perform adequately monitor the training activities.

The materials used include: manuals, articles, chapters, reports, case studies, software and other documentation and materials science relevant to the subject.

It will be necessary to use the virtual classroom, e-learning platform chosen by the University of Valencia to favor the teaching-learning processes and teacher-student interaction.

### **EVALUATION**

The information to obtain the final grade for the subject will be obtained through two basic procedures: final individual assessment and continuous or progress assessment (activities carried out in class, reports and / or individual and group work, access to content available in the virtual classroom, notebooks or similar, tests carried out in class, etc.).

In the final individual assessment, theoretical and practical content will be assessed by means of oral, written or skills performance tests and will represent 70% of the grade for the subject, with a maximum value of 7.

Continuous assessment or progress assessment of the work carried out by students throughout the course will be based on the oral or written presentation of reports, individual or group work, clinical cases and the use of diagnostic tests. This part of the evaluation will represent 30% of the grade for the course.

Attendance to the practicals is compulsory and in order to pass the course, it is necessary to attend at least 80% of the classes. Non-attendance must be due to well-documented reasons of force majeure (sudden health condition, death of a relative up to the third degree, court summons, official examination, accompanying a first-degree relative for medical reasons). The contents and activities carried out in face-to-face classes are considered to be recoverable by means of a written test to be taken at the end of the official final exam.

Within the continuous assessment there are two clearly differentiated parts: 1. There will be a single practical report which will have a maximum value of 2 points (20% of the grade for the course). 2.- Other activities carried out in face-to-face classes: reports and/or individual and group work that are not compulsory, access to contents available in the virtual classroom, notebooks or similar, tests carried out in class, participation in seminars, congresses or attendance at conferences, etc. The value of this part is a maximum of 1 (10% of the course grade).

The final mark is obtained from the weighted sum of the marks of each part of the assessment, provided that the part corresponding to the officially called written tests and the practical report has been passed.



There are no differences in the evaluation system between the first and second call. If the practical part of the subject is passed, the mark will be kept for the second sitting; otherwise, the practical part will be examined in order to pass the subject in the second sitting.

Students who obtain a mark equal to or higher than 9.2 will be eligible for an honours degree, which will be awarded according to the mark in order from highest to lowest. In the event of a tie, an oral exam will be held to decide who will receive the honours mark.

### **REFERENCES**

#### **Basic**

- Vila, J.M. (2009). Guía de intervención logopédica en la disfonía infantil. Ed. Síntesis S.A.
- Bustos, I. (2013). Intervención logopédica en los trastornos de la voz. Ed. Paidotribo.
- Quiñones, C. (2011). Técnicas para el cuidado de la voz. Ed. WOLTERS KLUWER EDUCACION.

#### **Additional**

- Acero, P. (2005). Tratamiento de la voz. Manual práctico. Incluye C.D. Ars Médica. Barcelona.
- De Mena González, A. (1996). Educación de la voz. Ed. Aljibe.
- Arias, C. & Estapé, M. (2005). Disfonía Infantil, Diagnóstico y Tratamiento. Ars Médica. Barcelona.
- Arias, C. (1993). Parálisis laríngeas: diagnóstico y tratamiento foniátrico de las parálisis cordales unilaterales en abducción. Masson. Barcelona.
- Bermudez, R. (2003). Exploración clínica de los trastornos de lavoz, el habla y la audición. Pautas y protocolos asistenciales. Ed. Aljibe
- Borragán. A. (1999). El juego vocal para prevenir problemas de voz. Ed. Aljibe. 1999.
- Echeverria S. (1996). Educación y reeducación de la voz infantil. Ed. CEPE.
- G. Heuillet-Martin y L. Conrad.(2003). Hablar sin laringe. Rehabilitación de la voz en laringectomizados.
- Garcia-Tapia, R. y otros. (2001). Diagnóstico y tratamiento de trastornos de voz. Ed. Garsi.
- Suarez, A. y otros. (2004). Trastornos de la voz. Estudio de casos. Ed. EOS.

## ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council



TEACHING GUIDE ADDENDUM FILE				
Name of the subject	35293 Speech therapy intervention in voice pathology			
Degree	SPEECH THERAPY DEGREE			

#### 1. CONTENTS

All the contents initially programmed in the teaching guide are maintained.

#### 2. WORKLOAD AND TIMETABLE OF THE COURSE

The workload is the same as in the teaching guide.

The practical sessions may be adapted to the online format if so determined by the Academic Committee of the Degree in accordance with the guidelines received from the Rector's Office. The workload will be adapted to the model in force at any given time.

#### 3. TEACHING METHODOLOGY

Substitution of the face-to-face theoretical class for the synchronous videoconference through the creation of Videoconference tasks within the virtual classroom and their execution through Blackboard Collaborate on the day and time of the face-to-face classes indicated by the Faculty of Psychology and Speech Therapy.

Same materials provided in the original guide for face-to-face teaching. Use of the virtual classroom forum to ask and answer questions. Tutoring system. The virtual tutoring programme is maintained at 100%: attention within 48 working hours maximum by e-mail and, by appointment, synchronous tutorials can be arranged (by videoconference).

#### 4. EVALUATION

**A) Hybrid teaching:** If the teaching is carried out in a hybrid way, that is to say, on-line theory and face-to-face practice, the evaluation of each section and its corresponding percentages will be as follows:

Final Test (50%)

The weight of the final exam will be reduced from 70% to 50%. The final evaluation test will be a written objective test with short questions. In order to pass the course, a minimum of 5 out of 10 must be obtained in the final exam.

Continuous assessment (50%)



The weight of the continuous assessment, which is 30% in the teaching guide, will be increased by 50%. Continuous assessment activities from the original guide are maintained:1.- Internship report. This had a maximum value of 2 points and now has a value of 4 points.2.- Other activities carried out in face-to-face and non-face-to-face classes: reports and/or individual and group work, access to contents available in the virtual classroom, blocks or similar, tasks carried out in class, participation and attendance at videoconferences programmed by the Centre (the teaching staff will indicate which ones), etc. The value of this part has a maximum of 1 point. The practical part must be passed by obtaining a minimum of 5 out of 10 in order to pass the course.

**B)** Online teaching: If the health situation worsens and requires the cessation of any form of face-to-face teaching (i.e. we move towards a completely online teaching and assessment model), the assessment of each section will be carried out through a virtual classroom, and following the guidelines dictated by the academic authorities. In this case, continuous assessment will be promoted:

#### Final Test (40%)

Final assessment test: this will be a written objective test with short questions. It will take place on the day and time initially proposed by the University of Valencia. The deadline time that will appear in the activity "Homework" of the virtual classroom will be the final time of delivery of the test. The professor will be able to arrange a videoconference to contrast any information regarding the exam or the evaluation activities. In the event of a network failure, problems with the Internet connection or any other computer incident, the oral exam will be held via videoconference.

If a person does not have the necessary means to establish a connection, access the virtual classroom and take the test, he/she must contact the teaching staff by e-mail. In these cases, the objective test will be replaced by an oral exam via videoconference through the platforms accessible by telephone. In order to pass the course, a minimum of 5 out of 10 must be obtained in the final exam.

#### Continuous assessment (60%)

The weight of continuous assessment, which is 30% in the teaching guide, will be increased to 60%. Continuous assessment activities from the original guide are maintained: 1.- Internship report. This had a maximum value of 2 points and now has a value of 4 points.2.- Other activities carried out in face-to-face and non-face-to-face classes: reports and/or individual and group work that are not compulsory, access to contents available in the virtual classroom, blocks or similar, tasks carried out in class, participation and attendance at videoconferences programmed by the centre (the teaching staff will indicate which ones), etc. The value of this part goes from having a maximum value of 1 point to 2. The practical part must be passed by obtaining a minimum of 5 out of 10 in order to pass the course.

The variation in the presence of the practical sessions could lead to changes in the weighting of the assessment systems. If the weighting contemplated in the addendum is modified due to this circumstance, it will be notified by the teaching staff publicly via the virtual classroom no later than one week after the end of the practical sessions.

The final exams will be held in accordance with the system determined by the agreements of the Governing Council in force at any given time.



#### 5. BIBLIOGRAPHY

The basic and complementary bibliographical references in the teaching guide are maintained.

