

**COURSE DATA****DATA SUBJECT****Code:** 35283**Name:** Hearing Assessment**Cycle:** Undergraduate Studies**ECTS Credits:** 4.5**Academic year:** 2026-27**STUDY (S)**

Degree	Center	Acad. year	Period
1203 - Degree in Speech Therapy	Facultat de Psicologia i Logopèdia	2	First quarter

**SUBJECT-MATTER**

Degree	Subject-matter	Character
1203 - Degree in Speech Therapy	Exploration of hearing	COMPULSORY

**COORDINATION**

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**SUMMARY**

This subject describes all the procedures that exist to explore and diagnose auditory pathology of the ear.

The explorations of the different parts of the ear are specified: external, middle and internal.

The different types of tests are also specified according to different ages.

This subject also includes exploration of the posterior labyrinth or vestibular apparatus.

The fundamental fields of work are audiology and vestibular examination, and basic knowledge of ear anatomy and physiology must be available.

**PREVIOUS KNOWLEDGE****RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE****1203 - Degree in Speech Therapy**



Obligation to have previously passed the subject(s)

35272 - Anatomy of Language and Hearing Organs  
35273 - Physiology of Language and Hearing Organs

## **OTHER REQUIREMENTS**

No enrollment restrictions have been specified for other subjects in the curriculum.

It is essential to have knowledge of the inner ear anatomy and physiology of hearing and vestibular apparatus. Knowledge of neuroanatomy are recommended.

## **COMPETENCES / LEARNING OUTCOMES**

### **1203 - Degree in Speech Therapy**

Know the concept of hearing screening and its application.

Know the different methods of hearing screening.

Know the methods of examination of the vestibular apparatus.

Know the operation of hearing aids and of the cochlear implant.

Select, implement and facilitate the learning of augmentative communication systems, as well as the design and use of prostheses and technical aids adapted to the physical, psychological and social conditions of the patient.

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 be able to communicate information, ideas, problems and solutions to both expert and lay audiences.

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.

Understand and be able to integrate the biological principles (anatomy and physiology), psychological principles (evolutionary development and processes), linguistic principles and pedagogical principles of speech therapy into communication, language, speech, hearing, voice and non-verbal oral communication.

## **DESCRIPTION OF CONTENTS**



## **1. ANATOMIICAL AND FUNCTIONAL RECALL OF THE INNER EAR.**

Memory of the functioning of the inner ear and consequences of the sound and bioelectric alteration.

Anatomy and physiology of hearing  
Anatomy and physiology balance  
Pathophysiology of hearing  
Pathophysiology of balance

## **2. BASIC CONCEPTS FOR EXPLORATION OF THE INNER EAR**

Basic explorations of the inner ear and the technologies that are applied.

Basic concepts of acoustics and psychoacoustics  
Basic concepts of hearing examinations  
Clinical examination of hearing disorders  
Otoscopy. Acumetry  
Clinical examination of the balance

## **3. BASIC AUDIOMETRY**

Knowledge of the audiometric technique at the different levels of application.

Subjective test concept  
Threshold tone audiometry and masking  
Suprathreshold tone audiometry  
Speech audiometry  
Hearing tests to asses hearing and language  
Child audiometry

## **4. OBJECTIVE AUDIOLOGICAL TESTS**

Knowledge of the different objective hearing tests, objective test concept

Impedancemetry  
Otoacoustic emissions  
Auditory evoked potentials of the brainstem  
Steady-State Auditory Evoked Potentials  
Instrumental vestibular examination



## 5. SPECIAL AUDIOLOGICAL TESTS

Application of audiology in special pathologies.  
 Assessment of central auditory processing  
 Other audiological examinations  
 Tinnitus examination tests.  
 Examination tests for the indication of hearing aids

## 6. SPECIFIC EXAMINATION OF THE CHILD AND ADULT

Sequence of diagnostic tests at different ages.  
 Systematic hearing screening in newborns  
 Systematic examination of hearing in children  
 Systematic exploration of hearing in adults

# WORKLOAD

## PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Clinical practice	5,00
<b>Total hours</b>	<b>35,00</b>

## NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	20,00
Preparation of lessons	20,00
Preparation for assessment activities	27,50
Resolution of case studies	0,00
<b>Total hours</b>	<b>67,50</b>

# TEACHING METHODOLOGY

Theoretical classes: presentations by the teacher with audiovisual support, explanations of the



contents and discussion in class. 30 face-to-face hours.

Practical classes: clinical sessions held in university hospitals, case studies, exploration techniques and participation in practical activities under supervision. 15 face-to-face hours.

Independent study and work by the student, preparation of classes and assessment activities, 67,5 hours.

## EVALUATION

The assessment system will be the same for both the first and second sessions.

SE1: Assessment of theoretical and practical content through written tests. This section will account for 80% of the final grade.

SE2: Attendance at hospital practical sessions and completion of assignments. This section will account for 20% of the final grade. This section cannot be retaken, and the grades for the second session will be maintained.

Students who have completed 80% of the practical sessions may apply for the first session.

Students who did not attend the first session and those who failed the first session must apply for the second session.

Minimum requirements:

Attendance at hospital practical sessions is mandatory. A requirement for taking the assessment exam is to attend at least 80% of the sessions and adequately justify absences due to force majeure.

To pass the subject, both in the first and second sittings, it will be necessary to obtain a minimum of:

- 4 points out of 8 in SE1.- 1 point out of 2 in SE2.

The different sections included in the assessment will only be added together when the minimum requirements established for each of them are exceeded.

In the event of fraudulent practices, the procedure will be followed as determined by the Protocol for action against fraudulent practices at the University of Valencia (ACGUV 123/2020): <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>.

As indicated in the regulations for assigning Honour Rolls, they will be awarded in strict order of grade. In the event of a tie, the Honor Roll will be awarded to the student with the highest grade in SE1. If the tie persists, the grade from SE2 will be used. If all the marks are equal, the professor may assign an additional test to the students involved.

## REFERENCES

### Basic

- Notes published in the virtual classroom.



- M. Manrique y J. Marco. (2014). Audiología. SEORL-PCF. Ed CYAN. Madrid.
- Antonia Angulo Jerez (2018). Audiología: Teoría y Práctica. Ediciones Egea.

### **Complementary**

- Utilización del aula virtual para intercambio de información y presentación de los informes.
- Manrique Rodríguez, M., Marco Algarra, J. (2014). AUDIOLOGÍA. Ponencia Oficial de la Sociedad Española de Otorrinolaringología y Patología Cérvico-Facial EORL Edición a cargo de CYAN, Proyectos Editoriales, S.A. (EN LINEA).
- Angulo Jerez, A., Rosselló Martinelli, L., Harguindey Antolí-Candela, A., Yuste García, M., Feijoo Frazier, S., Brocal Fernández, F. y Salobral Peña., S. (2017). Audiología. Teoría y Práctica. Ediciones Egea.