

Pathology of hearing, speech, voice and swallowing

Code: 104143 ECTS Credits: 9

2024/2025

Degree	Туре	Year
2500893 Speech therapy	ОВ	2

Contact

Name: Miquel Quer Agusti Email: miquel.quer@uab.cat

Teachers

Francisco Javier Leon Vintro Cesar Jose Orus Dotu (External) Albert PUJOL (External) Cristina VALERO

Teaching groups languages

You can view this information at the <u>end</u> of this document.

Prerequisites

There are no prerequisites. It is convenient for the student to have general knowledge of anatomy and physiology of the organs that make up the auditory system, the phonatory and nervous system. This will facilitate comprehension of hypoacusia and the voice disorders that a may appear in many pathological situations.

ALTERNATIVE TEACHING OF THE SUBJECTS OF THE OLD CURRICULUM.

This is the alternative teaching subject for students who have enrolled in the old plan

101715.- Pathology of hearing, speech and voice

101716.- Laryngeal and resonance cavity diseases: assessment and intervention

In the event that only 101715 was passed.- Pathology of hearing, speech and voice, you will have to take Block II (Pathology of voice, speech and swallowing).and if the subject passed was only 101716.- Diseases of the larynx and the resonance cavity: assessment and intervention, only Block I (Hearing pathology) must be taken.

Objectives and Contextualisation

Disorders that affect the nose, mouth, pharynx, larynx and ear, are usually accompanied by communication disorders. Doctors and in particular ENTs are often the first to be consulted when language is slow to appear, when it is difficult to understand or when there is any other alteration in the voice.

Once the ENT specialist and / or Phoniatrist has established the diagnosis and, if applicable, medical-surgical techniques have been applied to solve the specific problem, it is usually necessary for the Speech Therapist to intervene. Speech therapists apply evaluation techniques and interventions that allow as much recovery as possible of the altered functions of hearing, voice, language and speech in order to achieve their normal capacity for communication and facilitation of their social integration.

With the content of the course it is intended that the students acquire precise knowledge of the clinical anatomy and physiopathology, as well the clinical and diagnostic methods of the hearing apparatus, and phonation and swallowing systems. This will help them to be able to intervene in their disorders, developing speech therapy functions according to the patients' individual needs, as well as to be to be able to advise the family if necessary.

Competences

- Act appropriately with respect to the profession's ethical code: respect professional confidentiality, apply
 professional criteria in the completion and referral of treatment.
- Critically evaluate the techniques and instruments of evaluation and diagnosis in speech therapy, as well as its procedures of intervention.
- Demonstrate an understanding of disorders in communication, language, speech, hearing, voice and non-verbal oral functions.
- Demonstrate an understanding of how the profession works, and the legal status of the speech therapist.
- Identify, analyze and solve ethical problems in complex situations.
- Working in intra- and interdisciplinary teams.

Learning Outcomes

- 1. Demonstrate knowledge of the legal status of speech therapists in the health system.
- 2. Describe the main disorders of speech, voice, hearing and deglutition.
- 3. Explain the basics of exploring and examining the phonetic apparatus (larynx, pharynx, mouth, nostrils) and the auditory system
- 4. Identify situations requiring referral to other professionals.
- 5. Identify, analyze and solve ethical problems in complex situations.
- 6. Respect confidentiality in clinical practice.
- 7. Working in intra- and interdisciplinary teams.

Content

AUDITION

- 1. Pathophysiology of hearing.
- 2. Assessment of hearing loss.
- 3. Childhood hearing loss.
- 4. Transmission deafness.
- 5. Deafness of perception. Presbycusis.

- 6. Hearing aids and other devices for deafness.
- 7. Cochlear implants and their rehabilitation.

SPEAK AND VOICE

- 8. Pathophysiology and exploration of the nose. Pathology of the nose.
- 9. Pathophysiology and exploration of the pharynx. Pharynx pathology.
- 10. Pathophysiology and exploration of the oral cavity. Pathology of the oral cavity.
- 11. Pathophysiology of the larynx. Laryngeal examination. Voice exploration.
- 12. Embryonic and evolutionary development of the phonation organs and resonance cavities. Phonation mechanisms.
- 13. Pathophysiology and exploration of the articulation of speech.
- 14. Oral, pharyngeal, nasal and pulmonary voice disorders. Resonance disorders.
- 15. Articulation disorders
- 16. Dysphonia: etiopathogenesis and classification.
- 17. Dysphonia due to congenital lesions of the vocal cords. Children's dysphonia. Puberfonia.
- 18. Dysphonia due to acquired injuries of the vocal cords. Organic and functional dysphonia.
- 19. Peripheral and central laryngeal paralysis
- 20. Dysphonia due to neurological and neuromuscular diseases
- 21. Aging: voice, speech and breathing. Presbiphony
- 22. Role of surgery in different dysphonia
- 23. Head and neck cancer: the sequelae of treatments
- 24. Total laryngectomy and its rehabilitation
- 25. Gender change. Voice sung. Occupational pathology.

SWALLOWING

- 26. Pathophysiology of swallowing
- 27. Exploration of swallowing
- 28. Functional dysphagia
- 29. Structural oropharyngeal dysphagia
- 30. Role of surgery in the treatment of dysphagia

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes

Type: Directed

Clinical case seminars	54	2.16	1, 2, 3, 4, 5, 6, 7
Theoretical sessions	45	1.8	2, 3, 4, 5
Type: Autonomous			
Bibliographical search	31	1.24	1, 2, 4, 5
Studying	90	3.6	1, 2, 3, 4, 6, 7

Theoretical sessions

Exposition of theoretical themes with iconographic material, stimulating the discussion of the subject.

Clinical case seminars

The students will be divided into 3 groups and will carry out these seminars where the teacher will present practical clinical cases to the students, who will have to have an active participation. The active participation of students will be encouraged at all times through questions, debate and suggestions.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
EV1. Multiple choice test I	35%	1	0.04	1, 2, 3, 4
EV2. Multiple choice test II	35%	1	0.04	1, 2, 3, 4
EV3. Evaluation of clinical cases	30%	3	0.12	1, 2, 3, 4, 5, 6, 7

Theoretical content (EV1 and EV2):

Two multiple-choice tests individual and face to face, questions with 5 options, with only one correct. The exams will include at least two questions by topic, although this number can be increased depending on the theoretical content and the relevance of these at the time of consolidating the theoretical bases of the subject. Not-answered questions do not penalize. There's also a penalty for guessing, four wrong answers erase one good answer.

The EV1 would take place in the second assessment period, first semester (web page).

The EV2 would take place in the second assessment period, second semester (web page).

The EV3 would take place in the second assessment period, second semester (web page).

THE MINIMUM GRADE TO PASS THE COURSE IS 5 ON EACH TEST: AVERAGE WILL NOT BE DONE WITH A GRADE OF LESS THAN 5.0 ON EACH OF THE TESTS.

Each exam EV1 and EV2 represents 35% of the final grade of the course

THE DELIVERY OF THE TRANSLATION OF THE EVALUATION TESTS PRESENTATION WILL BE MADE IF THEY ARE COMPLETED REQUIREMENTS ESTABLISHED IN ARTICLE 263 AND IS PERFORMED YOUR REQUEST IN WEEK 4 TELEMATICALLY (EFORM) (more information on the Faculty's website).

Evaluation of clinical cases(EV3):

The attendance and involvement of the student will be evaluated (30% mark) and a written, individual and face to face evaluation will be made on four clinical cases where the student must give an orientation on the same (70% remaining of the note).

The grade for the evaluation of clinical cases represents 30% of the final grade. THE MINIMUM GRADE TO PASS THE COURSE IS A 5.0 OF THIS CLINICAL CASE EVALUATION (5.0 out of 10).

THE DELIVERY OF THE TRANSLATION OF THE EVALUATION TESTS PRESENTATION WILL BE MADE IF THEY ARE COMPLETED REQUIREMENTS ESTABLISHED IN ARTICLE 263 AND IS PERFORMED YOUR REQUEST IN WEEK 4 TELEMATICALLY (EFORM) (more information on the Faculty's website).

Final grade:

The final grade will be the result of the following formula: Theoretical content is equivalent to 70% + Clinical case represents 30%.

Assessable student: when the student delivers evidence of learning with a weight of at least 40%.

Passing the course: when the student has done all the evidences, obtaining at least a 5.0 (0-10 scale).

Resit:

Students who have done evidences with a weight of at least 2/3of the total, and having a final grade of equal or greater than 3.5 and lower than 5.0. They will be resited only the parts evaluated as insufficient during the course.

The resit woult include a multiple response test and a clinical case evaluation.

This would take place during the resit examination period

No unique final synthesis test for students who enrole for the second time or more is anticipated.

The general UAB guidelines for assessment can be found here: https://www.uab.cat/web/estudiar/graus/graus/avaluacions-1345722525858.html

UNIQUE EVALUATION:

THE SINGLE EVALUATION IS REQUESTED TELEMATICALLY (E-FORM) DURING THE SPECIFIC PERIOD (more information on the Faculty's website)

This assessment will have two elements:

- 1. EV1-2. Multiple-choice objective test of the entire subject: 50% of the final grade.
- 2. EV3. Evaluation of clinical cases: 50% of the final mark.

The EV1-2 assessment will last 1 hour.

The EV3 assessment will last 3 hours.

Both EVs will be held on the same day, which will be attempted to be the same as the EV of the continuing assessment of the second assessment period.

The same recovery system as for continuous assessment will be applied

The review of the final qualification follows the same procedure as for the continuous assessment

Bibliography

Basic references:

Bermúdez R. Exploración clínica de los trastornos de la voz, el habla y la audición. Ed. Aljibe. Málaga. 2003.

Bleeckk. Disfagia: Evaluación y reeducación de los trastornos de la deglución. Ed. McGraw-Hill 2004.

Ramírez C. Manual de Otorrinolaringología, Ed. McGrawHill. Madrid 2008.

Ramos A. Cenjor C .Manrique M. Morera C. Implantes de oído medio e implantes cocleares. Ed. Ars Médica 2007

Further readings:

Angulo A, Blanco JL, Mateos F. Audioprótesis: Teoría y práctica. Ed. Massón. Barcelona 1997.

Bermúdez R. Exploración clínica de los trastornos de la voz, el habla y la audición. Ed. Aljibe. Málaga. 2003.

Bleeckk. Disfagia: Evaluación y reeducación de los trastornos de la deglución. Ed. McGraw-Hill 2004.

Bleeckk. Disfagia: Evaluación y reeducación de los trastornos de la deglución. Ed. McGraw-Hill 2004.

Casado J. C. La evaluación clínica de la voz. Fundamentos médicos y logopédicos. Ed. Aljibe. Málaga 2002.

Casado J. C. Pérez A. Trastornos de la voz: Del diagnóstico al tratamiento. Ed. Aljibe. Málaga 2009.

Cobeta I., Nuñez F., Fernández S. Patología de la voz.. Ponencia Oficial de la Sociedad Española de ORL y Patología Cervico-Facial 2014. Ed. Marge Medica Books

Courtat P., Peytral C, Elbaz P. Exploraciones funcionales en ORL. Ed. Massón. Barcelona 1994.

FIAPAS. Manual Básico de Formación Especializada sobre Discapacidad Audtiva. 2004.

Jaume G, Tomas M. Manejo de la disfagia y aspiración. Ed. Ergon 2007

Le Huche F, Allali A. La voz Tomo (1,2,3, 4). Ed. Massón. Barcelona 2004

Manrique M, Huarte A. Implantes cocleares. Ed. Massón 2002.

Médica 2007.

Menaldi J. La Voz Patológica. Ed. Panamericana 2002

Navarro S. Navarro F., Romero P. Voz: Trastornos y rehabilitación. Ed. CEP 2007

Patología de la voz. I Cobeta, F. Nuñez, S Fernández. Ponencía Oficial de la SEORL PCF Ed. Marge Méica Books 2014

Peña J. Manual de logopedia. Ed. Massón. Barcelona 2001.

PerellóJ. Evaluación de la voz, lenguaje y audición. Ed. Lebón. Barcelona 1996

Perelló J. Sordera Profunda Bilateral Prelocutiva. Ed. Massón 4º edición. Barcelona 1992.

Perelló J. Trastornos del habla. Ed. Massón 5º edición. Barcelona 1995.

Puyuelo M. Casos Clínicos en logopedia. Ed. Massón 1997

Ramírez C. Manual de Otorrinolaringología, Ed. McGrawHill. Madrid 2008.

Ramos A. Cenjor C .Manrique M. Morera C. Implantes de oído medio e implantes cocleares. Ed. Ars Médica 2007

Rivera T. Audiología. Técnicas de exploración. Hipoacusias neurosensoriales. Ed. Ars Médica 2003. Rodríguez-Smith-Agreda. Anatomía de los órganos del lenguaje, visión y audición. Ed. Panamericana 2003.

Salesa E., Perelló E., Bonavida A. Tratado de audiología. Ed. Masson. Barcelona 2013

Suárez A. Martínez J.D., Moreno J.M, García ME. Trastornos de la voz. Estudio de casos. Ed. EOS 2003.

Tomas M, Bernal M. Tratado de otorrinolaringología pediátrica. Ponencia de la SEORL 2000.

TomatisA. Foniatria. el oido y la voz..Editorial: Paidotribo. 2010.

Vallejo L.A. Hipoacusia Neurosensorial. Ed. Massón. Barcelona 2003.

VV.AA. Educación de la voz. Anatomía, patologías y tratamiento. Ed Ideaspropias. 2004.

Software

No specific software needed

Language list

Name	Group	Language	Semester	Turn
(SCC) Clinical case seminars	111	Catalan	annual	morning-mixed
(SCC) Clinical case seminars	112	Catalan	annual	morning-mixed
(SCC) Clinical case seminars	113	Catalan	annual	morning-mixed
(TE) Theory	1	Catalan	annual	morning-mixed