

**COURSE DATA****DATA SUBJECT**

Code: 35310
Name: Physiotherapy applied to Speech Therapy
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1203 - Degree in Speech Therapy	Facultat de Psicologia i Logopèdia	4	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1203 - Degree in Speech Therapy	Physiotherapy applied to speech therapy	ELECTIVES

COORDINATION

ARNAL GOMEZ ANNA

SUMMARY

Physical Therapy applied to Speech and Language Therapy is a fourth-year elective subject where the student will know what Physical Therapy is, its characteristics and fundamental techniques and their application in patients with voice and language disorders in order to improve their communication potential. At the same time, students will learn both theoretical and practical functional assessment of vocal behavior, their main diseases and their treatment, emphasizing the rehabilitative function of Physical Therapy.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

Subject without prerequisites.



COMPETENCES / LEARNING OUTCOMES

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Be able to carry out the rehabilitation of the speech and language disorder in different patients.

Be able to determine the characteristics of a functional and comprehensive assessment of vocal behaviour.

Be competent in the assessment of orofacial alterations, which are of great importance in speech therapy practice.

Have the ability to teach the patient the application of a physiotherapy treatment in certain pathologies associated with impaired speech and swallowing.

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 developed the learning skills needed to undertake further study with a high degree of autonomy.

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.

DESCRIPTION OF CONTENTS

1. Introduction to Physical Therapy applied to Speech and Language Therapy.

1.1 Concept of Physical Therapy.

1.2 Specialized techniques: Kinesiotherapy and Massotherapy. Electrotherapy. Thermotherapy and cryotherapy. Hydrotherapy. Phototherapy.

1.3 Basic Concepts in Physiotherapy: reference planes and axis, posture, balance, muscle contraction types.

2. Musculoskeletal assessment applied the mouth and phonation system, the backbone and the respiratory system.

2.1 Assessment of muscle function on facial area, pharynx and oral area, and temporomandibular joint.

2.2 Assessment of the backbone: cervical tract, shoulder girdle, dorsal spine, lumbar spine and pelvic girdle.

2.3 Osteoarticular study of the rib cage and respiratory mechanics. Assessment on respiratory muscles and breathing types.



3. Physical Therapy techniques applied to Speech and Language Therapy (I).

- 3.1 Kinesitherapy: Basic Techniques and Special Techniques. General Indications and contraindications.
- 3.2 Massage: Basic Maneuvers and Special Maneuvers. Effects on the organism. General Indications and contraindications.
- 3.3 Relaxation: Advantages. Types of relaxation.
- 3.4 Thermotherapy and cryotherapy: applications. Indications and contraindications.

4. Physical Therapy techniques applied to Speech and Language Therapy (II).

- 4.1 Electrotherapy: effects, risks, types of electric current.
- 4.2 Neuromuscular bandage (kinesiotape): concept, physiological effects, application techniques. Indications and contraindications.
- 4.3 Respiratory Physiotherapy: objectives and techniques.

5. Physical therapy in disorders of voice and speech.

- 5.1 Systems involved in voice and speech production.
- 5.2 Contributions of physiotherapy in dysphonia: postural reeducation, relaxation, breathing pattern retraining, applying Kinesio Taping, exercises, massage.
- 5.3 Contributions of physiotherapy in speech alterations.
- 5.4 Physical therapy in laryngectomy.
- 5.5 Physical therapy in laryngeal paralysis.

6. Physical Therapy in Orofacial and swallowing disorders.

- 6.1 Physiotherapy in the cranio-mandibular dysfunction: main symptoms and signs, physiotherapy treatment.
- 6.2 Physiotherapy in neurogenic orofacial pain and postoperative pain.
- 6.3 Physiotherapy in facial paralysis.
- 6.4 Contributions of physiotherapy in the dysphagia: Concept and etiology, symptoms and signs, exploration of the various phases of swallowing, dysphagia assessment, rehabilitation techniques and facilitation.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Classroom practices	15,00
Total hours	45,00

NON PRESENCIAL ACTIVITIES



Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	30,00
Preparation of lessons	0,00
Preparation for assessment activities	22,50
Resolution of case studies	15,00
Total hours	67,50

TEACHING METHODOLOGY

The theoretic classes of the subject will include lectures of the contents. Clinical cases will be studied, literature will be reviewed and different audiovisual methods will be used.

In the practical classes, we will rehearse and develop techniques and physical therapy procedures previously seen in lecture explains. The techniques will be done by couples where one takes the role of the patient and the other of the therapist.

Furthermore individualized tutoring and group will be made in order to supervise student in their learning process.

EVALUATION

1) Assessment of theoretical and practical content through a written and individual test. It will take place on the date and time designated by the Faculty of Psychology and Speech Therapy and will represent 70% of the subject's grade. The final test of the first call to evaluate the specific objectives of the subject will contain a total of 30 questions: 25 test-type questions on the theoretical and practical content and 5 test-type questions on a clinical case. Each question will have 4 answer options and only one will be valid. It will be corrected with the following formula:

NOTE= $[\text{rights} - (\text{errors} / \text{no. of options} - 1)] \times (\text{maximum mark} / \text{no. of questions})$

This section will be retrievable in the second call through a written test with the same structure as the one taken in the first call.

2) Written presentation of the Internship Report, which will include reports, individual or group work, clinical cases, problem solving and interpretation of diagnostic tests, related to the activities of the internship sessions (30%).

This section will be recoverable in the second call through presentation of the Practice Report with the same structure as the one made in the first call.

The final result of the subject is obtained from the weighted sum of the marks of each part of the assessment, so it will be an essential requirement to pass the subject to achieve a minimum of 50% in each



of the two assessment sections (written test called officially, required minimum 3.5 out of 7; and internship report, minimum 1.5 out of 3). The grade of the part approved from the first to the second call of the same academic year will be kept in case one of the parts is not passed.

The mention of honors registration (MH) can be awarded to students who have obtained a grade equal to or higher than 9.0, and by strict order of grade in the grade report. The procedure that will be followed to obtain the honors registration in case of a tie in the qualification, will be the resolution of a written clinical case with test-type questions.

Fraudulent practices will be dealt with according to what is established by the Action Protocol fraudulent practices at the University of Valencia (ACGUV 123/2020): <https://www.uv.es/sgeneral/Protocols/C83.pdf>

REFERENCES

Basic:

- Blandine Calais-Germain. (2013) *La Respiración. Anatomía Para El Movimiento*. Ed. La Liebre de Marzo.
- Torres M., Salvat I. (2006) *Guía de masoterapia para fisioterapeutas. Colección de fisioterapia*. Madrid: Ed. Médica Panamericana.
- Wanderley F, Mussolino A, Victoria K. (2008) Alteraciones posturales y su repercusión en el sistema estomatognático. *Acta Odontológica Venezolana*, vol. 46, núm. 4

Supplementary:

- Aramburu, C., Muñoz, E., e Igual, C. (1998). *Electroterapia, termoterapia e hidroterapia*. Síntesis: Madrid
- Mora, E., y de Rosa, R. (1998). *Fisioterapia del aparato locomotor*. Síntesis. Madrid.
- Meliá Oliva J.F. (2008) *Historia de la Fisioterapia*. València: Ilustre Colegio Oficial de Fisioterapeutas de la Comunidad Valenciana
- Dueñas L, Balasch M, Espí GV. *Técnicas y nuevas aplicaciones del vendaje neuromuscular*. Lettera Publicaciones. Bilbao. 2010
- Tarkowska A, Katzer L, Ahlers MO. Assessment of masticatory performance by means of a colorchangeable chewing gum. *J Prosthodont Res*. 2017 61(1):9-19
- Likewise, each topic will specify the books, scientific articles, and readings of interest



recommended for preparing the content covered.