



## IDENTIFYING DATA

### (\*)Exercicio terapéutico no tratamento de enfermidades neurodexenerativas e na diversidade funcional

|                     |  |           |      |            |
|---------------------|--|-----------|------|------------|
| Subject             | (*)Exercicio terapéutico no tratamento de enfermidades neurodexenerativas e na diversidade funcional   |           |      |            |
| Code                | P05M191V01107  |           |      |            |
| Study programme     | Máster Universitario en Ejercicio terapéutico en fisioterapia  |           |      |            |
| Descriptors         | ECTS Credits   | Choose    | Year | Quadmester |
|                     | 3  | Mandatory | 1st  | 1st        |
| Teaching language   | #EnglishFriendly<br>Spanish<br>Galician  |           |      |            |
| Department          |  |           |      |            |
| Coordinator         | Monge Pereira, Esther  |           |      |            |
| Lecturers           | González González, Yoana<br>Monge Pereira, Esther  |           |      |            |
| E-mail              | esther.monge@uvigo.es  |           |      |            |
| Web                 |  |           |      |            |
| General description | <p>This subject is focused to the learning of the theoretical knowledges-practical that owes to have a *fisioterapeuta specialized in *implementar programs of therapeutic exercise in people that suffer the consequences of a dysfunction of the system *neuromusculosquelético.</p> <p>They Will board the profits of the suitable practice of therapeutic exercise in those patients with dysfunctions *neuromusculosqueléticas, since so that *ésta *sea beneficial, owes to be adjusted to the capacities of the person, *respetando his limitations and favouring his functionality.</p> <p>Stop this, the students will purchase the training and the knowledge that allow them value the state of the patient and allow them propose the exercise adjusted to the his functional level, taking into account those practices of exercise that can be counterproductive. *Ademáis, they will purchase competitions to guide the practice of therapeutic exercise.</p> |           |      |            |

## Training and Learning Results

|      |  |
|------|--|
| Code |  |
| A2   | That the students know how to apply the knowledge acquired and their ability to solve problems in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.  |
| A3   | That the students are able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments. |
| B1   | Know how to work in teams that are structured in a uni or multidisciplinary and interdisciplinary way as a professional specialized in Therapeutic Exercise in Physiotherapy.  |
| C10  | Design and apply therapeutic exercise programs in the prevention and treatment of pathologies or musculoskeletal, cardiovascular, respiratory, endocrine, neurodegenerative diseases, in urogynecological and obstetric dysfunctions, and oncological processes.                       |
| C11  | Adapt therapeutic exercise sessions based on the characteristics of the patient, the pathology and the environment.  |
| C12  | Apply a protocol for measuring the functional capacity of patients based on their characteristics, as well as the pathology in the different areas of specialization.  |
| D1   | Ability to understand the meaning and application of the gender perspective in the different fields of knowledge and in professional practice with the aim of achieving a fairer and more equal society.   |
| D5   | Recognition of diversity and multiculturalism.   |
| D6   | Creativity, entrepreneurial spirit and adaptation to new situations.   |
| D8   | Maintain an attitude of learning and improvement.  |

| <b>Expected results from this subject</b> |  |
|---|--|
| Expected results from this subject        | Training and Learning Results                        |
| New                                       | A3<br>C11<br>C12                                     |
| New                                       | A2<br>A3<br>B1<br>C10<br>C11<br>D1<br>D5<br>D6<br>D8 |

| <b>Contents</b>   |  |
|---|--|
| Topic   |  |
| (*)Valoración funcional.  | (*)Coñecer a importancia clínica da avaliación funcional do paciente con trastornos neuromusculares.   |
| (*)Medición estandarizada das capacidades funcionais.   | (*)Utilizar a avaliación funcional como unha ferramenta útil para adecuar o exercicio terapéutico ao estado funcional do paciente. Utilizar a avaliación funcional para analizar a evolución do paciente que practica exercicio terapéutico. |
| (*)Consideracións de problemáticas específicas de cada enfermidade neurodegenerativa.                 | (*)Consideracións a ter en conta ao implementar programas de exercicio terapéutico tras ictus, traumatismos craneoencefálicos, lesións medulares, etc.   |
| (*) Desenvolvemento de programas específicos de exercicio terapéutico segundo trastornos específicos. | (*)Deseño e aplicación de programas específicos de exercicio terapéutico segundo o obxectivo terapéutico exposto.  |

| <b>Planning</b>         |             |                             |             |
|-------------------------|-------------|-----------------------------|-------------|
|                         | Class hours | Hours outside the classroom | Total hours |
| Introductory activities | 1           | 0                           | 1           |
| Lecturing               | 6           | 12                          | 18          |
| Laboratory practical    | 15          | 24                          | 39          |
| Presentation            | 1           | 2                           | 3           |
| Essay                   | 1           | 7                           | 8           |
| Portfolio / dossier     | 1           | 4                           | 5           |
| Systematic observation  | 1           | 0                           | 1           |

\*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

| <b>Methodologies</b>    |   |
|-------------------------|---|
|                         | Description   |
| Introductory activities | The guidelines of the methodologies that the students must develop during the realisation of the subject will be indicated. |
| Lecturing               | Participatory theoretical classes using case studies and previous study.  |
| Laboratory practical    | Demonstration by part of the lecturers of the contents and student participation solving the proposed case study exercises. |
| Presentation            | The students present the work of the subject.   |

| <b>Personalized assistance</b> |  |
|--------------------------------|--|
| Tests                          | Description  |
| Essay                          | The work will be monitored and the students will be informed of the criteria that will be taken into account for the evaluation.                                     |
| Portfolio / dossier            | Answers will be given to the queries made by the students about their dossier and the criteria that will be taken into account for the evaluation will be announced. |
| Systematic observation         | The handling of the students with the practical contents will be supervised in the classroom, responding to their queries.   |

## **Assessment**

|                        | Description  | Qualification | Training and Learning Results             |
|------------------------|--|---------------|---|
| Essay                  | The presentation and defense of the work will be evaluated.                                  | 40            | A2<br>A3<br>D1<br>D5<br>D6<br>D8          |
| Portfolio / dossier    | The presentation and defense of the dossier will be evaluated.                               | 40            | C10<br>C11<br>C12<br>D1<br>D5<br>D6<br>D8 |
| Systematic observation | The handling of the students with the practical contents will be evaluated in the classroom. | 20            | C10<br>C11<br>C12                         |

### Other comments on the Evaluation

**The work and the postfolio may be delivered up to one week after the end of the course.**

#### Ordinary call:

Students may request the waiver of continuous assessment by informing the coordinator of the subject within the established period.

If so, the evaluation will be: a job for 40% of the grade and an exam of the practical content that will account for the remaining 60%. To pass the subject, both parties must have passed independently.

To pass the subject, students must have independently passed all the evaluation sections and have attended 80% of the practical classes. Then non-attendance to the practices supposes the loss to the continuous evaluation.

Students who have one of the approved parts will keep the passed part for the next call within the same academic year.

#### 2nd chance:

Students can take the 100% exam in the 2nd call in the same way as if they renounce continuous assessment.

To pass the subject, students must independently pass the theoretical and practical exam.

**\*In any of the calls, if the student obtains a numerical grade greater than 5, but does not meet the requirements established to pass the subject, they will have a grade of 4.5 (failed). In case of lower grades, the grade obtained will be given.**

### Sources of information

#### Basic Bibliography

Marta Bisbe Gutiérrez, Carmen Santoyo Medina, Vicenç Tomàs Segarra i Vidal., **Fisioterapia en Neurología: Procedimientos para restablecer la capacidad funcional.**, Medica Panamericana, 2012

Rodríguez, M<sup>a</sup> & Cano de la Cuerda, Roberto & Collado-Vázquez, Susana & Casas, Patricia, **Aps en neurorrehabilitación**, Dykinson, 2016

Kisner y Colby, **Ejercicio Terapéutico: Fundamentos y técnicas**, Editorial Medica Panamericana, 2010

de Maria Stokes, Emma Stack, **Fisioterapia En La Rehabilitación Neurológica**, 3<sup>a</sup> Edición, Elsevier, 2013

ANNE SHUMWAY-COOK, **CONTROL MOTOR DE LA INVESTIGACION A LA PRACTICA CLINICA: De la investigación a la práctica clínica**, LIPPINCOTT WILLIAMS & WILKINS, 2019

Marta Bisbe Gutiérrez, Carmen Santoyo Medina, **Fisioterapia en neurología: Procedimientos para restablecer la capacidad funcional**, Médica Panamericana, 2021

#### Complementary Bibliography

Roberto Cano de la Cuerda, Rosa M<sup>a</sup> Martínez Piédrola, Juan Carlos Miangolarra Page, **Control y Aprendizaje Motor**, Medica Panamericana, 2015

Roberto Cano de la Cuerda, Susana Collado Vázquez., **Neurorrehabilitación: Métodos específicos de valoración y tratamiento**, Medica Panamericana, 2012

Paeth Rohfs, Bettina, **Experiencias con el concepto Bobath**, Editorial Medica Panamericana, 2012

Duane E. Haines, Gregory A. Mihailoff, **Principios de neurociencia - 5<sup>a</sup> edición: Aplicaciones básicas y clínicas**, Elsevier, 2019

### Recommendations