



## IDENTIFYING DATA

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

|                     |   |           |      |            |
|---------------------|---|-----------|------|------------|
| Subject             | (*)Exercicio terapéutico no tratamento de enfermidades neurodegenerativas 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   | Spanish<br>Galician   |           |      |            |
| Department          |   |           |      |            |
| Coordinator         | González González, Yoana  |           |      |            |
| Lecturers           | González González, Yoana<br>Monge Pereira, Esther   |           |      |            |
| E-mail              | yoana@uvigo.es  |           |      |            |
| Web                 | <a href="http://https://www.uvigo.gal/es/node/263057">http://https://www.uvigo.gal/es/node/263057</a>   |           |      |            |
| General description | (*)Esta materia está enfocada ó aprendizaxe dos coñecementos teórico-prácticos que debe de ter un fisioterapeuta especializado en implementar programas de exercicio terapéutico en persoas que padecen as consecuencias dunha disfunción do sistema neuromusculoesquelético.<br>Abordaranse os beneficios da práctica adecuada de exercicio terapéutico naqueles pacientes con disfuncións neuromusculoesqueléticas, xa que para que ésta sea beneficiosa, debe estar axustada ás capacidades da persoa, respetando as súas limitacións e favorecendo a súa funcionalidade.<br>Para iso, os estudiantes adquirirán a formación e o coñecemento que lles permita valorar o estado do paciente e lles permita propor o exercicio axustado ó seu nivel funcional, tendo en conta aquellas prácticas de exercicio que poidan ser contraproducentes. Ademáis, adquirirán competencias para guiar a práctica de exercicio terapéutico. |           |      |            |

## Skills

### 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>Learning outcomes</b>           |  | Training and Learning Results                        |
|------------------------------------|--|--|
| Expected results from this subject |  | 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 evaluación funcional do paciente con trastornos neuromusculoesqueléticos.  |
| (*)Medición estandarizada das capacidades funcionais.                                 | (*)Utilizar a avaliación funcional como unha ferramenta útil para adeguar o exercicio terapéutico ó estado funcional do paciente.<br>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 ó implementar programas de exercicio terapéutico tras ictus, traumatismos craneoencefálicos, lesións medulares, etc.  |
| (*)Desenvolvemento de programas específicos de ejercicio terapéutico según trastornos | (*)Diseño e aplicación de programas específicos de exercicio terapéutico según o obxectivo terapéutico planteado.  |

| <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           | 5                           | 6           |

\*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 | They will indicate the guidelines of the methodologies that will owe to develop the students during the realisation of the matter.          |
| Lecturing               | Participatory theoretical classes employing studies of cases and previous study   |
| Laboratory practical    | Demonstration by part of the lecturers of the contents and participation of the students resolving the exercises of study of cases proposed |
| Presentation            | The students presents the work of the matter  |

| <b>Personalized assistance</b> |   |
|--------------------------------|---|
| <b>Tests</b>                   | <b>Description</b>  |
| Essay                          | It will make the follow-up of the work and will give to know to the students the criteria of evaluation that will take into account for the evaluation of the even.                 |
| Portfolio / dossier            | It will give answer to the queries made by the students on his dossier and will give to know the criteria of evaluation that will take into account for the evaluation of the even. |

| <b>Assessment</b> |   |                |                               |  |
|-------------------|---|----------------|-------------------------------|--|
|                   | Description   | Qualification  | Training and Learning Results |  |
| Essay             | (*)Evaluarase a presentación e defensa do traballo. | 50<br>A2<br>A3 | D1<br>D5<br>D6<br>D8          |  |

|  |    |     |    |
|--|----|-----|----|
| Portfolio / dossier(*)Evaluarase a presentación e defensa do cartafol. | 50 | C10 | D1 |
|  |    | C11 | D5 |
|  |    | C12 | D6 |
|  |    |     | D8 |

## Other comments on the Evaluation

### 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.**, 9788498353068, Medica Panamericana, 2012
- Rodríguez, Mª & Cano de la Cuerda, Roberto & Collado-Vazquez, Susana & Casas, Patricia, **Apps en neurorrehabilitación**, 978-84-9085-727-4, Dykinson, 2016
- Kisner y Colby, **Ejercicio Terapéutico: Fundamentos y técnicas**, 978-9500600965, Editorial Medica Panamericana, 2010
- de Maria Stokes, Emma Stack, **Fisioterapia En La Rehabilitación Neurológica**, 8490223068, 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**, &#8206; 8417370854, LIPPINCOTT WILLIAMS & WILKINS, 2019
- Marta Bisbe Gutiérrez, Carmen Santoyo Medina, **Fisioterapia en neurologia: Procedimientos para restablecer la capacidad funcional**, 8491105573, Médica Panamericana, 2021

#### Complementary Bibliography

- Roberto Cano de la Cuerda, Rosa Mª Martínez Piédrola, Juan Carlos Miangolarra Page, **Control y Aprendizaje Motor**, 9788491105374, Medica Panamericana, 2015
- Roberto Cano de la Cuerda, Susana Collado Vázquez., **Neurorrehabilitación: Métodos específicos de valoración y tratamiento**, 9788491104070, Medica Panamericana, 2012
- Paeth Rohfs, Bettina, **Experiencias con el concepto Bobath**, 9788498350340, Editorial Medica Panamericana, 2012
- Duane E. Haines, Gregory A. Mihailoff, **Principios de neurociencia - 5<sup>a</sup> edición: Aplicaciones básicas y clínicas**, 8491133429, Elsevier, 2019

## Recommendations