PHYSICAL DISABILITY AND REHABILITATION

Degree in Occupational Therapy

Code: 804154
Type: mandatory
Grade: Third
Semester: 2º
Department: Radiology, Rehabilitation and Phisiotherapy
Credits: 6 ECTS

TEACHING STAFF

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SHORT DESCRIPTOR

The subject deals with spinal cord injury, acquired brain damage, hearing damage and hand disorders.

The most frequent pathologies are presented so that the Occupational Therapist has the necessary knowledge to be able to evaluate the disability that they can generate and thus advise on technical aids and adaptations at home.

The necessary knowledge is provided to be able to guide and inform patients and relatives about the existing social resources. Likewise, resources are provided that would allow patients to be advised on work, social and leisure activities according to the level of disability.

The methods for assessing and applying treatment techniques to the different degrees of disability caused by the aforementioned pathologies are explained and practised.

COMPETENCIES

They are those corresponding to the Module and Subject to which this course belongs.

General Competencies

•Understand the conceptual foundations of the occupational nature of human beings and the performance of their occupations throughout the life cycle.
•To carry out the assessment and adaptation of the environment to promote participation in meaningful occupations in the different facets of daily life, personal autonomy and quality of life.
•Conduct assessment of occupational functioning appropriate to the needs of individuals and populations.
•Determine occupational dysfunctions and needs, define planning and establish Occupational Therapy intervention, using the therapeutic potential of meaningful occupation, through the use of activity, with the consent and participation of individuals and populations.
•Conduct occupational assessment, determine planning and establish Occupational Therapy intervention, using the therapeutic potential of meaningful occupation, through the use of activity, with the consent and participation of individuals and populations.
•Understand the rationale for action, indications and efficacy of Occupational Therapy interventions, based on the available scientific evidence.

Specific Competences

- Perform appropriate treatment, respecting the different phases and basic principles, through therapeutic occupations and based on related knowledge such as occupational science, in the different areas of occupational performance,

analysing the components of performance and the different existing environments and contexts.

- Encourage the participation of the user and family in their recovery process.
- To know, understand and apply the fundamentals of personal autonomy in activities of daily living with and without adaptations and/or technical aids in the life cycle.
- To analyse occupation in Occupational Therapy and its therapeutic use in the life cycle.
- To know and understand the knowledge of Occupational Therapy for the integration of the individual in his/her environment throughout the life cycle.
- Appreciate and respect individual differences, cultural beliefs, customs and their influence on occupation and participation.
- Be able to argue the scientific principles that underpin the intervention in Occupational Therapy, adapting it to the available scientific evidence.

Transversal Competences

- Flexibility. Modifying behaviour to adapt to situations of change or ambiguity, maintaining effectiveness in different environments, with different tasks, responsibilities and patients.
- Planning/organisation. Defining priorities; establishing the necessary action plans to achieve the objectives set, adjusting to the means and time available; defining intermediate goals and the contingencies that may arise; establishing the appropriate control and follow-up measures.
- Emotional control. Remaining calm in difficult situations of social interaction, maintaining self-control in stressful situations and controlling emotions.
- Responsibility. Providing help to other colleagues when requested, seeking the collaboration of others to complete activities, following through on commitments and completing the tasks he/she starts.
- Problem solving and decision making. Analysing problems and complex situations, identifying their most relevant aspects and their causes, according to the available information, in order to choose the best quality solutions within the established timeframe.
- Teamwork: actively collaborate and take responsibility to contribute to the achievement of the objectives set.

OBJECTIVES

Students will learn how the upper limb is affected in the main pathologies in which the Occupational Therapist intervention.

The student will learn the Occupational Therapist's action techniques in various pathologies where the hand is especially affected.

Students will learn the main pathologies related to acquired brain damage, and will learn about the application of means of evaluation, complications and treatment.

Students will acquire the necessary knowledge about spinal cord injury for their professional development: definition, aetiology, evaluation, methods, complications and treatment.

Students will learn the therapeutic applications and methodology for motor activities involving the use of the upper limb, both in dependent and independent patients.

The student will learn to know the basic elements that make up upper limb orthoses and prostheses.

Students will acquire the necessary knowledge about the performance of the occupational therapist in training in the use of upper limb prostheses.

AGENDA

1.- Functional memory of the normal hand

2. The hand in inflammatory and degenerative arthritis. Intervention in Occupational Therapy I.

3. The hand in inflammatory and degenerative arthritis. Intervention in Occupational Therapy II.

4. The hand in inflammatory and degenerative arthritis. Intervention in Occupational Therapy III.

5 The hand in inflammatory and degenerative arthritis. Intervention in Occupational Therapy IV.

6. The traumatic hand. Occupational Therapy in patients with muscle-tendon and bone injuries I.

7. The traumatic hand. Occupational therapy in patients with muscle-tendon and bone injuries II.

8. The traumatic hand. Occupational therapy in patients with muscle-tendon and bone injuries III.

9. The traumatic hand. Occupational therapy in patients with muscle-tendon and bone injuries IV.

10. Application of actions and treatments in the neurological hand. Occupational therapy in patients with peripheral nerve injuries I.

11. Application of actions and treatments in the neurological hand. Occupational therapy in patients with peripheral nerve lesions II.

12. Cerebrovascular accident (CVA/ICTUS): definition, epidemiology, description of types of injury. Evaluation.

13. Craniocerebral trauma: definition, epidemiology. Evaluation.

14. Application of actions and Occupational Therapy in patients with central neurological injuries I.

15. Application of actions and Occupational Therapy in patients with central neurological lesions II.

16. Application of Occupational Therapy and actions in patients with central neurological lesions III.

17. Functional mobility. Decubitus transfers.

18. Functional mobility. Dependent transfers.

Functional Mobility. Independent transfers.

20. Spinal cord injury. Evaluation and description of injury levels.

21. Spinal Cord Injury. Occupational Therapy intervention in the acute and intermediate phases of the patient with spinal cord injury.

22. Spinal Cord Injury. Occupational Therapy intervention in the chronic phase.

23. Complications of spinal cord injury. Occupational therapy intervention.

24. Functional mobility. Independent Transfers.

25. Multiple sclerosis. Definition, epidemiology. Classification. Evaluation in Occupational Therapy.

26. Multiple sclerosis. Occupational therapy intervention. New therapies.

27. COVID-19. Occupational Therapy Intervention.

28. Upper limb prostheses: conventional prosthesis, myoelectric prosthesis I.

29. Upper limb prostheses: conventional prostheses, myoelectric prostheses II.

30. Upper limb prosthesis: Occupational Therapy Treatment.

TEACHING ACTIVITIES

In the practical classes, activities related to the contents of the theoretical programme will be carried out, instructing and training the student in their use and application:

1. Therapeutic applications in decubitus activities. Evaluation and methods of transfers: assisted and independent.
2. Therapeutic applications in wheelchair activities. Evaluation and methods of transfers: assisted and independent.
3. Fabrication of plaster splints.
4. Splints, Orthoses, Support Products and Cranes.
5. Intervention in Occupational Therapy

EVALUATION

The theory will be assessed by means of a multiple-choice test, based on short questions with four or five options, only one of which is correct. Answering a question incorrectly does NOT result in a negative mark. An exam composed of this type of questions will be considered passed in December/January and July, when a minimum of 65% of the questions have been answered correctly.

Attendance at the practicals is COMPULSORY, and students who do not attend a minimum number of hours of the practicals may be suspended. The practicals will be assessed by means of a multiple-choice exam with the same characteristics as the theory exam. If the student has attended all the practicals; in the December/January and July sessions, he/she will be considered to have passed when a minimum of 50% of the multiple-choice exam has been answered correctly.

If the student does NOT attend any of the practicals, the exam of this content will be one question TYPE TOPIC per practical, in the December/January and July exams.
This question will be graded PASS or FAIL.

The qualification of the practical part in this case, will be the one corresponding to the Practical Examination Type Test that must also be taken. The student must have passed the Topic Question.

The final grade of the course will be the average of the grades of Theory and Practical. In order to obtain this average, it is essential to have passed each part SEPARATELY.

A corrective factor will be added/discounted to this final mark depending on the student's attendance and participation.

The student's dedication, interest and collaboration in the development of the subject will be valued in addition to, and will never reduce the mark obtained, and may improve the final mark by a percentage stipulated by the lecturers responsible.

In order for the student to acquire the competences of this subject, it is necessary that they carry out learning methodologies based on simulations; the student must: practice with other students, carry out different explorations, use or apply evaluation, assessment and treatment techniques, which may involve discovering parts of their body or simulating "pathological situations". The practicals are compulsory and will be supervised at all times by the lecturers; failure to carry them out in accordance with the above will mean not acquiring the necessary competences and therefore failing the subject.

The voluntary or accidental infringement of the rules of the exam will prevent the assessment of the same, so that the offending student will sit the oral exam of the subject to establish their knowledge of the subject. If the cheating is confirmed as intentional, it will be considered a very serious misconduct, and the Services Inspectorate will be informed in order to take the disciplinary measures it deems appropriate.

BIBLIOGRAPHY / RELATED INTERNET LINKS

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- Kapandji, A.I., Fisiología Articular. Volumen I. Miembro Superior, Editorial Médica Panamericana, 5ª ed., Madrid, 1998.
- Kottke,F.J.; Stillwell, G.K y Lehmann, J.F., Krusen: Medicina Física y Rehabilitación, Editorial Médica Panamericana, 4ª ed., Madrid, 1994.
- Monográfico sobre: ”Rehabilitación de pacientes tras Accidente Cerebrovascular”, Rehabilitación (Madrid) 2000, 34 (6): 393-518.
- Moruno Miralles, P.; Moreno Ayuso, D.Mª., Actividades de la Vida Diaria, Editorial Elsevier Masson, 1ª ed., Barcelona, 2006.
- Pérez de Heredia, Marta; Martínez Piédrola, Rosa; Huertas Hoyas, Elisabet, Tratamiento de las Actividades de la Vida Diaria. Terapia Ocupacional., Editorial Médica Panamericana, Primera Ed., Madrid 2022.
- Polonio López, B., Terapia Ocupacional en Discapacitados Físicos: Teoría y Práctica, Editorial Médica Panamericana, 1ª ed., Madrid, 2004.
- Polonio López, B., Terapia Ocupacional Aplicada al Daño Cerebral Adquirido, Editorial Médica Panamericana, 1ª ed., Madrid, 2010.
- Polonio López; Terapia Ocupacional en Disfunciones Físicas. Teoría y Práctica., Editorial Médica Panamericana, Segunda ed., Madrid, 2015.
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- Trombly, C.A., Terapia Ocupacional para enfermos incapacitados fisicamente, Ediciones Científicas: La Prensa Médica Mexicana, 1ª ed., 1990.
- Tubiana, R.; Thomme, J., La mano: anatomía funcional y exploración clínica, Editorial Masson, Barcelona, 1992.

- Turner, A.; Foster, M. y Johnson, S.E., Terapia Ocupacional y Disfunción Física. Principios, Técnicas y Práctica, 5ª ed., Editorial Elsevier, Madrid, 2003.
- Viladot, R.; Cohi, O.; Clavell, S., Ortesis y prótesis del aparato locomotor. Extremidad superior, Editorial Masson, Barcelona, 1992.
- Zambudio Periago, R., Prótesis, ortesis y ayudas técnicas, Editorial Elsevier Masson, 1ª ed., Barcelona, 2009.

Stroke Clinical Practice Guidelines:

- GPC del Ictus Catalana.
- AHA: Asociación Americana del Corazón.
- ASA: Asociación Americana del Ictus.
- EUSI: European Stroke Initiative.
- NZGG: New Zealand Guidelines Group.
- RCP: Royal College of Physicians, UK.
- SIGN: Red de guías intercolegiadas escocesas.

WEB SITES AND LINKS

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- Instituto de Biomecánica de Valencia:

  www.ibv.org

  www.ibv.org/información/libros
- Instituto Nacional de Migración y Servicios Sociales (IMSERSO):

  www.seg-social.es/imserso
- Centro Estatal de Adaptación Personal y Ayudas Técnicas (CEAPAT):

  www.ceapat.org

  www.catalogo_ceapat.org

  www.ceapat@mtas.es
- Asociación Española de Terapia Ocupacional (APETO):

  www.apeto.org
- Terapia Ocupacional:

  www.terapiaocupacional.com
- Asociación de Alumnos de Terapia Ocupacional de la Universidad Complutense de Madrid:

  www.serTO./españa.es
- Estatuto del Personal Sanitario No Facultativo de Instituciones Sanitarias de la Seguridad Social:

  www.funcionadministrativa.com
- Comité Europeo de Profesionales de Terapia Ocupacional (COTEC):

  www.cotec-europe.org
- GUIA LESION MEDULAR ASPAYM

  https://www.aspaymmadrid.org/wp-content/uploads/2018/05/guia-manejo-integral-2013.pdf
- GUIA DESCRIPTIVA DE ORTOPROTESIS

  https://www.mscbs.gob.es/profesionales/prestacionesSanitarias/CarteraDeServicios/ContenidoCS/6PrestacionOrtoprotesica/docs/GuiaDescriptivaOrtoprotesisTomo2.pdf
- https://www.stroke.org.uk/sites/default/files/occupational_therapy_after_stroke.pdf
- http://www.aota.org/about-occupational-therapy/professionals/rdp/stroke.aspx
- http://calder.med.miami.edu/pointis/
- www.health.nsw.gov.au/resources/gmct/spinal/

  occupational_therapy_pdf.asp
- www.ncbi.nlm.nih.gov/pmc/articles/PMC1339440
- www.ncbi.nlm.nih.gov/pubmed/20130419
- www.ncbi.nlm.nih.gov/pubmed/20486810
- www.ncbi.nlm.nih.gov/pubmed/21190391
- www.scicpg.org
- www.spinal-injury.net
- www.spinalistips.se