

Academic Year/course: 2022/23

25656 - Physiotherapy in Traumatology, Reumatology, and Sports

Syllabus Information

Academic Year: 2022/23

Subject: 25656 - Physiotherapy in Traumatology, Reumatology, and Sports

Faculty / School: 127 - Facultad de Ciencias de la Salud

Degree: 605 - Degree in Physiotherapy

ECTS: 6.0

Year: 3

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

1.1. Aims of the course

The general goal of the subject is for the student to be able to establish, explain and perform an assessment, the diagnosis and prescribe and apply a treatment within the context of a physiotherapeutic intervention in the specialties of the traumatology, rheumatology and sport.

The specific goals of the subject are:

- Know, describe and use the assessment methods in the specialties of traumatology, rheumatology and sport.
- Know, describe and use the different methods of clinical reasoning to establish the diagnosis of physiotherapy in the specialties of traumatology, rheumatology and sport.
- Know, explain, prescribe and perform the different methods of intervention of physiotherapy in the specialties of traumatology, rheumatology and sports.
- Know and use the scientific evidence described in the clinical guidelines.

These approaches and goals are aligned with the following Sustainable Development Goals (SDG) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the learning outcomes of the subject provides training and competence to contribute to some extent to its achievement:

- Goal 3: Health and well-being.
- Goal 4: Quality education.

1.2. Context and importance of this course in the degree

This 3rd year physiotherapy course tries to bring together, relate and develop the knowledge already acquired in the basic subjects and the more specific ones on physiotherapy intervention procedures and methods, in the specialties of traumatology, rheumatology and sports.

It will be based on the theory already described in the fundamentals of physiotherapy course. It uses the assessment methods already taught in the subject assessment and diagnosis in physiotherapy I and II. It also integrates the knowledge acquired about physiotherapy methods and techniques described in the subjects general intervention procedures I and II, kinesitherapy and physiotherapy methods in musculoskeletal processes. All this, taking into account the knowledge already acquired about the pathological processes in the subjects general pathology in physiotherapy and medical-surgical conditions. Subsequently, this subject will be developed in the real field within the subject Practicum I and II, and part of the content may be used in the Physiotherapy degree final project.

It is important to highlight that this subject deals with some of the most prevalent pathologies in the population and those that physiotherapy intervenes more frequently.

1.3. Recommendations to take this course

It is recommended to review the content of the following subjects: assessment and diagnosis in physiotherapy I and II, general pathology in physiotherapy, medical-surgical conditions and general physiotherapy procedures I and II, methods of physiotherapy in musculoskeletal processes and kinesitherapy.

2. Learning goals

2.1. Competences

General competences

CG03 ? Know and understand physiotherapeutic methods, procedures and actions, aimed both at the current therapy to be applied in the clinic for re-education or functional recovery, and at carrying out activities aimed at promoting and maintaining health.

CG05 ? Assess the functional status of the patient, considering the physical, psychological and social aspects.

CG06 - Carry out a diagnostic in Physiotherapy according to standards and with internationally recognized validation instruments.

CG07 ? Design the Physiotherapy intervention plan according to criteria of adequacy, validity and efficiency.

CG08 - Execute, direct and coordinate the Physiotherapy intervention plan, using their own therapeutic tools and attending to the individuality of the user.

CG09 - Evaluate the evolution of the results obtained with the treatment in relation to the goals set.

CG10 - Prepare the discharge report for patients in Physiotherapy once the proposed goals have been met.

CG11 - Provide effective Physiotherapy care, providing comprehensive assistance to patients.

CG17 - Understand the importance of updating the knowledge, abilities, skills and attitudes that make up the professional skills of the Physiotherapist.

CG19 - Communicate effectively and clearly, both orally and in writing, with the users of the health system, as well as with other professionals.

Specific competences

CE09 - Know the physiological and structural changes that can occur as a result of the application of physiotherapy.

CE12 - Identify the changes produced because of the physiotherapy intervention.

CE17 - Know and apply the theoretical bases and the development of physiotherapy methods and procedures.

CE18 - Have the ability to assess, from the perspective of physiotherapy, the functional status of the patient/user, considering its physical, psychological and social aspects.

CE19 - Understand and apply manual and instrumental assessment methods and procedures in Physiotherapy, as well as the scientific evaluation of their usefulness and effectiveness.

CE23 - Identify the most appropriate physiotherapy treatment in the different processes of alteration, prevention and promotion of health, as well as in the processes of growth and development.

CE24 - Identify the situation of the patient/user through a diagnosis in physiotherapy, planning interventions, and evaluating their effectiveness in a cooperative work environment with other professionals in health sciences.

CE25 - Know and apply clinical practice guidelines.

CE31 - Analyse, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.

CE37 - Know and apply the mechanisms of quality in the practice of physiotherapy, adjusting to the criteria, indicators and quality standards recognized and validated for proper professional practice.

Transversal competences

CT01 - Ability to apply critical reasoning

CT02 - Capacity for analysis and synthesis

CT03 - Ability to assume ethical commitment

CT04 - Ability to recognize diversity and multiculturalism

CT05 - Ability to work based on quality criteria

CT06 - Ability to develop creativity

CT07 - Ability to develop initiatives and entrepreneurial spirit

CT09 - Ability to plan and evaluate

CT10 - Ability to properly use computer media and new technologies

CT12 - Ability to develop information management skills

CT13 - Capacity for criticism and self-criticism

2.2. Learning goals

To pass this subject, the student must demonstrate the following results:

- Know the concept and theoretical bases of clinical reasoning in traumatology, rheumatology and sports.

- Ability to make the diagnosis in physiotherapy through history, physical examination, functional evaluation and complementary tests in traumatology, rheumatology and sports.
- Describes and prescribes a physiotherapy intervention plan in traumatology, rheumatology and sports based on scientific evidence.

2.3. Importance of learning goals

The student will learn the methodology of physiotherapy intervention in the specialties of traumatology, rheumatology and sports, in this way they will acquire the theoretical and practical bases for its subsequent application in the real clinical situation.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

Assessment system will be as follows:

- Theoretical exam 50%.
- Presentation of the case report 20%
- Practical exam 30%

Theoretical exam. There will be a multiple-choice exam in 1st call. The content for the exam will include theoretical, practical and case reports topics. A penalty of 0.25 points will be used for the wrong answers.

Case report. Presentation of a case report of traumatology, rheumatology or sport (real or simulated).

The case report should include the following sections:

- Background and purpose.
- Case description. Assessment, diagnosis and therapeutic objectives.
- Intervention plan.
- Outcomes.
- Discussion.

In this clinical case, special importance will be given to assessment, diagnosis, and objectives. Background, scientific evidence and discussion sections are also very important.

5 students from the practice group will be the components of the case report group.

The duration of the case report exam will be a maximum of 15' per group.

Practical exam. Intervention, manual and clinical reasoning skills will be evaluated in this exam.

It is necessary to pass each of the parts separately.

Those students who have not attended a case report presentation a written case study exam will be carried out.

For students who cannot attend the 1st official call for the theoretical exam (justified cause) or by those who appear in 2nd and subsequent calls a short questions written exam will be carried out.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in the subject physiotherapy in traumatology, rheumatology and sport combine theoretical lectures of a single group, problem solving clinical cases and practical classes with the elaboration of a case report and the student's autonomous study.

Classroom materials will be available via Moodle.

4.2. Learning tasks

This is a 6 ECTS course organized as follows:

Lecture (10 hours).

The theoretical content of the course will be presented in lectures and participatory models will be established with the student. These classes will be streamed on Google Meet

Practice session (45 hours).

These practical classes will be organized in four groups. The role playing will be the main method for the achievement of the learning objectives. In these classes, they will focus on manual and clinical reasoning skills.

Case study (5 hours).

These classes will focus on real-world clinical case problem solving, clinical reasoning, and clinical guidelines evidence. It will be organized in two groups.

Autonomous and group work and study of the student (90 hours).

4.3. Syllabus

The course will address the following topics:

General topic I. Generalities of traumatology, physiotherapy competences in traumatology.

- Topic 1. Generalities in physiotherapy intervention in traumatology.
- Practice 1. General assessment in traumatology.
- Case study 1. Clinical history, anamnesis and physical exam in physiotherapy.

General topic II. Physiotherapy intervention in upper limb trauma.

- Topic 2. Physiotherapy intervention in bankart surgery.
- Topic 3. Physiotherapy intervention in colles fracture.
- Practice 2. Passive translatoric mobilization of the shoulder joint.
- Practice 3. Passive translatoric mobilization of the wrist joint.
- Case study 2. Clinical reasoning in shoulder musculoskeletal pathology.

General topic III. Physiotherapy intervention in lower limb trauma.

- Topic 4. Physiotherapy intervention in adult midshaft femur fractures.
- Topic 5. Physiotherapy intervention in total hip and knee replacement.
- Practice 4. Passive translatoric mobilization of the hip joint.
- Practice 5. Passive translatoric mobilization of the knee joint.
- Practice 6. Passive translatoric mobilization of the ankle joint.

General topic IV. Physiotherapy intervention in spine trauma.

- Topic 6. Physiotherapy intervention in whiplash syndrome.

General topic V. Generalities of rheumatology, physiotherapy competences in rheumatology.

- Topic 7. Physiotherapy intervention in rheumatoid arthritis and osteoarthritis.

General topic VI. Physiotherapy intervention in rheumatology.

- Topic 8. Physiotherapy intervention in fibromyalgia.
- Topic 9. Physiotherapy intervention in osteoporosis.
- Topic 10. Physiotherapy intervention in chronic low back pain.
- Practice 7. Assessment and diagnosis in hip and knee osteoarthritis.
- Practice 8. Physiotherapy intervention in hip and knee osteoarthritis.
- Practice 9. Physiotherapy intervention in ankylosing spondylitis.
- Practice 10. Physiotherapy intervention in chronic low back pain.

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General topic VII. Generalities of physiotherapy and competences in sport.

- Topic 11. General Physiotherapy intervention in sport.

General topic VIII. Assessment and diagnosis in sport musculoskeletal pathology.

- Practice 11. Assessment and diagnosis of knee ligament and meniscus pathology.
- Practice 12. Instrumental and manual muscular strength assessment.
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General topic IX. Physiotherapy intervention in sport.

- Topic 12. Physiotherapy intervention in acute and chronic ankle sprain.
- Topic 13. Physiotherapy intervention in anterior cruciate ligament surgery.
- Topic 14. Physiotherapy intervention in Achilles tendinopathy.
- Topic 15. Physiotherapy in anterior knee pain.
- Topic 16. Physiotherapy in hamstring strain.

Practice. Soft tissue interventions

- Practice 13. Passive stretching and autostretching.
- Practice 14. Instrumental soft tissue mobilization. Diacutaneous fibrolysis and others.
- Practice 15. Neuromuscular taping.
- Practice 16. Progressive loading exercise in muscular and tendinopathy strain.

Practice. Hypermobility.

- Practice 17. Active muscular stabilization. Upper limb.
- Practice 18. Active muscular stabilization. Lower limb.
- Practice 19. Taping.

General topic X. Generalities. Diagnostic imaging.

- Topic 17. Musculoskeletal ultrasound imaging.
- Case study 3. Musculoskeletal ultrasound imaging.

4.4. Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the "Facultad de Ciencias de la salud" website and the Degree website (<https://fcs.unizar.es/>, <http://moodle2.unizar.es>)

Important dates:

- Case report exam: end December.
- Theoretical and practice final exam: 1st call 27 of January, 2nd call 26 June (official exam dates)

4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25656>