COURSE DATA

DATA SUBJECT

Code: 33033
Name: Sports physiotherapy
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1202 - Degree in Physiotherapy	Facultat de Fisioteràpia	4	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1202 - Degree in Physiotherapy	Sports physiotherapy	ELECTIVES

COORDINATION

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SUMMARY

The Sport Physiotherapy subject aims to give students a range of knowledge, attitudes and skills using different special physiotherapy techniques correctly. With these, they will cover correctly the most characteristic physiotherapeutic problems of the sport physiotherapy at the different stages of the treatment as the prevention, the injuries treatment and the rehabilitation.

The contents of this subject are:

- General and specific aspects of the physical activity.

- Athlete's basic physical capacities.

- Most common injuries in the sport area.

- Physiotherapy techniques applied to the sports injuries treatment.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

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

OTHER REQUIREMENTS

It is advisable to the student to like the sport or want to belong to a multidisciplinary sport team since the subject will try to establish the necessary basis for the physiotherapists training in sport.

COMPETENCES / LEARNING OUTCOMES

1202 - Degree in Physiotherapy

Apply the physiotherapy techniques in the treatment of sports injuries.

Have the ability to organise and plan work.

Keep updated one's professional knowledge, competences and skills.

Know and understand the physiotherapy methods, procedures and interventions applied in clinical settings for both, functional recovering or re-education and in activities aimed at health promotion and maintenance

Know general and specific aspects of physical activity.

Know how to carry out the functional assessment of the sports player.

Know how to establish the objectives of the physiotherapeutic treatment of the sports player.

Know the basic physical conditions of the sports player.

Know the most frequent injuries in the sports area.

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 acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced textbooks, but also some cutting-edge knowledge in their field of study.

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.

Understand the effects of exercise on the organs and systems.

Work in teams.

DESCRIPTION OF CONTENTS

1. General and specific aspects of the physical activity

- Overload and injuries in sport.
- Force and motion.
- Levers and force magnitude.
- Intern and extern forces.
- Mechanical effort and energy.
- Tension and compression forces.
- Torque forces and bending effect.
- Shears.
- Repeated load and fatigue.

2. Understand the effects of the physical exercise on the different organs and systems

- Effects of physical exercise on different organs and systems.
- Predisposition and prevention of sports injury.
- Operation, functions and recruitment of each organ and systems during and after the exercise.
- Referred and reflexes pains of the different organs and systems.

3. Athlete's basic physical capacities

- Athlete's performance.
- Athlete's evolving physical abilities.
- Force: types and characteristics.
- Resistance: types and effects.
- Speed: determinants.
- Flexibility: types and objectives.
- Warming-up and cooling-down in sport: rules, types and effects.

4. Athlete's functional evaluation

- Athlete's analytical assessment.
- Athlete's joint balance.
- Athlete's muscle balance.
- Neurodynamic assessment.
- Myofascial assessment.
- Passive and active differential diagnosis in sport injuries.

5. Most common injuries in the area of the sport

- Physiotherapy in sport injuries in growing age.
  Locomotor system characteristics in growing age.
  Characteristic acute injuries in the child and his/her physiotherapy.
  Specific overload injuries in the child and his/her physiotherapy.
  Preventive measures in sport during the growing age.
- Physiotherapy in bones and joints in sport.
  Causes and determinant factors of bones and joints injuries in sport.
  Types of bones and joints lesions in sport and its physiotherapy.
  Most common bones and joints injuries depending on sports.
- Physiotherapy in soft tissue's sport injuries.
  Production mechanisms of the soft tissue's sport injuries.
  Determinant factors of the soft tissue's sport injuries.
  Physiotherapy of the tendon injuries in sport.
  Physiotherapy of the ligament injuries in sport.
  Factors that favour the muscular injury in sport.
  Types of muscular injuries in sport.
  Physiotherapy of the muscular injury in sport.
  Muscular injuries' preventive measures in sport.

6. Athlete physiotherapy treatment objectives

- Analysis of the static and dynamic posture with postural test (video-foto)
- Posture control (eye-pelvis-ankle)
- Balance, force, posture, stamina and elasticity assessment tests.
- Medical, nutritional and lesion history
- Planning a correct rehabilitation.
- Prevention of relapses

7. Applied physiotherapeutic techniques in the treatment of the sports injuries

- Massage in sports.
  Massage effects at sport level.
  Massage modalities in sport. Before, in resting periods and after the competition.
  Massage indications and contradictions in sport.
  The massage in different soft tissues' sport injuries.
- Deep transversal massage.
  Effects and indications of the MTP in sport injuries.
  Applications of the MTP in different sport injuries: tendons, ligaments, muscles.
- Manual therapy techniques
  Rules and types of manual therapy applied to the sport.
  Joint hipomobility and hipermobility concept.
  Localization and evaluation of the most common dysfunctions in sport.
- Rules and types of neural movement techniques.
  Locate and assess of the most common neural dysfunction in sport.
- Rules and types of myofascial techniques
  Locate and assess the most common myofascial dysfunctions in sport.
- Fundamentals and characteristics of the functional and neuromuscular dressings in sport.
- Spine injuries' physiotherapy in sport:
  Functional assessment of the spine.
  Physiotherapy in the cervical raquis injuries in sport.
  Acute
  By overload
  Physiotherapy in the thoracic raquis injuries in sport.
  Statics
  Acute
  Physiotherapy in the lumbar raquis injuries in sport.
  Contractures
  Instabilities
  Spinal disk herniation
  Physiotherapy in pelvic girdle injuries in sport.
  Pelvic muscle-tendon injuries.
  Types
  Pubis osteopathy
  Production mechanisms
  Joint fixations in the pelvic girdle
  Physiotherapy of the shoulder girdle's injuries in sport.
  Shoulder girdle's functional assessment
  Physiotherapy of the swimmer's shoulder
  Physiotherapy of the pitcher's shoulder
  Physiotherapy of the athlete's dislocated shoulder
  Physiotherapy of the elbow, wrist and hand injuries in sport.
  Physiotherapy of the elbow's injuries in sport.
  Tennis elbow
  Golfer's elbow
  Dislocated elbow
  Physiotherapy of the wrist's injuries in sport.
  Wrist sprain

Scaphoid fracture
Physiotherapy of the hand's injuries in sport.
Sprains.
Fractures.
Dislocations
Physiotherapy of the knee's

8. Teamwork

- Roles and responsibilities of each multidisciplinary team's component.
- Teaming work to do.
- Identifying the goals to achieve in each athlete's recovery, rehabilitation or fitness stage.

9. Ability to organize and plan the work

- Proper objective data organization of trials and specific tests.
- Assessment of the subjective information provided by the athlete.
- Planning of the objectives and methodology to be used in each stage of the recovery.

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	15,00
Independent study and work	29,50
Preparation of lessons	6,00
Preparation for assessment activities	14,00
Resolution of case studies	3,00
Total hours	**67,50**

TEACHING METHODOLOGY

The teaching learning methodology will be framed in the learning cognitive-constructivist theory that emphasizes the essential active role of the student. It will be the protagonist of its educative process and it will try to develop a meaningful learning process based on previous knowledge. The teacher will act as mediator and learning facilitator using motivating, modeling, maieutics, introspection and problem-solving techniques.

The teaching program may be modified during the development of the course if the teacher under teacher quality criteria and assimilation of knowledge by the student, deems it appropriate.

EVALUATION

The evaluation of the acquired skills by the student in this subject will be based on the marks obtained from the theoretical and practical tests of the final exam. Also, there will be a student continuous assessment based on his/her assistance, attitude and participation in different training activities.

The assessment of the acquired competences by the student in this subject is based on a Final theoretical exam and a practical exam.

The student must pass both parts in order to pass the subject.

Theory: the last written exam could consist of a multiple choice test composed by 25-50 questions with 4 alternatives to be chosen as right answer. The correct answers add up 0.20; the incorrect ones 0.10. It also could consist of a 5-10 essay questions to develop.

The last theory exam is the 50% of the final mark.

Practice: the final oral exam consists of a case study exposition, which is the 10% of the final mark; and the implementation of different techniques and treatments, which are the 30% of the final mark.

It is necessary to pass the case study exposition in order to be able to do the second part of the practical exam.

It will be assessed the assistance to the theoretical and practical classes, as well as the punctuality, the respect, the morality and the ethic toward peers and teachers assuming the 10% of the final mark.

It is necessary to pass the theoretical and practical exams in order to get the medium with the percentage of the student's attendance.

REFERENCES

Basic

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Additional

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- Ylinen, J. Estiramientos terapéuticos en el deporte y en las terapias manuales. ELSEVIER. 2009
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