

**Physiotherapy Applied to Prevention and Treatment  
of Sport Injuries**

Code: 103988  
ECTS Credits: 6

Degree	Type	Year	Semester
2500892 Physiotherapy	OT	4	0

## Contact

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## Use of Languages

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: No

## Teachers

Fermín Oliete Candela

## Prerequisites

Having passed the subjects of the previous courses that empower the student to take 4th grade subjects of Degree

## Objectives and Contextualisation

The main objective of the subject is to empower the student to establish a correct assessment, exploration physiotherapy clinic of an injured sportsman, from this initial assessment set specific goals and achievable and to know how to structure and apply a therapeutic physiotherapy plan adapted to each type of sportsman / injury in order to promote the most accurate, efficient and efficient rehabilitation of the lesional process.

Also, as a goal, students will be given the knowledge that will allow the student to propose strategies for physiotherapy - physical activity that will serve the athlete to do a work to prevent further injuries frequent to the sport you practice.

## Competences

- Design the physiotherapy intervention plan in accordance with the criteria of appropriateness, validity and efficiency.
- Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
- Develop independent learning strategies
- Display critical reasoning skills.
- Display knowledge of physiotherapy methods, procedures and interventions aimed at health promotion and maintenance.
- Display knowledge of the morphology, physiology, pathology and conduct of both healthy and sick people, in the natural and social environment.
- Display knowledge of the physiotherapy methods, procedures and interventions in clinical therapeutics.

- Evaluate the functional state of the patient, considering the physical, psychological and social aspects.
- Integrate, through clinical experience, the ethical and professional values, knowledge, skills and attitudes of physiotherapy, in order to resolve specific clinical cases in the hospital and non-hospital environments, and primary and community care.
- Make a physiotherapy diagnosis applying internationally recognised norms and validation instruments.
- Solve problems.
- Work in teams.

## Learning Outcomes

1. Apply the knowledge and competences acquired to resolve clinical cases involving patients with sports injuries.
2. Apply the specific methods and techniques for dealing with sports injuries.
3. Define general and specific objectives for using physiotherapy to treat sports injuries.
4. Describe and apply physiotherapy assessment procedures to disorders caused by sports injuries and their possible functional repercussions.
5. Describe the circumstances that can influence priorities when using physiotherapy to treat sports injuries.
6. Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
7. Develop independent learning strategies
8. Display critical reasoning skills.
9. Enumerate the different types of material and apparatus used in physiotherapy for sports injuries.
10. Enumerate the medical-surgical treatments used for sports injuries, focusing on physiotherapy and orthopaedics.
11. Establish a diagnostic physiotherapy hypothesis in the case of patients with sports injuries.
12. Explain the physiopathology of sports injuries.
13. Solve problems.
14. Use specific physiotherapy methods for preventing sports injuries.
15. Work in teams.

## Content

Theoretical classes:

1- most frequent injuries for each type of sport. Manel Torelló. Manuel.Torello@uab.cat.

2- essential aspects of the sport gesture - evaluation and treatment in the joints- shoulder / knee / ankle. Manel Torelló. Manuel.Torello@uab.cat.

3- main characteristics of the anatomical tissues involved in the injuries - physiopathology joints lesional - etiopathogenesis - phases biological repair of the different tissues and techniques adapted to them. Manel Torelló. Manuel.Torello@uab.cat.

4- Essential aspects of prevention of sports injuries and aspects of physiotherapy in recovery post-effort. Manel Torelló. Manuel.Torello@uab.cat.

5- structuring a therapeutic plan based on exploration - assessment, establishment of therapeutic objectives and choice of techniques adapted Manel Torello. Manuel.Torello@uab.cat.

6- theoretical-practical aspects of specific commassage techniques - stretching - proprioception -members functional / kinesiotape - toning / potentiation - diathermia - shock waves. Manel Torelló. Manuel.Torello@uab.cat

7 -Theoretical-practical classes: Manel Torelló

1. techniques adapted to muscle - tendon - capsule - ligaments Manuel.Torello@uab.cat
2. toning - empowerment - readjustment of the sport gesture Manuel.Torello@uab.cat

3. evaluation - manual treatment for lower limb Manuel.Torello@uab.cat
4. assessment - coxo-femoral-lumbo-pelvic unit treatment Manuel.Torello@uab.cat
5. assessment - manual upper hand treatment Manuel.Torello@uab.cat
6. massage - massage therapy - manual therapy Manuel.Torello@uab.cat
7. stretching of the set miotendinos - fascial Manuel.Torello@uab.cat
8. practical application of proprioceptive re-education Manuel.Torello@uab.cat
9. functional bandwidths - k-tape Manuel.Torello@uab.cat

## Methodology

theoretical classes.

Supervised practical theoretical classes.

practical classes of specific aspects of the subject.

practices / guided visits to sports centers. Club esportiu Claror / RC Tennis Barcelona Autonomous activities - virtual.

discussion forum clinical cases - scientific articles.

discussion in class of clinical cases and / or discussion of articles prepared by groups of students.

We offer specific gearboxes: shock waves - isoinertional systems

Training activities

Title Hours ECTS Learning outcomes

Type: Directed

LABORATORY PRACTICES (PLAB)

THEORY (TE)

Type: Autonomous

STUDY PERSONAL

READING OF ARTICLES / REPORTS OF INTEREST

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
LABORATORY PRACTICES	19.5	0.78	
THEORY	18	0.72	
Type: Autonomous			
PERSONAL STUDY	90	3.6	1, 2, 14, 3, 4, 5, 7, 6, 9, 10, 11, 12, 8, 13, 15
READING ARTICLES AND REPORTS OF INTEREST	15	0.6	7, 8, 15

## Assessment

### Evaluation

#### ASSESSMENT OF THE SUBJECT

TO ADOPT THE SUBJECT IS IMPRESSIVE TO BE APPROVED ALL THE ACTIVITIES PARTIAL ASSESSABLES

WRITTEN EVALUATION BY TESTING OBJECTIVES OF SELECTION OF ELECTION ITEMS MULTIPLE WITH A WEIGHT OF 30%

DELIVERY OF WORK REPORTS 30%

ASSISTANCE TO CLASSES AND SEMINARS 20%

EVALUATION OF FORUM PARTICIPATION (MOODLE) 20%

THE PERIOD AND DATE OF THE THEORETICAL EXAMINATION, SOLE AND FINAL, WILL BE DURING THE TWO RIGHTS WEEK OF THE MONTH OF JUNE 2019.

Students who have not passed the subject / module through the continuous assessment can be submit to a final recovery test no later than one week after the final theoretical evaluation of the subject in a date - time agreed between the students and the professor responsible for the subject.

TO BE PRESENTED TO THE FINAL EXAM CALDRÁ HAVER SUPERAT. THE REST OF ACTIVITIES PROPOSED AVALUATIONS:

DELIVERY OF WORKS REPORTS 30%: IN THE DATES AND THEMES THAT THE TEACHER INDICATE THE FIRST CLASS DAY

ASSISTANCE TO CLASSES AND SEMINARS 20%: ASSISTANCE WILL VALUE FOR CLASSES AND SEMINARS

FORUM EVALUATION OF DISCUSSION SUBJECTS PROPOSED BY THE TEACHER 20%: WILL VALUE THE QUALITY OF CONTRIBUTIONS TO THE SUBJECTS PLANTED BY THE TEACHER OF PRESENTATION AL VIRTUAL PARTICIPATION FORUM.

The evaluation of the students in exchange will be the same as for the rest of UAB students, it is It will take into account in each specific case, the non-possibility of attending practical classes or seminars and this fact it will not negatively count students "out", the teacher, evaluating each situation and specific case, will propose substitute activities, for the rest of activities where the presence is not essential the student in exchange you must complete and pass the periodic evaluable activities that will allow you to submit to the test final written.

When it is considered that the student has not been able to provide sufficient evidences of evaluation in the act will be consigned this subject is not evaluable.

### Evaluation activities

Title Weight Hours ECTS Results of learning

ASSISTANCE AND ACTIVE PARTICIPATION CLASSES AND SEMINARS

WRITTEN EVALUATION THROUGH OBJECTIVE TESTS OF SELECTION OF MULTIPLE ELECTION ITEMS

EVALUATION BY MEANS OF PRACTICAL CASES AND RESOLUTION OF PROBLEMS

Delivery of papers and reports

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
ASSISTANCE TO CLASSES AND SEMINARS AND ACTIVE PARTICIPATION	20	2	0.08	1, 2, 14, 4
DELIVERY OF WORKS AND REPORTS	30	2	0.08	1, 2, 14, 4
EVALUATION THROUGH PRACTICAL CASES AND COMMENTARY ARTICLES IN FORUM	20%	1.5	0.06	7, 6, 8, 13, 15
WRITTEN EVALUATION THROUGH OBJECTIVE EVIDENCE OF SELECTION OF MULTIPLE CHOICE ITEMS	30%	2	0.08	3, 5, 9, 10, 11, 12

## Bibliography

Fisioterapia del deporte y ejercicio . Kolt G et al Ed Elsevier 2004

Tratamiento fisioterapico de la rodilla . Basas Garcia . Mc Graw Hill 2003

Anatomía para el movimiento . Calais Germain .B. Ed los libros de la liebre de marzo .1994

Nuevas tendencias en fuerza y musculación .Julio Tous Fajardo .Ed Ergo 1999

Lesiones musculares en el deporte . Balius-Pedret . Ed Panamericana 2013

Diagnostico Fisioterapico . Viel Eric . Ed Masson .1999

Tecnicas de Rehabilitacion en medicina deportiva .Prentice .W Ed Paidotribo 2001

Reeducation raisonnee de l'épaule opérée et non opérée . Benedicte Forthomme. Ed Frisons Roche .2002

Lesiones Deportivas . Bahr . Maehlum .Ed Panamericana . 2004.

Rehabilitation in Orthopedic Surgery . Imhoff et al . Ed Springer 2016