



## COURSE DATA

### Data Subject

<b>Code</b>	33219
<b>Name</b>	Prevention and first aid for injuries due to physical activities
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2023 - 2024

### Study (s)

Degree	Center	Acad. year	Period
1312 - Degree in Physical Activity and Sport Sciences	Faculty of Physical Education and Sport Sciences	4	First term
1331 - Degree in Physical Activity and Sport Sciences (Ont)	Faculty of Physical Education and Sport Sciences	4	First term

### Subject-matter

Degree	Subject-matter	Character
1312 - Degree in Physical Activity and Sport Sciences	15 - Prevention and first aid for physical activity-related injuries	Obligatory
1331 - Degree in Physical Activity and Sport Sciences (Ont)	15 - Prevención y primeros auxilios de lesiones en la actividad física	Obligatory

### Coordination

Name	Department
GARCIA LUCERGA, CONSOLACION	190 - Physiology

## SUMMARY

The Prevention and First Aid course of injury in physical activity is within the common compulsory subjects, with 6 ECTS, with a temporary organization for the quarterly grade 4 Science in Sports and Physical Activity.

The proposal and the teaching of this subject are done by the Department of Physical Therapy. It consists of a total of 6 credits (150hours). Among the subjects in the curriculum has been clustered, this document within the area: Physical Activity and Quality of Life. It is desirable that future professionals in Physical Activity Sciences familiar with the study of this subject:

- Overview of preventive measures in the exercise regularly.
- Musculoskeletal injuries in children, adults, the largest and women.
- Changes made in other systems of the human body.



- Immediate treatment techniques to physical injury sport.
- Proposals for activities to prevent injuries and acute and chronic disorders.

Since, it represents a problem in the development of quality of life in any social field, for example, in everyday life which is incorporated in the performance of sport and / or scope of the exercise or performance or in school....

## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

The approved the Anatomy`s and Physiology`s modules.

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 1312 - Degree in Physical Activity and Sport Sciences

- Know and understand the physiological and biomechanical factors that determine the practice of physical activity and sport.
- Identify health risks derived from inappropriate physical and sporting activities and propose alternatives.
- Identify the health risks of practising inadequate activities for the populations that practise physical activity to improve their quality of life.
- Know and to know how to act in situations that require immediate action due to any physical-sports practice.
- Know and understand the human body's mechanisms for causing and responding to trauma.
- Know and understand the specific and common injuries caused by the practice of physical activity for different ages and genders.
- Apply the principles of hazard prevention to the different fields of physical activity and sport.
- Plan, implement and evaluate physical activity and sports programmes and propose alternatives when these prove inadequate.
- Understand the scientific literature in the field of hazard prevention and first aid for physical activity and sport, in English and in other languages with significant presence in science.

## LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)



The teaching of this course is aimed at getting students to acquire sufficient knowledge, theoretical and practical, to enable it:

1. Familiar with the scope and breadth of sports injuries.
2. Guide, eliminate or reduce risk, both in daily life or during physical practice sports.
3. Know the steps to take to prevent the possibility of injury occurring within the physical and athletic.
4. Review step by step the vital components to develop an effective emergency plan to be followed if an athlete is injured while playing sports.
5. Guide, eliminate or reduce risk and / or injury, both in daily life or during physical practice sports.
6. Knowing the most common injuries resulting from physical practice - sport.
7. Identify the first aid to be provided for each type of injury more frequently.
8. Know how to apply first aid techniques depending on the type of accident or injury and according to established protocols.
9. Monitor alarm conditions produced by the most common accidents in sports.
10. Able to develop a kit with the necessary material for the application if necessary.

## DESCRIPTION OF CONTENTS

### 1. Part 1: BASIC CONCEPTS.

We study the general principles and basic concepts, to provide an important foundation in the subject, on the injury and its prevention. General principles of sports injuries. Bony sports injuries. Joint sports injuries. Tendon sports injuries. General preventive measures in sport.

### 2. Part 2: FIRST AID.

The main measures are recognized to perform first aid in sports. Initial evaluation of the injured. Life support. Airway obstruction. Alterations of consciousness. Cardio-circulatory accidents. Accidents mechanical aggression. Accidents chemical attack. Thermal injury accidents.

### 3. Part 3: ALTERATIONS AND SPORTS INJURIES

Are known in depth the changes and injuries, according to the different anatomical parts, organs and body systems.

Traumatic injury and overuse of the upper extremity: shoulder, elbow, arm, wrist, hand and fingers

Traumatic injury and overuse in the head and face: bone, joint, muscle, tendon and nerve.

Traumatic injury and overuse in the neck and spine: joint, muscle, tendon and nerve.

Injury and overuse of the hip and pelvis: joints, muscles, tendons, and nerves.

Traumatic injury and overuse of the lower limbs: thigh, knee, leg, ankle and foot.

Alterations and cardiac and vascular, ophthalmic, otorhinolaryngology, skin, hematological, neurological and gastroenterological sports.



**4. PART 4 : SPECIFIC SPORTS INJURIES.**

Will try to give the vision of the injuries, according to the pedagogical treatment that the sports historian Javier Olivera does in one of their studies. This work brings together all the sports specialty generic models classified from the point of view of the historical evolution of human movement.

- Individual sports, combat sports, equipment sports, instruments spots, nautical sports, sliding control and precision sports, horse riding sports, air sports, motor sports, traditional sports and wild sports.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Laboratory practices	15,00	100
Development of group work	18,00	0
Development of individual work	9,00	0
Study and independent work	18,00	0
Readings supplementary material	9,00	0
Preparing lectures	18,00	0
Preparation of practical classes and problem	9,00	0
Resolution of case studies	9,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

The 150 hours of work, is divided into 15 weeks of classes, for one term.

The subject will be developed in coordination. First you will expose the **theoretical content** of the main themes, alternating with **seminars** by one or two reference books, and using audiovisual media, thus serving to fix knowledge associated with the powers provided.

Each issue of the subject will have a script that the student can download from the virtual classroom. The knowledge presented in lectures and seminars will be completed in **class labs**.

From these lectures, seminars and practical, the students professor propose to make **words in groups**, from, theory and/or practice knowledge for whose implementation will be supported by the teacher in group and custom tutorials, where students can share the doubts with their peers and the teacher, obtaining solutions to achieve competence. Of all the knowledge the student will have to make a **group oral presentation** with audiovisual support and following discussions with all students. There will be a calendar of performances in the latest part of the course, once explained the key issues.



## EVALUATION

By changing the learning of students have to change the ways to assess learning. Overcoming a matter cannot be determined by a single score obtained with a single test. Must be continuously evaluated, considering the real and daily work of the student. Specifically, 60% of the final grade corresponds to the theoretical and practical final exam on the knowledge gained through the development agenda of theoretical and practical program.

40% of the remaining note will be distributed as follows: 15% will correspond to the preparation, presentation and public defense of a work. The other remaining 20% will value the attendance to the theoretical and practical classes, the assistance to tutorials, the participation in the classroom, the resolution of the delivered cases, the participation in seminars, the learning portfolio, etc.

This 40% will not add to the grade taken with the theoretical-practical final exam (60%), if a score of at least 30% has not been obtained, in the theoretical-practical final exam.

In the case of not attending 80% of the practical laboratory classes, the teacher may perform an oral examination on the practical content.

## REFERENCES

### Basic

- Bahr R, Mæhlum S. Lesiones deportivas. Diagnóstico, tratamiento y rehabilitación. Madrid: Panamericana; 2007.
- Brad Walker. La anatomía de las lesiones deportivas. Badalona: Paidotribo; 2010.
- Gotlin Robert S. Guía ilustrada de la lesiones deportivas. Diagnóstico, tratamiento y recuperación de más de 130 lesiones. Madrid: Tutor, S.A.; 2009.
- Pfeiffer Ronald P, Mangus Brent C. Las lesiones deportivas. 2nd ed. Badalona: Paidotribo; 2007.
- Cruz Roja. Manual de primeros auxilios. Madrid: Pearson Educación; 2007.

### Additional

- Arnheim DD, Anderson MK. Fisioterapia y entrenamiento atlético: Causas, respuesta y tratamiento de las lesiones deportivas. Madrid: Mosby Doyma; 1994.
- Brukner P, Khan K. Clinical Sports Medicine. Sydney: McGraw-Hill Book Company; 1995.
- Brunet-Guedj E, Moyon B, Genéty J. Medicina del deporte. 3ª ed. Barcelona: Masson; 1997.
- Consejo Español de Resucitación Cardiopulmonar. Recomendaciones 2005 en Resucitación Cardiopulmonar del European Resuscitation Council. Disponible en: <http://www.sedar.es/index.php?option=content&task=view&id=156>



- Danowski RG, Chanusot JC. Manual de traumatología del deporte. Barcelona: Masson; 1992.
- Gómez Gálvez CJ, García Bermejo P, Millán Soria J, Mínguez Platero J. Soporte vital básico y avanzado y atención inicial al politrauma. Valencia: Ilustre Colegio Oficial de Médicos de Valencia; 2007.
- Guerrero Morilla R, Pérez Moreno BA. Prevención y tratamiento de lesiones en la práctica deportiva. 2nd ed. Alcalá la Real: Formación Alcalá; 2002.
- Kulund DN. Lesiones del deportista. 2nd ed. Barcelona: Salvat; 1990.
- Piedrola Gil y cols. Medicina preventiva y Salud pública. 9ª ed. Barcelona: Masson-Salvat; 1991.
- Renström, PAFH. Prácticas clínicas sobre asistencia y prevención de lesiones deportivas. Badalona: Paidotribo; 1999.
- Romero-Tous. Prevención de lesiones en el deporte. Claves para un rendimiento deportivo óptimo. Madrid. Panamericana; 2010.
- Comité Internacional de Editores de Revistas Médicas. Requisitos de uniformidad para manuscritos. Actualización en abril 2010. Acceso 18 de julio de 2011. Disponible en : <http://foietes.wordpress.com/2011/06/21/normas-vancouver2010/>
- Rodríguez Rodríguez LP, Gusi Fuertes. Manual de prevención y rehabilitación de lesiones deportivas. Madrid: Síntesis; 2002.