1. OVERVIEW

Subject area	Human Anatomy
Degree	Bachelor's Degree in Exercise and Sport Sciences
School/Faculty	Medicine, Health and Sports
Year	First
ECTS	6 ECTS
Type	Core
Language(s)	Spanish/English
Delivery Mode	On campus
Semester	S1 and S2
Academic year	2025/2026
Coordinating professor	Silvia Burgos Postigo

2. INTRODUCTION

The subject area "Human Anatomy" on the Bachelor's Degree in Exercise and Sport Sciences is a core subject for understanding the structure, morphology and functions of the musculoskeletal system and other systems involved in the movement, exercise and physical performance of human beings. This subject area provides students with skills such as understanding and analysing the structure of the human body, from a basic level of organisation such as *tissue* to the complex overall organisation of the human body (combination of systems). It also provides knowledge about the functional processes of the human body through the exploration and investigation of scientific knowledge applied to physical education, physical health and physical exercise. The subject area is part of the group of core subjects that study the biological, anatomical and physiological fundamentals of how the human body moves. Specifically, it covers the following content: *anatomical terminology, contextualisation of anatomical techniques to understand the human body, knowledge of the levels of organisation of the human body* and a *detailed study of the structure and functionality of the musculoskeletal system.* This content is all applied to physical exercise (basic physical exercises, simple, compound and sequential exercises) and the process of teaching/learning about the human body in Physical Education.

In the subject area "Human Anatomy", future "Exercise and Sport Sciences" professionals will gain a solid theoretical and practical understanding of general anatomy and the musculoskeletal system, allowing them to understand and link together the anatomical processes behind the movement of the human body. This will contribute to a better understanding of other core subject areas that are taught on the degree programme, such as Biomechanics, Human Physiology and The Systematics of Movement.

3. SKILLS AND LEARNING OUTCOMES

- **Basic skills (CB, by the acronym in Spanish):**

CB2. Students can apply their knowledge to their work or vocation in a professional manner and possess the skills which are usually evident through the forming and defending of opinions and resolving problems within their study area.

CB4. Students can convey information, ideas, problems and solutions to both specialist and non-specialist audiences.
CB5: Students have developed the necessary learning skills to undertake further study with a high degree of autonomy.

- **Cross-curricular skills (CT, by the acronym in Spanish):**

CT01. Independent Learning: Ability to choose the most effective strategies, tools and opportunities for independent learning and implementation of what has been learnt.
CT04. Ability to analyse and synthesise: be able to break down complex problems into manageable blocks; evaluate other options and perspectives to find the ideal solution. Synthesising to reduce the complexity and better understand the situation and/or solve problems.
CT11. Planning and time management: Ability to set objectives and choose the right means to fulfil them through efficient use of time and resources.
CT12. Critical thinking: ability to analyse an idea, occurrence or situation from different perspectives and adopt a personal viewpoint based on scientific rigour and objective reasoning, rather than intuition.

- **Specific skills (CE, by the acronym in Spanish):**

CE05. Ability to identify inappropriate practices that pose a risk to health in order to prevent and correct them in different groups of people.
CE06. Ability to assess levels of physical fitness and motor skills, prescribing and planning health-orientated physical exercises in different age groups.
CE07. Ability to promote and assess long-lasting and autonomous habits of health-orientated physical activity and sport.

- **Learning outcomes (RA, by the acronym in Spanish):**

RA1. To understand key concepts related to human anatomy.
RA2. To determine, based on specific tests, the foundations for understanding human anatomy.
RA3. To act professionally when using equipment and following safety protocols for laboratory work linked to the musculoskeletal system.
RA4. To produce essays in order to study the human musculoskeletal system and damage to this system.
RA5. To understand fundamental anatomical concepts.
RA6. To give anatomical descriptions with correct use of anatomical nomenclature.
RA7. To relate anatomical structures and how they work.
RA8. To understand and summarise anatomical images and models.
RA9. To produce in-depth analysis and summaries based on searches of key literature about human anatomy.

The following table shows how the skills developed in the course match up with the intended learning outcomes:

Skills	Learning outcomes
CB2, CB4, CB5, CT01, CT04, CT11, T12, CE05, CE06, CE07	RA1. To understand key concepts related to human anatomy.
CB2, CB4, CB5, CT01, CT04, CT11, CT12, CE05, CE06, CE07	RA2. To determine, based on specific tests, the foundations for understanding human anatomy.
CB2, CB4, CB5, CT01, CT12	RA3. To act professionally when using equipment and following safety protocols for laboratory work linked to the musculoskeletal system.

CB2, CB4, CB5, CT04, CT11, CT12, CE05, CE06, CE07	RA4. To produce essays in order to study the human musculoskeletal system and damage to this system.
CB2, CB4, CB5, CT01, CT04, CT11, CE05	RA5. To understand fundamental anatomical concepts.
CB2, CB4, CB5, CT01, CT04, CT11, CT12	RA6. To give anatomical descriptions with correct use of anatomical nomenclature.
CB2, CB4, CB5, CE5, CE6, CE7	RA7. To relate anatomical structures and how they work.
CB2, CB4, CB5, CT01, CT04, CE05, CE06	RA8. To understand and summarise anatomical images and models.
CB2, CB4, CB5, CT01, CT04, CT11, CT12, CE05, CE07	RA9. To produce in-depth analysis and summaries based on searches of key literature about human anatomy.

4. CONTENTS

- Knowledge of the anatomical structures that make up the musculoskeletal system to understand how the human body works, how it behaves in different positions and movements and the implications of musculoskeletal injuries.
- Anatomical Nomenclature.
- Basics of the musculoskeletal system.
- Study of the osteology/arthrology and myology of the torso, head and upper and lower limbs.

Learning units covering the content of the subject area

Unit 1: In search of the *Anatomy and organisation of the human body in future Exercise and Sport Sciences graduates*.

- Topic 1. "All go to action Now!". Definition of anatomy, objectives of anatomy, phylogenesis and ontogeny.
- Topic 2. "In Action terminology". Anatomical terminology applied to movement and physical exercise.
- Topic 3. "Amazing organization of our body": *giving shape to the human organism with internal organs and body systems.*

Unit 2: Discovering the "locomotor" of the human body and its "parnets": basic features of the bone, joint, muscle and nervous system applied to movement.

- Topic 4. "Amazing skeletons". Skeletal system: formation of bone tissue, types of bone tissue (osteology), types of bones, structure of the axial skeleton and the appendicular skeleton.
- Topic 5. "Amazing joints". Formation of joints, classification of joints, functions of joints.
- Topic 6. "Amazing muscles". Muscle tissue, properties, functions, classification of skeletal muscles and practical applications for exercise and sport sciences of the integration of bone, joint and muscle systems.
- Topic 7. *Exciting!* Structure and function of the nervous system. Organisation and functions of the anatomical components of the central nervous system (the control tower).

Unit 3: Fire up the locomotor system!

- Topic 8. *Get to know your body from top to bottom!* Bone, joint and myotendinous anatomy of the axial skeleton (spine and thorax) applied to physical exercise and teaching about the human

body in physical education.

- Topic 9. *Discover the dynamism and movement potential of your upper limbs!* Bone, joint and myotendinous anatomy of the upper limbs applied to physical exercise and teaching about the human body in physical education.
- Topic 10. *Discover the dynamism and movement potential of your lower limbs!* Bone, joint and myotendinous anatomy of the lower limbs applied to physical exercise and teaching about the human body in physical education.

5. TEACHING/LEARNING METHODS

The types of teaching-learning methods are as follows:

1. Lectures.
2. Case studies.
3. Collaborative learning.
4. Problem-based learning (ABP by its acronym in Spanish).
5. Simulation environments.
6. Project-based learning.
7. Independent learning.

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On campus:

Learning activity	Number of hours
Lectures (on campus)	28
Asynchronous lectures (on campus)	12
Oral presentations (on campus)	6
Reports and written work (on campus)	20
Case studies/workshop activities (on campus)	20
Tutorials (on campus)	8
Independent working (on campus)	28
Case studies (on campus)	28
TOTAL	**150**

7. ASSESSMENT

The assessment methods, plus their weighting in the final grade for the course, are as follows:
On campus:

Assessment system	Weighting
On-campus knowledge tests	25% (15–25%)
Learning portfolio	20% (20–25%)

Participation in classroom activities	20% (20–30%)
Case study/problem	20% (20–30%)
Laboratory work	15% (10–20%)

On the Virtual Campus, when you open the course, you can see all the details of your assessment activities and the deadlines and assessment procedures for each activity.

7.1. Ordinary exam period

For students under the CONTINUOUS ASSESSMENT system

To pass the subject area in the ordinary exam period, students will need a minimum grade of 5.0 out of 10.0 (weighted average) **in each of the assessment units that are specified below:**

*** "Learning activities" unit, which accounts for 50% of the final grade for the subject area and includes the following ASSESSABLE tasks:**

- **Individual activities** (including the "anatomical student ID card") **and group activities in class or outside of class** linked to the theoretical and practical content of the topics in each unit = **10%**.
- **Laboratory work, workshops, activities in the multi-purpose training room** = **20%**. *In order to pass, students must attend 100% of these sessions and successfully complete the associated activities. Requirements for students being assessed under the continuous assessment system.*
- ***IMPLÍCATE ACTIVITY*** (pair work) = **5%**. *Minimum grade of 5 out of 10 to pass the subject area. If failed in the ordinary exam period, can be retaken in the extraordinary exam period in July.*
- **Final Subject Area Project** (PFA, Spanish acronym) = **15%**. *Minimum grade of 5 out of 10 to pass the subject area. If failed in the ordinary exam period, can be retaken in the extraordinary exam period in July.*

Important:
- **Minimum attendance of 80% is required for assessment.** This does not include attendance of workshops, LABORATORY WORK and/or training room activities, for which 100% attendance is required.
- **FAILURE TO ATTEND or FAILURE TO PASS 2 or more of any of these activities** means students will have to take a final practical exam in the official exam period.

**** "On-campus knowledge tests" unit (exams), which accounts for *50% of the final grade for the subject area*. This includes two exams: Exam 1 (20%) and exam 2 (30%). A minimum of 5 out of 10 in both exams is required to pass the subject area and to include this unit in the final weighted average with the "Learning activities"**.
Details of the exams:
- Test-style exams with a maximum of 42 questions with 4 possible answers (A, B, C and D), where only one answer is 100% correct. The questions will refer to the case studies seen in the laboratory work and in class.
- The exams will be sat on the virtual campus using the "RESPONDUS" program.
- If students pass the **first exam**, they will not be tested on the content of units 1 and 2 in the second exam. The exam is scheduled for the 8th or 9th week of the semester.

- The **second exam** will be on the content of unit 3 and 5% of the content of the first exam. The exam is scheduled for the last week of the semester.

Note:
******The final grade for the subject area, covering both the "learning activities" unit and the "on-campus knowledge tests"** unit, will be weighted according to the percentages of the subject area's **assessment system** (as defined in the table in point **7. Assessment**).

For students not under the CONTINUOUS ASSESSMENT system

To pass the subject area in the ordinary exam period, students who are NOT UNDER THE CONTINUOUS ASSESSMENT SYSTEM will need a minimum grade of 5.0 out of 10.0 (weighted average) **in each of the assessment units that are specified below**:

* "**Learning activities**", which accounts for 30% of the final grade for the subject area **and includes the following ASSESSABLE tasks:**

- **Final Subject Area Project** (PFA, Spanish acronym) = **20%**. ***Minimum grade of 5 out of 10 to pass the subject area. If failed in the ordinary exam period, can be retaken in the extraordinary exam period in July.***

- ***IMPLÍCATE activity*** (individual or pair work) = 10%. *Must be passed to pass the subject area. If failed in the ordinary exam period, can be retaken in the extraordinary exam period in July.*

** "**On-campus knowledge tests" (exams)**, which accounts for 70% of the final grade for the subject area. *One exam with 50 questions about the theoretical and practical content of the subject area and one practical exam* covering the content of the laboratory work and case studies completed during the course.

Practical exam: Resolution of case studies with short answers about the anatomy of the musculoskeletal system applied to physical exercise and teaching about the human body in physical education. % of the assessment = 30% of the 70% of this assessment unit.

Note:
****The final grade for the subject area, covering both the "learning activities" unit and the "on-campus knowledge tests"** unit, will be weighted according to the percentages of the subject area's **assessment system** (as defined in the table in point **7. Assessment**).

7.2. Extraordinary exam period (resits)

For students under the CONTINUOUS ASSESSMENT SYSTEM IN THE ORDINARY EXAM PERIOD

Students will sit any final or midterm exams that they did not pass in the ordinary exam period. They will also submit the IMPLÍCATE project and the PFA if they did not pass or submit this work in the ordinary exam period.

The final grade for the subject area is the weighted average of the two assessment units: *Learning activities and **On-campus knowledge tests.

Note:
****The final grade for the subject area, covering both the "learning activities" unit and the "on-campus knowledge tests"** unit, will be weighted according to the percentages of the subject area's **assessment system** (as defined in the table in point **7. Assessment**).

For students NOT UNDER THE CONTINUOUS ASSESSMENT SYSTEM IN THE ORDINARY EXAM PERIOD

***Learning activities and **On-campus knowledge tests.**

- Completion and oral presentation of the *IMPLÍCATE* and *PFA* activities.

Note:
****The final grade for the subject area, covering both the "learning activities" unit and the "on-campus knowledge tests"** unit, will be weighted according to the percentages of the subject area's **assessment system** (as defined in the table in point **7. Assessment**).

8. TIMELINE

This section presents the timeline for the subject area's assessable tasks, including the submission dates. This timeline is subject to changes at the teacher's discretion.

Assessable tasks	Date
Individual activity	Week 1
Group activity	Week 2
Multi-purpose training room practical activity I	Week 3
Laboratory work I	Week 4
Start of the *IMPLÍCATE* activity Individual activity	Week 5
Laboratory work II	Week 6
Individual activity	Week 7
Laboratory work III	Week 8
Group activity in the multi-purpose training room II	Week 9
Laboratory work IV and V Group activity	Week 10
1st exam (units 1 and 2)	Week 11
Laboratory work VI	Week 12
Laboratory work VII	Week 13
Laboratory work VIII	Week 14
Individual activity	Week 15
Laboratory work IX and X	Week 16
Presentation of the PFA and 2nd exam (unit 3)	Week 17

The timeline may be subject to change for logistical reasons related to the activities. Students will be informed of any changes in due time and course.

9. BIBLIOGRAPHY

The reference material for the subject area is as follows:

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- Michael, S., Schulte, E., & Schumacher, U. (2015). *Prometheus: texto y atlas de anatomía* (3ª ed.) Madrid: Panamericana.
- Tortora, G. J. & Derrickson, B. (2014*). Principios de anatomía y fisiología* (13ª ed., 1ª reimp.) Buenos Aires: Editorial Médica Panamericana.
- Weineck, J. (2004). *La anatomía deportiva* (4ª ed.). Barcelona: Paidotribo.

Multimedia reference bibliography

- https://www.visiblebody.com/es/ http://www.adameducation.com/aiaonline https://www.anatomage.com/
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- http://es.aclandanatomy.com.ezproxy.universidadeuropea.es/ https://www.youtube.com/user/alsanagust http://www.felipeisidro.com/biblioteca-digital/ingüíst-fisiología.

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- García-Porrero, J. M. & Hurlé, J. (2012). *Anatomía humana*. Madrid: McGraw-Hill Interamericana.

10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by means of counselling and personalized plans for students who need to improve their academic performance.

2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunities for all students.

3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.

4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at: orientacioneducativa@universidadeuropea.es

11. STUDENT SATISFACTION SURVEYS

Your opinion matters!

Universidad Europea encourages you to complete our satisfaction surveys to identify strengths and areas for improvement for staff, degree courses and the learning process.

These surveys will be available in the surveys area of your virtual campus or by email.

Your opinion is essential to improve the quality of the course.

Many thanks for taking part.