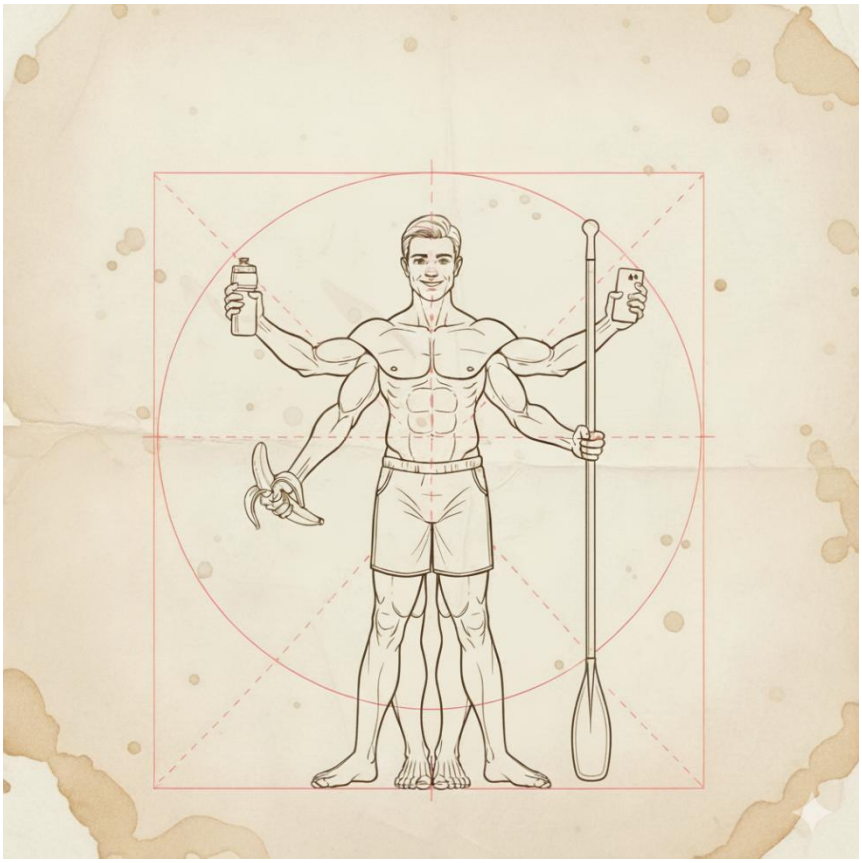
UNIVERSIDAD DE ALMERÍA | Erasmus+ BIP 2026

Co-funded by the European Union

Applied Anthropometry in Sport Sciences

BIP's code: 2025-1-ES01-KA131-HED-000312649-1



Organizer: University of Almería (Almeria, Spain)	**ECTS credits for participating students:** 3
Online period: Late April or early May The online part of the BIP will provide foundational knowledge on the application of anthropometry in sports and will organise participants into international teams for their collaborative project.	**Onsite period:** 18-22 May 2026 Sessions will take place at the campus of the University in Almería, with some field trips to the local coast.
Academic coordinators: Prof. Fernando Alacid Cárceles and Prof. Álvaro Sicilia Camacho	**Administrative coordinator:** erasmusbip@ual.es
Academic requirements: undergraduate and postgraduate students with at least an English B1 level, enrolled in Bachelor's or Master's Degrees in Physical Activity and Sport Sciences, Nutrition, Physiotherapy, Medicine or related Health Science fields.	

LEARNING OUTCOMES

· **Applied Anthropometric Fundamentals:** Participants will begin with a theoretical-practical session on the core principles of applied anthropometry. This will establish a solid foundation, covering its history, terminology, and key applications.

• **Landmark Identification:** A crucial hands-on workshop will be dedicated exclusively to learning the accurate location and marking of key anthropometric landmarks on the body. This skill is essential for ensuring the precision of all subsequent measurements.

• **Equipment Handling and Calibration:** A dedicated practical session will cover the correct use, management, and calibration of all anthropometric instruments. This ensures participants can minimise instrumental error and maintain data quality in their professional practice.

• **Basic Measurements:** Participants will engage in practical training to master the techniques for taking basic anthropometric measurements, including stature, body mass, arm span, and sitting height, using calibrated equipment.

• **Skinfold and Girth Measurement for Body Composition:** Participants will engage in a focused practical workshop to master the techniques for assessing body composition. They will develop technical proficiency in measuring a comprehensive set of skinfolds and body girths (perimeters), which are critical variables for evaluating an athlete's physical profile.

• **Advanced Measurement of Body Breadths and Heights:** This session will expand the participants' practical skills to include more advanced anthropometric techniques. They will learn to accurately measure a range of body breadths (diameters) and segmental heights, providing data for a more complete structural analysis of the human body.

• **Technical Error of Measurement (TEM):** Participants will attend a specific session on data quality control, where they will learn the concept of the Technical Error of Measurement (TEM). They will practice repeated measurements to calculate and interpret their own TEM, a key indicator of reliability.

• **Somatotype and Proportionality:** Building on the data collected, these sessions will focus on analysis and interpretation. Participants will learn to calculate and critically evaluate key indexes such as somatotype and proportionality.

• **Estimating Somatic Maturation through Anthropometry:** Participants will attend a theoretical-practical session on the importance of biological maturation in youth sports. They will learn to apply specific anthropometric methods to estimate somatic maturation, enabling them to interpret physical development and its impact on athletic performance, independent of an athlete's chronological age.

• **Anthropometry and Sports Performance Analysis:** A final integrative session will focus on applying all the collected data. Participants will learn to analyse how body composition, somatotype, and proportionality collectively influence and predict sports performance and contribute to talent identification processes.

• **Training in Professional Ethics and Proxemics:** A dedicated workshop will address the essential aspects of professional ethics and proxemics. Participants will learn and practice creating a respectful, secure, and professional environment when conducting physical assessments on individuals

DAILY PROGRAM OUTLINE

Day 18: Foundations of Anthropometry

• Theory-Practical Session: The week will begin with a welcome session and an introduction to the programme. This will be followed by a theoretical block covering the fundamentals of anthropometry, its history, terminology, and applications. The session will conclude with a presentation on essential anthropometric instruments and their calibration procedures to ensure data quality.

Practical Workshop: Participants will engage in a hands-on workshop focused on two key areas: the precise marking of anatomical landmarks and the correct technique for taking basic measurements (stature, body mass, arm span, and sitting height).

Day 19: Data Quality, Ethics, and Body Composition I

• Theory-Practical Session: The theoretical part will cover three crucial topics: the principles of proxemics and professional ethics when working with athletes, the concept of the Technical Error of Measurement (TEM) for data quality control, and an introduction to body composition assessment.

• Practical Workshop: This session will be entirely dedicated to the practical skill of skinfold measurement. Participants will learn and practice the correct technique for a comprehensive set of skinfold sites.

Day 20: Somatotype Analysis and Somatic Maturation

• Theory-Practical Session: The theoretical block will delve into key anthropometric indicators, covering somatotype analysis, methods for estimating somatic maturation, and the relationship between anthropometry and sport.

• Practical Workshop: The practical focus will be on mastering the measurement of body girths (perimeters), complementing the previous day's work on body composition.

Day 21: Proportionality and Data Management

• Theory-Practical Session: The theory will focus on the concept of proportionality and its importance in athletic profiling. A practical theoretical session will introduce the use of Excel spreadsheets for creating and managing anthropometric reports.

• Practical Workshop: Participants will learn the techniques for measuring body breadths (diameters) and segmental heights. The session will conclude with a group activity on the interpretation of complete anthropometric profiles.

Day 22: Integration, Application, and Final Assessment

• Theory-Practical Session: The final theoretical block will integrate all concepts learned, focusing on the direct link between anthropometry and sports performance, and discussing current lines of research in applied anthropometry.

• Practical Workshop: The final hands-on session will involve the measurement of complete anthropometric profiles, putting all learned skills together. It will conclude with a practical assessment where each participant's measurement technique will be evaluated.

• Farewell Session: The BIP will conclude with a session to summarise the week's activities, reflect on the learning experience, and a farewell lunch to celebrate achievements.

VIRTUAL COMPONENT

1. Introduction Session to the BIP Programme

• **Objective:** To provide a comprehensive overview of the Erasmus BIP programme, its structure, goals, and learning outcomes. Participants will also receive a foundational introduction to applied anthropometry to prepare them for the physical mobility week.

• **Content:**

- Welcome and Programme Overview: An explanation of the purpose and structure of the BIP, highlighting the integration of virtual and physical learning.
- Presentation of the Partner Institutions: A brief overview of the participating universities, focusing on their expertise in the field of Sports Science.
- Introduction to the Learning Platform: A tutorial on how to use the online platform for virtual collaboration, including accessing resources, communicating with peers, and understanding the programme schedule.
- Asynchronous Preparatory Material: Before the session, participants will be provided with a series of introductory videos on anthropometric assessment. This material will allow them to familiarise themselves with the basic terminology, key anatomical landmarks, and the correct handling of equipment, setting a common baseline of knowledge for all attendees.

2. Applied Anthropometry and Collaborative Project Kick-off

• **Objective:** To provide foundational knowledge on the application of anthropometry in sports and to organise participants into international teams for their collaborative project.

• **Content:**

- Fundamentals of Anthropometry in Sports Performance: A theoretical session covering the key applications of anthropometry, including body composition, somatotype, proportionality, and maturation analysis, and their relationship with athletic performance.
- Group Dynamics and Team Building: Participants will be organised into international teams to work on a collaborative group project.

- Project Description: Each team will be tasked with researching and analysing the typical anthropometric profile of an athlete in a specific sport of their choice. They will focus on:

▪ Identifying the key anthropometric variables that are most relevant to performance in that sport.

▪ Exploring how factors like body composition, somatotype, and proportionality influence success.

▪ Considering the ethical and proxemic protocols necessary for conducting assessments in their chosen context.

- Expected Outcome: Each team will produce a report and a multimedia presentation summarizing the ideal anthropometric profile for their chosen sport. This work will integrate insights from their culturally diverse team members, and the projects will be presented during the physical mobility sessions to share ideas and learn from each other's findings.