Course	TRAUMATOLOGY
Level and Study Program	Bachelor's Degree in Sports Science
Academic Discipline Sector (SSD) (SSD)	MED/33
Year of Study	1
Accademic Year	2024-2025
Total Credits	6
Prerequisites	Fundamental knowledge of anatomy and physiology.
Docente	Name and Surname: Giacomo Rizzello AREA: MALATTIE DELL'APPARATO LOCOMOTORE - TRAUMATOLOGIA NICKNAME: GIACOMO RIZZELLO EMAIL: GIACOMO.RIZZELLO@UNICUSANO.IT
Course Overview	The **Traumatology** course focuses on the principles of anatomy, physiology, and biomechanics of the musculoskeletal system. These principles are essential for preventing injuries and improving the performance of both recreational and professional athletes.
Learning Objectives	The course aims to: 1. Provide knowledge on the locomotor system, facilitating the understanding of major traumatic and microtraumatic lesions and their healing processes. 2. Apply biomechanical and orthopedic knowledge to optimize training programs and workloads associated with motor and sports activities.
Prerequisites	Fundamental knowledge of human anatomy, human physiology, biomechanics, and introductory concepts of traumatology.
Expected Learning Outcomes	By the end of the course, students will: • Be able to identify movements and actions that pose a risk of injury during sports activities. • Be able of planning safe and effective physical activity programs.
Course Structure	The course is delivered through a combination of the following activities: Didactic Lectures: 3 hours per module. Interactive Sessions: 2 hours via forum-based discussions (virtual classroom). Synchronous teaching tools, including web-conference meetings and real-time chat platforms, are also utilized to enhance interaction with enrolled students. To ensure steady progress, students are advised to allocate at least six hours per week for independent study over a 12-week period.

Course Modules	*Module I*
	Review of the istology, physiology, and mechanical properties of tissues of the musculoskeletal system. Introduction to the principles of traumatology.
	Module II
	Fractures: classification and treatment principles. Fractures of the upper limb, spine, pelvis, and lower limb.
	Module III
	Cartilage lesions. Joint injuries involving the knee, hip, and ankle. Treatment principles.
	Module IV
	Ligament injuries. Capsulo-ligamentous injuries of the shoulder and knee. Treatment principles.
	Module V
	Tendon injuries. Rotator cuff injuries. Tendon injuries of the lower limb. Treatment principles.
	Module VI
	Muscle injuries: classification and treatment principles.
Study Materials	Video Lectures: Pre-recorded sessions by the lecturer, organized into five modules. Supplementary Materials: Handouts, slides, and additional resources provided by the lecturer. Recommended Texts for Further Reading: Kapandji, I. A. (2020). Functional Anatomy. Monduzzi Editore. Levangie, P. K., Norkin, C. (2019). Joint Structure and Function: A Comprehensive Analysis. 6th Edition, F.A. Davis Company. Grassi, F.A., Pazzaglia, U.E., Pilato, G., Zatti, G. (2012). *Manual of Orthopedics and Traumatology*.
Examination Methods	Students' knowledge and skills will be evaluated through a written or oral examination, typically conducted at the central campus in Rome. Written Examination: Includes 10 multiple-choice questions and 5 open-ended questions (theoretical and/or practical) covering the entire syllabus. Oral Examination: Involves a structured discussion with five theoretical and/or practical questions spanning the course content. Each question holds equal weight, contributing a maximum of 10 points. In both formats, the evaluation emphasizes analytical skills, conceptual integration, and precise communication. Active participation in virtual classrooms (forums) and successful completion of e-tivities will also contribute to the final assessment.

Criteria for Final Thesis Assignment	The assignment of the final thesis will be based on a preliminary discussion, where the student outlines their specific academic interests. No restrictions are placed on thesis requests, and no minimum grade point average is required to initiate the process.