



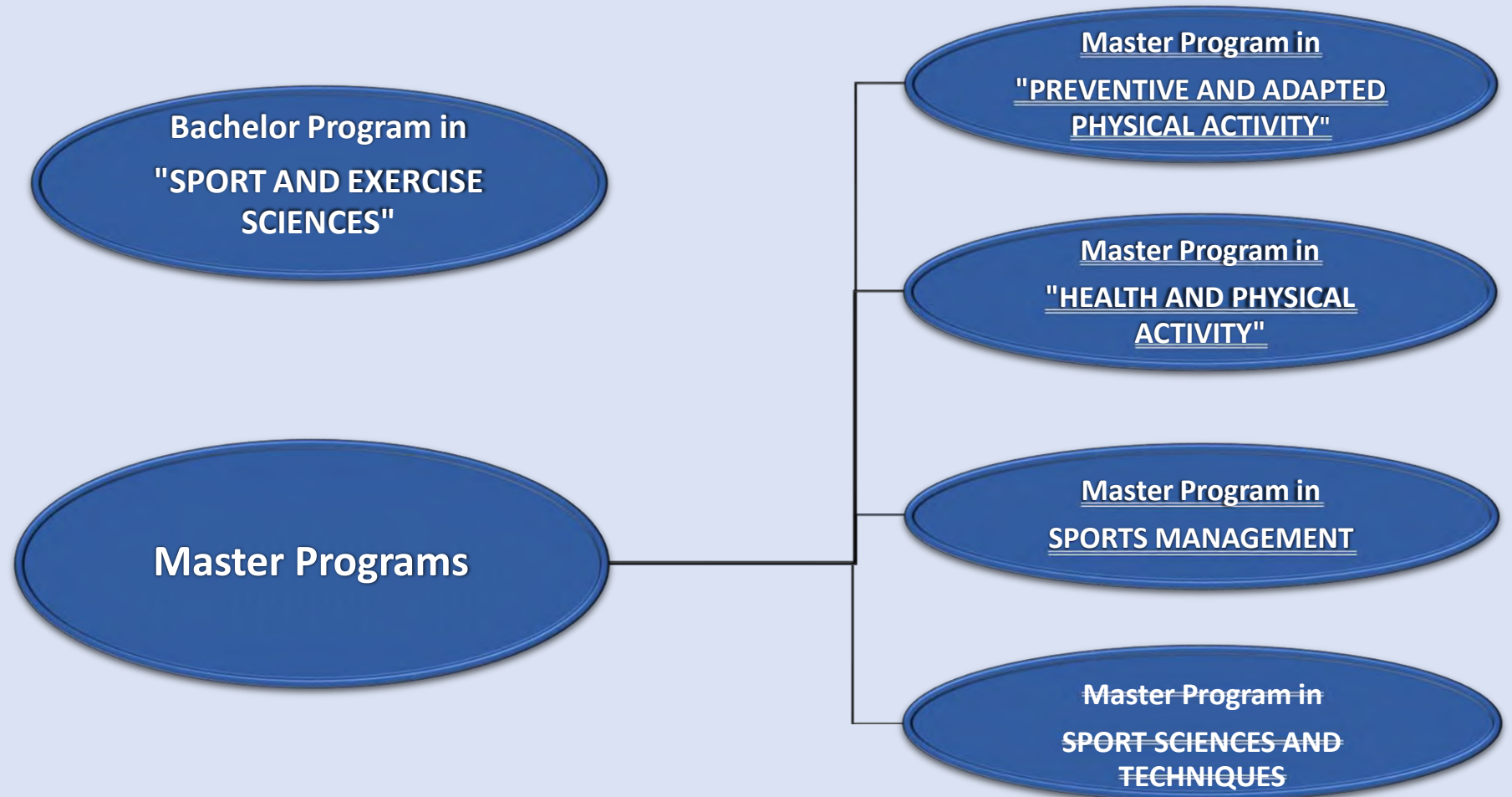
# UNIVERSITY OF ROME “FORO ITALICO”

Piazza Lauro dei Bosis, 15  
00135 Roma.  
[www.uniroma4.it](http://www.uniroma4.it)

## ACADEMIC OFFER



# University Of Rome "Foro Italico"





UNIVERSITÀ DEGLI STUDI DI ROMA "FORO ITALICO"

L22 (Bachelor)

SPORT AND EXERCISE SCIENCES

## L22 (Bachelor) - SPORT AND EXERCISE SCIENCES

### 1<sup>st</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTES</u>
Anatomia Applicata all' Attività Motoria e Antropometria	Applied Anatomy of Motor Activity and Anthropometry	12	Annual	L22-01	
Biologia e Biochimica Generale e Umana	General and Human Biology and Biochemistry	12	Annual	L22-02	
Basi dell' Attività Motoria	Bases of Movement Activities	7	Annual	L22-06	
Giochi Sportivi	Team Sports	7	Annual	L22-09	
Pedagogia Generale e Dello Sport	General and Sport Pedagogy	7	2 <sup>nd</sup> Semester	L22-14	
Lingua Straniera: Inglese 1 (A2/B1 Livello)	English 1: The Language of Sport	4	2 <sup>nd</sup> Semester	L22-22A	No Mark
Lingua Straniera: Spagnolo 1 (A2/B1 Livello)	Spanish 1: The Language of Sport	4	2 <sup>nd</sup> Semester	L22-44	No Mark

### 2<sup>nd</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTES</u>
Fisiologia Umana e dello Sport	Human and Sport Physiology	10	Annual	L22-03	
Attività Motoria per l'età Evolutiva e gli Anziani	Physical Activity for Children, Adolescents and Older Adults	9	Annual	L22-07	
Sport Individuali	Individual Sports	12	Annual	L22-11	
Fondamenti di Economia Aziendale e Gestionale e Istituzione di Diritto Pubblico	Basic Management and Public Law	8	Annual	L22-13A	
Psicologia Generale e Dello Sport	Introductory and Sport Psychology	10	Annual	L22-16	
Ulteriori Conoscenze Linguistiche - Inglese (B1/B2 Livello)	English 2	4	1 <sup>st</sup> Semester	L22-23	No Mark
Ulteriori Conoscenze Linguistiche - Spagnolo (B1/B2 Livello)	Spanish 2	4	1 <sup>st</sup> Semester	L22-45	No Mark

### 3<sup>rd</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTES</u>
Biomeccanica e Traumatologia dell' Attività Motoria	Biomechanics and Traumatology of Motor Activity	10	Annual	L22-04A	
Endocrinologia e Medicina dello Sport	Endocrinology and Sport Medicine	12	Annual	L22-05A	
Attività Motoria Preventiva e Adattata	Preventive and Adapted Physical Activity	8	Annual	L22-08	
Sport Natatori e Prevenzione negli Impianti Sportivi	Swimming Activities and Prevention in Sport Facilities	12	Annual	L22-10	
Didattica e Pedagogia Speciale e psicologia dello Sviluppo e dell' Educazione	Didactic and Special Education, Developmental Psychology and Education	9	Annual	L22-15A	
Teoria e Metodologia dell' Allenamento e Qualità degli Impianti Sportivi	Theory and Methodology of Training and Quality of Sports Facilities	7	1 <sup>st</sup> Semester	L22-12	
Tirocinio (The registration of the subject will be done in June. For further information, write to <a href="mailto:relazioni.internazionali@uniroma4.it">relazioni.internazionali@uniroma4.it</a> )	Internship	5	1 <sup>st</sup> /2 <sup>nd</sup> Semester	L22-17	No Mark



## L22 (Bachelor) - SPORT AND EXERCISE SCIENCES

### 1<sup>st</sup> YEAR

#### Applied Anatomy of Motor Activity and Anthropometry (L22-01)

<u>Faculty Staff:</u>	<u>Franchitto Antonio</u>
<u>Email:</u>	<a href="mailto:antonio.franchitto@uniroma4.it">antonio.franchitto@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

Cells and tissues. General anatomy and anatomical terminology, terms of movement and position. General anatomy of the locomotor system. Anatomy of bones, joints and muscles. Anatomy of the cardiovascular system. The heart. Anatomy of the respiratory system: airways, lung, and alveolus. Anatomy of the digestive system: the gut and the glands. Anatomy of the urinary system. Generalities of genial and endocrine systems. Nervous system and sensory organs.



## General and Human Biology and Biochemistry (L22-02)

<u>Docenti:</u>	Daniela Caporossi Roberta Ceci Ivan Dimauro Guglielmo Duranti Maria Paola Paronetto
<u>Email:</u>	<a href="mailto:mariapaola.paronetto@uniroma4.it">mariapaola.paronetto@uniroma4.it</a> <a href="mailto:daniela.caporossi@uniroma4.it">daniela.caporossi@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

### Content of the course:

Biological propaedeutics: Cell composition and chemistry references: atom and bonds, organic molecules, functional groups; weak interactions: the hydrogen bond; water and solutions: acids, bases and salts; the pH. The biological macromolecules: carbohydrates, lipids, proteins, nucleic acids.

General and human biology: Evolution and the environment. Origin of life and evolution of living beings; prokaryotes and eukaryotes: the five kingdoms; viruses and prions. Human evolution and its biogeographical variability: adaptations to the environment, genetic polymorphisms, populations.

Cell biology, reproduction and genetics: Cell type and its variability. Cytoplasm and organelles; cytoskeleton and structures of movement. Cell membrane and passage of substances. Cellular energetics.

Cell reproduction: cell cycle, mitosis and meiosis. Mendel's laws of Inheritance and principles of classical genetics; genes and chromosomes, sex determination, sex-related traits; mutations. DNA, genetic code and protein synthesis. Principles of human genetics.

Proteins: primary, secondary, tertiary and quaternary structure. Examples of structure-function relationships: Hemoproteins for oxygen transport and reserve; collagen; contractile proteins; receptor proteins

Enzymes and enzymatic catalysis: prosthetic groups, cofactors, coenzymes; concept of active site and specificity; enzyme-substrate complex, enzyme regulation and inhibition.

Bioenergetics and oxidative phosphorylation: free energy variation and coupled reactions; the respiratory chain and oxidative phosphorylation; the chemo-osmotic theory.

Biomolecules involved in metabolic control and regulation processes: vitamins; hormones.

Metabolism of carbohydrates, lipids and proteins: glycolysis and fermentation; citric acid cycle; pentose phosphate pathway; gluconeogenesis; metabolism of fatty acids; ketogenesis; the nitrogen cycle; amino acid metabolism: deamination, transamination; urea cycle.



### Bases of Movement Activities (L22-06)

<u>Faculty Staff:</u>	Federica Fagnani (channel 1-2) Alessandra Di Cagno (channel 3)
<u>Email:</u>	<a href="mailto:federica.fagnani@uniroma4.it">federica.fagnani@uniroma4.it</a> <a href="mailto:alessandra.dicagno@uniroma4.it">alessandra.dicagno@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	7
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

This integrated course includes 2 modules: one in the area of sports sciences and one in physics.

#### MODULE I

Methods and techniques of motor activities

##### ⊕ Theory lessons (I semester)

Movement forms and classifications: reflex, voluntary and automated motility Postures and movement patterns

Motor skills: coordination skills Motor skills: aerobic endurance Motor skills: strength

Motor skills: speed

Motor skills: joint mobility

Motor activity planning and organization Motion control

Ability and success of motor learning

##### ⊕ Practice lessons (II semester)

Technical movements and execution modalities. The human body: nomenclature, axes and plans; aptitudes, attitudes and positions. Movements, gymnastic movements. Positions and exercises of the body. Free-body gymnastic exercises: simple, compound, combined. Exercises with large and small tools.

#### MODULE II

Physics

Review of basic mathematics Kinematics, static and dynamics Average acceleration

Vector quantities Torque

Mass and Weight Force Uniform circular motion

Centripetal and centrifugal acceleration Conservative and dissipative forces Kinetic Energy and Potential Energy

#### **NOTE:**

The final evaluation includes a written test (multiple choice quiz) about the theoretical contents of the course, an oral test about the technique of the exercises, two practical tests (individual exercises with no tools and couple exercises with tools)



### Team Sports (L22-09)

<u>Faculty Staff:</u>	Antonio Tessitore Carlo Minganti
<u>Email:</u>	antonio.tessitore@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	7
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

The course is divided into two modules:

The origins of team sports; Classification of team sports and characteristics of the performance model; Introduction to team sports g training theory; Writing a training program; Play skills and principles of sports training applied to Sports Games; Motor skills training applied to sports games; Introduction to the evaluation and monitoring of sports games; Elements of match analysis;





## General and Sport Pedagogy (L22-14)

<u>Faculty Staff:</u>	Emanuele Isidori
<u>Email:</u>	<a href="mailto:emanuele.isidori@uniroma4.it">emanuele.isidori@uniroma4.it</a> <a href="mailto:alba.naccari@uniroma4.it">alba.naccari@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	7
<u>Term:</u>	2 <sup>nd</sup> Semester

### Content of the course:

The model of body education in the classical paideia

- ⊕ Body education in the Middle Ages, the Renaissance, and the Enlightenment
- ⊕ The birth of the sport in England
- ⊕ Body education in Europe between the nineteenth and twentieth centuries
- ⊕ The characteristics of Olympic education
- ⊕ The Pedagogy of Sport as a Science
- ⊕ The educational agents of sport
- ⊕ Body, motor activity, and bodily expression from an educational perspective
- ⊕ The holistic approach to the person at the different ages of life
- ⊕ New methodologies for education and wellness between movement and dance
- ⊕ Elements of the pedagogical setting for motor and expressive activity



---

**English 1: The Language of Sport (A2/B1 Level) (L22-22A)**

<u>Faculty Staff:</u>	Veronica Bonsignori
<u>Email:</u>	<a href="mailto:veronica.bonsignori@uniroma4.it">veronica.bonsignori@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	4
<u>Term:</u>	2 <sup>nd</sup> Semester

**Content of the course:**

- ✦ Reading: development of reading strategies related to global comprehension and looking for specific information;
- ✦ Listening: development of the ability to listen to simple dialogues and discourse related to everyday life and sport;
- ✦ Oral interaction: development of the skills needed to interact in situations related to personal interests and everyday life;
- ✦ Writing: description and simple narration, short letters and messages;
- ✦ Morphology: basic morphological concepts, word formation of English words in order to understand their function in context.
- ✦ Special emphasis will be given to enhance speaking skills and pronunciation. Online audio/video material will be provided and used based on the students' needs.
- ✦ Specific online paths available through e-tools.

**NOTE:** No Mark



### Spanish 1: The Language of Sport (A2/B1 Level) (L22-44)

<u>Faculty Staff:</u>	Alessandra Fazio
<u>Email:</u>	<a href="mailto:alessandra.fazio@uniroma4.it">alessandra.fazio@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	4
<u>Term:</u>	2 <sup>nd</sup> Semester

#### Content of the course:

**Reading:** development of reading strategies in order to understand the main points and look for specific information in written texts regarding everyday life, job and sport.

**Listening:** development of the ability to understand dialogues and simple speeches about familiar matters and sport.

**Spoken production and interaction:** development of the ability to talk about habitual activities, tell a story, describe experiences and events, express opinions and talk about future plans. The students are able to take part in conversations on topics that are of personal interest or pertinent to everyday life (family, leisure, travels, health, food, education, cinema, television) and sport.

**Grammar:** ability to use the tenses of the indicative, the imperative, the gerund, the verbal periphrasis, the relative and object pronouns, the main prepositions, the indefinite adjectives and pronouns, the comparatives, the superlatives, the verbs SER and ESTAR, the verbs HAY, ESTA/ESTAN correctly.

**NOTE:** No Mark



## L22 (Bachelor) - SPORT AND EXERCISE SCIENCES

### 2nd YEAR

#### Human and Sport Physiology (L22-03)

<u>Faculty Staff:</u>	Francesco Felici Andrea Macaluso Ilenia Bazzucchi
<u>Email:</u>	<a href="mailto:andrea.macaluso@uniroma4.it">andrea.macaluso@uniroma4.it</a> <a href="mailto:francesco.felici@uniroma4.it">francesco.felici@uniroma4.it</a> <a href="mailto:ilenia.bazzucchi@uniroma4.it">ilenia.bazzucchi@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

##### Module 1: Biological control systems

- ⊕ Internal environment and homeostasis.
- ⊕ General characteristics of control systems.
- ⊕ Bioelectricity.
- ⊕ Sarcomere.
- ⊕ Molecular basis of muscle contraction.
- ⊕ Mechanics of muscle contraction
- ⊕ Motor Unit
- ⊕ Voluntary control of muscle contraction
- ⊕ Receptors of the musculoskeletal system.
- ⊕ Reflex control of muscle contraction
- ⊕ Central fatigue.
- ⊕ Neuromuscular responses to training
- ⊕ Ageing and neuromuscular responses to acute and chronic exercise

##### Module 2: Coordinated body functions

- ⊕ Circulation
- ⊕ Cardiac cycle
- ⊕ Cardiac output
- ⊕ Emodynamics: flow, pressure and resistance
- ⊕ Pulmonary circulation; capillary flow
- ⊕ Acute and chronic cardiovascular response to exercise and training
- ⊕ Respiration
- ⊕ Organisation of the respiratory system
- ⊕ Mechanics of respiration
- ⊕ Respiratory exchanges



- ⊕ Control of respiration
- ⊕ Respiratory exchanges during exercise
- ⊕ Regulation of water and sodium body balance
- ⊕ Renal function and water and sodium balance at rest
- ⊕ Renal function and water and sodium balance during exercise
- ⊕ Renal mechanisms of pH regulation at rest and during exercise.

#### Module 3: Muscle energetics

- ⊕ Energy, work and power
- ⊕ Energetics and thermodynamics of muscle contraction.
- ⊕ Anaerobic alactacid energy sources
- ⊕ Lactacid mechanism: anaerobic threshold
- ⊕ Steady state. EPOC.
- ⊕ Maximal aerobic power; efficiency
- ⊕ Metabolic adaptations to training
- ⊕ Peripheral fatigue

#### Module 4: Principles of Nutrition

- ⊕ Nutrients
- ⊕ Water balance
- ⊕ Body composition
- ⊕ Energy balance
- ⊕ Principle of nutrition for health and sport

### **NOTE:**

**Final exam:** Students' proficiency will be evaluated with an oral examination.

The ideal candidate will be able to describe the integrated function of body systems and apparatus, with emphasis on body adjustments to exercise.



## Physical Activity for Children, Adolescents and Older Adults (L22-07)

<u>Faculty Staff:</u>	Roberta Forte – Elisa Grazioli
<u>Email:</u>	<a href="mailto:roberta.forte@uniroma4.it">roberta.forte@uniroma4.it</a> <a href="mailto:elisa.grazioli@uniroma4.it">elisa.grazioli@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

### Content of the course:

- ✦ Fundamental motor skills: different phases of development; exercises to develop body awareness and schema, and fundamental motor skills in pre-school and primary school children; the use of fabulation, body language and imitation.
- ✦ Development of physical and motor fitness, the use of task analysis. Exercises based on multi-sports and multilaterality.
- ✦ Motor learning and the practical implications of prescriptive and heuristic approaches to teaching; how to apply the principles of practice variability: the use of variation for the development of generalized motor programs (GMP); the variation in the control of degree of freedom.
- ✦ Relationship between cognitive functions and life skills; exercises to promote the development of cognitive executive functions and intrapersonal and interpersonal life skills through movements and games.
- ✦ Physical fitness in children; exercises to improve physical fitness with games for children and adolescents. 1 Demographic changes and classification of aging; introduction to the objectives of physical activity for older
- ✦ individuals, how to apply the principles of exercise prescription to this population. Designing "multicomponent" exercise to concurrently stimulate physical and motor fitness, and cognitive functions; the use of different types of equipments;
- ✦ Changes in functional ability with particular reference to mobility and cognition; designing exercises mimicking daily tasks in terms type, intensity and complexity.
- ✦ Main anthropometric, muscular and skeletal age-related changes; exercises to stimulate strength and power with and without overload, the use of multicomponent exercise.
- ✦ Cardiovascular modification, exercises to manipulate intensity, promote cardiovascular fitness, health and the effective performance of daily aerobic exercise.
- ✦ Changes in proprioception, and range of motion, coordination, balance and gait; exercises to improve balance, gait and prevent falls, exercises for the improvement of flexibility



## L22-11 SPORT INDIVIDUALI

<u>Docenti:</u>	Paola Sbriccoli (channel 1) Maria Francesca Piacentini (channel 2-3)
<u>Email:</u>	<a href="mailto:paola.sbriccoli@uniroma4.it">paola.sbriccoli@uniroma4.it</a> <a href="mailto:mariafrancesca.piacentini@uniroma4.it">mariafrancesca.piacentini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

### Content of the course:

1)The theoretical part of the course will unravel the technical, tactical, historical and physiological characteristics of the main Olympic individual sports. From track and field to triathlon, pentathlon and biathlon, to endurance and ultraendurance disciplines such as cycling, to winter sports such as long and short track, and skiing, to weight lifting, gymnastics and combat sports. The main focus will be to deliver training indications for young athletes and master athletes.

### 2)Practical part

- ⊕ Technique, didactics and correction of the main errors for rhythmic gymnastics
- ⊕ Technique, didactics and correction of the main errors for gymnastics
- ⊕ Technique, didactics and correction of the main errors for weight lifting
- ⊕ Technique, didactics and correction of the main errors for track and field
- ⊕ Technique, didactics and correction of the main errors for karate

### **NOTE:**

#### **Assessing the learning outcomes:**

Ongoing (in itinere) evaluations to assess the learning outcomes. The following evaluations will be provided:

Written test with multiple answers regarding aspects on theory, methodology and teaching of individual sports

- ⊕ Practical exams for module of track and field
- ⊕ Practical exams for module of Artistic Gymnastics
- ⊕ Practical exams for module of Rhythmic Gymnastics
- ⊕ Practical exams for module of Combat sports

Those students who will not have carried out the “in itinere” evaluations or who will have poor (insufficient) evaluations could repeat the evaluations a second time, during the exam sessions. The final evaluation will then be based on the average of all the evaluations obtained in the following tests: written test, track and field module, rhythmic artistic gymnastics module, artistic gymnastics module, combat sport module.



### Basic Management and Public Law (L22-13A)

<u>Faculty Staff:</u>	Alberto Frau Carmine De Angelis
<u>Email:</u>	alberto.frau@uniroma4.it c.deangelis1@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	8
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

Knowledge and understanding:

- ⊕ of the fundamental notions of general theory of law;
- ⊕ of the Italian Form of Government;
- ⊕ of the system and of the hierarchy of sources in public law;
- ⊕ of the general theory on constitutional rights and freedoms;
- ⊕ the constitutional concept of the right to health referred to Article 32 and its constitutional interpretations.





### Introductory and Sport Psychology (L22-16)

<u>Docenti:</u>	Alfredo Brancucci Federico Di Russo Luca Mallia Sabrina Pitzalis Arnaldo Zelli
<u>Email:</u>	<a href="mailto:arnaldo.zelli@uniroma4.it">arnaldo.zelli@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

##### General Psychology Module

Through this course, the student should be able to acquire the basic knowledge with the main areas of inquiry of psychology and with its main theoretical models concerning the relations between human behavior and mental processes. In particular, the student will be able to understand the following themes of study:

- Common sense and scientific psychology
- Research methods in psychology
- Perception
- Learning and memory
- Motivation and Emotion
- Personality and theories of personality functioning
- Social Behavior: Groups and social interactions

##### Sport Psychology Module

- Introduction to the nervous system
- Perception, attention, executive functions, and imagery for action and sports control.
- The motor brain.
- Learning and brain: skills and capacities cognitive-motor and memory features.
- Expert motor brains: How does the athlete's brain works?
- The motivations: the reasons for human actions and personality underpinning sports behavior
- The groups: the group dynamics in sport.
- Emotions and sport: athletes and audience emotions.
- Doping: psychological features.
- Eating disorders.
- Gender differences in sports practice.
- Mental training: Main techniques.
- Sleep and sport.



**NOTE:** Evaluation of students' learning outcomes will be based on a multiple-choice exam concerning the topics and subjects covered during the teaching module, with a attention to students' knowledge of methodological issues, as well as of basic mental processes and personality organization.

**Module 2:**

- ⊕ Perception and attention for action and sport control.
- ⊕ The motor brain.
- ⊕ Learning and brain: skills and capacities cognitive-motor and memory features.
- ⊕ Expert motor brains: How the athlete brain works?
- ⊕ The motivations: the reasons of human actions; to decide, to want, to succeed.
- ⊕ Personality studies on top-level athletes.
- ⊕ The groups: the group dynamics in sport.
- ⊕ Emotions and sport: athletes and audience emotions.
- ⊕ Gender differences in sport practice.
- ⊕ Doping: psychological features.
- ⊕ Eating disorders.
- ⊕ Commitment and optimism as keys to success.
- ⊕ Increase the concentration to cope the competition.



## English 2 (L22-23)

<u>Faculty Staff:</u>	Michela Menghini
<u>Email:</u>	michela.menghini@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	4
<u>Term:</u>	1 <sup>st</sup> Semester

### Content of the course:

- ⊕ Reading: analysis and interpretation of academic texts and articles.
- ⊕ Listening: development of the ability to listen to extended spoken discourse related to sport and familiar topics.
- ⊕ Oral interaction: development of the skills needed to interact with native speakers in familiar or professional situations; the ability to present linear descriptions of specific themes and express a point of view.

**NOTE:** No Mark



**Spanish 2: (B1/B2 Level)**  
**(L22-45)**

<u>Faculty Staff:</u>	Alessandra Fazio
<u>Email:</u>	alessandra.fazio@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	4
<u>Term:</u>	1 <sup>st</sup> Semester

**Content of the course:**

Reading: comprehension and analysis of articles and informative texts and ability to understand the author's attitude and viewpoint.

Listening: comprehension of quite long and complex oral texts as long as the topic is familiar enough.

Spoken production and interaction: ability to talk in a quite detailed way of specific topics and giving reasons in support of a particular point of view; interact with native speakers in familiar or professional situations.

Grammar: ability to use the tenses of the indicative, the tenses of the subjunctive, the verbal periphrasis, the prepositions, the verbs SER and ESTAR, the impersonal constructions, the passive form, the reported speech, the subordinate clauses correctly.

**NOTE:** No Mark

## Biomechanics and Traumatology of Motor Activity (L22-04A)

<u>Docenti:</u>	Elena Bergamini Valentina Camomilla Fabrizio Margheritini Giuseppe Vannozzi
<u>Email:</u>	<a href="mailto:elena.bergamini@uniroma4.it">elena.bergamini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Content of the course

#### BIOMECHANICS

1.Math basics Scalars and vectors Vector operations Pythagorean theorem  
Trigonometry and right triangles resolution

2.Measurement and estimation of physical quantities Measurement and estimation  
International System of units (IS) Base units in the IS and derived units  
Errors and types of measurement/estimation errors Error assessment  
Charateristics of measurement instruments

3.Human body Center of Mass  
Center of Mass definition and properties  
How to estimate the position of human body segments center of mass How to estimate the position of the whole human body center of mass

4.Linear and angular kinematics  
Position vector, velocity and acceleration (linear and angular) 1-D uniform motion  
1-D uniformly accelerated motion Free fall and 2-D projectile motion Circular motion

5.Linear kinetics (of a particle)  
Definition of dynamics as well as of inverse and direct dynamics Definition of force, mass and inertia  
First, second and third Newton's laws of motion Superposition principle  
Key forces in biomechanics: gravitational, elastic, friction force, muscular force, reaction force Definition of force impulse  
Definition of linear momentum  
Law of conservation of linear momentum

6.Angular kinetics (of a rigid body)  
Definition of moment of force (torque) and of moment of inertia  
Diagram of a rigid body in pure rotation Angular momentum  
Law of conservation of angular momentum Estimation of muscular (internal) forces

7. Ergometry  
Definition of energy, mechanical work and mechanical power Mechanical work as energy transfer



The concept of heat Definition of kinetic energy Kinetic energy theorem  
Definition of gravitational and elastic potential energy variation Total mechanical energy  
Work of non-conservative forces (friction and muscular forces)

## TRAUMATOLOGY

1. Inflammation biological processes

2. Bone

Anatomy and histology of bone Bone remodelling  
Mechanical properties  
Conditions of bone mineral density

3. Cartilage Structure

Mechanical Properties

4. Ligaments Structure

Mechanical Properties

Ligament injuries of the lower limb and rehabilitation principles

Knee instability

Patellar instability

Ankle instability

Ligament injuries of the upper limb and rehabilitation principles

Shoulder injury

Elbow injury

5. Tendon

Mechanical properties

Tendon injuries of the lower limb and rehabilitation principles

Patellar tendon injuries

Achilles tendon injuries

Tendon injuries of the upper limb and rehabilitation principles

Shoulder impingement syndrome

Rotator cuff disease

Elbow tendinopathy

6. Muscle

Mechanical properties

Clinical applications of Isokinetics Muscle disease

Clinical movement analysis

Quantitative assessment of motor performance Quantitative assessment of motor capacity

### **NOTE:**

#### **Learning assessment method:**

The exam consists in a written test made of twenty multiple-choice questions (four answers one of which is correct) and four open questions. The former questions aim at assessing knowledge of the basic principles of the subject matter. The latter questions, which may entail the solution of numerical problems, aim at assessing the candidate's capacity to provide an answer to planning and/or operative questions.



## Endocrinology and Sport Medicine (L22-05A)

<u>Docenti:</u>	Paolo Borrione Luigi Di Luigi Chiara Fossati Attilio Parisi Paolo Sgrò
<u>Email:</u>	<a href="mailto:chiara.fossati@uniroma4.it">chiara.fossati@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

### Content of the course:

#### **Elements of endocrinology**

- ⊕ internal secretion glands and hormones: definition, actions, feed-back, function, endocrine axis.
- ⊕ Neuroendocrine system, Hypothalamus, Hypophysis, Thyroid, Parathyroids, Pancreas, Adrenal glands, Testicles, Ovaries.
- ⊕ Endocrine biorhythm
- ⊕ Hormones and behavior
- ⊕ Human reproduction and sexuality
- ⊕ Endocrinology in the elderly
- ⊕ Notes of most frequent endocrine pathologies

#### **Auxologic endocrinology**

- ⊕ Notes of auxology and auxologic methods
- ⊕ Growth and development
- ⊕ Endocrinology in puberty age
- ⊕ Growth curves
- ⊕ Growth and puberty alterations

#### **Endocrinology applied to physical activity**

- ⊕ Stress, Homeostasis and allostatic injuries
- ⊕ Endocrine mediator of biologic adaptation in response to the stress
- ⊕ Experimental method for studying endocrine response to acute physical activity
- ⊕ Factors which cause endocrine response to acute physical activity
- ⊕ Neuro-endocrinology of physical activities
- ⊕ Physical activities and endocrine system: GH, IGF1, Hypothalamus-Hypophysis-Thyroid axis, insulin and glucagon, Hypothalamus-Hypophysis-Adrenal gland axis, catecholamines, Hypothalamus-Hypophysis-Testicles, Hypothalamus-Hypophysis-Ovaries.
- ⊕ Physical activities and endocrine system in different ages
- ⊕ Chronoendocrinology and Physical activities
- ⊕ Overtraining endocrinology
- ⊕ Physical exercise and physiopathology of endocrine



## Basics in Sports Medicine

- ⊕ Sport medicine organization in Italy and the world
- ⊕ Health legislation in sport activities
- ⊕ Physiological functional assessment in sports medicine
- ⊕ Sport activities classification
- ⊕ Physiological functional assessment in sports medicine
- ⊕ Physiopathology and medical aspects in sport activities
- ⊕ Cardiovascular apparatus and physical activity: cardiovascular functional adaptations to physical activities, cardiovascular diseases and sport, sudden cardiac death in athletes
- ⊕ Semeiotics, medical examinations in sport medicine
- ⊕ Respiratory functional adaptations to physical activities
- ⊕ Pulmonary disease and sport: asthma and pneumothorax
- ⊕ Methods of evaluation for respiratory system
- ⊕ Nutrition and supplementation in sport activities
- ⊕ Sport medicine in different ages and gender (child, elderly, female athletes)
- ⊕ Management of emergencies in sports medicine: first aid, cardiopulmonary resuscitation
- ⊕ Doping
- ⊕ Notes, history and basics on doping and its prevention
- ⊕ Legislation: Therapeutic use exemptions
- ⊕ Prohibited substances: classification and side effects
- ⊕ Prohibited methods
- ⊕ Prohibited substances in some sports



## Preventive and Adapted Physical Activity(L22-08)

<u>Docenti:</u>	Massimo Sacchetti Attilio Parisi
<u>Email:</u>	massimo.sacchetti@uniroma4.it attilio.parisi@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	8
<u>Term:</u>	<u>Annual</u>

### Content of the course:

#### ⊕ Module I

##### Theoretical part

Preventive and adapted physical activity: general principles. Risk stratification.

Hypokinetic disease.

Morpho-functional evaluation.

Morphological alterations: the role of adapted physical activity. Paramorphisms and dysmorphisms.

The spine: functional evaluation and treatment of the main morphological alterations on the frontal and sagittal planes.

Proprioceptive dysfunctions and role of physical activity. Physical activity and metabolic diseases.

Physical activity and cardiovascular diseases. Physical activity and osteoporosis.

Physical activity and neurodegenerative pathologies. Physical activity and cancer.

Practical application Posture.

Kinetic chains.

Prevention and treatment of pathologies of the foot, knee, pelvis, trunk. Morpho-functional evaluation.

Adapted physical activity in scoliosis and scoliotic attitude Adapted physical activity in hyper-lordosis and low back pain. Mezier and Suchard methods.

#### ⊕ Module II

Role of physical activity for health and fitness. Evolution of group exercise: from fitness to wellness. Physical fitness components. Exercise and cardiorespiratory fitness (theory and practice). Exercise and muscular function (theory and practice). Functional training (theory and practice). Exercise and body composition.



## Swimming Activities and Prevention in Sport Facilities (L22-10)

<u>Faculty Staff:</u>	Sabrina Demarie Saverio Giampaoli Giusy Lofrano Vincenzo Romano Spica Federica Valeriani
<u>Email:</u>	vincenzo.romanospica@uniroma4.it sabrina.demarie@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

### Content of the course:

#### ⊕ Module Swimming sports:

Peculiarities of swimming activities and main physical laws governing human body in the water, drag and fluid dynamics laws. Statics and dynamics analyzers, motor schemes on land and in water. Learning of swimming skills, educational and methodological principles of water familiarization, floating and slipping, general aspects of swimming teaching, swimming school organization for age groups. Technical, educational and methodological principles of the four swimming strokes and perfecting swimming techniques.

#### ⊕ Module Prevention in sport facilities:

Fundamentals of hygiene, preventive medicine and public health in sport activities. Swimming pools and recreational water. epidemiological methodology. Elements of demography and health statistics. Observational and experimental epidemiology; the concept of risk. Classification, methods and timing of prevention: goals and instruments. The health-illness continuum and disease models. Elements of environmental toxicology. Pollution.

Open and confined environments. Regulations for environmental protection and occupational health; hygiene implications for physical activities environments. Lifestyles. Elements of food hygiene. The chemical, physical, biological risk. Exposure to toxic and carcinogenic substances. VOCs. EMF, UV, microclimate, noise. Classification of microorganisms. Basics of immunology, inflammation. The microbiological indicators in swimming pool water.

Natural history of disease. Infectious diseases: infectious risk in the pool and tools for prevention. The epidemiological triangle. Indices of progression of infectious diseases. The mode of transmission. Vehicle and vector. Zoonoses. Athlete's foot, the plantar warts, hepatitis, tetanus, Legionnaires' disease, COVID-19, pediculosis, scabies, exanthematous diseases, sexually transmitted diseases. The prevention of infectious diseases: environment and person. Immunoprophylaxis, chemio/antibioticprophylaxis, disinfection, sterilization, disinfection in sports. The accordo Stato Regioni for public health issues in swimming facilities. The chronic diseases: the network of risk factors. Epidemiology and etiology of cancer, cardiovascular diseases, metabolic diseases, pulmonary. Atopy and swimming sports. The prevention of multifactorial diseases. Screening. Avoidable morbidity and mortality. Injuries, accidents, drug abuse, hospital-acquired infections. Health by age. Hydrology, water cures. Travel and health risks. The context of health services in the area.

### **NOTE:**

The lectures will be accompanied by optional tutoring activities in small groups and self-study online.



## Didactic and Special Education, Developmental Psychology and Education (L22-15A)

<u>Faculty Staff:</u>	Alfredo Brancucci Angela Magnanini Luca Mallia
<u>Email:</u>	<a href="mailto:angela.magnanini@uniroma4.it">angela.magnanini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

### Content of the course:

#### Module 1

The course will be divided into a number of thematic nodes within which the salient topics of the course will be addressed:

- 1) Principles, foundations, history and theories of Special Pedagogy: Diversity; Education-Training; Person-Individual-Society; Adaptation-Integration-Inclusion.
- 2) Principles, foundations, history and theories of Didactics: Mediators; Formative design; Strategies and methodologies; Curriculum;
- 3) Principles, fundamentals, history and theories of motor and sports activities: Bodily expressiveness; Inclusive games; Inclusive sports; Strategies and methodologies; Evaluation;
- 4) Thematic insights: Educational Relationship; Cooperative Learning; Accessibility.

#### Module 2

Lessons will focus on the main psychological perspectives investigating the developmental processes in humans. Specifically, the following general themes will be deepened:

- ⊕ The concept of development and the main methods of investigation in developmental psychology
- ⊕ Developmental psychobiology
- ⊕ Perceptual development
- ⊕ Cognitive development
- ⊕ The development of emotional and social skills
- ⊕ Adolescence: physical, cultural and psychological changes

### **NOTE:**

#### Learning evaluation

The examination will consist of a multiple-choice test (written test) with some questions open ended and of an oral examination. Both sessions will concern on the whole program of the course.



## Teoria e Metodologia dell'Allenamento e Qualità degli Impianti Sportivi (L22-12)

<u>Docente:</u>	Alessandra Di Cagno (canale 1) Maria Francesca Piacentini (canale 2-3)
<u>Email:</u>	<a href="mailto:alessandra.dicagno@uniroma4.it">alessandra.dicagno@uniroma4.it</a> <a href="mailto:mariafrancesca.piacentini@uniroma4.it">mariafrancesca.piacentini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	7
<u>Periodo Didattico:</u>	<u>2° Semestre</u>

### Contenuti del corso:

- ⊕ Definizioni e principi dell'allenamento sportivo
- ⊕ Concetto di allenabilità
- ⊕ Metodi e i mezzi per l'allenamento sportivo
- ⊕ Principi per l'elaborazione di programmi e pianificazione dell'allenamento durante una stagione sportiva
- ⊕ Periodizzazione tradizionale (Basic Strategy)
- ⊕ Periodizzazione a Blocchi
- ⊕ Allenamento giovanile
- ⊕ Strumentazioni tecnologiche a supporto eper il controllo dell'allenamento
- ⊕ Corretti principi di allenamento della forza, della resistenza, della flessibilità della rapidità e della agility
- ⊕ Conoscenze dei Requisiti di funzionalità: corretto dimensionamento, organizzazione distributiva, accessibilità, comfort ambientale, sicurezza degli impianti sportivi e loro regolamentazione



## Theory and Methodology of Training and Quality of Sports Facilities (L22-12)

<u>Docente:</u>	Alessandra Di Cagno (channel 1) Maria Francesca Piacentini (channel 2-3)
<u>Email:</u>	<a href="mailto:alessandra.dicagno@uniroma4.it">alessandra.dicagno@uniroma4.it</a> <a href="mailto:mariafrancesca.piacentini@uniroma4.it">mariafrancesca.piacentini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	7
<u>Term:</u>	2 <sup>nd</sup> Semester

### Content of the course:

- ⊕ Definitions and principles of sports training
- ⊕ Concept of individualized training
- ⊕ Methods and means for sports training
- ⊕ Principles for developing training programs and planning during a sports season
- ⊕ Traditional Periodization (Basic Strategy)
- ⊕ Block Periodization
- ⊕ Youth training
- ⊕ Technological equipment to support and control training
- ⊕ Basic knowledge in strength, endurance, speed and agility training
- ⊕ Functionality requirements: correct sizing, distribution, accessibility, environmental comfort, safety.  
Regulations on sports facilities

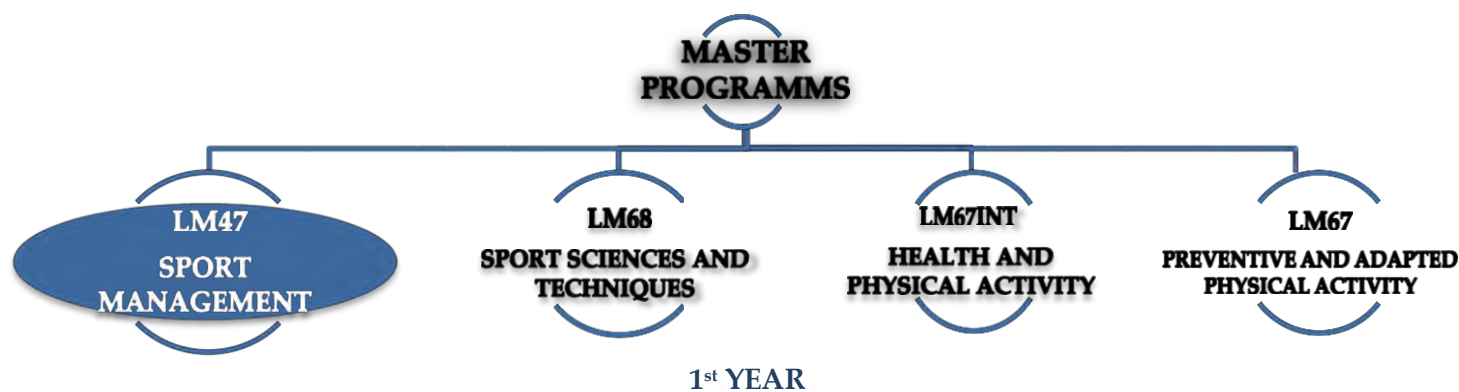




UNIVERSITÀ DEGLI STUDI DI ROMA "FORO ITALICO"

LM47 (Master)

SPORT MANAGEMENT



<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTES</u>
Economia Aziendale	Business Administration	19	Annual	LM47-02C	
Comunicazione, Media e Tutela Sanitaria nelle Attività Motorie e Sportive	Communication, Media and Health protection in Physical Activity	9	1 <sup>st</sup> Semester	LM47-05B	
Teoria, Regolamentazione e Organizzazione delle Attività Motorie e Sportive	Theory and Organization in Sport and Physical Activity	8	1 <sup>st</sup> Semester	LM47-06	
Diritto dell'Ordinamento Sportivo	Sport Law	6	1 <sup>st</sup> Semester	LM47-01	
Psicologia dell'Organizzazione	Organizational Psychology	6	2 <sup>nd</sup> Semester	LM47-04	
Lingua Straniera	Business English	6	2 <sup>nd</sup> Semester	LM47-10	No Mark

**2<sup>nd</sup> YEAR**

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTES</u>
Strategie e Marketing nel Settore dello Sport	Strategy and Marketing in the Sport Sector	15	Annual	LM47-12A	CV1 <sup>1</sup>
Giustizia Sportiva e Giurisdizione Statale	Sport Justice and State Jurisdiction	10	Annual	LM47-20	CV2 <sup>1</sup>
Diritto Commerciale e Tributario dello Sport	Taxation and Business Law	10	Annual	LM47-21	CV2 <sup>1</sup>
Sociologia e Formazione nelle Organizzazioni Sportive	Sociology and Learning in Sport Organisation	9	Annual	LM47-11A	CV1 <sup>1</sup>
Diritto Amministrativo	Administrative Law	8	1 <sup>st</sup> Semester	LM47-16	CV1/2 <sup>1</sup>
Diritto Privato dello Sport	Sport And Private Law	6	1 <sup>st</sup> Semester	LM47-22	CV1/2 <sup>1</sup>
Marketing dello Sport	Sport Marketing	8	1 <sup>nd</sup> Semester	LM47-19	CV2 <sup>1</sup>
Diritto dell'Informazione e della Comunicazione	Information and Communication Law	6	2 <sup>nd</sup> Semester	LM47-17	CV1 <sup>1</sup>
Diritto del Lavoro	Labor Law	6	2 <sup>nd</sup> Semester	LM47-18	CV2 <sup>1</sup>
Igiene, Sicurezza e Realizzazione degli Impianti Sportivi	Hygiene and Safety in Sport Facilities	4	2 <sup>nd</sup> Semester	LM47-03A	CV1 <sup>1</sup>
Tirocinio	Internship	4	2 <sup>nd</sup> Semester	LM47-07	No Mark

<sup>1</sup> Curriculum 1/ CV 1: Management

<sup>1</sup> Curriculum 2/ CV 2: Legal Administrative Management

---

### Business Administration (LM47-02C)

<u>Faculty Staff:</u>	Cristiana Buscarini Alberto Frau
<u>Email:</u>	cristiana.buscarini@gmail.com alberto.frau@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	19
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

- ⊕ The economic and financial balance sheet.
- ⊕ Study of balance sheet ratios.
- ⊕ The historical evolution of the entrepreneur: from the first contributions to the current context.
- ⊕ Sustainability as a new managerial paradigm: the ISO 26000; the Donut Economy; the Sustainable Development Goals; and sustainability in the sports sector.
- ⊕ Governance tools: Business Model Canvas, AA1000SES and stakeholder engagement, materiality analysis, sustainability performance matrix, and social/sustainability report.
- ⊕ The corporate strategy formulation throughout the SWOT analysis: the corporate strategy decision-making matrix.
- ⊕ Amateur sports associations: constitution; organizational types (ASD, SSD); institutional and commercial activity, tax regimes, accounting records; management aspects of an ASD / SSD.



---

### Communication, Media and Health Protection in Physical Activity (LM47-05B)

<u>Faculty Staff:</u>	Fabio Pigozzi Federica Fagnani
<u>Email:</u>	fabio.pigozzi@uniroma4.it federica.fagnani@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	1 <sup>st</sup> Semester

#### Content of the course

The course is subdivided into three modules.

##### MODULE I - COMMUNICATION AND MEDIA

The educational objectives are those inherent to communication in the world of sport, specifically those of making students acquire an in-depth knowledge of the development of the mass media, of the communication of sports bodies and organizations, in particular of the functions of the Press Office and its tools of work, of how to organize international events as well as an in-depth knowledge of the history of sport and sports journalism.

##### MODULE II - MARKETING AND COMMUNICATION

The students will acquire a basic knowledge of all aspects of the marketing mix and communication of sport.

##### MODULE III - HEALTH PROTECTION

The students will acquire knowledge of intervention policies and training / information projects on correct lifestyles, with particular reference to doping; they will have expertise in the field of doping from a regulatory, organizational and health point of view.

---

**Theory and Organization in Sport and Physical Activity (LM47-06)**

<u>Faculty Staff:</u>	Laura Capranica
<u>Email:</u>	<a href="mailto:laura.capranica@uniroma4.it">laura.capranica@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	8
<u>Term:</u>	1 <sup>st</sup> Semester

**Content of the course:**

1. European Sports policies for national and international sports organization.
2. Organization and management of services for motor and sports activities.
3. Organization, management and control of national and international sporting events.

**NOTE:**

**Assessing the learning outcomes:**

The method of assessment of learning outcomes includes tests in itinerary through classroom “exercises of situation simulation”, from time to time discussed with the teacher, highlighting the contribution of each student to the collective work, and an oral individual final test.

Students who have not done the "tests" in itinerary or have reported inadequate assessment may be assessed by oral examination about the main objectives of exercises and lessons of the course.

---

**Organizational Psychology (LM47-04)**

<b><u>Email:</u></b>	arnaldo.zelli@uniroma4.it
----------------------	---------------------------

<b><u>Language:</u></b>	Italian
-------------------------	---------

<b><u>ECTS:</u></b>	6
---------------------	---

<b><u>Term:</u></b>	2 <sup>nd</sup> Semester
---------------------	--------------------------

---

**Content of the course:**

During the course, the student will be presented with topics, principles and research characterizing organizational psychology, that is, the study and analysis of individual and group behaviors within organizations.

In particular, the course will offer an opportunity to discuss the guiding principles for theories and methodologies that have characterized research in organizational psychology, as well as methods of intervention designed to resolve or ameliorate organizational problems affecting individuals.

The teaching contents are distributed across five thematic modules that will be presented throughout the lectures and have a number of lecture hours that is quite similar for each thematic module.

---

Sport Law (LM47-01)

<u>Faculty Staff:</u>	Colarusso Marco
<u>Email:</u>	<a href="mailto:marco.colarusso@uniroma4.it">marco.colarusso@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	6
<u>Term:</u>	1 <sup>st</sup> Semester

Content of the course:

- ⊕ General principles of private law.
- ⊕ Torts in sports.
- ⊕ Sports Justice.
- ⊕ Sports clubs.
- ⊕ Membership.
- ⊕ Sponsoring, advertising and merchandising in sport.
- ⊕ Doping. Faculty Staff: Arnaldo Zelli

---

**Business English (LM47-10)**

<u>Faculty Staff:</u>	Alessandra Fazio
<u>Email:</u>	alessandra.fazio@uniroma4.it
<u>Language:</u>	English
<u>ECTS:</u>	6
<u>Term:</u>	2 <sup>nd</sup> Semester

**Content of the course**

The course consists of 12 weeks and 4-hour class per week. Lessons will focus on specific aspects of specialised communication in English ESP for:

1. professional purposes to improve communication in English for employability and to achieve professional goals.
2. professional objectives by mean of implementation of practical projects using English to complete a real-life task through interaction and group work in person or online.

Key concepts of specialised management / business language applied to sport, elements and techniques of argumentation and persuasion, as well as English for employability will be introduced through interviews, mini-lectures or debates with sports management professionals.

Class work will provide guidance on specific business buzzwords through active reading, discussions, debates, and comprehension tests. Course content may vary.

**NOTE:** No Mark

## LM47 (Master) - SPORT MANAGEMENT

### SPORT JUSTICE AND STATE JURISDICTION (LM47-20)

<u>Faculty Staff:</u>	Piero Sandulli
<u>Email:</u>	
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

#### Content of the course

The course intends to offer to students the acquisition of comparative capacity in the field of protection between Italian legislation, starting from the Constitutional Charter and the rules of sports justice within CONI and the individual Federations. Particular attention will be devoted to the analysis of anti-doping legislation and to that relating to the protection of offenses, both from a criminal point of view and from the point of view of sports justice.

## STRATEGY AND MARKETING IN THE SPORT SECTOR (LM47-12A)

<u>Faculty Staff:</u>	Francesca Vicentini Giuseppe Vannozzi
<u>Email:</u>	giuseppe.vannozzi@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	15
<u>Term:</u>	<u>Annual</u>

### Content of the course:

The first module -strategy- is structured in three main sections:

The first section aims at analyzing sport firms along the strategic management process. In the first section, students will understand the strategic analysis through the definition of goals and objectives, the analysis of the external environment and the internal environment of the firm.

In the second section, the business level strategic formulation (cost leadership, Focus, and differentiation) will be analyzed. Finally, the course will deepen the understanding of corporate strategies can contribute to the implementation of the strategic management process.

At the end of the course, students will acquire the ability to integrate different dimensions of a problem and to apply both logic and judgment in analyzing situations. Throughout the strategy module, students develop the analysis of case studies relating to prominent sport companies facing the challenge of competitive markets.

The second module (Information and Communication Technologies - ICT) aims to provide students with basic theoretical and operational knowledge about the available solutions to support business strategy as well as the management activity of the sports manager. Starting from basic computer science knowledge and integrating personal and professional experience in using technologies, the student will be accompanied on a path aimed at expanding their technical and operational knowledge up to the analysis of integrated information systems in business and sport management. The main topics covered will concern: the value of information; connecting computers and networks; computer-mediated communication; content management systems, databases; data warehouses and data mining; information systems. At the end of the module the student will be able to integrate the knowledge acquired in the ICT field at the service of business management and problem solving activities in the business and / or sports field.

The third module (Marketing Strategy) aims to critically assess the role of strategic marketing in sport organisations (NSFs, sports associations, professional sports clubs). Students will consider what marketing strategy means and look at a range of examples across sport sectors.

Core areas to be investigated will be: the key issues in the development and implementation of marketing strategies in the sport sector; the relationship between marketing strategies and operational marketing; implement and evaluate marketing strategies through the use of marketing concepts such as positioning, targeting, and segmentation; implement the decision-making analysis about product/service, pricing, distribution, promotion; draw the structure of a marketing plan related to the sport organizations. At the end of course, participants will acquire a critical and professional perspective that is demonstrably informed by knowledge and expertise in issues focused on sport marketing.

---

### SPORT SYSTEM LAW (LM47-17)

<u>Faculty Staff:</u>	Francesco Cardarelli
<u>Email:</u>	francesco.cardarelli@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	6
<u>Term:</u>	<u>2° Semester</u>

### Content of the course

- ⊕ The legal concept of sport. The constituent elements of the sports system. The principle of autonomy of the sports system in the light of legislative decree 220/2003. Autonomy, self-determination, legal irrelevance, technical justice, disciplinary scope. Constitutional Court decisions 49/2011 and 160/2019. Purely sport rules. The principle of fair play.
- ⊕ Constitutional and European principles. Article 11? of the Constitution and its interpretation and application.
- ⊕ The principles of European Union law. Sport in the rulings of the Court of Justice. Sport and competition. Sport and social value. Article 165 TFEU.
- ⊕ The international sports system. The IOC and the CAS. Analysis of the Olympic Charter. Constitution and functioning of the IOC. The powers over international federations and other subjects of the sporting order. The powers and prerogatives on the celebration of the Olympic Games.
- ⊕ The national sports system. Legislative Decree 242/1999. CONI and its Statute. Legal nature and functions. National Federations and other subjects of the sports system. CONI's powers. The general principles adopted by CONI. Sport and health spa. Law 145/2018. The attempts at reform (Law 86/2019). The d.l. 5/2021.
- ⊕ Hints on sport justice and the sport code of conduct. The bodies established at CONI. The justice bodies of the Federations.
- ⊕ Regulated professions. Sports agents. Legislative Decree 37/2021 and implementing regulations.
- ⊕ The international and national discipline of doping. Law 672/2000. CONI's anti-doping discipline. Anti-doping justice.
- ⊕ The discipline of broadcasting rights. Legislative Decree 8/2009 and subsequent amendments.
- ⊕ 10. Sports facilities: national and European regulations.



**Taxation and Business Law (LM47-21)**

<u>Faculty Staff:</u>	Laura Letizia
<u>Email:</u>	
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Sociology and Learning in Sport Organization (LM47-11A)

<u>Faculty Staff:</u>	Francesca Romana Lenzi G. Alba Anna Naccari
<u>Email:</u>	<a href="mailto:francescaromana.lenzi@uniroma4.it">francescaromana.lenzi@uniroma4.it</a> <a href="mailto:alba.naccari@uniroma4.it">alba.naccari@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

The integrated course is divided into 2 modules: one in the pedagogical field and one in the sociological field

MODULE I: Lifelong education in sports organizations. The module aims to address the following contents:

Relationship between educational training, sport and well-being. Body and sport in the different life cycles.

Sports organizations and lifelong education. Pedagogical innovation in sports organizations.

Management, educational training and democratic participation.

Educational planning in sports organizations.

MODULE II: General sociology and sport

The module aims to frame sport and the phenomena associated with it (communication, management, socialization, integration) as a tool for community structuring and object of sociological observation. Basic sociology will offer the theoretical and methodological foundations to observe and understand intervention strategies, indicate the methods to apply them appropriately and evaluate their effectiveness, inserting them in the continuum of conscious observation on the basis of the research of the scientific community

### Administrative Law (LM47-16)

<u>Faculty Staff:</u>	Gennaro Terracciano
<u>Email:</u>	gennaro.terracciano@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	8
<u>Term:</u>	1 <sup>st</sup> Semester

#### Content of the course:

The program is organized in 10 meetings of 4 hours. In order to integrate basic knowledge relevant to the topics covered by the course, 2 consecutive meetings concerning an introduction to administrative law will be held.

The main contents of the program involve the drafting techniques of administrative acts, the public procurement system and the management of public goods and services, with particular reference to the concession of public sports facilities.

The program also includes insights about the administrative system and the judicial system.

Corporate Sport Law /Sport and Private Law (LM47-22)

<u>Faculty Staff:</u>	Maria Pia Pignalosa
<u>Email:</u>	mariapia.pignalosa@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	6
<u>Term:</u>	1 <sup>st</sup> Semester

Content of the course

The course aims to provide the general principles of private law on issues affecting the world of sport, focusing on the study of natural and legal persons; contracts of major interest in the sports sector (such as sponsorship contracts, merchandising, endorsement, testimonials, advertising; the sports employment contract) civil liability, sports tort.

### Sport Marketing (LM47-19)

<u>Faculty Staff:</u>	Francesca Vicentini
<u>Email:</u>	francesca.vicentini@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	6
<u>Term:</u>	2 <sup>nd</sup> Semester

### Content of the course

The Marketing Strategy course aims to critically assess the role of strategic marketing in sport organisations (NSFs, sports associations, professional sports clubs). Students will consider what marketing strategy means and look at a range of examples across sport sectors.

Core areas to be investigated will be: the key issues in the development and implementation of marketing strategies in the sport sector; the relationship between marketing strategies and operational marketing; implement and evaluate marketing strategies through the use of marketing concepts such as positioning, targeting, and segmentation; implement the decision-making analysis about product/service, pricing, distribution, promotion; draw the structure of a marketing plan related to the sport organizations. At the end of course, participants will acquire a critical and professional perspective that is demonstrably informed by knowledge and expertise in issues focused on sport marketing.

#### Week 1

- ⊕ Presentation of the marketing module a and syllabus
- ⊕ The nature of marketing

#### Week 2

- ⊕ Understanding customer behavior

#### Week 3

- ⊕ Marketing research and customer knowledge

#### Week 4

- ⊕ Market segmentation, targeting and positioning

#### Week 5

- ⊕ Value through brands

#### Week 6

- ⊕ Value through the creation and management of products

#### Week 7

- ⊕ The value through services (the unique characteristics of the services; the management of sports services; relationship marketing)

#### Week 8

- ⊕ The value through the determination of sales prices Week 9

- ⊕ Distribution Week 10

- ⊕ Integrated marketing communication Week 11 and Week 12

- ⊕ Discussion of the case carried out by the students

### Information and Communication Law (LM47-17)

<u>Faculty Staff:</u>	Francesco Cardarelli
<u>Email:</u>	francesco.cardarelli@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	6
<u>Term:</u>	2 <sup>nd</sup> Semester

#### Content of the course

- ⊕ Constitutional and European principles of freedom of expression. The evolution of constitutional jurisprudence.
- ⊕ Media and convergence. The European regulatory framework. Liberalisation and privatisation of electronic communications. Legislative Decree 207/2021 The principle of technological neutrality.
- ⊕ Privacy protection. Origins and principles. The European foundation. Regulation 679/2016/EU and the personal data code, The notion of personal data. The subjects. The principles of lawfulness, fairness. Rights on the processing of personal data. Privacy by design and by default. Consent and information. Personal data processed by the P.A. Profiling. Algorithmic decisions. Control authorities. Administrative and criminal sanctions. Justicial and jurisdictional protection. Cross-border processing. Analysis of European and national case law.
- ⊕ Copyright: genesis and development in civil law and common law countries. The constituent elements of copyright. Copyright applied to new goods: software and databases. The protection of copyright. The fair use theory. Protection techniques through contract and technology. DRMS. Licences. Analysis of European and national case law. The 2019 European directive.
- ⊕ The regulation of the press and the journalistic profession. The new media. Blogs and social networks. Defamation in the press. Hate speech and fake news.
- ⊕ Open government. Open data and big data. The Internet of things. Electronic democracy.
- ⊕ ?. Electronic commerce. Liability of Internet providers.
- ⊕ 8. Artificial intelligence and robotics. Applications of AI. Algorithmic decisions.

### Labour Law (LM47-18)

<u>Faculty Staff:</u>	Guido Valori
<u>Email:</u>	guido.valori@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	6
<u>Term:</u>	2 <sup>nd</sup> Semester

### Hygiene and Safety in Sport Facilities (LM47-03A)

<u>Faculty Staff:</u>	Vincenzo Romano Spica Federica Valeriani
<u>Email:</u>	vincenzo.romanospica@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	4
<u>Term:</u>	2 <sup>nd</sup> Semester

#### Content of the course:

**Module I:** Health and safety and quality in the prevention as facilities for sports.

Principles of public health regulation in the management of sport and physical activities facilities.

Insurance, medical and legal issues in sports.

Basic facts related to the organization and management of medical emergencies and first aid.

Principles and standards for job security in an environment dedicated to motor activities.

Injury management, and requirements for occupational medicine, and the register of injuries.

The duties of employers in prevention.

**Module II:** Health and safety in sport and physical activities.

The salubrity of indoor environments: chemical, physical, biological, process-related aspects.

Managing the health quality of air, water, surfaces, materials, fabrics, equipment and facilities.

Special provisions for swimming pools: hygiene management.

Notes on the management of spa pools, sauna and facilities for motor rehabilitation in water.

**Module III:** The health care system and instruments for the protection and promotion of health.

The medical services of reference on the national territory and abroad.

The Travel: prevention and management of health risks related to travel.

Insurance aspects.

Outline of the principles and objectives of health economics.

Outline of medical insurance: disability, social insurance.

Principles and methods of health education through sport.

**Module IV:** legal profiles

Analysis of the Legislative Decree no. 81/2008 and subsequent amendments. The discipline of sports.

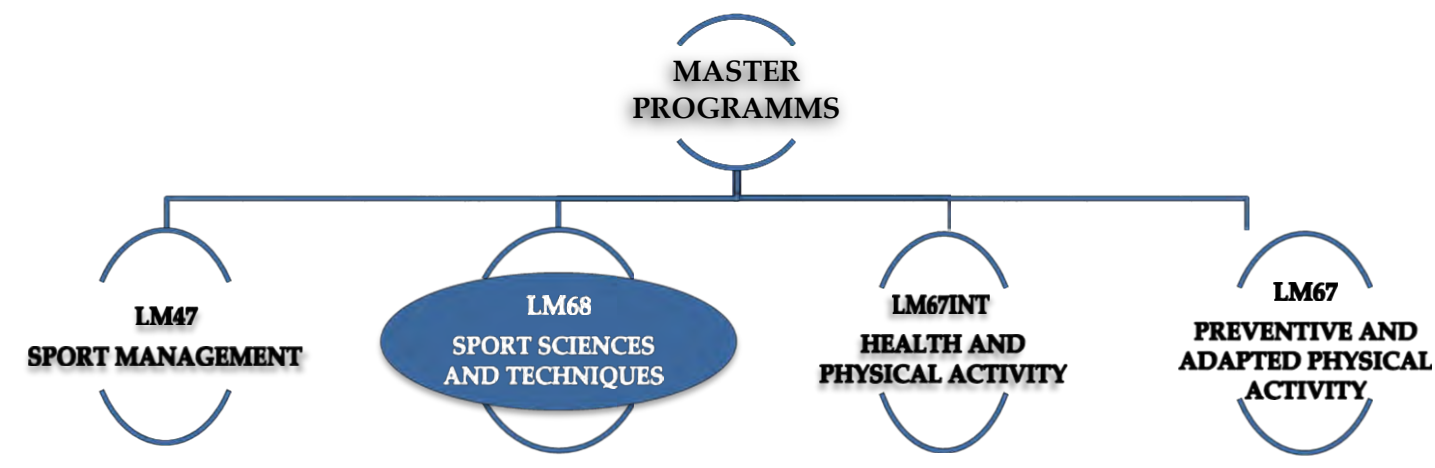


UNIVERSITÀ DEGLI STUDI DI ROMA "FORO ITALICO"

LM68 (Master)

SPORT SCIENCES AND TECHNIQUES





1<sup>st</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>SSD</u>	<u>NOTE</u>
Organizzazione e Valutazione dell'Allenamento e Fondamenti di Sport Olimpico	Organization and Evaluation of Training and Principles of Olympism	12	Annual	LM68-04	
Psicologia dello Sport e Pedagogia dello Sport Integrato	Psychology and Pedagogy of Sport	12	Annual	LM68-05A	
Fisiologia e Biomeccanica dello Sport	Exercise Physiology and Sport Biomechanics	10	Annual	LM68-03A	
Sport Individuali 1: Atletica Leggera e Triathlon	Individual Sports 1: Track and Field and Triathlon	9	Annual	LM68-06F	
Sport Acquatici 1	Water Sports 1	9	Annual	LM68-06D	
Sport di combattimento 1	Combat Sports 1	9	Annual	LM68-06E	
Giochi Sportivi di Squadra 1	Team Sports 1	9	Annual	LM68-06G	
Anatomia Funzionale e Traumatologia dello Sport	Functional Anatomy and Sport Traumatology	10	1 <sup>st</sup> Semester	LM-68-01A	
Biologia e Biochimica Applicate allo Sport	Biology and Biochemistry Applied to Sport	9	1 <sup>st</sup> Semester	LM68-02A	

2<sup>nd</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>SSD</u>	<u>NOTES</u>
Sport Individuali 2: Atletica Leggera e Triathlon	Individual Sports 2: Track and Field and Triathlon	9	Annual	LM68-10F	
Sport Acquatici 2	Water Sports 2	9	Annual	LM68-10D	
Sport di Combattimento 2	Combat Sports 2	9	Annual	LM68-10E	
Giochi Sportivi di Squadra 2	Team Sports 2	9	Annual	LM68-10G	



Endocrinologia e Medicina dello Sport	Endocrinology and Sport Medicine	12	1 <sup>st</sup> Semester	LM68-07A	
Legislazione Sportiva e Sicurazione Sanitaria	Sport Laws and Health Safety	8	1 <sup>st</sup> Semester	LM68-08	
Preparazione Fisica e Recupero dell'Atleta Infortunato	Physical Performance and Recovery of Injured Athlete	8	2 <sup>nd</sup> Semester	LM68-09	
Tirocinio	Internship	7	1 <sup>st</sup> /2 <sup>nd</sup> Semester	LM68-11A	No Mark

---

## LM68(Master) - SPORT SCIENCES AND TECHNIQUES

### 1<sup>st</sup> YEAR

<u>Faculty Staff:</u>	Laura Capranica Clara Crescioli Carlo Minganti Maria Francesca Piacentini
<u>Email:</u>	laura.capranica@uniroma4.it carlo.minganti@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

### Content of the course:

#### Module 1

Theory for good measurement and test procedures to guarantee objectivity in the evaluation of sport performance level and sport training effectiveness.

Data collection and organization. Types of data and scales of measure.

Descriptive statistics and inferential statistics. Hypothesis testing (parametric and non-parametric).

Indications on which type of test to use based on the assumptions and the type of variables.

#### Module 2

Origin and development of modern Olympic sports in relation to European sports principles, policies, and recommendations.

#### Module 3

Organization of training and competition

Specific aspects of training: Principles and variables of training, rest, and recovery; training monitoring and overtraining prevention, annual training plans and cycles; altitude training; gender differences in performance and adaptation; endurance, strength, speed and agility training. Specific aspects of competitions: Organization, peaking for competitions, pre competition tapering, racing tactics., pre conditioning strategies and heat acclimatation.



<u>Faculty Staff:</u>	Francesco di Russo Angela Magnanini Sabrina Pitzalis
<u>Email:</u>	<a href="mailto:francesco.dirusso@uniroma4.it">francesco.dirusso@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

**Content of the course:**

**Sport Psychology Module**

- ✦ Neural basis of human action
- ✦ Effect of emotions on performance (Anxiety, Fear, Shame and Stress)
- ✦ Attention and performance.
- ✦ Self-efficacy and performance
- ✦ Methods for controlling emotions (Biofeedback and Imagery).
- ✦ Mental training methods for coaches (goal setting and feedback).
- ✦ Organizational psychology in the sports field: group dynamics within the team; the role of the leader.
- ✦ The importance of communication.
- ✦ Neural bases of motor excellence.

**Special Pedagogy Module**

- ✦ Inclusive educational and training processes
- ✦ Pedagogical and didactic research for the construction of inclusive contexts, in international comparison, with reference to sports sciences.
- ✦ Ways and forms of integration and inclusion of people with disabilities in sports activities.
- ✦ The Helping Relationship: educational and sporting skills in connection with mediation and cooperation.
- ✦ Cooperative learning and sport.
- ✦ The tools of educational observation for the development of integration processes and the realization of sport training contexts for the achievement of well-being.
- ✦ The inclusive coach: competencies and guidelines

**NOTE:**

✦ Exam Format: **Sport Psychology**

Knowledge and competences are assessed in itinere. During the course, we include one group work (building up of the profile of individual performance of an athlete on a discipline selected from the group). In the interview we evaluate both the theoretical knowledge and the ability to apply what they have learned through simulation (for example, in a specific sport and with a specific type/level of athletes, how to apply techniques of goal setting and feedback).

**Special Pedagogy Sport**

Ongoing individual and group's assessment concerning the experience related to the issues tackled during the course, with theoretical in-depth considerations and critical reflections upon the practical activities. Written text comprising a series of multiple choice and open questions aimed at assessing the possess of

## Psychology and Pedagogy of Sport (LM68-05A)

competencies and the ability to use them to arrange inclusive sporting contexts.

### ✦ Final Mark

The independent evaluations of the two teachers converge in a single final mark; if present, the teachers will report weaknesses in the overall preparation.



---

### Water Sports 1 (LM68-06D)

<u>Faculty Staff:</u>	Sabrina Demarie
<u>Email:</u>	<a href="mailto:sabrina.demarie@uniroma4.it">sabrina.demarie@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

The sports that are covered in the course are: swimming, water polo, diving, artistic swimming, pentathlon, canoeing and rowing. The course aims to introduce the metabolic, mechanical and technical characteristics necessary to obtain high performance in water sports, the principles on which the training planning of athletes of age, masters and absolute categories is based, the characteristics of the coach of age and high-level athletes, the means, methods and protocols for verifying the effectiveness of training, performance analysis and the competition model specific for the various aquatic disciplines.

## Sport 1: Sport Individuali (LM68-06F)

<u>Faculty Staff:</u>	Francesco Felici Giuseppe Vannozzi Ilenia Bazzucchi Valentina Camomilla
<u>Email:</u>	<a href="mailto:francesco.felici@uniroma4.it">francesco.felici@uniroma4.it</a> <a href="mailto:giuseppe.vannozzi@uniroma4.it">giuseppe.vannozzi@uniroma4.it</a> <a href="mailto:ilenia.bazzucchi@uniroma4.it">ilenia.bazzucchi@uniroma4.it</a> <a href="mailto:valentina.camomilla@uniroma4.it">valentina.camomilla@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Content of the course:

Qualitative analysis of sport techniques. Measurement chain: components and functioning principles. Systems used to measure human movement (stereophotogrammetry, electrogoniometry, accelerometry). Measurement systems for external forces (dynamometry). Biomechanics of sport activities. Description, evaluation and optimisation of a sport task selected among general categories (jumps, trhows, rotations, hitting) using the language of biomechanics. Characterization of impacts with sports objects and aerodynamic effects. Risks associated with overloading the spine. Sports footwear technology. Introduction to sports physiology. Recalls of muscle mechanics: tension/length and force/speed relationships. The measurement of force. Voluntary regulation of muscle force. Thermodynamics of muscle contraction. Energy sources of muscle work. Maximum aerobic power. Thresholds. The energy cost of exercise: steady state, recovery, performance. Records. Nutrition for the sportsman. Dietary supplementation and supplements for sport: who, when, how?

## Individual Sports 1 (LM68-06F)

<u>Faculty Staff:</u>	Maria Francesca Piacentini
<u>Email:</u>	<a href="mailto:mariafrancesca.piacentini@uniroma4.it">mariafrancesca.piacentini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

### Content of the course:

The course is held simultaneously for the first and second year, topics are subdivided by area with no prerequisites between the two years.

- ⊕ Training methodologies of different track and field disciplines
- ⊕ Technical tactical aspects of the different track and field disciplines
- ⊕ Strength training in the different track and field disciplines
- ⊕ Speed training in the different track and field disciplines
- ⊕ Endurance training in the different track and field disciplines
- ⊕ Pacing strategy analysis in class and discussion
- ⊕ Periodization of the different track and field disciplines
- ⊕ Testing methodologies.



## Situational Sports 1 (LM68-06G)

<u>Faculty Staff:</u>	Antonio Tessitore
<u>Email:</u>	antonio.tessitore@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

### Content of the course:

The course is divided into two modules: the "Theory and Methodology of Team Sports 1" module and the "Practice of Team Sports 1" module.

The main contents of module 1 are:

Introduction to Sports Coaching; Coaching Philosophy (how to write your own); New technologies and coaching; Use of new technologies for training design. Specificity and adaptation of the workload in sports game training; How to write a training program based on a pre-season periodization; From the performance model to advanced Agility training in team sports; From the performance model to Decision Making and Tactics training; Train coordination in team sports; From the performance model to technical training; From the performance model to strength training in team sports; From the performance model to endurance training in team sports; Small Sided Games;

### **NOTE:**

The assessment of the preparation of the student will take into account the fact that the course is divided into a theoretical and a practical part. Thus, final evaluation of the course will be conducted as follows:

#### **COMBAT SPORTS 1**

- **PRACTICE:** Theoretical-practical evaluation. This will be performed to assess the ability to apply knowledge and skills in specific sports contexts. This check is aimed at the ability to implement a proper design, run, prescription and management of training technical and tactical, and physical fitness according to the discipline focus of the course followed during the academic year.
- **THEORY:** Oral assessment. At the end of the course, students will be required to attend an interview. They will be evaluated in both the theoretical knowledge and the ability to apply what they have learned during the course. To this end, it is up to the student sit the oral exam by a PowerPoint presentation concerning one of the topics covered during the course.



**ANATOMIA FUNZIONALE E TRAUMATOLOGIA  
DELLO SPORT (LM68-01A)**

<b><u>Faculty Staff:</u></b>	Franchitto Antonio Arrigo Giombini
<b><u>Email:</u></b>	<a href="mailto:antonio.franchitto@uniroma4.it">antonio.franchitto@uniroma4.it</a> <a href="mailto:arrigo.giombini@uniroma4.it">arrigo.giombini@uniroma4.it</a>
<b><u>Language:</u></b>	Italian
<b><u>ECTS:</u></b>	10
<b><u>Term:</u></b>	1 <sup>st</sup> Semester

**Content of the course:**

M1: General anatomy of locomotor system, functional anatomy of the spine, functional anatomy of the elbow, functional anatomy of the wrist, functional anatomy of the hip, functional anatomy of the knee, functional anatomy ankle.

M2: Generalities of traumatic sports injuries. Traumatic muscle injuries. Traumatic tendon injuries  
Traumatic shoulder injuries, impingement syndrome and shoulder Instability: etiology, diagnosis, treatment. Traumatic elbow injuries. Traumatic knee injuries, ACL and patellofemoral pathology: etiology, diagnosis, treatment. Traumatic ankle injuries. Generalities of chronic and spinal injuries. Return to competitive activity of the injured sportsman.

## LM68 (Master) - SPORT SCIENCES AND TECHNIQUES

<u>Faculty Staff:</u>	Daniela Caporossi Roberta Ceci Ivan Dimauro Guglielmo Duranti Stefania Sabatini
<u>Email:</u>	<a href="mailto:daniela.caporossi@uniroma4.it">daniela.caporossi@uniroma4.it</a> <a href="mailto:stefania.sabatini@uniroma4.it">stefania.sabatini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	1 <sup>st</sup> Semester

### Content of the course:

#### **BIOLOGY.**

Genetic studies on the inheritance of sport talent. Classical familiar and twin studies. Genetic and environmental factors related to the individual response to training.

Gene expression and regulation. Molecular genetics of human performance.

Developmental biology and genetics. Gene expression in relation to cellular differentiation and cellular adaptation. Modulation of gene expression through exercise. Stress stimuli and cellular response.

Oxidative, heat and hypoxic stress.

#### **BIOCHEMISTRY.**

Summary of energy metabolism. Regulation of enzyme activity. Hormonal regulation of metabolic pathways. Sources of energy for muscle contraction Three energy systems. Energy-rich phosphates. Purine nucleotide cycle. Metabolic responses to high-intensity and prolonged exercise. Metabolic adaptation to training.

Molecular basis of muscular fatigue. Lactic acid and metabolic acidosis. Mechanisms of ROS production. Oxidative stress. Anti-oxidant defenses.



## LM68 (Master) - SPORT SCIENCES AND TECHNIQUES

### Combat Sports 1 (LM68-06E)

<u>Faculty Staff:</u>	Laura Capranica Paola Sbriccoli
<u>Email:</u>	<a href="mailto:laura.capranica@uniroma4.it">laura.capranica@uniroma4.it</a> <a href="mailto:paola.sbriccoli@uniroma4.it">paola.sbriccoli@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

### Content of the course:

- ⊕ Definition of combat sports: open skill and closed skill
- ⊕ History of combat sports
- ⊕ Methods of investigation for the definition of the performance model of combat sports
- ⊕ Physiological and anthropometric profile of combat sports athletes
- ⊕ Aerobic and anaerobic profile of combat sports athletes
- ⊕ Cognitive profile of combat sports athletes
- ⊕ Maintenance of the health status and prevention of risks of injuries in combat sport athletes

### 2nd YEAR

## INDIVIDUAL SPORTS 2 (LM68-10F)

<u>Faculty Staff:</u>	Maria Francesca Piacentini
<u>Email:</u>	mariafrancesca.piacentini@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

### Content of the course:

The course is held simultaneously for the first and second year, topics are subdivided by area with no prerequisites between the two years.

- ⊕ Training methodologies of different track and field disciplines
- ⊕ Technical tactical aspects of the different track and field disciplines
- ⊕ Strength training in the different track and field disciplines
- ⊕ Speed training in the different track and field disciplines
- ⊕ Endurance training in the different track and field disciplines
- ⊕ pacing strategy analysis in class and discussion
- ⊕ Periodization of the different track and field disciplines
- ⊕ Testing methodologies

### Situational Sport 2 (LM68-10G)

<u>Faculty Staff:</u>	Antonio Tessitore
<u>Email:</u>	antonio.tessitore@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

Critical analysis of the related literature and writing scientific reports; The Training Diary; How to design a training diary; Training monitoring; Training monitoring techniques; Evaluation strategies in team sports; Tests in team sports; Analysis of training and competition data; Techniques for analyzing training and competition data; Match Analysis; Match analysis techniques; Recovery strategies and methods; Planning a Recovery Program.

#### NOTE:

#### **FINAL EVALUATION (EXAM)**

The assessment of the preparation of the student will take into account the fact that the course, for each module (Team Sports 2 and Combat Sports 2) is divided into a theoretical and a practical part.

Thus, final evaluation of the course will be conducted as follows:

- **PRACTICE:** Theoretical-practical evaluation. This will be performed to assess the ability to apply knowledge and skills in specific sports contexts. This check is aimed at the ability to implement a proper design, run, prescription and management of training technical and tactical, and physical fitness according to the discipline focus of the course followed during the academic year.
- **THEORY:** Oral assessment. At the end of the course, students will be required to attend an interview. They will be evaluated in both the theoretical knowledge and the ability to apply what they have learned during the course. To this end, it is up to the student sit the oral exam by a PowerPoint presentation concerning one of the topics covered during the course. **Medicina dello Sport**

- ⊕ Elementi di base relativi al primo soccorso e alla logistica e gestione delle emergenze nei differenti sport.
- ⊕ Patologie di interesse medico-sportivo.
- ⊕ Teoria e pratica di bendaggio funzionale sportivo.
- ⊕ Organizzazione dei servizi medici durante le manifestazioni sportive.
- ⊕ La valutazione funzionale negli sport di endurance.
- ⊕ La valutazione funzionale negli sport di potenza.
- ⊕ La valutazione funzionale negli sport di squadra.
- ⊕ Test da campo di valutazione funzionale.

## Tecniche di valutazione biomedica

- ⊕ Metodi di indagine biometrica nello sportivo: basi fisiche, anatomiche e correlazioni fisiopatologiche della struttura fisica.
- ⊕ Neuro-feedback, basi fisiche, fisiologiche e funzionali della valutazione del gesto atletico e dell'allenamento. Concetti di impedenziometria e valutazione della massa grassa e muscolare.
- ⊕ Plicometria nella valutazione dell'atleta.

## Endocrinology and Sport Medicine (LM68-07A)

<u>Faculty Staff:</u>	Paolo Borrione Paolo Sgrò Giovanni Vanni Frajese
<u>Email:</u>	<a href="mailto:paolo.borrione@uniroma4.it">paolo.borrione@uniroma4.it</a> <a href="mailto:paolo.sgro@uniroma4.it">paolo.sgro@uniroma4.it</a> <a href="mailto:giovanni.frajese@uniroma4.it">giovanni.frajese@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	1 <sup>st</sup> Semester

### Content of the course:

#### **Sports Endocrinology**

- ✦ Glands at internal secretion and hormones (Outline on: classification, metabolism and general mechanisms of action of hormones, hormonal receptors, main hormonal functions, the feed-back)
- ✦ The endocrine biorhythms
- ✦ Allostasis and allostatic damage
- ✦ The jet-lag
- ✦ Principals of sport auxologic
- ✦ Sports activity and growth
- ✦ Sports activity and puberty
- ✦ Hormones, behavior and sport performance
- ✦ Endocrinology applied to competitive sport: general and methodological concepts
- ✦ Endocrine response to "acute" sports activity
- ✦ Endocrine response to "chronic" sports activity
- ✦ The role of the endocrine system in athletes
- ✦ Sports activity and hormones in elderly
- ✦ Neuro-endocrine aspects of overtraining
- ✦ Competitive sport activity in the endocrine pathologies (diabetes, etc.)
- ✦ Nutritional integration, ergogenic aids and neuro-endocrine system
- ✦ Physiopathology of hormonal doping
- ✦ Doping and anabolic androgenic steroids
- ✦ Doping and hormones of the GH-IGFI system
- ✦ Doping and erythropoietin

#### **Sports Medicine**

- ✦ Basics in first aid and in managing emergency in sports activity
- ✦ Pathologies of sports medicine interests
- ✦ Theory and training of sport taping
- ✦ Medial Organization during sports events
- ✦ Functional evaluation in endurance sports
- ✦ Functional evaluation in power sports
- ✦ Functional evaluation in team sports
- ✦ Field tests of functional evaluation





---

## Biomedical Evaluations Techniques

- ⊕ Methods of biometric investigation in the athlete: anatomical and physical bases, physio-pathology of the body
- ⊕ Neuro-feedback: physics, physiology and function in the evaluation of the athletic movement and training
- ⊕ Concepts of impedentiometry and evaluation of lean and fat mass
- ⊕ Plicometry in the athlete's evaluation

<u>Faculty Staff:</u>	Maria Pia Pignalosa Vincenzo Romano Spica Federica Valeriani
<u>Email:</u>	vincenzo.romanospica@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	8
<u>Term:</u>	1 <sup>st</sup> Semester

### Content of the course:

Health Legislation Module. Health and safety in sport: aspects of epidemiology of diseases and injuries in different sports; prevention of specific risks. Principles and standards for occupational safety in the sport facilities. Hygiene applied to materials used in sport equipments. Health and safety in sport and physical activities: the salubrity of confined sports facilities (indoors). Special laws for swimming facilities. Outdoor sports and vector risks. The allergic risks. Aspects of health quality of sports facilities: technical and regulatory references.

The health care system and instruments for the protection of health: health services in the reference country and abroad. The Travel: prevention and management of health risks related to travel. Insurance aspects.

Sports Law Module. The course aims to provide the general principles of private law on issues affecting the world of sport, focusing on the study of natural and legal persons; contracts of major interest in the sports sector (such as sponsorship contracts, merchandising, endorsement, testimonials, advertising; the sports employment contract) civil liability, sports tort.

### **NOTE:**

Students must demonstrate adequate knowledge of the program's arguments, the understanding of institutions, the ability to present them with an appropriate technical language and mastery of related applications.

<u>Faculty Staff:</u>	Carlo Minganti
<u>Email:</u>	carlo.minganti@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	8
<u>Term:</u>	2 <sup>nd</sup> Semester

**Content of the course:**

- ⊕ Description and analysis of the different performance models in relation to the level of competition, age and gender differences.
- ⊕ Physical preparation in different age groups.
- ⊕ Evaluation and control of the athlete
- ⊕ Control of training
- ⊕ Sports injuries and their main causes.
- ⊕ Injury prevention.
- ⊕ The recovery of the injured athlete
- ⊕ Construction of a specific work program for the return to sport activity.

WATER SPORTS 2 (LM68-10D)

<u>Faculty Staff:</u>	Sabrina Demarie
<u>Email:</u>	<a href="mailto:sabrina.demarie@uniroma4.it">sabrina.demarie@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

Content of the course:

The sports that are covered in the course are: swimming, water polo, diving, artistic swimming, pentathlon, canoeing and rowing. The course aims to introduce the metabolic, mechanical and technical characteristics necessary to obtain high performance in water sports, the principles on which the training planning of athletes of age, masters and absolute categories is based, the characteristics of the coach of age and high-level athletes, the means, methods and protocols for verifying the effectiveness of training, performance analysis and the competition model specific for the various aquatic disciplines.

COMBAT SPORTS 2 (LM68-10E)

<u>Faculty Staff:</u>	Laura Capranica Paola Sbriccoli
<u>Email:</u>	<a href="mailto:laura.capranica@uniroma4.it">laura.capranica@uniroma4.it</a> <a href="mailto:paola.sbriccoli@uniroma4.it">paola.sbriccoli@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	9
<u>Term:</u>	<u>Annual</u>

Content of the course:

MODULE 1: JUDO

MODULE 2: TAEKWONDO

- ✦ Definition of combat sports: open skill and closed skill
- ✦ History of combat sports
- ✦ Methods of investigation for the definition of the performance model of combat sports
- ✦ Physiological and anthropometric profile of combat sports athletes
- ✦ Aerobic and anaerobic profile of combat sports athletes
- ✦ Cognitive profile of combat sports athletes
- ✦ Maintenance of the health status and prevention of risks of injuries in combat sport athletes



UNIVERSITÀ DEGLI STUDI DI ROMA "FORO ITALICO"

LM67INT (Master)

HEALTH AND PHYSICAL ACTIVITY



### LM 67INT (Master) - HEALTH AND PHYSICAL ACTIVITY

<u>SUBJECT</u>	<u>ECTS</u>	<u>SSD</u>	OFFERED IN	<u>EXAM</u>
Biomedical Issues Health and Exercise *	15	LM67I-1B	09 October – 27 October	from 22 to 27 November
Changing Behavior Towards a Lifelong Health Lifestyle: From Childhood to Adulthood *	15	LM67I-2B	27 November - 15 December	from 17 to 22 January*
Movement Therapy and Physical Activity for Elderly and Special Population **	15	LM67I-3B	22 January – 9 February	from 6 to 11 March**
Research Methodology **	15	LM67I-5A	11 March - 27 March( included Saturday 16th and Saturday 23rd	from 29 April to 6 May**

#### **NOTES**

Each module consists in 3 Intensive Weeks

\* The result of the exam will be register during the session in February

\*\* The result of the exam will be register during the session in July

These subjects are addressed to master students with a minimal of 180 credits

**For each subject, a maximal of 5 Erasmus students can be accepted. A selection will be made in July.**

Useful Information: <http://www.europeanmasterhpa.eu>

The all program is offered in English language.



## LM67INT (Master) - HEALTH AND PHYSICAL ACTIVITY

### Biomedical Issues Health and Exercise (LM67I-1B)

<u>Language:</u>	English
<u>ECTS:</u>	15
<u>Offered in:</u>	
<u>Exam:</u>	
<u>Results:</u>	<u>During the session in February</u>

#### **Content of the course:**

- ✦ Physical activity, public health and fitness: an approach from the point of view of epidemiology.
- ✦ Health and safety in sport and PA.
- ✦ Genetic variability in health and diseases.
- ✦ Basic human genetics: genetic variability and mutations, simple and complex trait inheritance, from gene to phenotype.
- ✦ Genetic variability and gene-environment interactions in relation to movement.
- ✦ Genetic basis of movement-related disorders.
- ✦ Human nutrition in health, diseases, development and aging: theoretical and practical applications.
- ✦ Nutrition and metabolism in health and exercise.
- ✦ Biology of growth and development.
- ✦ Biology of aging.
- ✦ Cardiovascular, respiratory and muscle-skeletal fitness in health prevention for children, adults and elderly.
- ✦ Metabolic syndrome and type 2 diabetes.
- ✦ Physical activity and neurodegenerative diseases.
- ✦ Neuroendocrine adaptation in response to physical exercise.
- ✦ Medical risks of substance abuse.
- ✦ Muscle strength assessment and testing.
- ✦ Neuromuscular adaptation in muscles and tendons in response to health-enhancing physical exercise.
- ✦ Energy metabolism in skeletal muscle during exercise: methodological considerations.
- ✦ Biomechanics and motion analysis.
- ✦ Energy metabolism in skeletal muscle during exercise: practical applications.
- ✦ Methods of fitness assessment.
- ✦ Principles of Fitness/Wellness: health benefits of strength and endurance training.
- ✦ Locomotor apparatus (bones) adaptation in response to health-enhancing physical exercise.
- ✦ Cardiorespiratory regulation and adaptations with regard to health-enhancing physical activity in aerobic performance.
- ✦ Fitness assessment, and exercise testing and prescription.





## Changing Behavior Towards a Lifelong Health Lifestyle: From Childhood to Adulthood (LM67I-2B)

Language:	English
ECTS:	15
Offered in:	
Exam:	
Results:	During the session in February

### **Content of the course:**

- ⊕ Physical Activity & Sport as Social Phenomena;
- ⊕ Socio-pedagogical issues in health-enhancing PA
- ⊕ Social impact of physical activity programs in emergency and special conditions;
- ⊕ The power of sport to promote development and peace: implementing physical activity projects in disadvantaged communities;
- ⊕ Enhancing physical activity: towards a social-ecological approach;
- ⊕ Effects of physical activity and exercise on mental health and cognitive processes;
- ⊕ Introduction to Psychology and Physical Activity;
- ⊕ Models of Health Behaviour Change;
- ⊕ Psychosocial Determinants of Physical Activity;
- ⊕ Health Psychology and Physical Activity in elderly populations;
- ⊕ Physical activity and optimal brain functioning;
- ⊕ Social cognitive models of behavioral change;
- ⊕ Biology of growth and development;
- ⊕ Motor Behaviour;
- ⊕ Motor development and cognition;
- ⊕ Effective intervention to enhance physical activity in young children and adolescents;
- ⊕ Exercise training in children;
- ⊕ Settings-based promotion of physical activity among children and youth - from evidence to practice;
- ⊕ Physical activity, fitness, and children's health;
- ⊕ Physical activity, fitness and children's health: practical applications;



## Movement Therapy and Physical Activity for Elderly and Special Population (LM67I-3B)

Language:	English
ECTS:	15
Offered in:	
Exam:	
Results:	During the session in July

### **Content of the course:**

- ⊕ Physical dimensions and individual differences with age;
- ⊕ Biology of aging;
- ⊕ Sociological issues on physical health and nutrition;
- ⊕ Skeletal muscle function, fatigue, and metabolism: effects of disuse and diseases;
- ⊕ Age-related changes in cardiovascular and neuromuscular systems;
- ⊕ Functional ability - testing procedures and association with adverse health outcomes;
- ⊕ Aging in the sensory system and postural control;
- ⊕ Exercise Prescription in aging populations;
- ⊕ Physical activity for the elderly - interdisciplinary approaches;;
- ⊕ Exercise and cognitive functions;
- ⊕ Sports therapy and the ICF classification;
- ⊕ Professional fields;
- ⊕ Immobilisation;
- ⊕ Injuries of the upper and lower extremities;
- ⊕ Sensomotoric system;
- ⊕ Gait training and coordination;
- ⊕ Muscle Training for Special Populations/ Training with Devices (Theory and Practical Application):  
Lower extremities;
- ⊕ Aquatherapy;
- ⊕ Practical applications lower and upper extremities;
- ⊕ Musculoskeletal disorders and sports activity Joint diseases: acute and overuse injuries;
- ⊕ Basics of disabled sports and medical aspects of different disabilities and practical applications;
- ⊕ Cancer and Sport.



## Research Methodology (LM67I-5A)

---

Language:	English
ECTS:	15
Offered in:	
Exam:	
Results:	During the session in July

---

### Content of the course:

- ✦ Theory of sport science - an introduction.
- ✦ Classic positions in the theory of science: intuitivism, falsifications, paradigms.
- ✦ Philosophical and ethical consideration in research design and management of results.
- ✦ Paradigms in the sport sciences: respect for persons and informed consent.
- ✦ Implications for student projects - discussion and group presentations.
- ✦ From anthropometry to biotechnology: research application in sport sciences.
- ✦ Research methods: planning, design, data acquisition & signal processing.
- ✦ Descriptive statistics.
- ✦ Experimental and quasi-experimental research.
- ✦ How to prepare a research proposal.
- ✦ Practical work - planning of potential thesis projects.
- ✦ Discussion of student projects - Student presentations.
- ✦ Research methods & statistics for the social sciences: theory and practical applications.
- ✦ Research methods in sport sciences: knowledge and methodology.
- ✦ Problem & hypothesis work.
- ✦ Validity, reliability, sensitivity, relevance.
- ✦ Literature search: theoretical and practical work.
- ✦ Writing and presenting the results.
- ✦ Practical applications.
- ✦ Research methods in Sport biology.
- ✦ Epidemiology and statistics in health-related sciences - Statistical application in epidemiology and metanalysis.
- ✦ Inferential statistics - part 1.
- ✦ Practical work.
- ✦ Reporting research results.
- ✦ Practical work.
- ✦ Hands-on practice using experimental data: descriptive statistics, inferential statistics, written and oral presentation.
- ✦ Practical work.
- ✦ Orientation to 2nd year.

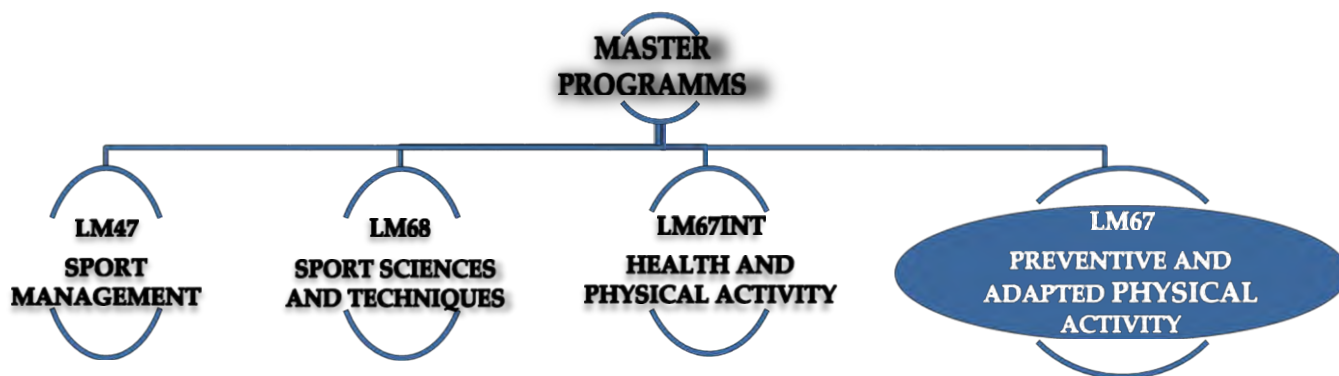




UNIVERSITÀ DEGLI STUDI DI ROMA "FORO ITALICO"

LM67 (Master)

PREVENTIVE AND ADAPTED PHYSICAL ACTIVITY



### 1<sup>st</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTE</u>
Adattamenti Biologici dell'Attività Motoria	Biological Adaptations to Exercise	12	Annual	LM67-03A	
Metodi e Tecniche Perla Valutazione della Capacità e della Prestazione Motoria	Methods and Techniques for Functional Evolutions and Motor Capability	11	Annual	LM67-07A	
Attività Motorie per l'età Evolutiva e gli Anziani	Physical Activity for Children, Adolescents and Older Adults	10	Annual	LM67-02	
Attività Motorie per la Salute e l'Efficienza Fisica	Physical Activity for Health and Fitness	10	Annual	LM67-01	
Medicina Interna ed Endocrinologia Applicate alle Attività Motorie	Internal Medicine, Endocrinology and Adapted Physical Activities	10	Annual	LM67-06	
Informatica Applicata	Computer Science	1	1 <sup>st</sup> Semester	LM67-04	No Mark
Lingua Straniera: inglese	English	2	1 <sup>st</sup> Semester	LM67-05	No Mark

### 2<sup>nd</sup> YEAR

<u>MATERIA</u>	<u>SUBJECT</u>	<u>ECTS</u>	<u>TERM</u>	<u>CODE</u>	<u>NOTES</u>
Pedagogia e Psicologia dell'Attività Motoria	Pedagogy and Psychology of Physical Activity	12	Annual	LM67-09A	
Attività Motorie per Popolazioni Speciali	Physical Activity for Special Population	10	Annual	LM67-08A	
Posturologia, Traumatologia e Rieducazione Neuro-Motoria	Posture, Traumatology and Neuromata Rehabilitation	10	Annual	LM67-10A	
Sociologia della Prevenzione, Epidemiologia ed Educazione Sanitaria	Sociological Issues of Preventive Medicine, Epidemiology and Health Education	10	Annual	LM67-11A	
Tirocinio	Internship	8	1 <sup>st</sup> / 2 <sup>nd</sup> Semester	LM67-12	No Mark



1st Year

Biological Adaptations to Exercise (LM67-03A)

<u>Faculty Staff:</u>	Daniela Caporossi Guglielmo Duranti Roberta Ceci Andrea Macaluso Stefania Sabatini
<u>Email:</u>	<a href="mailto:daniela.caporossi@uniroma4.it">daniela.caporossi@uniroma4.it</a> <a href="mailto:stefania.sabatini@uniroma4.it">stefania.sabatini@uniroma4.it</a> <a href="mailto:andrea.macaluso@uniroma4.it">andrea.macaluso@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

Content of the course:

BIOLOGY

- ⊕ Genetics of human variability
- ⊕ Organisms, environment and the genetic basis of diversity.
- ⊕ Biology and Genetics of adaptation
- ⊕ Biology and Genetics of development and aging

BIOCHEMISTRY

Summary of energy metabolism. Regulation of enzyme activity. Hormonal regulation of metabolic pathways. Integration of metabolism: metabolic effect of insulin and glucagon; the feed-fast cycle. Insulin resistance. Obesity. Diabetes. Sources of energy for muscle contraction. Three energy systems. Energy-rich phosphates. Purine nucleotide cycle. Metabolic adaptation to training. Molecular basis of muscular fatigue. Lactic acid and metabolic acidosis. Free Radicals. Oxidative stress. Anti-oxidant defenses. Biochemical adaptation to anaerobic and aerobic training.

PHYSIOLOGY

- ⊕ Physiology of neuromuscular adaptations.
- ⊕ Assessment methods of muscle strength and power.
- ⊕ Gender differences in muscle strength and power.
- ⊕ Training muscles for strength and power.
- ⊕ Structural and functional adaptations to training.
- ⊕ Muscular, tendinous and neural adaptations.
- ⊕ Training muscle strength and power in older individuals.



- ⊕ Main physiological techniques to study muscular, tendinous and neural adaptations to ageing and training.
- ⊕ Physiology of motor control
- ⊕ Concept of sensory-motor integration.
- ⊕ Voluntary and reflex motility.
- ⊕ Spinal mechanisms of movement control.
- ⊕ Control of posture and balance.
- ⊕ Organization of cerebellar circuits and functional role of cerebellum.
- ⊕ Morpho-functional organisation of cerebral cortex.
- ⊕ Planning and execution of voluntary movement.
- ⊕ Motor function of basal ganglia.

**NOTE:**

**FINAL ASSESSMENT**

Written midterm test and final oral examination

Interim assessments of learning shall be carried out at the end of each module, while credits will be awarded only at the end of the course through an oral examination.



## Metodi e Tecniche per la Valutazione della Capacità e della Prestazione Motoria (LM67-07A)

### Methods and Techniques for Functional Evolutions and Motor Capability (LM67-07A)

<u>Faculty Staff:</u>	Valentina Camomilla Laura Capranica Clara Crescioli Carlo Minganti
<u>Email:</u>	<a href="mailto:laura.capranica@uniroma4.it">laura.capranica@uniroma4.it</a> <a href="mailto:carlo.minganti@uniroma4.it">carlo.minganti@uniroma4.it</a> <a href="mailto:clara.crescioli@uniroma4.it">clara.crescioli@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	11
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

##### Module 1

Research principles in motor and sports sciences. Systematic model of quantitative and qualitative evaluation in adapted motor activities. Normative and criterion standards for the evaluation of adapted motor activities. Analysis of the scientific literature on functional evaluation and adapted motor activities. Theory for good practice in measurement and test procedures to ensure the objective assessment of performance level, treatment effectiveness and treatment planning in a subject or group of subjects. Data collection and organization. Types of data and scales of measure. Descriptive statistics and inferential statistics. Hypothesis testing (parametric and non-parametric). Indications on which type of test to use based on the assumptions and the type of variables.

##### Module 2

Methods and techniques for the measurement and quantification of human movement from a biomechanical point of view, estimation of bone segment pose and joint kinematics and kinetics, analysis of typical and pathological gait, laboratory- and field-based instrumentation (stereophotogrammetry, force platforms, wearable sensors), analysis of applications in clinical and sports contexts.





## Attività Motorie per la Salute e l'Efficienza Fisica (LM67-01)

<u>Faculty Staff:</u>	Clara Crescioli
<u>Email:</u>	<a href="mailto:clara.crescioli@uniroma4.it">clara.crescioli@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Content of the course:

- ✦ Instruction, Education, Training: the uniqueness of Homo sapiens. Insertion, Integration, Inclusion: normative references in the Italian school. Index for Inclusion: the search for inclusiveness is a collective undertaking.
- ✦ World Health Organization 2020 guidelines on physical activity: potential applications in the (post)Covid-19 era. The impact of the changes introduced by the Olympic Agenda 2020.
- ✦ The relevancy of the research "The right to play and sport of children and young people with disabilities": results and recommendations.
- ✦ The relationship between interculturality and sport in research "It doesn't matter if we are foreigners, we must all play together".
- ✦ School/extra-curricular activities, between reasonable accommodation and universal design. Teamwork on the organizations/projects presented such as Baskin, Calciosociale, IMAS, Korfbal, Special Olympics (YAP, MATP, US), Tchoukball
- ✦ The evolution from Integration Continuum to Inclusion Spectrum: a possible paradigm of reference on the inclusiveness of play/motor/sports activities. The operational indicators of the STEP model.
- ✦ Domains for the aging classification
- ✦ The most frequent sex-based pathologies in the elderly
- ✦ Exercisers, non-exercisers, aging and wellness
- ✦ Physical activity personalized programming
- ✦ Integration of movement and well-being in the autonomy of the elderly, determinants
- ✦ In-area structures for well-being, prevention and therapy with adapted motor activity in the elderly population
- ✦ Joint mobility and specificity of treatment.
- ✦ Movement as a therapy in frequent pathologies in old age
- ✦ The role of Musculo-skeletal health in maintaining general health in relation to biological factors characterizing muscle aging and activity
- ✦ The secretory and anti-inflammatory function of skeletal muscle as a therapy and prevention tool, the role of bio-factors released in muscle work in the control of various organ functions.
- ✦ Muscle work and control of metabolic disorders, and in rheumatic diseases.



<u>Faculty Staff:</u>	Massimo Sacchetti Paola Sbriccoli
<u>Email:</u>	massimo.sacchetti@uniroma4.it paola.sbriccoli@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

Content of the course:

1. Physical activity, well-being, and quality of life in adulthood.  
Physical activity, sedentariness, exercise and health; the components of physical fitness and well-being;  
Recommendations on physical activity for health promotion
2. Structuring and administration of exercise programs.  
Assessment of individual's goals and needs.  
Assessment of physical fitness.  
Stages of planning a program  
Concept and evaluation of training load
- 2.1 Exercise for cardiorespiratory fitness  
Benefits and risks associated with different types of exercise  
The structuring of exercise protocols: mode, intensity, duration, frequency and exercise progression  
Practical exercises, discussion of exemplary scientific studies and case studies
- 2.2 Exercise and muscle function  
Concept and importance of muscular strength and endurance  
Role and characteristics of various methods of resistance training  
Structuring of exercise sessions and programs for muscle conditioning  
Training from a functional perspective  
Practical exercises, discussion of exemplary scientific studies and case studies
- 2.3 Exercise for the metabolic function  
Exercise and metabolic function  
Metabolic effects of modulating exercise protocols  
Exercise protocols for weight and body composition control  
Practical exercises, discussion of exemplary scientific studies and case studies
- 2.4 Exercise for improving/maintaining flexibility  
Influence of flexibility on physical fitness



Characteristics and application of various flexibility exercise methods

3. Exercise for low back pain prevention and postural exercise  
Posture: concept of wholeness and functional correlations  
General principles of the main techniques of postural re-education and

## Internal Medicine, Endocrinology and Adapted Physical Activities (LM67-06)

<u>Faculty Staff:</u>	Fabio Pigozzi Luigi di Luigi
<u>Email:</u>	fabio.pigozzi@uniroma4.it luigi.diluigi@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Content of the course:

Physical activity as prevention and therapy in different internal medicine diseases

- ⊕ Cardiovascular diseases. Hypertension, ischemic heart disease. Exercise Programmes.
- ⊕ Respiratory diseases. principals of respiratory assessment: the spirometry, asthma, chronic Broncho pneumopathy, pulmonary emphysema;
- ⊕ Neoplastic diseases. functional assessment and rehabilitation in cancer patients
- ⊕ Muscular-skeletal disorders. Arthritis, arthrosis, prevention of traumatic injuries (taping techniques).
- ⊕ Physical activities programmes applied to different disorders.
- ⊕ Sport Medicine and disorders limiting physical activities. Respiratory infectious disease, hematological, Genito-urinary, gastrointestinal and dermatological diseases.
- ⊕ Special consideration about competition abroad
- ⊕ Environmental factors during competition and training.
- ⊕ Health emergency management in preventive and adapted physical activities: first aid and cardiopulmonary resuscitation.

Endocrinology

- ⊕ Notes on internal secretion glands and hormones
- ⊕ Notes on fundamentals of endocrinology: neuroendocrine system, hypothalamus, anterior and posterior pituitary gland, thyroid, parathyroid, pancreas, cortical surreal glands, mi dollar surreal glands, testicles, ovaries. Hormones and dietary habits, hormones and energy balance, hormones and bone tissue, hormones and muscular tissue.

Endocrinology and Auxological biometry

- ⊕ Evaluation methods of auxologic
- ⊕ Growing and development: normal and pathologic growing curve
- ⊕ Normal and pathologic body composition: definition and methods to determine it
- ⊕ Health and risk factors biometric-auxological evaluation



## Endocrinology applied to physical activity

- ⊕ Notes on wellness and lifestyle
- ⊕ Stress: definition, endocrine intermediary and generic reaction processes
- ⊕ Health and hormonal adjustment in response to stress
- ⊕ Endocrine responses to acute physical activity
- ⊕ Endocrine responses to chronic physical activities
- ⊕ Chronoendocrinology and physical activity
- ⊕ Notes on hormonal doping

## Preventive and adapted physical activity and endocrine system during particular stages of life and in the most diffuse endocrine pathologies

- ⊕ Puberty and Adolescence
- ⊕ Pregnancy
- ⊕ Climacteric and menopause
- ⊕ Polycystic ovary syndrome
- ⊕ Metabolic syndrome
- ⊕ Diabetes
- ⊕ Thinness and sarcopenic syndrome
- ⊕ Ageing
- ⊕ Osteoporosis
- ⊕ Sexual disorder



## Informatica Applicata (LM67-04)

---

### Computer Science (LM67-04)

<u>Faculty Staff:</u>	Federico Mari
<u>Email:</u>	<a href="mailto:federico.mari@uniroma4.it">federico.mari@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	1
<u>Term:</u>	1 <sup>st</sup> Semestrer

#### Content of the course:

- ⊕ Microsoft 365: Cloud Storage with OneDrive, common elements within different Office Apps (Excel, Word, PowerPoint)
- ⊕ Microsoft Excel: basics of datasheets, formulas, and functions
- ⊕ Statistical descriptive analysis, with applications in Excel
- ⊕ Microsoft Excel: Power Query
- ⊕ Microsoft Excel: Tabelle Pivot
- ⊕ Microsoft Power BI

**NOTE:** No Mark



## Lingua Straniera: Inglese (LM67-05)

---

<u>English (LM67-05)</u>	
<u>Faculty Staff:</u>	Alessandra Fazio
<u>Email:</u>	alessandra.fazio@uniroma4.it
<u>Language:</u>	English
<u>ECTS:</u>	2
<u>Term:</u>	1 <sup>st</sup> Semester

### Content of the course:

The course consists of 12 weeks and 4-hour meetings per week. Lessons will focus on specific aspects of specialised communication in English ESP for work and for professional objectives by implementing practical projects or case studies. English language will be used to complete a real-life task through interaction and group work in person or online.

Key concepts of specific language will be introduced through interviews, workshop, or debates with sports management professionals.

Class work will provide a guidance on specific language of preventive and adapted physical activity through active reading, discussions, debates, and comprehension tests. Course contents may vary.

**NOTE:** No Mark



**LM67 (Master) - PREVENTIVE AND ADAPTED PHYSICAL ACTIVITY**

**2nd YEAR**





## Attività Motorie per Popolazioni Speciali (LM67-08A)

<u>Docenti:</u>	Angela Magnanini Pasquale Moliterni Sabrina Pitzalis
<u>Email:</u>	<a href="mailto:angela.magnanini@uniroma4.it">angela.magnanini@uniroma4.it</a> <a href="mailto:pasquale.moliterni@uniroma4.it">pasquale.moliterni@uniroma4.it</a> <a href="mailto:sabrina.pitzalis@uniroma4.it">sabrina.pitzalis@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	12
<u>Term:</u>	<u>Annual</u>

### Content of the course:

- ✦ The meaning and the scientific model of Special Pedagogy and Didactics such as Inclusive Pedagogy and Didactics
- ✦ The words and meanings related to inclusion and disability
- ✦ Health education
- ✦ Pedagogical and didactic inclusive design
- ✦ From a bio-medical conception of disease/health to a psycho-bio-social conception.
- ✦ Models and research characteristic of the Health Psychology approach and, in particular, models for the choice and maintenance of a healthy lifestyle.
- ✦ Mental illness (anxiety, depression, burn out) and the effect of physical exercise.

### **Assessment of profit**

Interview to verify both the theoretical knowledge and the ability to apply what they have learned through simulation (for example, how to organize the initial discussion at the gym with a potential client who has certain characteristics)

### **Course Assessment**

For the final evaluation of this course, two commissioners will independently assign a vote for the two training patterns. Comparing their different evaluations, an unanimous final vote will be assigned. Commissioners will inform the student of any critical findings in his/her preparation.



### Physical Activity for Special Population (LM67-08A)

<u>Faculty Staff:</u>	Attilio Parisi Paola Sbriccoli
<u>Email:</u>	attilio.parisi@uniroma4.it paola.sbriccoli@uniroma4.it
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

#### Content of the course:

Definition of special population.

The Meaning of Adapted Physical Education and Adapted Sport.

Individualization of motor and sport fitness, the Special Olympics. National and International organization of sport for individuals with disabilities. Outlines of sport eligibility and sport classification.

Planning, developing and implementing sport programs for individual with special needs such as: mental retardation, motor disabilities, sensory disabilities. Examples of technical regulations for special and adapted sports.

Analysis of some special and adapted sport disciplines as: volleyball, soccer (for blind athletes and for individual with mental retardation), torball, swimming, wheelchair basketball, wheelchair fencing.

Planning, developing and implementing physical activity programs for individuals with special needs including: diabetes, cardiovascular diseases, neurodegenerative diseases, oncological diseases, osteoporosis also through the critical reading of international literature.



## Posture, Traumatology and Neuromotor Rehabilitation (LM67-10A)

Docenti:	Maurizio Ripani Guido Carpino Arrigo Giombini
<u>Email:</u>	<a href="mailto:maurizio.ripiani@uniroma4.it">maurizio.ripiani@uniroma4.it</a> <a href="mailto:guido.carpino@uniroma4.it">guido.carpino@uniroma4.it</a> <a href="mailto:arrigo.giombini@uniroma4.it">arrigo.giombini@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Content of the course:

#### Mod.1

Overview of Posture

Organs and Apparatuses Acting on Posture

Morphology and Organization in General of the CNS: Meninges, Cerebral

Hemispheres Morphology and Organization of the Cerebral Trunk and Cerebellum

Morphology and Organization of the Spinal Cord Organization of the Nervous Pathways in General, Sensory Pathways

Descending Pathways: Pyramidal and Extrapyramidal

Cervical and Brachial Plexus

Thoracic Nerves and Lumbosacral Plexus

Cranial Nerves: I - II - III - IV - V - VI Cranial

Nerves: VII - VIII - IX - X - XI - XII

Kinetic Chains

Basic Science

#### Mod. 2

Generalities on traumatic sports injuries.- Traumatic muscle injuries. Traumatic injuries of tendons

Traumatic injuries of the shoulder, Conflict syndrome and Instability:etiology, diagnosis, treatment -

Typical shoulder injuries in various sports, The traumatic injuries of the elbow . Traumatic injuries of the

knee, ACL pathology, meniscal pathology ,patellofemoral pathology etiology, diagnosis, treatment - Knee

overload syndromes, Pubalgia, Femoral-acetabular impingement,Traumatic injuries of the ankle,Chronic

ankle instability,Achilleus tendinopathy, Generalities on chronic and spinal injuries. Cervicalgia and

spondylolisthesis. Scoliotic attitudes and idiopathic scoliosis in the adolescent.

Stretching methods in reeducation and prevention, Return to competitive activity of the injured athlete

### **NOTE:**

Verification of the profit:

the final verification previews an oral test with the assignment of 10 ECTS in total.



## Sociological Issues of Preventive Medicine, Epidemiology and Health Education (LM67-11A)

<u>Faculty Staff:</u>	Saverio Giampaoli Francesca Romana Lenzi Vincenzo Romano Spica Federica Valeriani
<u>Email:</u>	<a href="mailto:vincenzo.romanospica@uniroma4.it">vincenzo.romanospica@uniroma4.it</a> <a href="mailto:saverio.giampaoli@uniroma4.it">saverio.giampaoli@uniroma4.it</a> <a href="mailto:francescaromana.lenzi@uniroma4.it">francescaromana.lenzi@uniroma4.it</a>
<u>Language:</u>	Italian
<u>ECTS:</u>	10
<u>Term:</u>	<u>Annual</u>

### Content of the course:

This integrated course includes 2 modules: one in the sociological area and one in the area of public health sciences

#### MODULE I: Preventive Medicine, Epidemiology and Health Education

The module aims to approach APA as a tool for prevention and health promotion within a public health perspective. Epidemiology, etiology and natural history of diseases will represent the fundamentals for understanding prevention strategies and acquire the methodology to implement and evaluate their effectiveness, based on scientific evidences, guidelines, current health regulations. From a perspective of Global Health and in consideration of the National Health Service, analysis by age group and considering the different times of prevention will represent the training hinges, both cultural and professionalizing, in order to acquire skills to integrate APA and health education into public health actions. In this context, environmental health and occupational safety in sports and wellness facilities are essential for the qualification of an APA graduated operator.

Program: The role of AMPAs in a Public Health perspective. Metanalysis studies and definition of guidelines. Elements of immunology and immuno-prophylaxis. Screening. Essential Levels of Assistance. Elements of social and community medicine; occupational, school and sport hygiene. Hydrology, APA and recreational waters hygiene. Health Education in the APA. Health systems and global health. Services and the role of the Prevention Departments and Health Districts. Guidelines for APA at different ages and in specific subgroups, including disability and social distress.

#### MODULE II: General sociology, well-being and prevention

The module aims to outline the main sociological dynamics that have designed the image of the self and of the other, conditioning the evolution of the concept of identity, integration, well-being, health and information today. Prevention in this sense intervenes as a new possibility for the purposes of information and education for health, the well-being of society, permitted and guaranteed by the new means of communication. Likewise, its limitations are precisely in the absence of filtering and control, which risks turning opportunity into damage, education into bad practices and information in fake news. Through greater clarity provided by the theory and methodology of sociological investigation, it is intended to provide the tools to scrutinize the various methods used by social actors to process images related to health, prevention and identity.



Program: Introduction: sociology, what is it? and what does it study? Categories and concepts. The sociological theories of modernity. Health sociology; Care sociologist: prevention education and information. Socialization and information. The city and urbanism as a way of life. Deviance and social control. Inequalities, social stratification, mobility. The body and health between the first and second modernity. Food education and nutritional transition. The Mediterranean diet;; Social roles, status, institutions. Culture: the anthropological and sociological perspective; The elements of culture: norms, values, social identity, methodology of social research.





UNIVERSITÀ DEGLI STUDI DI ROMA "FORO ITALICO"

## AFS (Attività Formativa a Scelta) ELECTIVE COURSES

Elective courses (AFS) enable students to broaden their studies by being able to choose from a wide range of academic subjects that usually focus on a specific occupational field.

At the end of the attendance, **AFS will give you ECTS credits but NOT MARK. Each elective course carries 4 ECTS credits.** Students can only attend 1 AFS per semester. Not more than 3 Erasmus students can attend a single AFS.

The "Sport Group" is an annual subject. These subjects have been grouped as: **AFS-382E - METODOLOGIA ED ESERCITAZIONI PRATICHE DEI GRUPPI SPORTIVI DI ATENEIO 5.** It will give you 4 credits for the entire year. In the Learning Agreement, if you are an "**Annual student**", you can insert **2 AFS + AFS-382E.**

Elective courses (AFS) may be freely selected from the list of available courses. This list may vary from year to year.

**1st SEMESTER / 1o SEMESTRE**

ECTS: **4**  
**NO MARK**

<b>MATERIA /SUBJECT</b>	<b>Insegnante/Teacher</b>	<b>Docente Verbalizzazione</b>	<b>SSD</b>
NUOTO: GIUDICE DI GARA	Paola Lazzerini, P.Robert	Sabrina Demarie	AFS-006
GIOCHI SPORTIVI ALLENATORE GIOVANILE: MINIBASKET	Marco Tamantini	Antonio Tessitore	AFS-244
METODOLOGIE DI BASE PER LE SCIENZE BIOCHIMICHE	Guglielmo Duranti	Roberta Ceci	AFS-319
GEOGRAFIA DELLO SPORT	Rosario De Iulio	Emanuele Isidori	AFS-320
CORSO PER TECNICI DI 1° LIVELLO DI PALLA TAMBURELLO	Luca Livia	Antonio Tessitore Maurizio Pecora	AFS-331
CORSO DI INTRODUZIONE ALLA LINGUA CINESE - SETTORE SPORT	Laura Gabrielli	Alessandra Fazio	AFS-350
PREPARAZIONE PER LA CERTIFICAZIONE LINGUISTICA: INGLESE - LIVELLO B2	Michela Menghini	Alessandra Fazio	AFS-380
LINGUA E CULTURA ITALIANA PER STUDENTI STRANIERI	Alessandra Fazio	Alessandra Fazio	AFS-386
CORSO DI PUGILATO	Marco Consolati	Antonio Tessitore	AFS-405
FITNESS IN ACQUA	Giampaoli	Sabrina Demarie	AFS-406
INCONTINENZA URINARIA E SPORT: IL PAVIMENTO PELVICO	Angelo Di Santo	Franchitto	AFS-407
SCIENZE FORENSI E SPORT	Andrea Berti	Giampaoli	AFS-408
TALENTO, PERFORMANCE E RIUSCITA: LE STRATEGIE PSICOLOGICHE PER IL SUCCESSO	Pietro Castiello,	A.Parisi	AFS-413
GOVERNO DEL TERRITORIO, SERVIZI E IMPIANTI SPORTIVI	G.Terraciano	Marco Salzano	LM47-28
FONDAMENTI DI MACROECONOMIA	Alberto Frau		LM47-31
INTERCULTURAL SPORT EDUCATORS FOR REFUGEES AND FOREIGNERS' INCLUSION	Isidori-Fazio		LM47-46
SPORT DIPLOMACY: A PATH TO PEACE, EDUCATION AND SOCIAL INCLUSION IN EUROPE	Isidori-Fazio		LM47-48
GOVERNANCE DELLO SPORT	C. Buscarini, Cecilia D'Angelo		LM47-37
INNOVAZIONE E TRASFORMAZIONE DIGITALE NEL MANAGEMENT DELLO SPORT	F. Vicentini, Paolo Carito		LM47-39
NEW MIRACLE-EQUITA' DI GENERE NEL MANAGEMENT SPORTIVO	Laura Capranica, Flavia Guidotti		LM47-41
ORGANIZZAZIONE ED ECONOMIA DEL MOTORSPORT	C. Buscarini, Lorenzo Maria Cioccolini		LM47-42
WEARABLES PER L'ATTIVITA' FISICA E LO SPORT: DALLA TEORIA ALLA PRATICA	Nicolò A.	Massimo Sacchetti,	LM67-33
PROGRAMMAZIONE INFORMATICA IN PYTHON	Mari		LM67-35
SPORT E CINEMA		Laura Capranica	LM68-17
PROGRAMMAZIONE NELLA PREPARAZIONE FISICA SPORTIVA	Simone Giella	Maria Francesca Piacentini	LM68-21
INTERVENTI EDUCATIVI ANTI-DOPING DALLA TEORIA	Luca Mallia		LM68-24



**1st SEMESTER / 1o SEMESTRE**

ECTS: **4**

**NO MARK**

ALLA PRATICA			
STRATEGIE E TECNICHE DI NEGOZIAZIONE NELLO SPORT	Marco Mastracci, Annamaria Di Legge	Antonio Tessitore	LM68-25





**2nd SEMESTER / 2o SEMESTRE**

ECTS: **4**  
**NO MARK**

<b>MATERIA / SUBJECT</b>	<b>Insegnante/Teacher</b>	<b>Docente Verbalizzazione</b>	<b>SSD</b>
PALLANUOTO	Pietro Robert, Nicola Izzo, Andrea Calderone	Sabrina Demarie	AFS- 017
ISTRUTTORE SALA PESI	Marco Giovannini	Maria Francesca Piacentini	AFS-179
EMERGENZA SANITARIA, PREVENZIONE E SICUREZZA NEGLI IMPIANTI SPORTIVI	Francesco Ruggero	Vincenzo Romano Spica, Saverio Giampaoli	AFS-215
ARTICOLAZIONE TEMPORO-MANDIBOLARE, OCCLUSIONE E POSTURA	Giuseppe Ficola	Franchitto	AFS-281
JUDO 2	Gianni Caso	Paola Sbriccoli	AFS-290
FILOSOFIA DELLO SPORT E DELL'EDUCAZIONE OLIMPICA	Clea Adjistephanou Papaellina	Emanuele Isidori	AFS-301
SICUREZZA ACQUATICA E PROTEZIONE DELLA POPOLAZIONE	Giuseppe Andreana	Vincenzo Romano Spica	AFS-304
ANATOMIA FUNZIONALE DELL'ARTO INFERIORE, CORRELAZIONI ANATOMO CLINICHE	Alessandro Caprio	Maurizio Ripani, Fabio Pigozzi	AFS-313
CORSO DI BADMINTON	Paolo Cambone, Vanda Chiara Luciana Tonelli	Antonio Tessitore	AFS-314
ANATOMIA FUNZIONALE DELL'ARTO SUPERIORE, CORRELAZIONI ANATOMO CLINICHE	Roberto Postacchini	Franchitto	AFS-321
TECNOLOGIE INNOVATIVE E APPROCCIO MULTIDIMENSIONALE ALL'UNITA' NERVO-MUSCOLO: DALLA FISILOGIA ALLA PATOLOGIA ALLA RIABILITAZIONE	Fabio De Santis	Franchitto	AFS-323
BIOTECNOLOGIE APPLICATE ALLE SCIENZE DEL MOVIMENTO UMANO	Palombo Ramona, Ivan Dimauro	Maria Paola Paronetto	AFS-329
FOOTBALL AMERICANO	C.Faccini	Antonio Tessitore	AFS-352
IL PRIMO SOCCORSO NELLO SPORT	G.Roscio, P.Mottironi	Attilio Parisi	AFS-360
L'ESERCIZIO POSTURALE PER LA RIABILITAZIONE DELLO SPORTIVO	Gianluca Farese	Fabio Pigozzi	AFS-362
FISCALITA' DELLE SOCIETA' E DELLE ASSOCIAZIONI SPORTIVE	Lorenzo Lelli	Vicentini	AFS-363
MOUNTAIN BIKING	Aldo Pontecorvo	Massimo Sacchetti	AFS-366
BASEBALL E SOFTBALL	Fabio Borselli	Antonio Tessitore	AFS-367
LEGISLAZIONE AMBIENTALE APPLICATA A IMPIANTI ED EVENTI SPORTIVI	Luigi Cerciello Renna	Emanuele Isidori	AFS-376
SPORT REMIERI	R. Dezi, G.Benigni	Sabrina Demarie	AFS-378
PREPARATORE FISICO DI PRIMO GRADO PER IL TENNIS	Luca Livia	Antonio Tessitore	AFS-381
IDROCHINESITERAPIA	Danilo D'Andrea	Giampaoli	AFS-383
LINGUA ITALIANA DELLO SPORT PER STRANIERI	Alessandra Fazio	Alessandra Fazio	AFS-385
SCI NORDICO E SALUTE	Lorenzo Lupi	Giampaoli	AFS-389
ALLENAMENTO PROPRIOCETTIVO E CONTROLLO POSTURALE	Eleonora Pisu, Marco De Angelis	A.Parisi	AFS-402
SPORT E INTEGRAZIONE	MAGNANINI, SBRICCOLI,	ISIDORI	AFS-409



ESCURSIONISMO E BENESSERE	CECI, GIAMPAOLI		AFS-412
RIANIMAZIONE CARDIOPOLMONARE DI BASE E DEFIBRILLAZIONE PRECOCE PER LA COMUNITA' (BLSDA)	Roscio Giancarlo, Mottironi Pierluigi	Attilio Parisi	L76/S-100
RIABILITAZIONE E RIEDUCAZIONE FUNZIONALE MEDICO SPORTIVA	C. Mazzola, E. Castellacci, Giombini	F.Pigozzi	L76/S-121
GINNASTICA DOLCE PER LA PREVENZIONE DELLE CADUTE NELL'ANZIANO	Francesca Brienza	Laura Capranica	L76/S-99
FARMACOLOGIA APPLICATA ALLO SPORT E PREVENZIONE DEL DOPING	Alessia Di Gianfrancesco	Fabio Pigozzi, S. Sabatini	LM67-20
CARDIOLOGIA DELLO SPORT	Leonardo Calò	Fabio Pigozzi	LM67-21
PSICOLOGIA DELLA COMUNICAZIONE	Pitzalis	Pitzalis	LM67-24
RIABILITAZIONE ED ESERCIZIOTERAPIA NEL CARDIOPATICO	Lazarevic Zlatan	Fabio Pigozzi	LM67-29
METODOLOGIA DELLA RICERCA SOCIALE	Francesca Romana Lenzi	Francesca Romana Lenzi, Luca Mallia	LM67-32
SPORT AND AUTISM			LM67-36
RISPOSTA IMMUNITARIA, SPORT E SALUTE		Clara Crescioli	LM68-19
DIDATTICA DEI TUFFI			LM68-27
	Alberto Azara	A.Piazza,	
ILLECITO SPORTIVO	Alberto Frau	Alberto Frau	LM47-27
PROGRAMMAZIONE E CONTROLLO DI GESTIONE	Carlo Rombolà	G. Terracciano,	LM47-32
DIRITTO INTERNAZIONALE DELLO SPORT	P. Sandulli	P. Sandulli	LM47-34
PRINCIPI GENERALI RELATIVI ALLA TUTELA STATALE E SPORTIVA	Riccardo Meloni	G. Terracciano,	LM47-35
GESTIONE DELLE RISORSE UMANE IN AMBITO SPORTIVO	Leopoldo Di Bonito	G.Terracciano	LM47-36
IL SISTEMA DEI FINANZIAMENTI PUBBLICI, NAZIONALI ED EUROPEI A SOSTEGNO DELLO SPORT	Paolo Carito	F.Vicentini,	LM47-38
MANAGEMENT STRATEGICO E IL FENOMENO DEI FONDI D'INVESTIMENTO NELLO SPORT	Lorenzo Maria Coccolini	G.Terracciano,	LM47-40
PROFILI AMMINISTRATIVI SULLA RIQUALIFICAZIONE, COSTRUZIONE E GESTIONE DEGLI IMPIANTI SPORTIVI	Alberto Azara	A.Piazza,	LM47-43



ANNUAL / ANNUALE

ECTS: 4

NO MARK

<u>MATERIA /SUBJECT</u>	<u>SSD</u>
<u>METODOLOGIA ED ESERCITAZIONI PRATICHE DEI GRUPPI SPORTIVI DI ATENEIO 5</u>	AFS-382-E

SPORT GROUPS 2022/2023

- ⊕ Atletica Leggera
- ⊕ Calcio A 5 Femminile
- ⊕ CalcioMaschile
- ⊕ Canottaggio
- ⊕ Ciclismo
- ⊕ Corporeità eEspressione
- ⊕ Judo
- ⊕ Karate
- ⊕ Nuoto
- ⊕ Pallacanestro  
Maschile/Femminile
- ⊕ Pallavolo Maschile/Femminile
- ⊕ Rugby
- ⊕ Tennis
- ⊕ Tennis Tavolo
- ⊕ Team gym (Jumps/Trampoline)

