

**Welcome to the**

**Università degli Studi di Roma**  
**"Foro Italico"**

**Information for LLP/Erasmus students**



## THE CITY OF ROME

All roads lead to Rome, as the saying goes; the truth is, they all depart from Rome: in fact, most of the road network built by the Ancient Romans still represents the backbone of many modern European road systems.

The city of Rome developed from a small village on the Palatine Hill, but its influence reached well beyond its Emperors' most ambitious dreams: countries and continents, unheard of at the height of the Roman Empire's splendour, owe their language, their laws, their faith and their calendar to Rome.

Innumerable masterpieces reflect the city's continuity as a seat of power and learning under the papacy, and as the capital of modern Italy; they also trace the history of art and architecture through the ages, from the *Pantheon* (119 B.C.) to the state-of-the-art in design and technology, the *Auditorium* (2002). Such a rich complexity, stemming from almost 3000 years of haphazard superposition, is bewildering and then progressively fascinating, as the visitor discovers this unique city's unexpected charm. Students will find out that, despite all its grandeur, Rome carries its years lightly and that a visit to this easygoing, friendly, lively, often chaotic city is, in itself, an enriching experience.

To receive updated information on what's on in Rome, you can ask the Tourist Information Kiosks (PUNTI INFORMAZIONE TURISTICA, P.I.T.).

**Further information on the city of Rome can be found on: [www.comune.roma.it](http://www.comune.roma.it)**

### CLIMATE

The weather in Rome is generally mild and pleasant.

Winters are usually moderate except for January and February when it can be very cold and wet (average temperature respectively, 0 / - 6°C and 1 / - 7°C.) It can also be very hot in July-August with temperatures rising over 35°C, but evenings are usually extremely pleasant.

### PUBLIC TRANSPORTS

Bus tickets are on sale in most tobacconists and newspaper kiosks; vending machines may be found at underground stations (metro). Tickets must be validated immediately on boarding the bus or at the railway station before boarding an urban train. Bus and metro inspectors do spot checks and the fine for being caught without a validated ticket is € 100.00.

The standard ticket, **B.I.T.** costs € 1.00; it is valid for 75 minutes on all busses and urban trains; it also includes one trip on the metro.

The daily ticket **BIG** costs € 4.00 and is valid for one whole day.

The **C.I.S.** is a weekly pass for all busses, urban trains and the metro; the cost is € 16.00.

The monthly pass (**Tessera Metrebus**) costs € 30.00 and must be purchased at the beginning of the month: **Foreign students can get a discount monthly pass for € 18.**

All details concerning public transport in Rome, including itineraries, are available on the web site [www.atac.roma.it](http://www.atac.roma.it)

### COST OF LIVING

Erasmus students should expect to spend an average of € 800 a month, including housing and a margin for general expenses. Prices of the most common items are listed below:

- daily newspaper: € 1.10
- milk (per litre): € 1.70
- bread (per kg): € 1.90



- cappuccino: € 1.00
  
- apples (per kg): from € 2.00
- meal in a pizzeria: from € 12.00 to 18.00
- cinema: € 7.50
- theatre: from € 15.00 to 60.00

## THE UNIVERSITY

It is a vocational university, the only Italian state university dedicated to sports and exercise sciences.

It was created in 1998 as Istituto Universitario di Scienze Motorie IUSM, when it replaced Rome's Istituto Superiore di Educazione Fisica (ISEF), whose activity had been focused on higher education for Ph.E. teachers. IUSM, now "Foro Italico University" extended the ISEF's scope, to cover all the fields of interest related to human physical activity: scientific research, coaching for recreational sports and for high level competitive sports, teaching, fitness, re-education and rehabilitation, organization of sport events, management of sports facilities, etc.

### FACILITIES

The University is situated in the northern district of Rome; the area, known as Foro Italico, was built in 1932, when a number of impressive buildings and facilities were conceived as Rome's sports centre. The area represents a typical example of Fascist architecture, characterized by a wide use of white marble and triumphal statues and obelisks.

The Olympic Stadium, at the back of the Institute, was built on the occasion of the Rome Olympic Games (1960) and has since been the venue of the World Championships in Athletics (1987) and of the World Soccer Championships (1990).

**Foro Italico University** facilities include modern education structures (11 lecture halls, a computer centre, a language centre, a specialized library), up-to-date sport facilities (10 fully-equipped gyms, 2 swimming pools, a rowing centre on the River Tevere) research centres (more than 20 laboratories). The University also has its own audiovisual centre for the production of educational and non-professional materials, and conference halls for national and international congresses.

### FACULTY AND PROGRAMMES

The University is currently structured into 3 research-based Departments:

- *Human Movement and Sport Sciences,*
- *Health Sciences,*
- *Educational Sciences*

Teaching offerings within the Faculty of Sport and Exercise Sciences include first- and second-tier programs, and research-oriented doctoral programs.

#### First tier **Laurea triennale**

(Three-year degree Bachelor)

Bachelor in Sport and Exercise Sciences – 3 years, 180 ECTS

This assures students a basic theoretical preparation and an adequate command of general scientific methods and content, in addition to the acquisition of specific professional know-how. It requires 180 credits, which can generally be accumulated within 3 years.

#### Second tier **Laurea Magistrale**

Laurea Magistrale in Sport Sciences and Techniques – 2 years, 120 ECTS

Laurea Magistrale in Preventive and Adapted Physical Activity – 2 years, 120 ECTS

Laurea Magistrale in Sport Management – 2 years, 120 ECTS

Laurea Magistrale in Health and Physical Activity, 2 years 120 ECTS Course taught in English language



A "Laurea Magistrale" affords a more sophisticated level of education. This second level qualification is open to graduates with a three-year degree and requires an additional 120 credits, which can be accumulated over an average of two years. A minimum degree level and specific curricula may be required for admission

### MASTER / MASTERS

- Master in Sport Psychology (2nd Level, 1 year, 60 ECTS)

A Masters is an intermediate university qualification and can be obtained both after a three-year degree (1st level Masters) and after a Higher degree (2nd level Masters). These courses last at least one year and involve the acquisition of 60 credits for each academic year. Their purpose is to build on a student's knowledge and to convert it into specific professional skills.

### Doctoral School of research (3 years)

- Doctoral Course: Health and Physical Activity: Biomedical and Methodological Aspects
  - Curricula A Applied Biomedical/Methodological Approach
  - Curricula B Integrative Biology Approach – European Curriculum
- Doctoral Course :Sport, Exercise and Ergonomics
- Doctoral Course : Culture, disability and inclusion: education and training

## COURSES

Courses mainly are annual courses and students are allowed to take examinations at the end of the second semester.

Teaching methods include lectures and practical work, as well as seminars and tutorials, where students play an active role. Lectures provide the basic framework of the course: students are expected to organize their own homework in view of the examination. Tutors are always ready to help.

All courses are given in Italian , except for Laurea Magistrale in Health and Physical Activity.
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Classes are scheduled in the morning and in the afternoon, Monday through Friday.

## BACHELOR'S DEGREE IN MOVEMENT SCIENCES

The complete course programs in Italian and English may be found at the following website:

[www.uniroma4.it](http://www.uniroma4.it) clicking on **Servizi agli studenti > Didattica**: double click on the course you are interested in, stroll to end page and double click on **Offerta didattica > choose the academic year and click on Visualizza Offerta Didattica**.

### First Year

COURSE NAME	DURATION	ECTS
<p><b>Human Anatomy applied to Physical Education</b></p> <p>General Anatomy: The cell - The tissues - Structure of the arteries and the veins - Structure of the lymph nodes - System integumentary - The joints and the muscles</p> <p>Upper limb: Surface anatomy and Anthropometry - The skeleton of the upper limb - The joints and the muscles of the upper limb - The vases and the deep nerves - The cavities and the spaces</p> <p>Lower limb: Surface anatomy and Anthropometry - The skeleton of the lower limb - The joints and the muscles of the lower limb - The vases and the deep nerves - The cavities and the spaces</p> <p>Median region of the Back: Surface anatomy and Anthropometry - Spine - Joints and muscles of the rachis Chest: Sternum - Ribs - Sternum-costal joint - Muscles of the thoracic anterior wall</p> <p>Abdomen: Abdomen muscles - Inguinal canal. Neck: Anterior, Lateral and Posterior Muscles</p> <p>Head: The skull - Temporo-mandibular joint - Masticatory muscles. Head: Surface anatomy and Anthropometry- The layers and the superficial organs - The nasal hollow - The oral hollow - The eye - The ear - The encephalon - The cerebellum - The cerebral trunk. Neck: Surface anatomy and Anthropometry- The layers and the superficial organs - The pharynx - The esophagus - The larynx - The thyroid - The parathyroidis - The vases and the nerves of the neck - Visceral space of the neck</p> <p>Median region of the Back: Spinal marrow - Spinal roots. Chest: Surface anatomy and Anthropometry - The layers and the superficial organs - The organs of the hollow thoracic -The mediastinum</p> <p>Abdomen: Surface anatomy and Anthropometry - The layers and the superficial organs - The abdominal hollow - The space retroperitoneal - The pelvic space extraperitoneal - The perineum.</p>	annual	12
<p><b>General and Human Biology and Biochemistry</b></p> <p>Fundamentals of biological thinking and their implications for science and society, the notions of organisation, complexity, homeostasis. The basic organisation of matter, the characteristics and diversity of life, the principles of evolution, the structures and functions of the cell and the organism at the different levels of complexity.</p> <p>The principles of genetic information and its expression in metabolism, development, reproduction. Mendelian inheritance and application in human genetics. The concept of complex trait. Human evolution, adaptations and diversity, and the biology of growth and aging. The basic principles of ecology, environmental issues, and the frontiers of contemporary biology. Structure of major biomolecules. Carbohydrates of physiological significance. Glycogen: function, structure and importance during exercise. Lipids of physiological significance: fatty acids, triacylglycerols, phospholipids and cholesterol. Proteins of physiological importance: Myoglobin, Hemoglobin, Collagen, Actin and Myosin. Biochemistry of extracellular and intracellular communication.</p> <p>Bioenergetics. Respiratory chain and oxidative phosphorylation.</p> <p>Hormones: structure, mechanism of action and their effect on the energy metabolism. Role of Vitamins and Minerals. Digestion and Absorption. Carbohydrates metabolism: glycolysis, oxidation of pyruvate, citric acid cycle, gluconeogenesis and the pentose phosphate pathway. Metabolism of glycogen. Metabolism of fructose. Metabolism of Lipids: oxidation of fatty acid, ketogenesis. Metabolism of proteins and amino acids: transamination. Fates of carbon skeletons of amino acids. Fate of ammonia: biosynthesis of urea</p>	annual	12
<p><b>Basic Theories and Techniques of Movement Activities</b></p> <p>1. Movement and motor skills. Concepts, definitions and teaching methods.</p> <p>2. 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.</p>	annual	7

<p><b>Pedagogy of Sport</b> Module I 1.1 The model of body education in the classical paideia 1.2 body education in the Middle Ages, Renaissance and Enlightenment 1.3 The birth of the sport in England 1.4 The body education in Europe between the XIX and XX century 1.5 The Olympic Education Module II 2.1 Pedagogy, Education and Sciences of Education 2.2 The Pedagogy of sport as a science 2.3 main problems of sport pedagogy 2.4 Education, well-being and sport 2.5 The research methods in sport pedagogy</p>	2 <sup>nd</sup> semester	7
<p><b>Theory, technique and didactics of Sport Games</b> Classification and characteristics of the sports games. Definition of the several models of performance and the consequent models of training. Learning and technical training. The dominant physical qualities in practicing the sports games. Relation between training of the conditioning capacities, coordination and the performance in the sports games. Organizing and designing the training in the sports games. Methods of the physical training applied to the sports games. The coaching. Characteristics and content of youth training. The functional evaluation in the sports games. Injury Prevention and reconditioning of the athlete. The Match Analysis</p>	annual	7
<p><b>Computer Sciences</b> General concepts Hardware: computer rating, central unit, i/o devices-Software: operating system, general purpose software-Networks: communication systems, Lan/Wan, Internet -Security and Ergonomics Data privacy law</p>	semestral	2
<p><b>English or French language (Introduction)</b></p>	1 <sup>st</sup> semester	0
<p><b>English or French language (course 1)</b></p>	2 <sup>nd</sup> semester	5
<p><b>Elective activity</b></p>		4

## Second Year

COURSE NAME	DURATION	ECTS
<b>Physical Activity for Children and the Elderly</b> (1) Theory: Fundamental motor skills: how they develop at the different stages of childhood and adolescence. Praxis: Learning experiences supporting the development of body scheme and fundamental motor skills in preschooler and primary schoolers through imaginative and imitation plays. (2) Theory: Development of co-ordinative abilities and task analysis. Pratica: multi-sport approach to physical activity. (3) Theory: Motor learning: prescriptive and heuristic approaches and their applied consequences. Praxis: How to apply the criteria of variability of practice: systematic exercise variations to structure generalize motor programs and manipulation of degrees of freedom to facilitate creative problem solving in the motor domain. (4) Theory: physical fitness and fitness-related capacity to sustain physical loads at developmental age. Praxis: How to enhance physical fitness of children and adolescents through playful physical activity. (5) Demographic changes and classification of aging. (6) Age-related changes in anthropometric measures, bone, muscle, and flexibility: Theory and PA prescription. (7) Age-related changes in balance, postural control and locomotion: theory and PA prescription to prevent falls. (8) Age-related changes of the cardio-vascular system and of motor coordination: theory and PA prescription.	annual	9
<b>Human Physiology and Sport</b> Module 1: Biological control systems Module 2: Coordinated body functions Module 3: Human nutrition. Nutrition and sport. Muscle energetics	annual	10
<b>Individual sports: Track and Field, Gymnastics, Rhythmic Gymnastics –</b> Sport classification; technical tactical aspects of individual sports; Periodization and training monitoring; Talent identification in individual sports; technical aspects of track and field technical aspects of gymnastics; technical aspects of rhythmic gymnastics	annual	12
<b>General Psychology and Sport Psychology</b> Module 1: 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-Evaluation of students? learning outcomes will be based on a multiple-choice exam concerning the topics and subjects covered during the teaching module. 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	annual	10
<b>Basis of Economics and Public Law</b> General characters of juridical phenomenon The Constitution and its interpretation; relationship between national and European Community legal systems; Parliament; The Government; the President of Republic; Public Administration; individual rights and freedoms	annual	8
<b>English or French language (course 2)</b>	Semestral	4

## Third Year to be confirmed

COURSE NAME	DURATION	ECTS
<b>Preventive and Adapted Physical Activity</b> General Principles. General laws of skeletal development and of muscle function. Application modalities of muscle contraction at different range of motion. Muscular and articular kinetic chains. General principles of the abdominal and respiratory exercises. Methods and techniques of muscle stretching. Posture. Concept of globality and functional correlations. Morfo-functional evaluation. General principles of the main postural reeducation techniques. Ergonomics and Back-school general principles. Vertebral pathologies. Etiology, prevention programs of pain due to abnormal solicitations in sport or work activities. Scoliosis. Etiology, evolution, tridimensionality and biomechanics of scoliotic column. Evaluation of scoliotic subjects and screening principles. General principles of kinesiology for scoliosis prevention. Scoliosis and sport activity. Adapted physical activity. Definition of adapted physical and sport activity. International and national organization for special and adapted sport activities.	annual	8

<b>Endocrinology and Sport Medicine:</b>	annual	10
<b>Sports Traumatology and Biomechanics</b>	annual	9
<b>Swimming Activities and Safety Management in Sport Facilities</b>	annual	12
<b>Training Methodology and Factional Evaluation in Sport Facilities</b>	semestral	7
<b>Psychology of Development and Special Pedagogy</b>	annual	9
<b>Vocational Training</b>	annual	7

## POSTGRADUATE PROGRAMMES

### Postgraduate Degree in Sports Management

Course Name	DURATION	ECTS
<b>Theories, Regulation and Management of sport and physical activities</b> Theory of the training process: managerial aspects. History elements of Olympic sports. National and International Sport Organization Bioethical Principles in Sport Organization and management of sport and physical activities services. Organization, management and control of national and international sport events. Sport communication: communication processes in the world of sport and physical activities.	1 <sup>st</sup> semester	8
<b>Business Administration and Accounting</b>	annual	20
<b>Sports Law</b>	1 <sup>st</sup> semester	8
<b>Health and Safety Management in Sport Facilities</b>	1 <sup>st</sup> semester	6
<b>Techniques of Sport Activities and prevention of doping phenomena</b>	2 <sup>nd</sup> semester	8
<b>Psychology of Work and Organisations</b> The course departs from the premise that the student has already acquired basic knowledge in psychology. 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 course includes a series of seminars concerning organizations that will be offered to provide students with examples of psychological practices and assessment within organizations.	2 <sup>nd</sup> semester	6
<b>Vocational Training</b>		4

### Second year to be confirmed

Course Name	DURATION	ECTS
Administrative Law and Information/communication Law	2 <sup>nd</sup> semester	8
English or French Language	annual	6
Sociology and Training in Sport Organisations	annual	6
Strategic Management and Government in Sport Organisations	annual	20
Business Law	1 <sup>st</sup> semester	6

**Postgraduate Degree in Preventive and Adapted Physical Activity**

**First year**

<b>Course Name</b>	<b>DURATION</b>	<b>ECTS</b>
<p><b>Biomedical issues in health and exercise</b></p> <p><b>BIOLOGY</b> Genetics of human variability; Organisms, environment and the genetic basis of diversity; Biology and Genetics of adaptation; Biology and Genetics of development and aging</p> <p><b>BIOCHEMISTRY</b> Biochemical adaptation in the nutrition/fasting cycle; Metabolic adaptation in obesity; Metabolic adaptation in Type I and Type II Diabetes; Oxygen toxicity and damage induced by free radicals; The antioxidant defence system; Biochemistry of erythrocytes and their functional adaptation to different environments</p> <p><b>PHYSIOLOGY</b> 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. Physiology of adaptations to environmental stress; Exercise at medium and high altitude; Exercise and thermal stress; Sport diving; Exposure to microgravity. 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 and neural adaptations; Gender comparisons in adaptations to training; Training muscle strength and power in older individuals.</p> <p><b>FINAL ASSESSMENT</b> 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.</p>	annual	12
<p><b>Internal Medicine and Endocrinology applied to Physical Activity</b></p> <p>Physical activity as prevention and therapy for different Internal Medicine Diseases: Cardiovascular disease: arterial hypertension, ischemic heart disease; Pulmonary disease: instrumental evaluation principles, spirometry, asthma:symptoms, diagnosis and therapy; chronic bronchopneumopathy: chronic bronchitis, pulmonary emphysema; Tumoral disease: functional evaluation and rehabilitation of tumoral patient; Rheumatic artropathy: arthritis, how to prevent traumatic lesions (functional bandage). Physical activities programs applied to different disorders. Sport Medicine and disorders limiting physical activities; Breathing apparatus infections, haematological, genito-urinary, gastrointestinal and dermatological diseases Health Emergency management in preventive and adapted physical activities Principles of emergency, notions of first aid, sport medicine and environmental factors, how to prevent drugs and other substance abuse. Endocrinology: Notes on internal secretion glands and hormones; Notes on fundamentals of endocrinology: neuroendocrine system, hypothalamus, anterior and posterior pituitary gland, thyroid, parathyroids, pancreas, cortical surrenal glands, midollar surrenal 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 auxology; 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 - Cronoendocrinology 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; Climateric and menopause; Polycystic ovary syndrome; Metabolic syndrome; Diabetes; Thinness and sarcopenic syndrome; Ageing; Osteoporosis; Sexual disorder</p>	annual	10
<p><b>Physical Activity, Wellness and Quality of life</b></p> <p>1. Physical activity, wellness and quality of life in adults Physical activity, exercise and health; Components of wellness and physical fitness; Public recommendations on physical activity for health promotion 2. Exercise program design; Evaluation of individual aims and needs; Evaluation of physical fitness; Phases of exercise prescription; Planning and teaching of the exercise session 2.1 Exercise for cardio-respiratory fitness; Benefits and risks of the various forms of exercise; Type, intensity, duration, frequency and progression of exercise Practical work, discussion of representative studies and case studies</p>	annual	10

2.2 Exercise and muscular function; Concept and importance of muscular strength and endurance; Role and characteristics of the different forms of resistance exercise Functional training; Practical work, discussion of representative studies and case studies 2.3 Exercise for management of body weight and composition; Role of exercise for the prevention of overweight and obesity; Characteristics of the exercise for management of body weight and composition; Practical work, discussion of representative studies and case studies 2.4 Exercise and flexibility; Influence of flexibility on physical fitness; Characteristics and applicability of the different methods of exercise for improvement of flexibility 3. Exercise for prevention of low-back pain and postural reeducation; Concept of body posture and functional applications; General concepts of the principal techniques in postural exercise		
<b>Motor Activities for Children and the Elderly</b> As concerns the developmental age, the module is focused motor testing and PA prescription to support the development of co-ordinative abilities, physical fitness for health, cognitive efficiency for health and life skills in healthy individuals and those affected by developmental coordination disorders (DCD), attention deficit hyperactivity disorders (ADHD) and problems related to low levels of physical fitness. As concerns, older adults, the module is focused on motor testing and integrated PA prescription aimed at contrasting age-related declines of motor coordination, balance, cardio-vascular fitness, muscular strength, flexibility, and cognitive	annual	10
<b>Tests and Measurements for Functional Evaluation in Sport Performance</b> Evaluation in adapted physical activity Qualitative and quantitative measurements of adapted sport and physical activity Norms and criteria for the evaluation of adapted physical activity Analysis of the scientific literature in functional evaluation and adapted physical activity	annual	9
<b>English Language</b>	1 <sup>st</sup> semester	2
<b>Computer Science</b>	1 <sup>st</sup> semester	1

**Second year to be confirmed**

<b>Course Name</b>	<b>DURATION</b>	<b>ECTS</b>
<b>Traumatology and Rehabilitation of the Locomotor and Neurological System</b>	annual	4
<b>Preventive Sociology, Epidemiology and Health Education</b>	annual	10
<b>Motor Activities for Special Populations</b>	annual	12
<b>Pedagogy and Psychology of Physical Activities</b>	annual	12
<b>Vocational Training</b>		8

## Postgraduate Degree in Sport Sciences and Techniques

### First year

Course Name	DURATION	ECTS
<b>Theory/Methodology of training and Technical/Tactical Aspects of Olympic sports</b> Introduction and development of Olympic sports and Olympic participation. Development of performance in relation to political, technological, media, and ethical aspects. Qualitative and quantitative measurements of sport training and performance in relation to the analysis of the scientific literature. 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.	annual	12
<b>Sport 1</b>	annual	9
<b>Sport Physiology and Biomechanics</b> 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, throws, rotations, hitting) using the language of biomechanics. Characteristics of sport surfaces materials. Shoes technology. Introduction to sport physiology. The cerebral motor systems: movement, voluntary and reflex control. Integration of sensory and motor systems. Maximal voluntary contraction. Regulation of the muscular force. The size principle, recruitment, and firing rate. Hill model and Huxley model. The force-velocity curve and muscular power. Power measurements: laboratory and field tests. Specificity of neuromuscular responses to training. Surface electromyography as the instrument to study neuromuscular responses to exercise. The M wave and the muscle fibers conduction velocity. The Hoffman reflex (H reflex) and the measures of excitability of the neuromuscular system. Energetic cost of exercise: specialization effects. Maximal aerobic power: laboratory and field tests. Anaerobic threshold determination: laboratory and field tests using invasive and non invasive methods. Maximal anaerobic power: laboratory and field test. The "Maximum anaerobic running test (MART)". The evaluation of the elderly athlete (aerobic and anaerobic tests, evaluation of muscular force and power)	annual	11
<b>Sport Biology and Biochemistry</b> 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. Sources of energy for muscle contraction; Purine nucleotides and phosphocreatine; Factors influencing the utilization of fuel sources during exercise ;Metabolic responses to high-intensity and prolonged exercise; Metabolic adaptation to training; Oxidative stress; Mechanisms of ROS production and anti-oxidant defenses	1 <sup>st</sup> semester	7
<b>Anatomy and Sport Traumatology</b> Notes of articular anatomy, muscular and functional of the great joints; Notes of clinical, prevention and functional rehabilitation of the great joints; Anatomy of the shoulder; Clinical, prevention and functional rehabilitation of the shoulder; Anatomy of the elbow; Clinical, prevention and functional rehabilitation of the elbow; Anatomy of the hand; Clinical, prevention and functional rehabilitation of the hand; Anatomy of the hip; Clinical, prevention and functional rehabilitation of the hip; Anatomy of the knee; Clinical, prevention and functional rehabilitation of the knee; Anatomy of the neck-foot; Clinical, prevention and functional rehabilitation of the neck-foot; Anatomy of the foot; Clinical, prevention and functional rehabilitation of the foot; Anatomy of the spine; Clinical, prevention and functional rehabilitation of the spine	1 <sup>st</sup> semester	8
<b>Psychology and Pedagogy of Sport</b> SPORT PSYCHOLOGY Emotions, attention and performance. Anxiety and stress; general principles for control of stress and anxiety. Techniques of biofeedback and imagery; Goal setting, feedback.	annual	12

<p>Self-efficacy. Theory and applications; Team psychology: group interactions and leadership; Psychophysiology of excellence in sport SPECIAL PEDAGOGY OF SPORT Different cultural and institutional models active in pedagogical research, applied on the analysis of situation of disability, in the international comparison. The ICF. The modern concept of education, as inclusion and integration. Different educational methods with people with serious disability. Help relation: educational and sports abilities in the connection of mediation and cooperation. Cooperative learning and sport. Instruments of educational observation for the empowerment of the integration processes within sports contexts and well-being environments. Analysis of integration's experiences of some sport's associations for the widening of the formative and sport planning. To know the pedagogical aspects implies in the doping, in the context of wellness and social and community life.</p>		
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**Second year to be confirmed**

<b>Course Name</b>	<b>DURATION</b>	<b>ECTS</b>
<b>Sport 2</b>	annual	9
<b>Sport law and Health Safety</b>	1 <sup>st</sup> semester	8
<b>Endocrinology and Sport Medicine</b>	1 <sup>st</sup> semester	8
<b>Theory of training and competition/Rehabilitation of an injured athlete</b>	2 <sup>nd</sup> semester	8
<b>Vocational Training</b>		14

### Postgraduate Degree in Health and Physical Activity

<b>Course Name</b>	<b>DURATION</b>	<b>ECTS</b>
<p><b>Biomedical Issues in Health and Exercise</b></p> <p>a) Human Biology, Sport Medicine and Public Health: Physical activity, public health, and fitness: an approach from the point of view of epidemiology; Genetic variability in health and diseases; Principles of Fitness/Wellness: Health benefits of endurance or strength training; Nutrition and metabolism in health and exercise; Metabolic syndrome and type 2 diabetes; Medical risks of substance abuse</p> <p>b) Exercise Physiology, Motor Analysis and Biomechanics; Energy metabolism in skeletal muscle during exercise: methodological considerations; Neuromuscular adaptation in muscles and tendons in response to health-enhancing physical exercise; Cardiorespiratory regulation and adaptations with regard to health-enhancing physical activity in aerobic performance; Neuroendocrine and immune adaptation in response to physical exercise; Locomotor apparatus (bones) adaptation in response to health-enhancing physical exercise; Biomechanics and motion analysis; Fitness assessment, and exercise testing and prescription; Muscle strength assessment and testing; Research methods in fitness assessment; Language tests and individual planning of the language study for the Mod 1</p>	1 <sup>st</sup> semester	12
<p><b>Physical Activity for Children and Elderly</b></p> <p>A) Physical Activity for Children: Biology of growth &amp; development; Exercise training in children; Settings based promotion of Physical activity among children and youth ? from evidence to practice; Psychosocial health effects of physical activity &amp; sport in young people; Physical activity, fitness and children's health; Effects of physical exercise on cognition in children; Motor Behaviour</p> <p>b) Physical Activity for the Elderly: Biology and epidemiology of aging; Age-related changes in physical functional ability; Effects of physical activity in the elderly; Exercise prescription; Functional tests; Psychosocial and cultural gerontology; Physical activity for the elderly ? interdisciplinary approaches; Aging and the dynamical systems approach to complexity and biological coordination in the neuromusculo-o skeletal system; Exercise and cognitive functions; Language tests and individual planning of the language study for the Mod 3</p>	1 <sup>st</sup> semester	11
<p><b>Psychosocial and Educational Issues in Health and Exercise</b></p> <p>a) Psychosocial Aspects of Physical Activity and Exercise: Introduction to Psychology and Physical Activity; Effects of physical activity and exercise on mental health and cognitive processes; Social Cognitive Models of Behavior Change; Enhancing Physical Activity Promotion by Health Practitioners; Lifestyle assessment and counselling: Monitoring and management; Research Methods &amp; Statistics for the Social Sciences I; Qualitative Research Methods in Social Science : Theory and Practice.</p> <p>b) Interventions, Applications And Future Directions: Pedagogical &amp; Philosophical Issues in Sport and Physical Activity; Enhancing physical activity: towards a social-ecological approaches; Physical Activity &amp; Sport as Social Phenomena; Models of Health Behaviour Change; Research Methods &amp; Statistics for the Social Sciences II; Language tests and individual planning of the language study for the Mod 2</p>	1 <sup>st</sup> semester	12
<p><b>Movement Therapy and Physical Activity for Special Population</b></p> <p>a) Movement Therapy and Physical Activity for Special Populations: Sports therapy and the ICF classification; Professional fields; Coordination Training for Special Populations? Practical Application; Aquatherapy; Muscle Training for Special Populations/ Training with Devices (Theory and Practical Application); Neurologic diseases and Sensomotoric system; Coordination training; Gait training and Coordination ? Practical Application ? Practical Application Lower and Upper Extremities; Practical Application Trunk; Systemic diseases</p> <p>b) Issues in Prevention, Rehabilitation and Sport: Prevention and treatment of degenerative diseases in the elderly; Imaging and diagnostic procedures in traumatology and rehabilitation; Neuro-rehabilitation in post-traumatic brain injury; Musculo-skeletal disorders and sports activity; Joint diseases: acute and overuse injuries; Managing of the overuse injury; Health and safety in sport and PA; Language study ? conclusive session</p>	1 <sup>st</sup> semester	13
<p><b>Research Methodology</b></p> <p>-Philosophical and Ethical consideration in research design and management of results -Knowledge and Methodology in Sport Science and Health related research -Research methods: theory and practice in planning, design, data collection - Research methods: theory and practice in data analysis and presentation</p>	1 <sup>st</sup> semester	7

## UNIVERSITY SPORTS TEAMS

The so-called "**Gruppi Sportivi d'Ateneo**" are sport teams, which represent "Foro Italico University" in all sports events among different Universities, sport federations and sports authorities. Sports teams include football, gymnastics (including rhythmic), basketball, volleyball, teamgym, tennis, rugby, fencing and an experimental group called "Argonauti". All sport teams are quite successful both on a national and international level. In order to have access to one of the sport teams, students are required to practise the discipline at an agonistic level and stay at "Foro Italico" University for the all academic year.

## VOCATIONAL TRAINING

More than 150 public and private companies have drawn up agreements with "Foro Italico University" in order to give our students the opportunity to carry out a training experience (**tirocinio**) in a real working environment. The activities available vary greatly, ranging from teaching in primary school, to working in sport centres (both teaching and managing-administrative positions), to stages in sport equipment producers, etc.

To get the list of available Vocational trainings, Erasmus students should get in touch with the Job Placement office and speak **a fluent Italian**.

## ACADEMIC CALENDAR

The Italian higher education system is based on the academic year, which is divided into two semesters:

**I semester:** from October to the end of January.

**II semester:** from March to the end of May

**The Italian language course usually start during the last week of September (for the I semester) and February (for the II semester). Dates will be published as soon as possible.**

**Examinations** are held in February (1<sup>st</sup> semester) and in June/July (2<sup>nd</sup> semester)..

**No teaching activity is offered** on the following dates:

- November 1<sup>st</sup>,
- December 8<sup>th</sup>;
- Christmas holidays: from Dec. 21<sup>st</sup> to Jan. 7<sup>th</sup>;
- Easter holidays: from the previous Thursday to the following Tuesday;
- April 25<sup>th</sup>;
- May 1<sup>st</sup>,
- June 2<sup>nd</sup>,
- June 29<sup>th</sup>.

Summer vacations: from August 1<sup>st</sup> to August 31<sup>st</sup>.

## UNIVERSITY SERVICES

### THE INTERNATIONAL OFFICE

The International Office is responsible for coordinating and favouring worldwide contacts and relations with fellow universities and higher education and research institutions. It is also in charge of all matters concerning the LLP/Erasmus Programme and therefore assists Erasmus students with a view to making their stay in Rome as pleasant and profitable as possible.

To this end, the office carries out all enrolment and bureaucratic procedures and provides support in all practical matters, such as lodging, administrative issues, everyday life. It is also the necessary link with home universities and Foro Italico University faculty and staff.

### IMPORTANT

#### **Erasmus students admitted to Erasmus Programme must:**

- complete the Application Form and the Learning Agreement Form stating all the exams they intend to take during their stay in Rome. The Learning Agreement should be completed according to the Foro Italico University programme of studies and authorized by either the Sending and Receiving Institutional Coordinators;
- after receiving signatures, send both documents to our International Office by fax or mail, together with a photocopy of their passport and a copy of the exam transcript;
- wait for the Learning Agreement to be approved by our International Office;
- before leaving for Italy, students should bring with them, the original copy of all the above documents, a copy of his LLP contract and a medical certificate stating his good health to practice physical activities.

NOTE: If necessary, the Learning Agreement can be modified within two weeks of the beginning of the academic year. However, any change must be communicated in writing and accepted by the home University.

**Upon their arrival in Rome**, Erasmus students are requested to contact the International Office in order to confirm their registration to University. The office will give them an Erasmus certificate, stating their enrolment at the Institute and, after a few days, the ADISU card for the canteen. The Office will also inform the students of all administrative procedures needed to get the temporary residence permit (when needed) and to register with the local health authorities

**Italian Language Courses:** Italian courses are held at the beginning of each semester. In order to monitor the level of knowledge of the Italian Language, each student will be invited to take an entry test.

**Welcome meeting:** At the beginning of the academic year, a "Welcome meeting" for Erasmus students is organized. The precise dates is communicated in advance by the International Office to all Erasmus students by e-mail



**Before leaving Rome:** Erasmus students must report to the International Office. On their departure day, they receive a certificate stating they have been Erasmus students at Foro Italico University.

### **THE VOCATIONAL GUIDANCE AND TUTORAGE SERVICE**

The Vocational Guidance and Orientation service (**Centro Orientamento**) provides support to all students, regarding academic matters: it may answer any question concerning programmes, examinations, schedules, etc.

At the Centro Orientamento, students can also find daily newspapers, Internet points and other information on theatres, cinemas and events for university students.

The Centro Orientamento is open Monday through Thursday from 9:00 a.m. to 15:00 p.m and Friday 9:00 – 13:00

### **DISABILITY SUPPORT OFFICE**

Disability Support Office in Foro Italico University (**Centro Accoglienza Studenti Disabili**) provides adequate solutions to disabled students' specific needs, in order to enable free access and full participation in the university life. Among the available forms of support supplied by the Centre, we remind:

- individual curriculum and didactics
- different examination procedures
- specialized tutoring
- use of specific technological equipment
- stenotyping
- interpreting /assistance to communication

### **LIBRARY**

A library specialized on physical education, sports and motor activities is available inside the University.

Opening hours : Monday through Friday 9:30 a.m. to 1:00 p.m.  
Tuesday and Thursday also 1:30 p.m. to 16:30 p.m.

Catalogue available on line

In Rome there is a wide network of public libraries, where all students can freely borrow books, dvd, cd and, after the purchase of a 5 euro Bibliocard, also surf on internet.

Most public libraries are usually open every day (except Sundays) from 9,30 a.m. to 7.00 pm.

The complete list of public libraries can be found in the following website : [www.comune.roma.it](http://www.comune.roma.it) clicking on Istituzioni culturali – biblioteche di Roma

**Informatics rooms** will be open at stated times, they will be available starting from September.

**Gyms** will be open at stated times. Students need a health certificate.

**Swimming pool** will be available in the morning at stated times. Students need a health certificate.

Internet wireless is not available

### **LANGUAGE CENTRE**



At the University's Language Centre, the most common European languages are taught; courses are intended for Foro Italico University students: therefore, a special attention is paid to sport terminology and culture. Several individual positions for self-learning are also available.

### **CANTEEN**

On their arrival in Rome, Erasmus students will receive their ADISU card which allows them to enter the student canteen (mensa). At the canteen, Erasmus students can enjoy a complete hot meal for € 3,00.

The canteen is located right in front of the Institute, in Viale del Ministero degli Affari Esteri, 5.

Lunch is served from noon to 3:00 pm;

Dinner is served from 7:00 pm to 9:00 pm.

The canteen is closed on Sundays.

FORO ITALICO UNIVERSITY students are **not** be allowed to enter other universities' canteens.

### **MEDICAL ASSISTANCE**

The University has its own medical centre for casualties and minor ailments.

### **C.U.S. (CENTRO UNIVERSITARIO SPORTIVO)**

Since year 2008, Foro Italico University has founded a Sports Center, named CUS ROMA Foro Italico. The list of facilities and courses is available at Gruppi Sportivi Office – room D209.

## THE EUROPEAN CREDIT TRANSFER SYSTEM (ECTS)

This system, which was developed by the European Commission in order to promote student mobility throughout Europe, helps institutions assess and recognize all studies accomplished abroad.

**A single credit is the equivalent of 25 study hours:** to complete an academic semester, Foro Italico University students need 30 credits; 60 credits are requested for a whole academic year.

Grading systems in use in European universities still vary greatly: this is why an ECTS grading scale has also been developed, to provide additional information on the student's performance. Each university makes its own decisions on how to apply the ECTS grading scale to its own system; home institutions shall inform their outgoing students on how Foro Italico University grades will be assessed at the end of their period of study.

A conversion table, from the ECTS grading scale to the Italian national system, is given below:

ECTS	ITALIAN MARKS	DEFINITION
<b>A</b>	30 – 30 lode	Excellent, outstanding performance
<b>B</b>	27 – 29	Very good, above the average, with some errors
<b>C</b>	24 – 26	Good, generally sound work with a number of notable errors
<b>D</b>	21 – 23	Satisfactory, fair but with significant shortcomings
<b>E</b>	18 – 20	Sufficient, performance meets the minimum criteria
<b>FX</b>	<18	Fail, some more work required before the credit can be awarded
<b>F</b>		Fail, considerable further work is required

## ACCOMMODATION

**The University does not, at present, have any student housing facilities. Students must therefore rent rooms privately or share a flat with other students. Foreign students should expect to spend an average of € 500 a month, including housing and a margin for general expenses. The International Relations Office support students in finding accommodation,**

In the website [www.porta-portese.it](http://www.porta-portese.it), students can instead find advertises for rooms and flats to rent for longer period. The cost of a single room in the city may range from 300 to 500 € per month, depending on the area and on the distance from the main Universities. Prices for a double room range from 200 to 350 € per person. Students had better look for rooms located in Ponte Milvio, Corso Francia, Flaminio, P.le Clodio, Monte Mario or neighbouring areas.

It may also be very useful to contact the Erasmus Student Network, at the University Roma 1 "La Sapienza, Facoltà di Economia, or read students' ads on bulletin board located in all main universities.

Other information for Erasmus students can be found on the following websites:

<http://www.study-in-italy.it>

## **HOW TO REACH FORO ITALICO UNIVERSITY**

Foro Italico University – Piazza Lauro de Bosis, 15 – Foro Italico – Roma 00194

### **FROM LEONARDO DA VINCI AIRPORT (FIUMICINO)**

- shuttle train, Leonardo Express to Stazione Termini, the main railway station, then the underground (Metro) Line A up to Piazzale Flaminio and, finally, streetcar n. 2 up to Piazza Mancini (last stop); cross the bridge, Ponte Duca d'Aosta; the University is right in front of you. Train departures every 30 minutes; journey lasts 31 minutes.

first ride: from Fiumicino Airport: 6:37 am - from Termini Station: 5:52 am

last ride: from Fiumicino Airport: 11:37 p.m. – from Termini Station: 10:52 p.m.

or

- "Linea FR1", which stops at all main railway stations in Rome, except Termini: Tiburtina, Trastevere, Ostiense, Tuscolana.

First train at 5:57 a.m., last train 11:27 p.m.; trains leave every 15 minutes and the fare is 5 €.

If you want to get to University of Foro Italico, get off at stazione Ostiense and then take the bus nr 280: last stop: Lungotevere Cadorna. Cross Ponte Duca D'Aosta and you'll find the Foro Italico University right in front of you.

There are vending machines for train tickets as well as a ticket window just off the platform. Tickets must be validated before boarding the train.

### **FROM CIAMPINO G.B. PASTINE AIRPORT**

Two different private bus companies organize shuttle rides to Termini Station and return:

Terravision Shuttle: connection with Ryanair and Easy-Jet flights

Schiaffini Travel shuttle: timetable

from airport: weekdays-12 :10 p.m. and 07 :45 p.m.– weekends and holidays: 12 :05 and 07 :30 p.m.

From Termini Station (Via Marsala – Hotel Royal Santina): weekdays: 10 :15 a.m. and 05 :35 p.m. – weekends and holidays: 10 :10 a.m. and 05 :35 p.m.

Ticket fare: € 8,00

COTRAL shuttle bus to Anagnina metro A station: information on website : [http://www.cotralspa.it/colleg\\_anagnina.asp](http://www.cotralspa.it/colleg_anagnina.asp)

Ticket fare: € 1,50

### **TAXIS**

A **taxi** ride from the airports (Fiumicino or Ciampino) to the city centre costs about € 50.00.

### **FROM MAIN RAILWAY STATIONS**

- **Stazione Termini**
  - underground Line A up to Piazzale Flaminio, then bus n. 2 up to Piazza Mancini (terminus); cross the bridge, Ponte Duca d'Aosta; the University is right in front of you;



- **Stazione Ostiense**
  - take the bus n. 280 and get off at the last stop on Lungotevere Cadorna, just before the bridge (Ponte Duca d'Aosta), the University is on your left;
- **Stazione Tiburtina**
  - take the underground line B up to Stazione Termini (see above).

## Contacts

### Università degli Studi di Roma "Foro Italico"

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

#### RECTOR

Prof. Paolo Parisi

#### RECTOR'S OFFICE

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#### INTERNATIONAL RELATIONS OFFICE

##### Erasmus Coordinator

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##### General inquiries

Ornella Corrente

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#### DISABILITY SUPPORT OFFICE

Students tutor: Tullio Zirini

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#### JOB PLACEMENT and Vocational Training

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