



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Scienze Psicologiche, Pedagogiche, dell'Esercizio Fisico e della Formazione		
<b>ACADEMIC YEAR</b>	2020/2021		
<b>MASTER'S DEGREE (MSC)</b>	SCIENCE OF PREVENTIVE AND ADAPTED PHYSICAL ACTIVITY AND SPORT PERFORMANCE		
<b>INTEGRATED COURSE</b>	SPORTS MEDICINE - INTEGRATED COURSE		
<b>CODE</b>	09424		
<b>MODULES</b>	Yes		
<b>NUMBER OF MODULES</b>	2		
<b>SCIENTIFIC SECTOR(S)</b>	MED/09, M-EDF/01		
<b>HEAD PROFESSOR(S)</b>	LO PRESTI ROSALIA	Professore Associato	Univ. di PALERMO
<b>OTHER PROFESSOR(S)</b>	LO PRESTI ROSALIA	Professore Associato	Univ. di PALERMO
	ZANGLA DANIELE	Professore Associato	Univ. di PALERMO
<b>CREDITS</b>	11		
<b>PROPAEDEUTICAL SUBJECTS</b>			
<b>MUTUALIZATION</b>			
<b>YEAR</b>	1		
<b>TERM (SEMESTER)</b>	1° semester		
<b>ATTENDANCE</b>	Not mandatory		
<b>EVALUATION</b>	Out of 30		
<b>TEACHER OFFICE HOURS</b>	<b>LO PRESTI ROSALIA</b> Wednesday 12:00 - 13:00 In videocomunicazione nel team "Lo Presti - ricevimento studenti" tramite il seguente link: <a href="https://teams.microsoft.com/l/team/19%3a7ea36b9decef4f75872b17fdb5d064c7%40thread.tacv.conversations?groupId=130083c8-0c83-4751-8397-c34b149b3796&amp;tenantId=bf17c3fc-3ccd-4f1e-8546-88fa851t">https://teams.microsoft.com/l/team/19%3a7ea36b9decef4f75872b17fdb5d064c7%40thread.tacv.conversations?groupId=130083c8-0c83-4751-8397-c34b149b3796&amp;tenantId=bf17c3fc-3ccd-4f1e-8546-88fa851t</a>		
	<b>ZANGLA DANIELE</b> Tuesday 16:00 - 17:00 via Pascoli o via teams previa comunicazione		

**DOCENTE:** Prof.ssa ROSALIA LO PRESTI

<b>PREREQUISITES</b>	Knowledge of exercise physiology and anatomy, and basics of sports medicine
<b>LEARNING OUTCOMES</b>	<p>Knowledge and understanding: knowledge of the functional and structural adaptations of the different organs to physical and sports activities, the methodology to evaluate the pathological processes and the preventive role of sports activities.</p> <p>Applying knowledge and understanding: acquisition of an overview of the effects of physical and sports activities on the various organs, the benefits and risks associated with exercise, and the preventive measures.</p> <p>Making judgements: ability to assess the indications and the contraindications to physical and sports activities demonstrating critical and scientific capacity in the evaluation and interpretation of data related to sports.</p> <p>Communication: ability to communicate clearly and unambiguously information, ideas, problems and solutions to both expert and non-expert audiences.</p> <p>Lifelong learning skills: acquisition of those learning skills that are necessary to undertake further study with a high degree of autonomy, taking particular care of the issue of disease prevention through physical and sporting activities.</p>
<b>ASSESSMENT METHODS</b>	<p>The exam is an oral exam aimed at verifying the competences and skills to be acquired at the end of the course. The purpose of the questions is to verify knowledge of contents to be acquired at the end of the course, as well as analytical and expository skills. Knowledge check includes scrutiny of the capability to establish relationships between contents, theories, patterns and methodologies which have been an object of study during the course. As far as analytical skills are concerned, check will aim at verifying that the student has achieved at least one of the following goals: - make judgements and opinions about the disciplinary contents - understand applications and/or implications of the disciplinary contents within the specific discipline of reference - set the disciplinary contents within the professional, technological and sociocultural setting of reference. The student will have to answer at least two\three questions in the oral form about aspects of the syllabus with reference to the suggested textbooks. The exam aims at verifying knowledge and understanding of topics, interpretative competence and autonomy of judgement of concrete cases. The passing grade threshold will be considered reached if the student shows to have acquired the topics of the specific subject matter and is able to solve specific concrete cases as well as to correctly convey knowledge with satisfactory expository skills. Below the above-mentioned threshold, the exam will be considered unsatisfactory. The more the student can interact with his examiner showing mastery of language, of the specific subject matter and ability to convey his\her knowledge of the topics of the specific field of reference, the more the assessment will be positive. The latter will be expressed by 18 to 30-30 with honours marks.</p>
<b>TEACHING METHODS</b>	Frontal lessons

**MODULE**  
**ARTICULAR PHYSIOLOGY AND FUNCTIONAL ANALYSIS OF MOVEMENT**

*Prof. DANIELE ZANGLA*

**SUGGESTED BIBLIOGRAPHY**

Pirola V. - Il Movimento Umano Applicato alla rieducazione e alle Attività Sportive - Edi-Ermes  
Kapandji I.A. - Fisiologia Articolare - Voll- 1, 2 e 3  
Dispense del docente

<b>AMBIT</b>	50540-Discipline motorie e sportive
<b>INDIVIDUAL STUDY (Hrs)</b>	90
<b>COURSE ACTIVITY (Hrs)</b>	35

**EDUCATIONAL OBJECTIVES OF THE MODULE**

The purpose of the teaching is to provide the basic cognitive and methodological tools related to a particular context joint physiology applied to human movement. To this end, biomechanical and physiological aspects will be presented in an integrated vision

**SYLLABUS**

<b>Hrs</b>	<b>Frontal teaching</b>
4	Spine, front and back pillar. Resistance indices, load indices. Biomechanical structure of the functional unit. Joint relationships, mobility and flexibility.
4	Low Back Pain. Cutting forces and compression forces
3	Spine Rhythm .Normal load and abnormal load.
3	Spine Rhythm .Normal load and abnormal load.
3	Lumbar kinetics
8	Evaluation of the LBP. Professional Diseases, Risk Factors. Overuse. Incongruous postures, repetitiveness, Weight Limit Recommended. Ergonomics
10	Shoulder, Wrist, Hand, Elbow, Trunk, Pelvic Incidence. Knee. Pelvis

## MODULE SPORTS MEDICINE

*Prof.ssa ROSALIA LO PRESTI*

### SUGGESTED BIBLIOGRAPHY

P. Zeppilli, Manuale di Medicina dello Sport, CESI  
Materiale fornito dal docente

<b>AMBIT</b>	50541-Biomedico
<b>INDIVIDUAL STUDY (Hrs)</b>	108
<b>COURSE ACTIVITY (Hrs)</b>	42

### EDUCATIONAL OBJECTIVES OF THE MODULE

Knowledge of the classification of sport according to cardiovascular responses, the main cardiovascular and respiratory diseases that can alter the response to physical exercise or that may be induced by exercise and the problems related to master and diabetic athletes, and people with disabilities.

## SYLLABUS

Hrs	Frontal teaching
2	Classifications of sports based on cardiovascular and metabolic demands
2	Cardiovascular pathophysiology. Athlete's heart
2	Arterial hypertension. Ischemic heart disease. Heart failure
2	Cardiomyopathies
2	Sudden cardiac death and sports
2	Cardiac evaluation in sports medicine
2	Exercise in patients with arterial hypertension and ischemic heart disease
2	Exercise in patients with heart failure
2	Principles of respiratory pathophysiology
4	Asthma: pathophysiology, clinical features and therapy
2	Exercise-induced bronchoconstriction. Asthma and sports
2	COPD: pathophysiology, clinical features and therapy
2	Exercise in COPD
2	Cardiopulmonary exercise test
4	Diabetes mellitus: pathophysiology, clinical features and therapy
2	Exercise in type 2 diabetes mellitus
2	The athlete with diabetes mellitus
2	Anemia in athletes
2	Exercise and cancer