

# UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Psicologiche, Pedagogiche, dell'Esercizio Fisico e della Formazione		
ACADEMIC YEAR	2021/2022		
MASTER'S DEGREE (MSC)	SCIENCE OF PREVENTIVE AND ADAPTED PHYSICAL ACTIVITY AND SPORT PERFORMANCE		
INTEGRATED COURSE	PLANNING OF PHYSICAL ACTIVITIES AT VARIOUS AGES AND IN METABOLIC DISORDERS - INTEGRATED COURSE		
CODE	19823		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	M-EDF/02, M-EDF/01		
HEAD PROFESSOR(S)	PALMA ANTONIO Professore Ordinario Univ. di PALERMO		
OTHER PROFESSOR(S)	BIANCO ANTONINO Professore Ordinario Univ. di PALERMO		
	PALMA ANTONIO Professore Ordinario Univ. di PALERMO		
CREDITS	9		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	2		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	BIANCO ANTONINO		
	Tuesday 11:00 15:00 Via Giovanni Pascoli 6. 2 piano		
	PALMA ANTONIO		
	Wednesday 10:00 12:00 Via Giovanni Pascoli N. 6 o su piattaforma Teams da concordare tramite e-mail.		

**DOCENTE: Prof. ANTONIO PALMA PREREQUISITES** All students interested to this course must know as prerequisite the fundamentals of training periodization in sports, applied human anatomy and physiology with particular focus on on musculoskeletal system. Fundamentals od posture and biomechanics. Fundamentals of resistance training. LEARNING OUTCOMES Knowledge of fundamental of fitness. Comprehension of basic principles of training periodization and training programming in the filed of traditional fitness and group fitness filed, respectively. Ability to assess, plan and evaluate fitness programs regarding general population. Ability to work in team environment and also with different professionals coming from other related disciplines. ASSESSMENT METHODS 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 at least one of the following goals: -S\he can give judgements and opinions about the disciplinary contents -S\he can understand applications and\or implications of the disciplinary contents within the specific discipline of reference -S\he can 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\her 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. A face to face interview will be provided to the students. A number of 3-4 questions will be administered according to the course topic and the learning outcomes. The assessment has a final grade included in the following range: 30-30 with honours (excellent), corresponding to 'excellent knowledge of topics, excellent use of language, good analytical skills, the student can implement his\her knowledge to solve the submitted issues'; 26-29 (very good), good mastery of topics, very good use of language, the student can implement his\her knowledge in order to solve the submitted issues'; 24-25 (good), corresponding to 'basic knowledge of the main topics, fair use of language, with moderate capability to independently implement knowledge to solve the submitted issues'; 21-23 (satisfactory), 's\he doesn't possess full mastery of the main teaching topics but s\he possesses knowledge of them, satisfactory use of language, poor capability to independently implement the acquired knowledge'; 18-20 (passing grade), 'very poor basic knowledge of both the main teaching topics and the technical language, no or very poor capability to independently implement the acquired knowlege'; unsatisfactory, 's\he doesn't possess an acceptable knowledge of the contents of the topics dealt with during the course'.

will include also work experience at gym.

The course provide lectures, practical sessions and case studies. The course

TEACHING METHODS

## MODULE PHYSICAL EXERCISE PLANNING FOR THE VARIOUS AGES AND IN METABOLIC DISORDERS

Prof. ANTONINO BIANCO

#### SUGGESTED BIBLIOGRAPHY

- Wilmore J.H., Costill D.L., Fisiologia dell'esercizio fisico e dello sport. Cap 1, 3 e 4 (Calzetti Mariucci 2005);
- Paoli A, Neri M, Bianco A. Principi di Metodologia del Fitness. Elika Edizioni, 2013.
- Thomas R. Baechle, Roger W. Earle. NSCA -National Strength & Conditioning Association. ISBN: 0736058036. 2008 3rd Edition
- Dispense preparate dal Docente (2016).

AMBIT	50536-Discipline motorie e sportive
INDIVIDUAL STUDY (Hrs)	98
COURSE ACTIVITY (Hrs)	52

#### **EDUCATIONAL OBJECTIVES OF THE MODULE**

At the end of the course I'm expecting students able to work within gyms as fitness coaches and personal trainers. They will be able to manage the gyms as technical director or managing directors. The students also will be able to proper plan training sessions for sedentary people with different targets at all ages (fat burn, strength and conditioning).

#### **SYLLABUS**

Hrs	Frontal teaching
4	Course presentation
6	Definition and classification of all fitness disciplines. Muscle fibers: Slow-Twitch (ST) e Fast-Twitch (FT). Muscle strength, muscle power. Over training, Over Reaching.
6	The energetic systems, muscle metabolism and different kind of exercises
6	Fundamentals of training periodization for individual and group fitness activities. Fundamentals of motivation and communication within gyms context. Microcycles, mesocycle, macrocycles.
6	Physiology of muscle hypertrophy. New methods for training and power training. Advanced techniques in resistance training programs
6	Practical lessons with fitness gyms equipments.
6	Practical lessons with dumbbells and the own body weight.
6	Practical lessons: the fitness programs for females
6	Practical lessons: the fitness programs for males

#### **MODULE**

#### MANAGEMENT OF PATIENTS WITH METABOLIC DISORDERS IN SPORTS AND PHYSICAL ACTIVITY

Prof. ANTONIO PALMA

#### SUGGESTED BIBLIOGRAPHY

Dispense del docente

Italo Sannicandro: Fitness metabolico. Prevenzione della sindrome metabolica attraverso le attivita' motorie adattate. Editore: Correre

2014

AMBIT	21001-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	54
COURSE ACTIVITY (Hrs)	21

#### **EDUCATIONAL OBJECTIVES OF THE MODULE**

At the end of the course of study it is a metabolic analysis towards the correct procedures of screening and management of the patient with metabolic disorders.

### **SYLLABUS**

Hrs	Frontal teaching
5	The Metabolic Syndrome
5	Diagnosis, prognosis, therapy
5	Guidelines for the diagnosis, therapy and control of endocrine and metabolic diseases
6	Case studies