

**The new Vocationally Oriented Master Curriculum - P.A.H.E.T. (60 ECTS, 2 semesters)*****Educational aims and description of the program***

This vocationally oriented Master program in Physical activity, Health and Exercise therapy is a one year postgraduate program (60 ECTS) (**Table 5**). It has been designed as a multidisciplinary, interfaculty study program, which upgrades the graduate degree in Sport Science or in other disciplines in an integrative and vocationally oriented manner, involving various University Faculties: Medicine, Sport and Physical Education, Psychology, Education and Rehabilitation.

The primary educational aim of this study is the development of an expert who has appropriate level of knowledge, skills, behaviors and competencies to work independently and effectively as the consultant in the area of physical activity in health, education, fitness and wellness, and rehabilitation. This program provides to the participants an opportunity to acquire knowledge and understanding necessary to apply scientific principles and critically analyze physical activity/exercise with patient-centered approaches. In this regard, the course offers learning outcome guaranteeing the acquisition of knowledge, competences and ability to upgrade techniques and theories utilizing research sources, enabling to plan, develop and manage programs of exercise prescription for prevention, improvement of physical abilities, but also for those who suffer from chronic diseases and we can use exercise as a therapeutic mean.

The curriculum consists of 6-8 obligatory and 3- 5 elective modules, allowing the student to pursue areas of special interest, primary depending on their primary education. The first semester includes obligatory, "core" knowledge courses in order the student to acquire skills related to research methodology and biostatistics. The flexibility within the elective modules includes different choices in the following areas: health prevention in general population, exercise for special groups such as women, children, older adults and disabled. It also comprises aspects of prevention and exercise therapy for groups with health risks and chronic diseases, e.g. overweight and obese, those with hypertension and cardio-vascular disease, respiratory diseases, metabolic diseases (diabetes), psychiatric diseases, cancer, and so on. Furthermore, there are some topics devoted to elite athletes, e.g. training, nutritional, psychological aspects. Students are exposed to a range of topics within internship practice, and practice in both laboratory and field settings. Where relevant, courses will address issues of international caliber. The study on this Master is completed by preparing and defending a thesis, in public.

**Learning outcomes (“Dublin Descriptors”)*****Knowledge and understanding***

This vocationally oriented Master program in physical activity, health and exercise therapy is meant to provide to students a wider understanding of the effects of physical activity on health, of exercise modalities and prescription on fitness and how exercise counteracts the degenerative impact of chronic diseases. The program provides knowledge and understanding with focus on the specific methodologies and technical skills needed to plan, organize, coordinate or conduct exercise programs, individual or group ones, both systematically and creatively, in the various age/health/functional abilities/disease conditions, whether for leisure, functional maintenance, disease prevention, coping with disabilities, recovery and rehabilitation, improving sport performance, for psychosocial integration and wellbeing.

The program is structured to allow various areas of specialization in exercise prescription and involves an one-year program focused on research and mastery of methods and skills in one of many alternative areas of specialization related to age groups (children, adults, elderly), women, athletes, patient with non-communicable disease and individuals with functional disability.

***Applying knowledge and understanding***

This vocationally oriented Master program in physical activity, health and exercise therapy will educate highly qualified professionals and develop their ability to critically, independently and creatively solve problems in the area of exercise prescription with originality and patient-centred approach. The graduates will be able to apply knowledge, competences and skills in new or

**Table 5. V.O. Master of Science in Physical Activity, Health and Exercise Therapy – P.A.H.E.T. (as accredited by the University of Belgrade)**

Course type	Subject C = Compulsory E = Elective	1 <sup>st</sup> semester	2 <sup>nd</sup> semester	ECTS 1 ECTS = 30 hours	Student workload (hours)					
					Lectures	Practical teaching	Internship / Practice/RW	Individual work	Exam	Total hours
C1	Scientific research methods in the field of sport science with basic principles of ethics	X		5	15	30	15	85	5	150
C2	Biostatistics in the field of prevention, exercise therapy and sports science	X		5	20	24	20	81	5	150
C3	Public health aspects of physical activity and exercise	X		2,5	20	5	4	41	5	75
C4	The psychological aspects of exercise (behavioral-socio-cultural-educational)	X		2,5	15	30	15	10	5	75
C5	Exercise physiology with the basic of nutrition	X		2,5	15	30	15	10	5	75
C6	Motor control and motor learning with the basics of biomechanics	X		2,5	20	5	4	41	5	75
C7	Components of physical fitness; exercise prescription	X		5	15	30	15	85	5	150
E	<b>One subject to be chosen among the following courses with internship in clinical practice:</b> 1. Diseases influenced by exercise, prevention and exercise therapy 2. The influence of physical activity and exercise on growth and development in children 3. Applied psychology in regular exercise 4. Physical activity and exercise in persons with disabilities	X		5	15	30	65	35	5	150
E	<b>Two subjects to be chosen among courses with clinical practice, 5 ECTS each:</b> 5. Exercise prescription for children and adolescents 6. Exercise prescription for women 7. Exercise prescription for elderly 8. Exercise prescription for overweight and obese 9. Exercise prescription for type 2 diabetes and pre-diabetes 10. Exercise prescription for cardiovascular patients 11. Exercise prescription for respiratory patients 12. Exercise prescription for depression and other mental disorders 13. Exercise prescription for cancer patients 14. Exercise prescription for functional impairment 15. Exercise prescription for cognitive impairment 16. New technologies in the modulation of motor skills and motor learning 17. Assessment of functional abilities in functional impairment 18. Environmental influence on physical activity and exercise 19. Exercise and sport nutrition and supplementation 20. Training modalities in elite athletes 21. Psychological preparation in elite athletes 22. Reparative and regenerative medicine in sport and exercise		X	10	30	60	130	70	10	300
C	Master Thesis		X	20			350	240	10	600
	<b>Total</b>			60	165	244	633	698	60	1800

RW = Research Work

unfamiliar environments, ranging from public health services to private health companies, workplace health promotion, physical re-education and rehabilitation, adapted physical activity for special groups, fitness or wellness clubs, social services, schools, leisure and recreation, tourism industry, etc. This multidisciplinary programme related to physical activity, health and exercise therapy can identify and apply appropriate research methods and techniques to conceive, design, plan and implement targeted experiments, clinical studies or simulations.

It further aims to develop graduates who independently and critically evaluate and interpret collected data, and formulate a substantial body of work on physical fitness, some of which would merit national or international refereed publication.

*Making judgements*

The acquisition of specific knowledge and professional skills will guarantee the graduates to develop autonomy in understanding and focusing on the specific problems connected with planning, organising, coordinating or conducting physical activity programs specially meant to different populations/requirements. The graduates will be able to synthesize and integrate knowledge in physical activity, health and exercise therapy in special field/age group/population, to deal with complex issues both systematically and creatively, make sound judgments even on the basis of incomplete or restricted information. Also, the graduates will be able to critical analyse, evaluate and synthesize of new and complex scientific ideas in this field and to participate in national and international research networks.

*Communication skills*

This vocationally oriented Master program in physical activity, health and exercise therapy is designed to increase the communication skills of the graduates in order to be able to convincingly and professionally communicate personal research, thoughts, ideas, and opinions of proposals, both written and oral, to different stakeholders from peers to a general public. Also, the graduates can communicate their conclusions and recommendations with the argumentation of the knowledge and rationale underpinning these, to both specialist



and non-specialist audiences (patients, athletes, disabled, different age groups) clearly and unambiguously. The program is also conceived to give an implementation of informatics skills.

#### *Learning skills*

This vocationally oriented Master program in physical activity, health and exercise therapy will guarantee the graduates to autonomous learning skills and responsibility for further professional development. After the intensive teaching in physical activity, health and exercise therapy, supplemented by tutoring study, graduates should be able to continue the studies independently, utilizing study resources and skills learned during the curricula. These learning skills will be useful both for professional implementation and research development.

#### **Employment and professional opportunities**

Upon successful completion of the Master program in physical activity, health and exercise therapy, the graduates can work in the fields of prevention and rehabilitation via exercise in fitness–wellness centers, clinics, hospitals, and health centers, recreation centers, education system (preschool institutions, elementary and secondary school, university), they are also qualified for administrative positions in sports organizations, sport clubs and for work in sport institutions. Graduates can also find work in the sports goods industry and sports media, as well as in areas associated with sport such as tourism and management/ governing and administrating organizations.

#### **Qualification, admission rules**

Candidates are eligible to apply if they hold one of the following qualifications:

- a) Undergraduate degree (at least 180 ECTS): Faculty of Sport and Physical Education, Faculty of Philosophy, department of Psychology, Faculty of Special Education and Rehabilitation.
- b) Undergraduate degree (360 ECTS): Faculty of Medicine,

To be admitted to the vocationally oriented Master program in physical activity, health and exercise, candidates from Faculty of Philosophy, Department of Psychology and Faculty of Special Education and Rehabilitation, are obliged to have additional written exam in certain areas of knowledge. All candidates' GPA (grade point average) formula will be also taken into account in the admission to the programme criteria.

#### **Duration of program and qualification awarding**

The duration of vocationally oriented Master program in physical activity, health and exercise therapy is extended to one year (two semesters - 60 ECTS) procedure. To obtain the Degree of Master program in physical activity, health and exercise therapy, the student should carry out: 40 ECTS through compulsory and elective courses as well as 20 ECTS to write and defend effectively a master thesis.

#### **Quality assurance**

The Quality Assurance Unit at relevant Universities will be responsible for continuous improvement of the vocationally oriented Master program in physical activity, health and exercise. This will be done by working closely with teaching staff and students to monitor quality assurance issues and critically evaluate programme's and students' progress. Means such as exams success ratio, Master thesis quality, interviews and surveys are intended to be used.

Additionally, the program will be evaluated externally every five years in accordance with the prevailing criteria of Accreditation process. Assessment results from both external and internal evaluations will be used for program improvements.