COURSE OUTLINE

(1) GENERAL

SCHOOL	PHYSICAL EDUCATION & SPORT SCIENCE		
DEPARTMENT	PHYSICAL EDUCATION & SPORT SCIENCE		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	**ΑΒ-114ΕΠ**	**SEMESTER**	Spring
COURSE TITLE	**APPLIED SPORTS ERGOPHYSIOLOGY**		

TEACHING ACTIVITIES	**TEACHING HOURS PER WEEK**	**ECTS**
Lectures	2	4
Practical application	1	

COURSE TYPE	Elective
PREREQUISITE COURSES:	-
TEACHING AND EXAMS LANGUAGE:	English/Greek
OFFERED TO ERASMUS STUDENTS	Yes
WEBPAGE (URL)	https://eclass.uoa.gr/courses/PHED392/

(2) LEARNING OUTCOMES

Learning outcomes

- Exercise is a stressor that challenges the homeostasis of human body. Applied Exercise Physiology studies the acute and chronic adaptations of human body in response to physical activity. Applied Exercise Physiology is based on Human Physiology and Exercise Physiology and its main aims are to study: a) the effects of acute exercise on human body and b) the adaptation of human body in response to chronic exercise. Applied Exercise Physiology supports the Exercise Physiology principles for increasing athletic performance and enhancing the effects of training on health and quality of life.
- The course content aims for the university student to understand the function of the body's systems that correlates with the enhancement of performance and the promotion of health. Moreover, through the course are highlighted the particularity of the different sports events and the specific approach of training for the promotion of health and quality of life.

General skills

Upon successful completion of the course the student:

- will learn about the function of the muscle under different load conditions as well as the use of energy substrates during exercise.

- will understand the different energy consumption depending on the type of exercise as well as the factors associated with fatigue.

- will learn about the function of the cardiovascular system during exercise as well as its adaptations to chronic protocols of different types of exercise.

- will understand the principles of training which have to be followed in order to optimize performance.

- will learn the peculiarities of resistance training depending on the sport while he will become familiar with the various models of aerobic and anaerobic training.

- will understand the different training approaches in different sports, will learn how to improve performance and will have the ability to recognize the overtraining syndrome.

- will learn about the importance of nutrition in athletic performance and health.

- will get acquainted with the ways of measuring and evaluating the physical performance.

- will recognize the characteristics of exercise induce muscle damage, its effect on exercise performance and on health parameters in both young and elderly.