

## ADVANCED EXERCISE PHYSIOLOGY

1	Course Title:	ADVANCED EXERCISE PHYSIOLOGY	
2	Course Code:	BED5110	
3	Type of Course:	Optional	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	none	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Şerife VATANSEVER	
15	Course Lecturers:	Prof. Dr. Şerife VATANSEVER	
16	Contact information of the Course Coordinator:	serife@uludag.edu.tr U.Ü Spor Bilimleri Fakültesi	
17	Website:		
18	Objective of the Course:	<p>To introduce the cell-tissue –organs and the systems that make up the human body</p> <p>To explain and implement how the energy sources come into being in the long and short terms, the effects of physical efforts on the respiratory-circulatory-nerves system and other systems in various circumstances</p> <p>To teach the effects and the practice of the physical changes that come into being under various circumstances</p> <p>To compare the effects of the long term adaptations to training sessions on the systems</p>	
19	Contribution of the Course to Professional Development:	To follow current developments in exercise physiology	
20	Learning Outcomes:		
		1	To establish a relationship between exercise and physiology
		2	To define the exercise physiology
		3	To explain the basic fields of the exercise and physiology
		4	To establish a link between the basic fields of exercise physiology and those of physiology education and sports
		5	To be able to use the tools that are necessary for the exercise physiology practices
		6	To compare the basic areas of exercise physiology and those training knowledge
		7	To comprehend the basics between the exercise physiology practices and those of the training science
		8	To be able to explain energy metabolism

		9	To explain the adaptation of the exercise		
		10	Explain the relationship between exercise physiology and performance		
21	Course Content:				
	Course Content:				
Week	Theoretical		Practice		
1	Introduction of cell muscle tissue and organelles				
2	Energy systems (phosphogen, lactic acid, aerobic).				
3	Energy production during aerobic and anaerobic exercises and recovery period,				
4	Muscle tissue, general characteristics of skeletal Muscle tissue, general characteristics of skeletal muscle and functions, distribution of fibers in muscle, and effects on sportive performance				
5	Muscle contraction types (isometric, concentric, isotonic, isokinetic contractions) and movement samples				
6	Cardiovascular system and functions, structure of heart and blood vessels and functions, Chronic responses of cardiovascular system to different types of				
Activites			Number	Duration (hour)	Total Work Load (hour)
Theoretical			14	2.00	28.00
Practicals/Labs			0	0.00	0.00
10	Endocrine system, functions of glands and their hormones, general hormonal response		14	3.00	42.00
Homeworks			4	5.00	20.00
11	Exercise in different conditions (thermal adaptation, altitude, etc.)		0	0.00	0.00
Field Studies			0	0.00	0.00
12	Exercise and recovery in Sport		1	10.00	10.00
Others			0	0.00	0.00
13	Observation of training adaptation adaptation associated with training		1	20.00	20.00
Total Work Load					120.00
14	Observation of training adaptation adaptation				4.00
ECTS Credit of the Course					4.00



ÖK10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives   PQ: Program Qualifications																
Contribution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							