AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Exercise Physiology								
Course Code	REKB201		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	4	Workload	94 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is; to introduce the muscle cell, to understand the muscle contraction process, muscle fibril types and the changes that will occur according to the type of exercise, to comprehend the contraction types and their relationship with exercise, energy production ways, energy production in exercise and recovery process, circulatory system, respiratory system, blood, hormones to learn the changes in chronic exercise.								
Course Content	Muscle physiology and functioning during exercise, ATP production pathways in exercise and recovery, circulatory system, respiratory system, blood system, hormonal system and exercise related changes.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Demonstration, Individual Study								
Name of Lecturer(s)	Assoc. Prof. Esin ERGİN								

Prerequisites & Co-requisities	
ECTS Requisite	45

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading	
1	Fox, C., Bower, W., Foss, D., 2011,(Çeviri: Mesut Cerit) Beden Eğitimi ve Sporun Fizyolojik Temelleri, Bağırgan YayıneviAnkara
2	Tiryaki Sönmez G., Egzersiz ve spor fizyolojisi, birlik yayınclık, Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	dersin işlenişi hakkında bilgi ve tanışma
2	Theoretical	enerji sistemleri
3	Theoretical	energy systems
4	Theoretical	physiological basis of recovery
5	Theoretical	muscle physiology, structure of skeletal muscle
6	Theoretical	muscle contraction, types of contraction and training adaptation
7	Theoretical	nervous system and muscular senses
8	Theoretical	Respiratory system and mechanism
9	Theoretical	midterm exam
10	Theoretical	Gas exchange and transport - partial pressure - oxygen and carbon dioxide transport - oxyhemoglobin curve
11	Theoretical	Circulatory system and heart-calf stimulation and action potential
12	Theoretical	Fick's equation and exercise adaptations of this equation, flow resistance
13	Theoretical	Exercise responses of the cardiovascular and respiratory system
14	Final Exam	final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	2	3	70

Individual Work	6	2	2	24
			Total Workload (Hours)	94
			[Total Workload (Hours) / 25*] = **ECTS**	4
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Learning the acute and chronic reactions of the physiological systems to the exhaust
2	Physiological bases of performance related physical fitness parameters
3	Performance related physical fitness parameters can be learned and applied to measurement methods.
4	The physiological effects of varying levels of physical activity and sex on the variable intensity and range of exercises comparison of reactions.
5	examination of the heart and circulatory system

Programme Outcomes *(Recreation)*	
1	Students have comprehensive and systematic information about concepts, principles, theories, facts in disciplines related to Recreation in Recreation field and use and interpret these information in workplace
2	By specialising in certain studies of profession related to Recreation, students carry out planning and control functions in the field.
3	By using the knowledge about Recreation, students fullfil responsibilities in league with other occupational groups
4	Students carry out the recommendation and coordination functions, and plan activities related to Recreation
5	Students behave in accordance with the codes of ethics and laws and regulations related to right and liability of Recreation field.
6	Students analyse by using the known techniques related to Recreation
7	Students fullfil scientific information responsibility related to Recreation and research
8	Students develop positive behaviour and attitude towards healthy life-long sport
9	Students set an example as a model to society and colleagues with theirprofessional identity related to Recreation field
10	Students must communicate written or verbal in some foreign languages