



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Exercise Physiology							
Course Code		REKB201		Course 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)									

### 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, Bağırhan Yayınevi Ankara
2	Tiryaki Sönmez G., Egzersiz ve spor fizyolojisi, birlik yayıncılık, Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	dersin işleniş 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
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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 fulfil 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 fulfil 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 their professional identity related to Recreation field
10	Students must communicate written or verbal in some foreign languages

