

FTR203 - Exercise Physiology

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
Exercise Physiology	FTR 203	2. Year/1. Term Fall	3	-	-	2
Prerequisites	-					
Course language	Turkish					
Course type	Compulsory					
Learning and teaching strategies	Lecture					
Instructor (s)						
Course objective(Aim of course)	The aim of the course is to teach the students the effects of exercise in different environmental conditions on different body systems, to assess the problems occurring during exercise, to provide understanding of exercise prescription and reflecting to basic practice					
Learning outcomes	1. Describes the acute and chronic responses of the heart, circulation, respiration, musculoskeletal and nervous systems to exercise. 2. Explains energy expenditure in the body during energy transfer, rest, physical activity and exercise 3. Defines the principles and basic concepts of anaerobic and aerobic exercise training 4. Plan a program to create an exercise recipe, explain the basic physiological responses after exercise					
References	Textbook of work physiology : physiological bases of exercise ; Per- Olof Astrand, Kaare Rodahl.1986 Egzersiz fizyolojisi : ders kitabı / ed. Emin Ergen, 2011 Klinik egzersiz fizyolojisi , Jonathan K. Ehrman, Paul M. Gordon, Paul S. Visich, Steven J. Keteyian ; çeviri editörleri Hülya Arıkan, Nevin Ergun, Arzu Razak Özdinçler, Baki Umut Tuğay, İstanbul tıp kitabevi, 2018					

Course outline weekly:

Weeks	Topics
1. Week	Introduction, explanation of the purpose and operation of the course
2. Week	Energy transfer systems in the body and exercise
3. Week	Muscle physiology, musculoskeletal system and exercise
4. Week	Thermoregulation and exercise,
5. Week	Cardiovascular system and exercise
6. Week	Endocrine system and body composition
7. Week	Respiratory physiology and exercise
8. Week	Midterm exam
9. Week	Measurement of energy capacity and expenditure at rest and physical activity, exercise testing
10. Week	Aerobic and anaerobic exercise training, recovery from exercise
11. Week	Underwater and high altitude physiology
12. Week	Nerve physiology and neural control
13. Week	Practice of submaximal and maximal exercise tests and clinical measurements
14. Week	Practical application of submaximal and maximal exercise tests and clinical measurements
15. Week	An overview

ECTS (Student Work Load Table)

Activities	Number	Duration	Total Work Load
Course Duration (X14)	14	3	42
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	0.5	7
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	1	6	6
Final Exam Preparation Time	1	5	5
Total Work Load (hour) / 25(s)	60 / 25		
ECTS	2		

Evaluation System

Mid-Term Studies	Number	Contribution
Midterm exams	1	%100
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
Total Time To Activities For Midterm		100
Final works		
Final	1	%100
Homework		
Practice		
Laboratory		
Total Time To Activities For Midterm		100
Contribution Of Midterm Studies On Grades		%40
Contribution Of Final Exam On Grades		%60
Total		100

The relationship between learning outcomes and the program qualifications of the courses

Program Qualifications			Learning outcomes	
	L.O.1	L.O.2	L.O.3	L.O.4
1-Acquire proficient infrastructure related to the field of Physiotherapy and Rehabilitation, gain the ability to use theoretical and practical knowledge and skills in this field.	5	5	5	5
2-Identify, define the factors affecting health and gain problem-solving skill by using the information they have; plan and implement a treatment and exercise program with appropriate evidence-based methods and new techniques.	5	5	5	5
3-Gain the ability to use information technologies effectively, as well as the ability to select and use modern tools, techniques and agents necessary for physiotherapy and rehabilitation applications.				
4-Design individual and multidisciplinary research, keep records, prepare reports, analyze and interpret results for quality service and research in health sciences.				
5-They conduct a literature search to access the information by using evidence-based databases and information sources.				
6-Gain autonomy in interdisciplinary and individual studies, ability to work effectively and take responsibility and awareness of the universal and social effects of their professional practice.				
7-Adopt life-long learning; contribute to quality improvement, field-related training and introductory programs and exhibit their professional behavior at national and international level.				
8-Have deontological and ethical awareness in professional researches and applications.				

Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent