EXERCİSE PHYSİOLOGY

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
Prequisites	-					
Course language	Turkish					
Course type	Compulsory					
Learning and teaching strategies	Face-to-Face					
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. Defines acute and chronic responses to exercise in musculoskeletal and neural systems 2. Defines acute and chronic responses to exercise in heart, circulatory and respiratory systems 3. Explains body energy transfer, resting, physical activity and exercise energy expenditure. 4. Determines aerobic and anaerobic exercise training principles and basic concepts. 5. Defines impacts of exercise on individual and environmental factors. 6. Learns basic physiologic responses after exercise 7. Measures acute and chronic responses to exercise. 8. Plans exercise prescription.					
References	1-McArdle WD, Katch FI, Katch VL. Exercise Physiology: Nutrition, Energy and Human Performance. 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2009. 2-ACSM's Guidelines for Exercise Testing and Prescription. 7th ed. Philadelphia: Lippincott Williams & Wilkins, 2009. 3-Powers S, Howley E. Exercise Physiology: Theory and Application to Fitness and Performance. 8th ed. New York: McGraw-Hill Humanities/Social Sciences/Languages, 2011.					

Course outline weekly:

Weeks	Topics
1. Week	Course outline and notes
2. Week	Energy transfer systems in body and their role in exercise

3. Week	Muscle physiology, musculoskeletal system and exercise
4. Week	Nerve physiology and neural control
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	Thermoregulation and exercise, underwater and high altitude physiology
12. Week	Practice of heart beat rate and blood pressure and clinical measurements
13. Week	Practice of submaximal and maximal exercise tests and clinical measurements
14. Week	Midterm exam
15. Week	Final exam

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		%50
Contribution Of Final Exam On Grades		%50
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**	**L.O.5**	**L.O.6**	**L.O.7**
1. Sufficient background in basic- clinical medical sciences and physical therapy and rehabilitation discipline; ability to use theoretical and practical skills and knowledge in these fields with analytical thinking	**5**	**5**	**5**	**5**	5	5	
2. Ability to determine, define, formulate and solve the factors that affect health; ability to choose and apply evidence based techniques and new methods for this aim.							5
3. Ability to choose and use modern equipments, techniques and modalities for physiotherapy and rehabilitation practices; effectively use the informatique technologies.							
4. Ability to design multidisciplinary research, keep records, collect appropriate data, analysis and interpret results.							
5. Ability to attain new knowledge, make literature reviews, use medical databases and sources of information devoted to medical- health sciences							
6. To work autonomously and effectively in health team and self confidence to take responsibility							
7. To internalize characteristically development, literate and lifelong learning; quality development,to contribute education and promotion programs in field,to internationalize their professional behavior.							
8. To have professional deontology and ethical awareness							

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