PHYSİOLOGY I

Course Name	**Code**	**Term**	**Theory (hours/week)**	**Application (hours/week)**	**Laboratory (hours/week)**		**ECTS**
Physiology I	**FTR 113**	**1.year/ 1.term Fall**	**4**	**-**	**-**		**4**
Prequisites							
Course language	Turkish						
Course type	Compulsory						
Learning and teaching strategies	Theory,Discussion						
Instructor (s)							
Course objective(Aim of course)	To teach the students all medical physiology.						
Learning outcomes	The students will able to explain the basic principles of physiology, mechanisms and control systems of the body.						
References	1. Vander İnsan Fizyolojisi 11. Edisyon, 2013 2.Yüksekokullar için Fizyoloji, Prof. Berrak Yeğen 2014 3.Guyton,Hall. "Tıbbi Fizyoloji" Nobel –Yüce 10.Edisyon 2001 4.Ganong. "Tıbbi Fizyoloji"Barış Kitabevi,1999						

Course outline weekly:

Weeks	Topics
1. Week	Introduction to Physiology, The characteristics of living organisms

	The definition and importance of homeostasis. The body's homeostatic regulatory mechanisms;
2. Week	Neural and hormonal regulatory mechanisms, Introduction to cell physiology, Structure and functional properties of the cell membrane
3. Week	Cell membrane transport mechanisms Body fluid compartments and content, Regulation of ion concentration in body fluids.
4. Week	Membrane potentials; Gibbs-Donnan equilibrium Formation of action potentials, recording methods
5. Week	Locomotor system, Excitable tissues; muscle, Physiological properties of skeletal muscle,
6. Week	Neuromuscular transmission mechanism Mechanisms of contraction and relaxation, muscle energy changes
7. Week	Regulation of muscle tone, muscle fatigue, abnormal contraction patterns Excitable tissues: peripheral nerve; Nerve fibers classification
8. Week	Synapses and synaptic transmission. Neurotransmitters and neuromodulators Introduction to the nervous system, the overall structure and function of the nervous system:
9. Week	Reflexes, reflex activities Specifications Pathways in the spinal cord, the sensory mechanisms
10. Week	States of consciousness, sleep Learning, memory, language
11. Week	Afferent pathways, the sensory cortex General and superficial senses
12. Week	Efferent pathways, the motor cortex Cerebellum and Basal Ganglia
13. Week	Autonomic and somatic nervous system Sense of sight
14. Week	Sense of hearing and balance Senses of smell and taste
15. Week	FINAL EXAM

ECTS (Student Work Load Table)

Activities	Number	Duration	Total Work Load
Course Duration (X14)	14	4	56
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	1	14
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	14	14
Final Exam Preparation Time	1	16	16
Total Work Load (hour) / 25(s)	100 / 25		
ECTS	4		

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
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
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.	
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