

COURSE DESCRIPTION FORM	
Course Code and Name	FZY100 Physiology I
Course Semester	1-2
Catalogue Data of the Course (Course Content)	Cell Physiology, Peripheral Nervous System, Muscle, Blood, Autonomic Nervous System
Course Textbooks	Rhoades Medical Physiology, LWW, 4th Ed. 2012 Ganong's Review of Medical Physiology, 24th Ed. LANGE 2012 Linda S. Contanzo, Physiology, LWW, 5th ed., Elsevier 2014 Berne & Levy Physiology, 7th Updated Edition, Elsevier 2018 Human Physiology Book, 2021
Supplementary Textbooks	-
Credit (ECTS)	5
Prerequisites for the Course (Attendance Requirements)	There are no prerequisites for the course. The attendance requirement of the student is according to Gazi University Faculty of Dentistry Education-Training and Examination Directive.
Course Type	Professional/ Technical
Language of Instruction	Turkish
Course Objectives	To learn the functions of organs and systems, the mechanisms of interaction with each other and the changes in function observed in clinical-pathological conditions.
Course Learning Outcomes	<ol style="list-style-type: none"> 1. The student should understand the terminology of physiology. 2. The student should understand the concept of homeostasis. 3. The student should be able to know cell organelles, solute and water transport through cell membrane. 4. The student should know the physiology and pathophysiology of peripheral nervous system. 5. The student should know the physiology of autonomic nervous system. 6. The student should know the striated and smooth muscle physiology and physiopathology. 7. The student should know blood physiology and physiopathology.
Instruction Method (Face-to-face, Distance education etc.)	Lessons are given in an amphitheater (with the support of projector, computer, animation, etc.). Face-to-face lecture is carried out in the form of mutual discussion (question and answer).
Weekly Schedule of the Course	<p>Week 1: Introduction to physiology (internal environment, homeostasis), Body fluid compartments and their properties</p> <p>Week 2: Functions of cell organelles</p> <p>Week 3: Solute and water transport through cell membrane, and Bioelectric potentials</p> <p>Week 4: Solute and water transport through cell membrane, and Bioelectric potentials</p> <p>Week 5: Solute and water transport through cell membrane, and Bioelectric potentials</p> <p>Week 6: Peripheral nervous system physiology, Peripheral nerve conduction properties</p> <p>Week 7: Synaptic activity, Synaptic transmission</p> <p>Week 8: Synaptic activity, Synaptic transmission</p> <p>Week 9: Autonomic nervous system</p> <p>Week 10: Autonomic nervous system</p> <p>Week 11: Autonomic nervous system</p> <p>Week 12: Nerve muscle junction, striated muscle and contraction theories</p> <p>Week 13: Nerve muscle junction, striated muscle and contraction theories</p> <p>Week 14: Nerve muscle junction, striated muscle and contraction theories</p> <p>Week 15: Mechanical properties of striated muscle</p> <p>Week 16: Spinal reflexes</p> <p>Week 17: Spinal reflexes</p>

	<p>Week 18: Functions of blood, its physical and chemical properties, regulation of blood production</p> <p>Week 19: Functions of blood, its physical and chemical properties, regulation of blood production</p> <p>Week 20: Functions of blood, its physical and chemical properties, regulation of blood production</p> <p>Week 21: Erythrocyte functions, blood groups and blood transfusion</p> <p>Week 22: Erythrocyte functions, blood groups and blood transfusion</p> <p>Week 23: Erythrocyte functions, blood groups and blood transfusion</p> <p>Week 24: Leukocyte functions</p> <p>Week 25: Leukocyte functions</p> <p>Week 26: Platelet functions and physiological properties of bleeding</p> <p>Week 27: Platelet functions and physiological properties of bleeding</p> <p>Week 28: An overview</p>									
Teaching Activities <i>(The time spent for the activities listed here will determine the amount of credit required)</i>	<p>Weekly theoretical course hours: 28 weeks / 2 hours</p> <p>Weekly practical course hours</p> <p>Reading activities: 24 weeks / 1 hour</p> <p>Internet search and library work: 24 weeks / 1 hour</p> <p>Designing and implementing materials:</p> <p>Making a report:</p> <p>Preparing and making presentations:</p> <p>Midterm and revision for midterm: 2 weeks / 4 hours</p> <p>Final exam and revision for final exam: 3 week / 5 hours</p>									
Assessment Criteria		Number(s)	Weight (%)							
	Midterm exam	2	60							
	Assignment									
	Application									
	Project									
	Practice									
	Quiz									
	Final exam	1	40							
Total	3	100								
Workload of the Course	Activity	Number of Weeks	Duration (Weekly Hour)	End of Semester Total Workload						
	Weekly theoretical course hours	28	2	56						
	Weekly practical course hours									
	Reading activities	24	1	24						
	Internet search and library work	24	1	24						
	Designing and implementing materials									
	Making a report									
	Preparing and making presentations									
	Midterm and revision for midterm	2	4	8						
	Final exam and revision for final exam	3	5	15						
	Total workload			127						
Total workload/ 25			5,08							
Course Credit (ECTS)			5							
Contribution Level between Course Outcomes and Program Outcomes	No	Program Outcomes				1	2	3	4	5
	1	Knows the normal structure and functions of the human body and specifically the structures and teeth in the mouth area on the basis of cells, tissues, organs and systems, and their interactions with each other.							x	
	2	Defines the causes, formation mechanisms, findings, structural and functional disorders							x	

		of oral, dental and jaw diseases, and how they affect the organism.						
	3	At a specified level, knows, comprehends, associates and evaluates the symptoms, findings, diseases, conditions and professional practices in the national core education program of dentistry and Gazi University Faculty of Dentistry Extended Education Program.		x				
	4	Knows how to reach the best current scientific evidence, evaluate its reliability and validity in line with personal learning needs.		x				
	5	Knows the legislation on professional legal responsibilities, deontology and ethical principles.			x			
	6	Knows and makes professional practices in the national core education program of dentistry and Gazi University Faculty of Dentistry Extended Education Program at a determined level.			x			
	7	Carries out diagnosis, treatment and follow-up processes by prioritizing evidence-based practice, critical thinking and ethical principles.			x			
	8	S/he is aware of own limitations, sets personal learning goals to support own professional development, and directs the patient to the appropriate center when necessary.	x					
	9	Knows the incidence of diseases in the mouth, teeth and jaws in society, contributes to the prevention and reduction.						
	10	While practicing their profession independently, they act in accordance with the laws, regulations, legislation and ethical principles related to own duties and responsibilities.						
	11	Has teamwork and leadership skills, becomes a role model to colleagues and society.						
	12	Plans personal professional development, executes it with the principle of lifelong learning		x				
	13	Establishes effective written and verbal communication with the patient, patient relatives, other health personnel, society, relevant sectors and the media.			x			
	14	Follows the innovations in the profession by using foreign language and information communication technologies.	x					
Lecturer(s) and Contact Information	Specialist, M.D., Pelin TÜRKKAN pelinozdemir@gazi.edu.tr							