Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Physıology	HEM 569	1st Semester	2	0	0	5
Prerequisites	None					
Language of the course	Turkish					
Type of Course	Forced					
Learning and teaching techniques of the course	Lecture, Discussion, Question-Answer, Role Play, Brain storming, Case Management.					
Responsible for the course (s)						
The aim of the course	To acquire information about the functioning of physiological mechanisms starting from the cell and in the integrity, in the execution, control and coordination of body functions, and to train nurses who are based on and use them in their professional practices.					
Learning outcomes of the course	1. Knows the basic concepts of physiology. 2. Knows the physiological and pathological processes in the cell. 3. Knows the process of dynamic and interstitial fluid exchange with blood. 4. Knows the processes of fat, carbohydrate and protein metabolism. 5. Knows the membrane potentials and action potentials. 6. Knows liquid electrolyte, hydrogen ion balance and imbalances. 7. Knows shock physiology.					
References	1. Guyton, C. Arthur, Hall, E. John, Textbook of Medical Physiology, 9th. Ed, WB. Saunders Comp, Philadelphia, 1996. 2. Amerikan Kanser Birliği, çev. Ed; Platin N, ve ark., (1998). Hemşireler İçin Kanser El Kitabı, T.C. Sağlık Bakanlığı Kanser Savaş Daire Bşk. 3. Black JM, Matassarin-Jacops E. (1993). Medical Surgical Nursing: Clinical Management for Positive Outcomes, Black&Hawks&Koene, Saunders. 4. Akdemir N Leman Birol L. İç Hastalıkları ve Hemşirelik Bakımı-Genişletilmiş 2. Baskı, 2005. 5. Brunner and Suddarth's Textbook of Medical Surgical Nursing, North American Edition In One Volume, Suzanne C Smeltzer, Brenda G Bare, Janice L Hinkle, Kerry H Cheever, Lippincott Williams & Wilkins, Twelfth edition. 6. Kathryn L. McCance RN, Sue E. Huether RN. Pathophysiology: The Biologic Basis for Disease in Adults and Children (Hardcover), sixth edition, Mosby, 2010.					

Weekly Course Subjects:

WEEKS	TOPICS TO BE PROCESSED
Week 1	Introduction to Physiology, Cell Physiology, Body Fluids.
Week 2	Muscle Physiology; Muscle Contraction Mechanism; Nerve, Muscle Junction and Motor Unit Properties.
Week 3	Smooth Muscle Physiology: Heart Muscle and Conduction System of the Heart.
Week 4	Nervous System Physiology: Central and Peripheral Nervous System; Control of Movement by Motor Cortex and Descending Paths.
Week 5	Reflex Physiology.
Week 6	Respiratory System Physiology: Respiratory Mechanics and Biophysics; Ventilation, Diffusion and Perfusion; Exchange and Transport of Gases.
Week 7	Respiratory Arrangement; Breathing in Different Conditions.
Week 8	**MIDTERM EXAM**
Week 9	Respiratory Function Tests and Spirometry.
Week 10	Circulatory System Physiology: Heart; Veins; Blood; Regulation of Blood Pressure; Pulse.
Week 11	Coronary Circulation; Lymph Circulation and Venous Circulation.
Week 12	Blood Physiology: Blood Transfusion; Blood Groups.
Week 13	Digestive System Physiology
Week 14	Urinary System Physiology.
Week 15	General Principles of Hormone Physiology: Thyroid Hormones and Metabolism; Parathyroid Hormone and Calcium Metabolism; Sex Steroids and General Effects. General Repeat.

Student Workload Table

Activities	Number	Time	Total Workload
Lesson	14	2	28
Laboratory			
Application			
Field Study			
Study Hours Out of Class (Free study / Group Work / Preliminary Work)	14	4	56
Presentation (Making videos / Preparing a poster / Oral presentation / Focus Group Meeting / Survey Application / Observation and Report Writing)			
Preparing a Seminar			
Project			
Case Study	3	5	15
Role Playing, Dramatizing			
Writing an article-Critical			
Mid-term exams	2	8	16
Final exams	1	10	10
Total workload (hours) / 25 (s)	125/25=5		
Course ECTS	**5**		

Evaluation System

Semester Studies	Number	Contribution
Midterm	1	%50
Quiz		
Laboratory		
Application		
Field Study		
Course-Specific Internship (If any)		
Homeworks		
Presentation and Seminar		
Projects		
Other		
Total of semester studies		%50
End of semester studies		
Final	1	%50
Homework		
Application		
Laboratory		
Total of end of semester studies		%50
Contribution of Semester Studies to Success Grade		%50
Contribution of Final Exam to Success Grade		%50
Total of success grade		100

Linking Course Learning Outcomes and Program Competencies

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.	Ability to develop and deepen their knowledge at the level of expertise,	5	5	5	5	5	5	5
2.	To be able to transform theoretical and practical knowledge at the level of expertise into behavior							
3.	To be able to create new information by integrating knowledge in the field of expertise with information from different disciplines.							
4.	To be able to solve problems that require expertise by using scientific research methods							
5.	To be able to develop new strategic approaches and produce solutions by taking responsibility in unforeseen complex situations encountered in applications in the field of expertise.	4	4	4	4	4	4	4
6.	To be able to transfer current developments and own studies in the field of expertise to groups in and out of the field systematically by written, oral and visual means.							
7.	To be able to use information and communication technologies at an advanced level with computer software at the level required by the field of expertise and to be able to translate in English.							
8.	To be able to develop application plans on the subjects related to the field of expertise and evaluate the results obtained within the framework of quality processes.							
9.	To be able to share these values by considering the social, scientific and ethical values in the stages of collecting, interpreting and announcing the data related to the field of expertise.							
Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4.High, 5. Excellent								