



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF HEALTH SCIENCES
PHYSIOLOGY
PHYSIOLOGY (MEDICAL)
PHYSIOLOGY (MEDICAL) MASTER
COURSE INFORMATION FORM

Course Title	Movement of Molecules Across Cell Membranes and Membrane Potentials								
Course Code	TFZ526	Course Level		Second Cycle (Master's Degree)					
ECTS Credit	6	Workload	150 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	To explain the concepts of diffusion, diffusion rate, diffusion through membranes, facilitated diffusion, active transport, osmosis, endocytosis and exocytosis, equilibrium potential, resting membrane potential, graded potentials, action potential								
Course Content	Diffüzyon, diffüzyon hızı, membranlardan diffüzyon, kolaylaştırılmış diffüzyon, aktif transport, osmoz, endositoz ve eksositoz, denge potansiyeli, dinlenme membran potansiyeli, dereceli potansiyeller, aksiyon potansiyeli								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Guyton, Tıbbi Fizyoloji
2	Vander, İnsan Fizyolojisi

Week	Weekly Detailed Course Contents
1	Theoretical
2	Theoretical
3	Theoretical
4	Theoretical
5	Theoretical
6	Theoretical
7	Intermediate Exam
8	Theoretical
9	Theoretical
10	Theoretical
11	Theoretical
12	Theoretical
13	Theoretical
14	Theoretical
15	Theoretical
16	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	1	0	14	14
Lecture - Practice	1	14	14	28
Assignment	11	3	3	66
Reading	4	0	10	40
Midterm Examination	1	0	1	1



Final Examination	1	0	1	1
Total Workload (Hours)				150
[Total Workload (Hours) / 25*] = ECTS				6
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	
2	
3	
4	
5	

Programme Outcomes (Physiology (Medical) Master)

1	To be able to acquire a background needed for basic physiological research and having the ability to use the teoritical and practical knowledge in the field
2	To be able to prepare the article in the science of physiology
3	To be able to present papers in the field of science of physiology
4	To have professional ethics and responsibility
5	To be able to reach a level to follow research in the field, to possess written and spoken communication skills and be able to join discussions

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	3	4	5	4	5
P2	4	3	4	4	5
P3	3	4	5	4	5
P4	4	5	5	4	5
P5	3	3	5	5	4

