



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Advanced Body Fluids, Acid-Base, Electrolyte Balance							
Course Code		TFZ613		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	156 (<i>Hours</i>)	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		Introduce knowledge skills about Body Fluids, Acid-Base, Electrolyte Balance. Present novel scientific data to participants.							
Course Content		Organism and environment; Body fluid compartments, intercompartmentary transition, The regulation of balance of body fluids, General information about H concantration; ph balance in body, The role of buffering systems in respiratory and urinary systems; Acidosis and alkalosis; General information about electrolytes; Solutions and membrane transport; Sodium–potassium diffusion; Importance of other ions; The osmolality of body; The regulation of electrolyte balance.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, 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, Medical Physiology
2	All scientific data about the subject

Week	Weekly Detailed Course Contents	
1	Theoretical	Organism and environment
	Practice	Organism and environment practice
	Preparation Work	Reading
2	Theoretical	Body fluid compartments
	Practice	Body fluid compartments practice
	Preparation Work	Reading
3	Practice	intercompartmentary transition practice
	Preparation Work	Reading
	Intermediate Exam	intercompartmentary transition
4	Theoretical	The regulation of balance of body fluids
	Practice	The regulation of balance of body fluids practice
	Preparation Work	Reading
5	Theoretical	General information about H concantration
	Practice	General information about H concantration practice
	Preparation Work	Reading
6	Theoretical	ph balance in body
	Practice	ph balance in body practice
	Preparation Work	Reading
7	Intermediate Exam	Midterm Exam
8	Theoretical	The role of buffering systems in respiratory and urinary systems
	Practice	The role of buffering systems in respiratory and urinary systems practice
	Preparation Work	Reading
9	Theoretical	Acidosis and alkalosis



9	Practice	Acidosis and alkalosis practice
	Preparation Work	Reading
10	Theoretical	General information about electrolytes
	Practice	General information about electrolytes practice
	Preparation Work	Reading
11	Theoretical	Solutions and membrane transport
	Practice	Solutions and membrane transport practice
	Preparation Work	Reading
12	Theoretical	Sodium–potassium diffusion
	Practice	Sodium–potassium diffusion practice
	Preparation Work	Reading
13	Theoretical	The regulation of electrolyte balance
	Practice	The regulation of electrolyte balance practice
	Preparation Work	Reading
14	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	1	2	42
Assignment	10	6	1	70
Midterm Examination	1	0	1	1
Final Examination	1	0	1	1
Total Workload (Hours)				156
[Total Workload (Hours) / 25*] = ECTS				6

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To be able to recognize the importance of advanced acid-base and electrolid equation
2	To be able to evaluate the relationship between other systems
3	To be able to investigate physiopathological symptoms about the subject
4	Interpret general principals about the subject
5	

Programme Outcomes (Physiology (Medical) Doctorate)

1	Has a deep and broad knowledge about the field and the interdisciplinary area related with the field through the achievements gained in undergraduate and professional levels.
2	Has the knowledge to create original ideas, analyze them and develop definition/product/diagnosis methods by using the knowledge gained in undergraduate and/or professional experience, when needed.
3	To learn the laws and regulations both national and international in the field of physiology.
4	To gain ability to apply the principles and fundamentals of scientific ethical rules.
5	Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary.

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	5	4	4	4	4
P2	5	4	4	4	4
P3	5	4	4	3	4
P4	5	4	4	4	4
P5	4	4	5	4	4

