



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Advanced Blood Physiology							
Course Code		TFZ609		Course 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 cell physiology. Present novel scientific data to participants.							
Course Content		Introduction to Physiology; Principles of physiology; Functional morphology of the cell; Cell membrane; The membrane potential; Organelles of the cell; The cytoplasm and organelles; Digestion, endocytosis, lysosomes at the cell, Energy metabolism at the cell; The mitochondria; The endoplasmic reticulum and golgi apparatus; Intercellular communication; Intracellular communication; The cell reproduction; Genetic control and protein synthesis; Diseases at the cell.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)		Prof. Recep ÖZMERDİVENLİ							

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	Introduction to Physiology
	Practice	Introduction to Physiology practice
	Preparation Work	Reading
2	Theoretical	Principles of physiology
	Practice	Principles of physiology practice
	Preparation Work	Reading
3	Theoretical	Functional morphology of the cell
	Practice	Functional morphology of the cell practice
	Preparation Work	Reading
4	Theoretical	Cell membrane; The membrane potential
	Practice	Cell membrane; The membrane potential practice
	Preparation Work	Reading
5	Theoretical	Organelles of the cell; The cytoplasm and organelles
	Practice	Organelles of the cell; The cytoplasm and organelles practice
	Preparation Work	Reading
6	Theoretical	Digestion, endocytosis, lysosomes at the cell
	Practice	Digestion, endocytosis, lysosomes at the cell practice
	Preparation Work	Reading
7	Intermediate Exam	Midterm exam
8	Theoretical	Energy metabolism at the cell; The mitochondria
	Practice	Energy metabolism at the cell; The mitochondria practice
	Preparation Work	Reading
9	Theoretical	The endoplasmic reticulum and golgi apparatus
	Practice	The endoplasmic reticulum and golgi apparatus practice
	Preparation Work	Reading
10	Theoretical	Intercellular communication



10	Practice	Intercellular communication practice
	Preparation Work	Reading
11	Theoretical	The cell reproduction
	Practice	The cell reproduction practice
	Preparation Work	Reading
12	Theoretical	Genetic control and protein synthesis
	Practice	Genetic control and protein synthesis practice
	Preparation Work	Reading
13	Theoretical	Genetic control and protein synthesis
	Practice	Genetic control and protein synthesis 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 Cell physiology
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	4	5	5	4	4
P2	4	5	5	3	4
P3	4	4	4	5	4
P4	4	4	4	5	4
P5	4	5	4	4	4

