



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Fetal And Neonatal Physiology							
Course Code		VFZ628		Course Level		Third Cycle (Doctorate Degree)			
ECTS Credit	2	Workload	50 (Hours)	Theory	1	Practice	0	Laboratory	0
Objectives of the Course		Learning neuro-immuno-endocrine control of fetal development. To investigate the factors lying in fundamentals of the development of fetus. Neonatal behavior and neonatal adaptation							
Course Content		Growth and functional development of the fetus, the compliance of the extrauterine life of newborn, breathing, and circulation activities, newborn feeding, newborn-specific functional problems, immunity, fluid balance, acid-base balance and kidney function, liver function.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Case Study, Individual Study, Problem Solving					
Name of Lecturer(s)		Prof. Muharrem BALKAYA							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	38
Final Examination	1	60
Quiz	2	1
Term Assignment	1	1

Recommended or Required Reading

1	Ritchie B.W., Harrison G., Harrison L. (1994). Avian Medicine Principles and Applications. Wingers Publishing, Inc.
2	Guyton AC, Hall JE (2001) Tıbbi Fizyoloji Onuncu baskı (Türkçe Çeviri). Ed: Çavuşoğlu H. Nobel Tıp Kitabevi, İstanbul.
3	Noyan A. (2003). Yaşamda ve Hekimlikte Fizyoloji. 13. baskı, Meteksan-Ankara
4	Randall D., Burggren W., French K, Fernald R., (1997). Eckert Animal Physiology. Mechanisms and Adaptations. 4th Ed., New York.
6	G.C. Whittow et al. (1998). Sturke's Avian Physiology.
7	Willmer P., Stone G., Johnston I. (2005). Environmental Physiology of Animals. 2nd Ed. Blackwell Publishing.
8	Despopoulos A., Silbernagl S. (2003). Color Atlas of Physiology 5th Ed. Thieme, Stuttgart New York.
9	Vander et al. (2001). Human Physiology: The Mechanism of Body Function, 8th Ed. The McGraw-Hill Companies.

Week	Weekly Detailed Course Contents	
1	Theoretical	Fetal development
2	Theoretical	Fetal circulation
3	Theoretical	Gonadal development of in the fetus
4	Theoretical	Transport of oxygen to in the fetus
5	Theoretical	Lung development of fetus
6	Theoretical	In the fetus blood production
7	Theoretical	Adaptation of the extra uterine life of newborn
8	Theoretical	Midterm
9	Theoretical	Neonatal behavior
10	Theoretical	Brown adipose tissue and thermoregulation
11	Theoretical	Neonatal immunity
12	Theoretical	Colostrums and related diseases
13	Theoretical	Neonatal fluid balance
14	Theoretical	Acid-base balance and renal function
15	Theoretical	Liver function

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	1	28



Assignment	1	1	1	2
Term Project	1	5	1	6
Quiz	2	1	1	4
Midterm Examination	1	3	1	4
Final Examination	1	5	1	6
Total Workload (Hours)				50
[Total Workload (Hours) / 25*] = ECTS				2
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	1. To learn Fetal circulation with their occurrence of fetal and maternal
2	2. To have information about the control of development of fetus
3	3. To have information about transport and fetal lung development in the fetus
4	4. Understanding the mechanisms of adaptation to life in neonatal and neonatal behavior
5	5. The importance of colostrum in neonatal life and colostrum diseases

Programme Outcomes (Physiology (Veterinary Medicine) 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	Is knowledgeable about theories and practices in methodological and scientific research methods to run an independent research
4	Excels in the laboratory, clinical and similar fields by using the theoretical and practical information gained in former education, and has the ability to create solutions in related fields
5	Designs and develops scientific methodology for the advanced level/newly defined/emerged problems about the field
6	Excels in the known scientific methods in the field for the advanced level/ newly defined/emerged problems
7	Designs unique researches and implements independently
8	Analyzes, synthesizes and evaluates the new ideas in related fields by using critical thinking
9	Plans, creates teams and carries out the interdisciplinary research projects in order to create solutions to the known/newly defined problems
10	Joins to congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions in different disciplines, and exchanges information with the other professionals to contribute to the solutions
11	Broadens the borders of scientific information by publishing scientific articles in national and/or international peer-reviewed journals
12	Creates new ideas and methods to contribute to the technological, social and cultural progress, or to help the development of information society by using the theoretical, practical, independent research, abilities responsibly
13	Designs and implements social projects with the awareness of creating an information society
14	Compiles and interprets any type of data (field observation, scientific knowledge etc.) in accordance with the aims
15	Develops and uses strategies about related topics with the field
16	Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary
17	Follows up and uses all the updates about the field (scientific information, legislations etc.), and has the qualification to change them
18	Adopts lifelong learning as a principle and acknowledges that the information gained through research is the most valuable gain

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	2	2	2	2	2
P2	1	1	1	1	1
P4	3	3	3	3	3
P5	2	2	2	2	2
P6	2	2	2	2	2
P7	1	1	1	1	1
P8	3	3	3	3	3
P10	3	3	3	3	3
P11	4	4	4	4	4



P12	2	2	4	2	2
P13	3	3	3	3	3
P14	4	4	4	4	4
P15	4	4	4	4	4
P16	4	4	4	4	4
P17	4	4	4	4	4
P18	4	4	4	4	4

