AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Respiratory System and Urinary System							
Course Code		VHE629		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	5	Workload	125 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		To teach the histological structure and functions of the respiratory system and urinary system.							
Course Content		Respiratory System: Nazal cavity, respiratoric mucosa, nasopharynx, larynx, trachea, lungs. Urinary System: The kidney histology and its functions, excretory passages of urine.							
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	30
Final Examination	1	70

Recommended or Required Reading	
1	Alberts B, Bray D, Lewis J, Raff M, Roberts K, Watson JD. (1989) Molecular Biology of the Cell, Garland Publishing, Inc. London.
2	Artan E. (1988) Histoloji, İstanbul
3	Banks WJ. (1986) Applied Veterinary Histology,Williams& Wilkins, USA.
4	Dellman HD, Brown LM. (1987) Textbook of Veterinary Histology, Lea&Febiger, USA.
5	Junqueira LC, Carneiro J. (2003) Basic Histology,The McGraw-Hill Companies,USA
6	Ross MH, Reith EJ, Romrell LJ. (1989) Histology. A Text and Atlas, Williams &Wilkins, London

Week	Weekly Detailed Course Contents	
1	Theoretical	Respiratory System: Nazal cavity
	Practice	Demonstration on cadaver parts of the respiratory system
2	Theoretical	Nazal cavity: vestibule, regio respiratory, regio olfactory
	Practice	Demonstration on cadaver parts of the respiratory system
3	Theoretical	Nasopharynx
	Practice	Demonstration on cadaver parts of the respiratory system
4	Theoretical	Larynx
	Practice	Demonstration on cadaver parts of the respiratory system
5	Theoretical	Trachea
	Practice	Examination of preparations Trachea
6	Theoretical	Trachea
	Practice	Examination of preparations Trachea
7	Theoretical	Lungs:Bronnchi, bronchioles, alveoli
	Practice	Examination of the microscopic appearance of the lung
8	Theoretical & Practice	Repetition of subjects and Midterm exam
9	Theoretical	Urinary System: The kidney histology and its functions
	Practice	Examination of the microscopic appearance of the kidney
10	Theoretical	The kidney histology and nephron
	Practice	Examination of the microscopic appearance of the kidney
11	Theoretical	The kidney histology and nephron
	Practice	Examination of the microscopic appearance of the kidney
12	Theoretical	The kidney histology, collecting tubules,Juxtaglomerular apparatus
	Practice	Examination of the microscopic appearance of the kidney
13	Theoretical	Excretory passages of urine , calyces, ureter
	Practice	Examination of the microscopic appearance of the kidney

14	Theoretical	Excretory passages of urine, urinary bladder, urethra, Article Discussion
	Practice	Examination of the microscopic appearance of urinary bladder, Article presentation
15	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	2	26
Lecture - Practice	13	0	2	26
Assignment	3	5	1	18
Midterm Examination	1	19	1	20
Final Examination	1	34	1	35
			Total Workload (Hours)	125
			[Total Workload (Hours) / 25*] = **ECTS**	5
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To have a detailed knowledge about the respiratory system
2	Learns the organs of the respiratory system.
3	To have a knowledge of the histology and functions of the urinary system
4	Learns the organs of urinary system.
5	Understand the importance of respiratory and urinary systems.

Programme Outcomes *(Histology and Embryology (Veterinary Medicine) Doctorate)*	
1	Gains expert knowledge on the function and basic histological features of cells, tissues and systems in animals.
2	Gains expert knowledge on the stages of embryonal and fetal development in both mammals and birds.
3	Based on his/her training during the Master of Science program, he/she has in depth knowledge in the field of histology/embryology as well as in areas related to his/her area of expertise.
4	Using basic knowledge gained during the undergraduate and master of science program, develops ,critically evaluates and tests novel ideas in his/her area of expertise.
5	Endowed with theoretical and practical knowledge as for the scientific research and methodology to be able to conduct an independent research project.
6	Has theoretical knowledge concerning skills (leadership, entrepreneurship, ability to reach information technologies, organization, industrial correspondence etc.). Knows laws and regulations concerning his/her area of expertise and related subjects.
7	Determines and uses laboratory equipment and consumables in a histology laboratory. Has the ability to solve problems in his/her area of expertise.
8	Has the ability to design and develop scientific methodology concerning new developments in his/her area of expertise. Has the ability to put established methods in use to tackle current problems in his/her area of expertise.
9	Designs and conducts an independent research project on his/her own.
10	Critically evaluates and reaches to a synthesis of new ideas in his/her area of expertise and related fields.
11	Uses and develops modern technologies in his/her area of expertise towards the industry in a systematic and critical manner.
12	Performs his/her expertise with the recognition of the rights and responsibilities obtained with the completion of doctorate program in histology/embryology.
13	Is able to break down new and immature ideas into simple components and suggest alternative solutions by using his/her ability to recognize possible relationships among these components.
14	If the need arises, designs an interdisciplinary research project , forms a team, leads and finalizes the research project to solve an old or a new problem in the field of histology/embryology.
15	Attends to activities such as congresses, panels, symposiums, workshops, seminars, journal clubs in his/her area of expertise, shares information in his/her area of expertise and contributes to the solution of a problem by interacting with experts in other fields.
16	Expands a growing body of information in his/her area of expertise by publishing scientific articles in national and international journals.
17	Is in recognition of taking professional and ethical responsibilities.
18	Develop new ideas and methods that has the potential to ignite social and cultural progress or add values to the information society by using practical and theoretical knowledge gained throughout his/her training and his/her skill to work independently and to take responsibilities.
19	Makes the concept of life-long learning a matter of principle and recognizes the fact that evidence-based information is the most important gain of education.

20	Provides information and manages information exchanges on issues of public and animal health in committees with the aim of defining and solving a problem using his/her expertise.

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

	L1	L3
P1	3	3
P14	3	3
P19	3	3