



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Muscle and Nervous Tissues							
Course Code		VHE524		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To teach the structure and function of the skeletal muscle, smooth muscle, cardiac muscle tissue and nerve tissue.							
Course Content		Muscle tissue: Skeletal muscle tissue, smooth muscle tissue, cardiac muscle tissue Nerve tissue: Nerve cells, myelin sheath, nerve synapse, neuroglia.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)		Prof. Şadiye KUM							

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Banks WJ. (1986) Applied Veterinary Histology, Williams & Wilkins, USA.
2	Leeson RR, Leeson TS, Paparo AA. (1985) Textbook of Histology, W.B. Saunders Company. USA
3	Sağlam M, Aştı RN, Özer A. (2001) Genel Histoloji Ders Kitabı, Yorum Matbaacılık, Ankara

Week	Weekly Detailed Course Contents	
1	Theoretical	General structure of muscle tissue
2	Theoretical	Skeletal muscle tissue
3	Theoretical	Differences of skeletal muscle fiber types
4	Theoretical	Mechanism of muscle contraction
5	Theoretical	Cardiac muscle
6	Theoretical	Cardiac muscle contraction
7	Theoretical	Smooth muscle tissue and its contraction
8	Intermediate Exam	Midterm
9	Theoretical	General knowledge about the nerve tissue
10	Theoretical	The organelles of nerve cells
11	Theoretical	Axon and myelin sheath
12	Theoretical	Synapses
13	Theoretical	Non-neural cells of central nervous system tissue
14	Theoretical	Non-neural cells of peripheral nervous system tissue
15	Theoretical	Image monitoring
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	1	5	0	5
Midterm Examination	1	17	1	18



Final Examination	1	23	1	24
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Knows to the structure and function of skeletal muscle.
2	Knows to the structure and function of cardiac muscle.
3	Knows to the structure and function of smooth muscle.
4	Knows to nerve cells, myelin sheath and synapse.
5	Knows to neuroglial tissue

Programme Outcomes (Histology and Embryology (Veterinary Medicine) Master)

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	Comprehends and defines interactions among disciplines related to histology-embryology.
4	Knows national and international laws and regulations concerning histology and embryology.
5	Determines and uses laboratory equipment and consumables in a histology laboratory.
6	Forms ideas to solve complex problems using theoretical and practical information gained throughout the histology/embryology education.
7	Integrates and interprets information in the area of histology/embryology with information in different fields and, if the need arises, provides scientific information and solutions to solve problems.
8	Performs his/her expertise with the recognition of the rights and responsibilities obtained with the completion of the master of Science in histology/embryology.
9	Develop alternative strategies to solve national and international problems in the field of histology/embryology using expert knowledge and expertise in histology/embryology obtained during his/her training, solves them and evaluates the data. If the need arises, takes a part as a team member to solve problems outside his/her field.
10	Takes responsibility in individual and collective work and completes his/her duties. Takes professional and ethical responsibilities.
11	Comprehends methods associated with attainment and presentation of scientific information.
12	Evaluates his/her expert information gained during the master of Science critically and determines new information and sources of information and attends to activities to complement his/her educational deficiencies
13	For his/her professional development, evaluates and uses any available information and activity in his/her studies.
14	If the need arises, gives information and organizes activities to define a problem in his/her field of expertise.
15	Takes responsibilities in professional organizations and committees related to his/her field of expertise.
16	Relying on his/her professional skills and rights, he/she plans and realizes projects with the conciseness of social responsibility. He/she follows the developments in the world and is sensitive to events.
17	In order to maintain his/her professional development and to have social interactions, he/she uses at least one foreign language.
18	Uses advanced technological means that might be necessary for both professional applications and social interactions.
19	Reviews, evaluates and interprets any data (field observations, available scientific information etc.) towards a specific purpose. Develops and uses strategies in his/her field of expertise.
20	Applies and defines his/her expert knowledge with realizing the needs of the region and the country.

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

	L1	L4	L5
P1	4	4	4
P3	3	3	3
P8	4	4	4

