



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Perfusion Technique in Rodents							
Course Code		VHE526		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		The aim of course is to teach perfusion technique in rodent and application							
Course Content		Perfusion technique in rodent and application.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Experiment, Demonstration, 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	Chiasson RB (1994) Laboratory Anatomy of the White Rat. The Mc Graw-Hill, Boston.
2	Cook MJ (1965) The Anatomy Of The Laboratory Mouse. Academic Press, London.
3	Hebel R, Stromberg MW (1976) Anatomy of the Laboratory Rat. The Williams and Wilkins Company, Baltimore.
4	Hillyer EV, Quesenberry KE (1997) Ferrets, rabbits and rodents: clinical medicine and surgery, W.B. Saunders Company, Philadelphia.
5	McLaughlin CA, Chiasson RB (1990) Laboratory Anatomy of the Rabbit. The Mc Graw-Hill, Boston
6	Waynforth HB, Flecknell PA (1992) Experimental and Surgical Technique in the Rat. Academic Press, London and San Diego
7	Tompsett DH, Wkaley SC. (1956) Anatomical techniques. Linvinstone LTD., Edinburg.

Week	Weekly Detailed Course Contents	
1	Theoretical	General knowledge about rodents
	Practice	Showing laboratory animal unit
2	Theoretical	General knowledge about rodents
	Practice	Showing laboratory animal unit
3	Theoretical	Rodent species
	Practice	Rodents in laboratory animal unit
4	Theoretical	Rodent species
	Practice	Rodents in laboratory animal unit
5	Theoretical	Introduction to perfusion technique
	Practice	Introducing of the perfusion technique materials
6	Theoretical	Introduction to perfusion technique
	Practice	Introducing of the perfusion technique materials
7	Theoretical	Introduction to perfusion technique
	Practice	Introducing of the perfusion technique materials
8	Intermediate Exam	Midterm
9	Theoretical	Technique in mouse
	Practice	Technique in mouse
10	Theoretical	Technique in mouse
	Practice	Technique in mouse
11	Theoretical	Technique in hamster
	Practice	Technique in hamster
12	Theoretical	Technique in hamster
	Practice	Technique in hamster
13	Theoretical	Technique in rabbit



13	Practice	Technique in rabbit
14	Theoretical	Technique in rabbit
	Practice	Technique in rabbit
15	Theoretical	Article discussion
	Practice	Article presentation
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	2	14	1	30
Laboratory	7	0	2	14
Midterm Examination	1	17	1	18
Final Examination	1	20	1	21
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	The student learns the definition of perfusion.
2	The student learns the purpose of perfusion technique.
3	The student learns perfusion technique in rodent.
4	The student learns application of perfusion technique.
5	The student follows the ethical rules when applying the perfusion technique.

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

	L3	L4
P4	4	4
P5	5	5
P7	3	3
P11	4	4
P20	3	3

