



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Microphotography								
Course Code	VHE635		Course Level		Third Cycle (Doctorate Degree)				
ECTS Credit	1	Workload	25 (Hours)	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	The aim of the course is to teach microscopic factor, light factor, effect of kind of light, position of light source, adjusting light source, a role of filters, effect of exposure time, factor of film, factor of slide, factor of camera, lup phography, use of dark room, bath solutions, technique of film bath, technique of dia positive								
Course Content	Microscopic factor, light factor, effect of kind of light, position of light source, adjusting light source, a role of filters, effect of exposure time, factor of film, factor of slide, factor of camera, lup phography, use of dark room, bath solutions, technique of film bath, technique of dia positive.								
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	30
Final Examination	1	70

Recommended or Required Reading

1	Sağlam M. (1968) Mikroskopi ve Mikrofotografi. Ankara Üniversitesi Basım Evi
2	Öner M. (1998) Biologlar için Mikrofotografi. Ege Üniversitesi Basım Evi.

Week	Weekly Detailed Course Contents & Teaching Methods	
1	Theoretical	Microscopic factor
	Practice	Taking photo from microscopic slider
2	Theoretical	Light factor
	Practice	Taking photo from microscopic slides
3	Theoretical	Effect of kind of light
	Practice	Taking photo from microscopic slides
4	Theoretical	Position of light source, adjusting light source
5	Theoretical	A role of filters
	Practice	Taking photo from microscopic slides
6	Theoretical	Effect of exposure time
	Practice	Taking photo from microscopic slides
7	Theoretical	Factor of film
	Practice	Taking photo from microscopic slides
8	Theoretical & Practice	Repetition of subjects and Midterm exam
9	Theoretical	Factor of slide, factor of camera
10	Theoretical	Lup phography
11	Theoretical	Use of dark room
	Practice	Use of dark room
12	Theoretical	Bath solutions
	Practice	Bath solutions
13	Theoretical	Technique of film bath Tab of black-white film
	Practice	Tab of black-white film
14	Theoretical	Technique of film bath; Technique of dia positive.
	Practice	Tab of black-white film; Preparation of dia positive film
15	Final Exam	Final Exam



Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	1	13
Lecture - Practice	10	0	1	10
Midterm Examination	1	0	1	1
Final Examination	1	0	1	1
			Total Workload (Hours)	25
			[Total Workload (Hours) / 25*] = ECTS	1

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	The student learns microscopic factor, light factor, effect of kind of light, position of light source, adjusting light source.
2	The student learns a role of filters, effect of exposure time, factor of film, factor of slide, factor of camera, lup photography.
3	The student gains use of dark room, bath solutions, technique of film bath, technique of dia positive.
4	Learn the purpose of microphotography
5	To apply microphotography technique in studies

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	L2	L3
P1	5	5	5
P4	3	3	3
P12	3	3	3

