AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Morphometrical Methods in Anatomy							
Course Code		VAN642		Couse Level		Third Cycle (Doctorate Degree)			
ECTS Credit	6	Workload	150 *(Hours)*	Theory	1	Practice	2	Laboratory	0
Objectives of the Course		The gained great skills about the methods relating to the shape and size of biological structures.							
Course Content		Different morphometric methods such as fresh, dry, two dimensional and three dimensional materials by using compass, goniometer, software.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Demonstration, Case Study					
Name of Lecturer(s)		Prof. İlknur DABANOĞLU							

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	28
Final Examination	1	60
Assignment	1	12

Recommended or Required Reading	
1	ÖCAL, M.K., ERDEN, H., ÖĞÜT, İ., KARA, M.E “Evcil memeli hayvanlarda Anatomi (Genel-Deri-Ön Bacak)." Adnan Menderes Üniversitesi Yayınları No: 5 (1998)
2	ÖCAL, M.K., ÖĞÜT, İ., KARA, M.E “Evcil memeli hayvanlarda Anatomi (Gövde).” Adnan Menderes Üniversitesi Yayınları No: 11 (1999)
3	DYCE, KM., SACK, WO., WENSING, CJG “ Textbook of Veterinary Anatomy” W.B. Saunders Company (1987)
4	NICKEL, R., SHUMMER, A., SEIFERLE, E “The Anatomy of the Domestic Animals Volume I –IV)” Verlag Paul Parey (1986)
5	POPESKO P, “Evcil Hayvanların Topografik Anatomi Atlası” Çeviri, Nobel Tıp Kitapevi (2010)

Week	**Weekly Detailed Course Contents**	
1	Theoretical	Morphometrical approaches to the anatomical studies
	Practice	Introducing the tools of the morphometrical measurements
2	Theoretical	General morphometrical methods for anatomical studies
	Practice	To introduce the tools of the morphometrical measurements
3	Theoretical	Subgross methods for anatomical studies
	Practice	To use the stereomicroscope
4	Theoretical	Reasons of error in morphometrical studies
	Practice	Repeated measurements from the cadaver and bone
5	Theoretical	General measurements from body regions
	Practice	Length and angle measurements from body
6	Theoretical	General measurements from body regions
	Practice	Area and volume measurements from body
7	Theoretical	Shape, diameter and volume measurements from organs
	Practice	Some measurements on the cadaver or images from organs, vessels and nerves
8	Intermediate Exam	Midterm exam
9	Theoretical	Measurement methods to asses the shape and size of bones
	Practice	Bone measurements by using caliper
10	Theoretical	Measurement methods to asses the shape and size of bones
	Practice	Bone measurement methods such as using photographs or 3D model
11	Theoretical	Statistical evaluation of the morphometrical data
	Practice	The importance of recording measurements
12	Theoretical	Statistical evaluation of the morphometrical data
	Practice	Using SPSS or Excel programmes
13	Theoretical	Statistical evaluation of the morphometrical data

13	Practice	Descriptive statistics
14	Theoretical	Statistical evaluation of the morphometrical data
	Practice	Comparison tests in statistical analysis
15	Theoretical	Research methods and exploring data
	Practice	Classification of the research design and scale of measurements
16	Final Exam	Term exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	2	16	2	36
Midterm Examination	1	27	1	28
Final Examination	1	43	1	44
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To use correctly the measurement tools for obtaining data from macroanatomical and subgross structures.
2	To obtain the morphometric values with higher reliability and repeatability.
3	3. To interpret the morphometric values regarding to the interaction between the anatomical shape and function.
4	know the measurements of body parts
5	know the errors encountered in measurements

Programme Outcomes *(Anatomy (Veterinary Medicine) Doctorate)*	
1	Doing research in any specific issues related to anatomy, planning a study, evaluating and presenting a report on the scientific area, independently.
2	To be able to improve themselves by innovations of the Anatomy
3	Sharing their concepts in seminar, symposium, conference etc. by using the skills of self study.
4	Having the scientific and vocational wafer and defending this apprehension in every medium
5	To be able to interpret what they have learned in the field of veterinary anatomy

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	5	5	5	5	5
P2	5	5	5	4	4
P3	4	4	5	5	5
P4	3	3	3	4	4