AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Nutritional and Digestive Physiology								
Course Code	VFZ606		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	6	Workload	150 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course	The investigation of GI tract comparing between different types of animals.								
Course Content	The control of taking nourishment and the balance between fasting, energy reserves and hypothalamus. The general comperative structure of digestive system, the digestion of nutrients, mechanical digestion, mastication and saliva, the secretion of stomach and their functions, GI hormones, the secretion of small intestine, liver and the secretion of bilis, digestion in the small intestine and large intestine, absorption, defacation.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Case Study, Individual Study, Problem Solving								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	38
Final Examination	1	60
Quiz	4	1
Term Assignment	1	1

Recommended or Required Reading	
1	Reece W.O. (2008) Dukes Veteriner Fizyoloji Cilt I ve II, Onikinci Baskı (Türkçe Çeviri). Ed: Yıldız S. Medipres, Malatya.
2	Guyton AC, Hall JE (2001) Tıbbi Fizyoloji Onuncu baskı (Türkçe Çeviri). Ed: Çavuşoğlu H. Nobel Tıp Kitabevi, İstanbul.
3	Noyan A. (2003). Yaşamda ve Hekimlikte Fizyoloji. 13. baskı, Meteksan-Ankara.
4	Randall D., Burggren W., French K, Fernald R., (1997). Eckert Animal Physiology. Mechanisms and Adaptations. 4th Ed., New York.
5	G.C. Whittow et al. (1998). Sturke's Avian Physiology.
6	Willmer P., Stone G., Johnston I. (2005). Environmental Physiology of Animals. 2nd Ed. Blackwell Publishing.
7	Despopoulos A., Silbernagl S. (2003). Color Atlas of Physiology 5th Ed. Thieme, Stuttgart New York.
8	Vander et al. (2001). Human Physiology: The Mechanism of Body Function, 8th Ed. The McGraw-Hill Companies.

Week	Weekly Detailed Course Contents	
1	Theoretical	The digestion in offspring.
	Practice	The investigation of anatomy-physiological structure of GI tract in differeent types of animals.
2	Theoretical	Carnivor, herbivor and omnivors
	Practice	The motolity of digestive system.
3	Theoretical	Neurologic and humoural controlling of dgestive.
	Practice	The effects of various chemicals on GI motility.
4	Theoretical	Appetiate, thirst and fasting .
	Practice	The effects of hormones on GI motility.
5	Theoretical	Mastication, saliva and its composition.
	Practice	The investigation of an effect of biliar secretion on digestion.

6	Theoretical	The digestion in the stomach.
	Practice	The investigation of an effect of amylase on digestion.
7	Theoretical	The digetion in the mouth.
	Practice	The investigation of pepsin.
8	Theoretical	Midterm
	Practice	Midterm
9	Theoretical	The digestion in düodenum.
	Practice	The effect of lypase on digestion.
10	Theoretical	The digestion in large intestine.
	Practice	Preperation of intestinal mechanism in vitro-I: Mechanism.
11	Theoretical	Biliar secretion.
	Practice	Preperation of intestinal mechanism in vitro-II: Remarkable points.
12	Theoretical	Defecation.
	Practice	Preperation of intestinal mechanism in vitro-III: Preperation of materyals.
13	Theoretical	Liver and its role on digestive.
	Practice	Preperation of intestinal mechanism in vitro-IV: Calibration
14	Theoretical	The secretion of pancreas.
	Practice	Preperation of intestinal mechanism in vitro-V: Recording.
15	Theoretical	Presentations.
	Practice	Detection of the efficient dosage of acetylcholine intestinal mechanism in vitro

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Lecture - Practice	14	1	2	42
Assignment	4	2	1	12
Term Project	1	15	1	16
Quiz	4	2	1	12
Midterm Examination	1	10	1	11
Final Examination	1	14	1	15
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	1. To get information about the physiology of digestive system
2	2. To get information about the control of taking nourishment.
3	3. To learn the digestive process as part of physiological fondations in the animal organism.
4	To learn how the neuro-humoral controlling of gastrointestinal tract is provided
5	To learn the roles of the microorganisms on digestive system

Programme Outcomes *(Physiology (Veterinary Medicine) Doctorate)*	
1	Has a deep and broad knowledge about the field and the interdisciplinary area related with the field through the achievements gained in undergraduate and professional levels
2	Has the knowledge to create original ideas, analyze them and develop definition/product/diagnosis methods by using the knowledge gained in undergraduate and/or professional experience, when needed
3	Is knowledgeable about theories and practices in methodological and scientific research methods to run an independent research
4	Excels in the laboratory, clinical and similar fields by using the theoretical and practical information gained in former education, and has the ability to create solutions in related fields
5	Designs and develops scientific methodology for the advanced level/newly defined/emerged problems about the field
6	Excels in the known scientific methods in the field for the advanced level/ newly defined/emerged problems
7	Designs unique researches and implements independently
8	Analyzes, synthesizes and evaluates the new ideas in related fields by using critical thinking
9	Plans, creates teams and carries out the interdisciplinary research projects in order to create solutions to the known/newly defined problems
10	Joins to congresses, panels, symposiums, workshops, seminars, article discussions and problem solving sessions in different disciplines, and exchanges information with the other professionals to contribute to the solutions
11	Broadens the borders of scientific information by publishing scientific articles in national and/or international peer-reviewed journals
12	Creates new ideas and methods to contribute to the technological, social and cultural progress, or to help the development of information society by using the theoretical, practical, independent research, abilities responsibly
13	Designs and implements social projects with the awareness of creating an information society
14	Compiles and interprets any type of data (field observation, scientific knowledge etc.) in accordance with the aims
15	Develops and uses strategies about related topics with the field
16	Implements and defends institutional and practical information and abilities in accordance with the needs of the country and the world, and changes when necessary
17	Follows up and uses all the updates about the field (scientific information, legislations etc.), and has the qualification to change them
18	Adopts lifelong learning as a principle and acknowledges that the information gained through research is the most valuable gain

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	2	2	2	2	2
P2	2	2	3	3	3
P3	1	1	1	1	1
P4	3	3	3	3	3
P5	2	2	2	2	2
P6	2	2	2	2	2
P7	1	1	1	1	1
P8	3	3	3	3	3
P9	1	1	1	1	1
P10	3	3	3	3	3
P11	4	4	4	4	4
P12	2	2	2	2	2
P13	2	2	2	2	2
P14	4	4	4	4	4
P15	4	4	4	4	4
P16	4	4	4	4	4
P17	4	4	4	4	4
P18	4	4	4	4	4